D-11A

general management plan
land protection plan
wilderness suitability review

GATES OF THE ARCTIC

NATIONAL PARK AND PRESERVE / ALASKA

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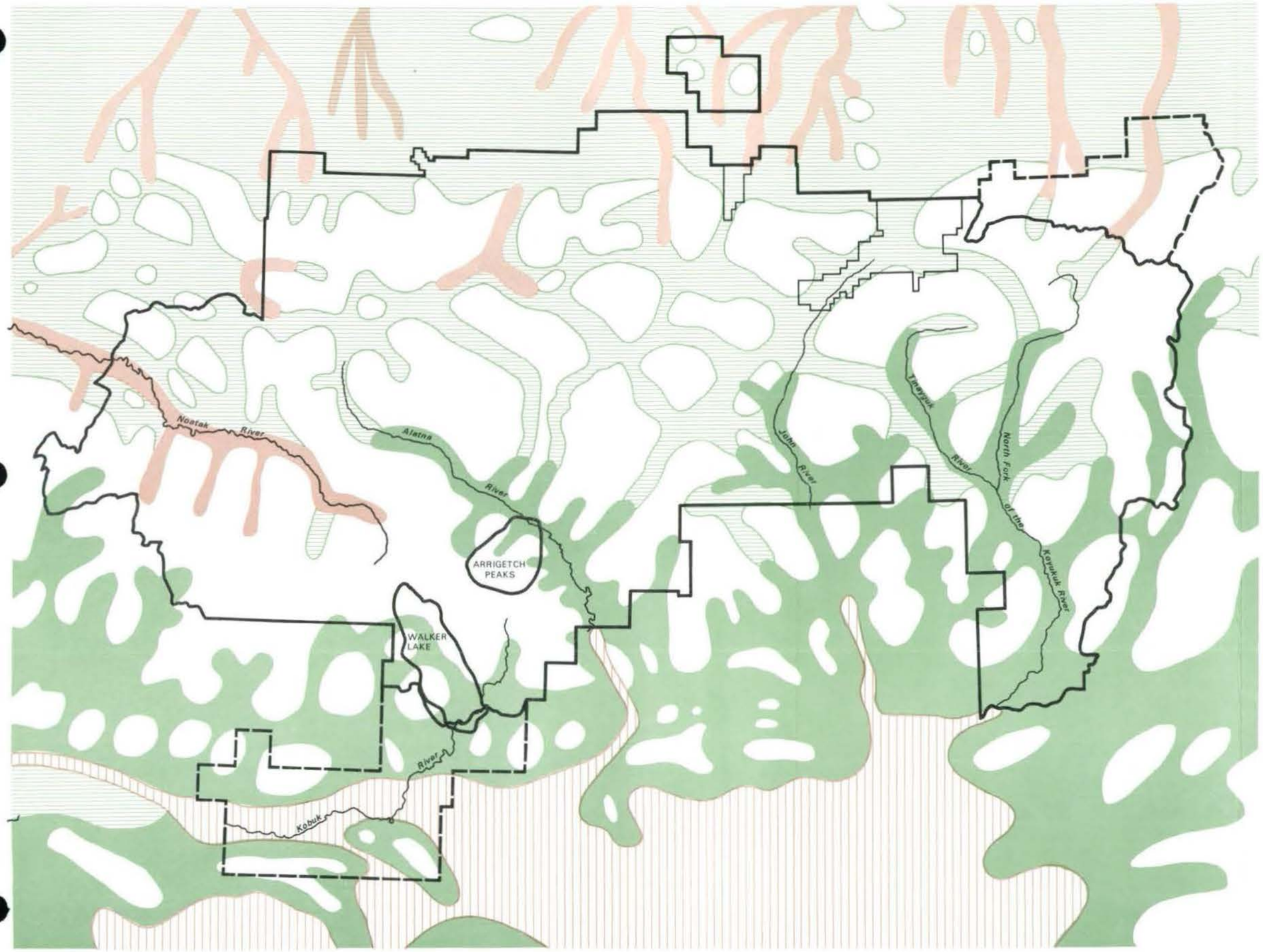
United States Department of the Interior
National Park Service

General Management Plan / Land Protection Plan
Wilderness Suitability Review

GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
ALASKA



GATES OF THE ARCTIC NATIONAL PRESERVE BOUNDARY
GATES OF THE ARCTIC NATIONAL PARK BOUNDARY
TUNDRA – ALPINE
TUNDRA – MOIST
SHRUB THICKET – HIGH BRUSH
FOREST – UPLAND SPRUCE – HARDWOOD
FOREST – LOWLAND AND BOTTOMLAND SPRUCE–HARDWOOD
WILD RIVER
NATIONAL NATURAL LANDMARK

SOURCE FOR VEGETATION: ADAPTED FROM ALASKA OFFICE OF GOVERNOR AND THE JOINT FEDERAL STATE LAND USE PLANNING COMMISSION FOR ALASKA REGIONAL PROFILES, 1975.

VEGETATION AND OUTSTANDING NATURAL FEATURES

GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE

UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

NORTH

0 5 10 15 20 MILES

0 5 10 15 20 25 30 KILOMETERS

185 | 260359
DSC | SEPT 85

ON MICROFILM

SUMMARY

In establishing Gates of the Arctic National Park and Preserve in Alaska's Brooks Range, Congress has reserved a vast and essentially untouched area of superlative natural beauty and exceptional scientific value--a maze of glaciated valleys and gaunt, rugged mountains covered with boreal forest and arctic tundra vegetation, cut by wild rivers, and inhabited by far-ranging populations of caribou, Dall sheep, wolves, and brown bears (barren-ground grizzlies). Congress has recognized a special value of the park and preserve to be its wild and undeveloped character and the opportunities it affords for solitude and wilderness travel and adventure. Congress also protected opportunities for subsistence by local rural residents, where traditional.

This document contains management actions addressing issues and problems facing Gates of the Arctic National Park and Preserve for the next 5 to 10 years. There are three major elements within this document:

General Management Plan - management of wilderness, wild rivers, natural and cultural resources, access and circulation, subsistence uses, recreational visitor uses; determination of needs for NPS operations and facilities

Land Protection Plan - relationship of nonfederal lands and other interests in and around the unit and methods to protect park purposes and values

Wilderness Suitability Review - evaluation of the suitability of nonwilderness lands within the park and preserve for inclusion in wilderness

The major directions of the plan are to maintain the wild and undeveloped character of the area, provide continued opportunities for wilderness recreational activities, protect park resources and values, and provide continued opportunities for subsistence uses by local residents, where such uses are traditional. The plan strives to maintain the area as it is today, and may erase some of the physical marks of modern man on the landscape, so that at the end of this 10-year planning period and beyond, this significant wilderness will not be diminished.

This final plan is the product of extensive public involvement and consultation. A full discussion of changes and public comments is found in the "Introduction."

GENERAL MANAGEMENT PLAN

Natural and Cultural Resource Management

Natural and healthy populations of fish and wildlife will be maintained in cooperation with the state of Alaska. Management of a few human

activities will be initiated to protect these populations, such as encouraging catch-and-release methods for sportfishing and avoiding adverse human-bear encounters with a program of information, portable bear-proof storage containers, and reporting.

Attempts will be made to reclaim areas where vegetation has been damaged by human activities. To protect fragile vegetation and nutrient cycles, recreational visitors will be encouraged to carry stoves, and campfires will be limited (subsistence and emergencies excepted).

Monitoring and research will be essential for establishing baseline data and protecting natural resources. Priority research is identified. Some activities associated with research, particularly the use of helicopters, will be managed to avoid disturbance of wildlife, subsistence, and recreational visitors.

Cultural resources include archeological sites, historic sites, and intangible cultural resources. These will continue to be identified through ongoing research activities. Two known historic cabins will be protected, and archeological sites will be protected. Important cultural patterns will be protected--for instance, by provisions for subsistence use.

Access and Circulation Management

Access and circulation within Gates of the Arctic is critical for wilderness recreational opportunities, subsistence use, private landholders within the unit, and other valid existing rights. The National Park Service will encourage traditional means of access that protect park resources and values and recognize other valid existing rights of access.

Subsistence Use Management

Opportunities for subsistence uses by local residents, where such uses are traditional, are guaranteed. The general management plan reports provisions of title VIII of ANILCA, existing regulations, and the forthcoming subsistence hunting program being devised by the subsistence resource commission with public involvement. Several areas of specific subsistence management concerns are discussed, such as resident zones, traditional use areas, access, and off-road vehicles (ORVs). These and other concerns will be addressed in a future subsistence management plan based on the recommendations of the approved program of the commission.

Recreational Visitor Use Management

Opportunities for wilderness recreational activities are guaranteed. Activities and methods of access that emphasize solitude, self-reliance, challenge, discovery, and minimum impact will be encouraged. To ensure that outstanding wilderness opportunities and natural resources remain

undiminished, standards have been established to clearly define the values to be protected and develop carrying capacity. Research and monitoring will determine if such standards are being met. When a standard is exceeded, it will trigger a closer look at the cause and may result in some management action. Some standards currently exceeded in certain areas indicate management is needed to prevent parkwide impacts. Tools of information, reclamation, working with commercial operators, and research are provided by this plan. Recreational visitor use limits identified in this plan will require changes to existing regulations and further public involvement.

Information will be a key tool for influencing the activities of park visitors so that they are careful to protect park resources. All visitors will be encouraged to register voluntarily for the purpose of giving and receiving information. It is recognized that information dispensed without special care could also interfere with visitors' opportunities for discovery and self-reliance, and it may have the adverse effect of concentrating visitors in certain areas. A single, concise package of key information will be provided, but beyond that visitors will be encouraged to rely on themselves to research further information.

Hiking, rafts, canoes, kayaks, pack animals, and aircraft are all appropriate means of wilderness recreational access; however, to protect park resources and values, limits on recreational visitor group size and hoofed pack animals are recommended. The use of snowmachines and motorboats for subsistence purposes, access to private property within the unit, and travel to and from villages and homesites will continue to be guaranteed. To protect the area's wilderness values, the National Park Service intends to pursue legislation that would discontinue the recreational use of snowmachines and motorboats in certain areas of the unit. The use of ORVs is prohibited in Gates of the Arctic.

Other components of recreational visitor use recommend limiting camping length of stay and placing special limits on a zone around Arrigetch Peaks, an area of high use with visible impacts. Special events, such as the dog team race, will only be allowed if appropriate to the area and under rigorous conditions that protect park resources, emphasize wilderness values, and perpetuate the traditional role of dog teams in the central Brooks Range.

Commercial wilderness guides and air-taxi operators who protect park resources and serve visitors make a valuable contribution. The present number of commercial operators is more than accommodating visitor needs. They will become increasingly important for disseminating information and dispersing recreational visitor use. The number of guides and air-taxi operators will be continued under a concession permit system, at the level of services up to 1984, with all operating from bases outside the unit.

Operations and General Development

Additional staff is needed for monitoring and protecting resources, documenting uses, providing information, and developing closer communication with local communities. The headquarters will remain in Fairbanks most of the year, but the superintendent and other key staff will move to Bettles for the period June through September, where they will be closer to the park and more available to residents of the region. Field stations will be operated year-round at Bettles, Coldfoot, and Anaktuvuk Pass. Each station will include staff housing, a visitor area, and workshops, and, wherever feasible, will be developed cooperatively with other agencies. Backcountry seasonals will operate out of portable camps.

A communications system will be developed to adequately support field staff with minimum intrusion to visitors; permanent repeaters will not be used. While search and rescue capabilities will be maintained, visitors will be expected to be responsible for their own safety because of the size, remoteness, and inherent hazards of this large area.

No new structures, roads, or trails will be built within the park and preserve by the National Park Service. Remaining cabins that are not subject to valid claims will be left standing for emergency and intermittent local winter use. There will be no permanent camps or caches in Gates of the Arctic.

Implementation

Planning is an ongoing and dynamic process, and further information collection and analysis and appropriate public involvement will be needed as this plan is implemented. There will be future action plans and policy development, and amendments to this plan may eventually be proposed. These, and any proposed closures or restrictions, will follow established notice and hearing requirements prior to implementation.

To implement the proposal, it is estimated that construction costs for general development would not exceed $5,578,000, and annual operating costs would not exceed $1,369,000.

LAND PROTECTION PLAN

Small Tracts and Native Allotments

The majority of small tracts and native allotments in the park represent a long pattern of human presence and subsistence culture, which exemplify subsistence traditions and complement the wilderness purposes of the park. However, significant and abrupt changes in land use could occur that would impair wilderness values. Incompatible uses include extensive timber cutting, road access, or new or increased commercial use. The minimum NPS interest necessary to protect park purposes is the

acquisition of development rights or a "conservation easement." The plan outlines general compatible and incompatible guidelines to be used during discussions with individual landowners to determine easements.

Mining Claims

Of some 250 filed mining claims within the park, only two placer gold mining operations are currently active. The development and operation of these and other valid claims could threaten park resources and values. Validity will be examined and, if warranted, contested. Undisturbed valid claims will be acquired, and previously disturbed valid claims will be managed to assure protection of resources.

Native Corporation Lands

Large tracts of land within the boundary are owned by native regional and village corporations. These tracts are largely undeveloped, except for the village of Anaktuvuk Pass, and uses of these lands generally complement park values. Future uses that may not be compatible include oil and gas development, commercial development, and road access. The land protection plan proposes to seek exchange or cooperative agreements for compatible land management of Arctic Slope Regional Corporation and Anaktuvuk Pass Village Corporation lands. Exchange will be pursued for Doyon, Ltd. lands and Arctic Slope Regional Corporation subsurface rights. Cooperative agreements will be sought for ANCSA 14(h)(1) sites claimed by NANA.

Adjacent Lands

The National Park Service is interested in maintaining good communication and ongoing cooperation with its neighbors. The plan addresses adjacent lands to identify opportunities and concerns in public forum, so such information is available to adjacent land managers well in advance of future land use planning and development. The Park Service is interested in participating in any planning effort in the region.

A significant opportunity is the future enhancement of the recreational and scenic values of the Dalton Highway corridor. Cooperative planning by the many affected parties is recommended. State classification and zoning for compatible and complementary uses are recommended for the adjacent Schwatka Mountains, Killik and Itkillik rivers, and the Kobuk, Alatna, John, and North Fork rivers. Cooperative planning is recommended for the Ambler mining district. A boundary adjustment is recommended along the Nigu River.

WILDERNESS SUITABILITY REVIEW

Of 1,209,302 acres of nonwilderness land within the park and preserve, 1,009,638 acres are suitable for wilderness designation, 9,641 acres are suitable pending resolution of ownership, and 190,023 acres are not suitable for wilderness designation.

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ABBREVIATIONS

ADF&G	- Alaska Department of Fish and Game
ANCSA	- Alaska Native Claims Settlement Act (43 USC 1601 et seq.)
ATV	- All-terrain vehicle, see ORV
ANILCA	- Alaska National Interest Lands Conservation Act (16 USC 3101)
BLM	- Bureau of Land Management
CFR	- Code of Federal Regulations (e.g., 36 CFR 13)
DM	- Departmental Manual, U.S. Department of the Interior (e.g., 60 DM 4.2)
EIS	- Environmental Impact Statement
FWS	- Fish and Wildlife Service
NANA	- NANA Regional Corporation, Kotzebue
NEPA	- National Environmental Policy Act
NPS	- National Park Service
ORV	- Any motor vehicle, including all-terrain vehicles (ATVs), designed for or capable of cross-country travel on or immediately over land, water, sand, snow, ice, marsh, wetland, or other natural terrain, except snowmachines or snowmobiles (36 CFR 13.1).
USC	- United States Code
USGS	- United States Geological Survey

INTRODUCTION

SECURING THE BENEFITS OF WILDERNESS

Americans have always had opportunities for wilderness experiences, for adventure and discovery along a shifting frontier--first the Appalachians, then the Ohio Valley, the Missouri River, the Rocky Mountains, the far west, and now Alaska. Those opportunities have done much to mold the character and to temper the spirit of Americans. Now, however, as settlement and development increasingly affect Alaska, the frontier is closing. Our most significant remaining wilderness areas are being reserved as a lasting public trust so that future generations may also enjoy opportunities for adventuring.

In establishing Gates of the Arctic National Park and Preserve in Alaska's Brooks Range, Congress has reserved a vast and essentially untouched area of superlative natural beauty and exceptional scientific value--a maze of glaciated valleys and gaunt, rugged mountains covered with boreal forest and arctic tundra vegetation, cut by wild rivers, and inhabited by far-ranging populations of caribou, Dall sheep, wolves, and brown bears (barren-ground grizzlies). Congress has recognized a special value of the park and preserve to be its wild and undeveloped character and the opportunities it affords for solitude and wilderness travel and adventure. At the same time, exceptional provisions have been made for access and use, which will be honored.

Some of the most important aspects of wilderness are its intangible qualities. Space is critical--space for animals to roam freely and for people to wander and to find solitude. Another critical element is the dominance of the forces of nature, allowing almost no evidence of human activity. The most elusive benefits of wilderness are in the minds of people--the feelings of solitude, freedom, discovery, adventure, challenge, and self-reliance are essential products of the wilderness experience that has always been a part of American culture.

The national park system comprises over 300 areas of special importance to the people of the United States--a system that includes superlative natural, historical, scientific, and recreational areas in every region of the country. Within this broad spectrum of resources and opportunities, Gates of the Arctic National Park and Preserve is distinguished by its special wilderness purposes. Gates of the Arctic encompasses several congressionally recognized elements, including the national park, national preserve, wilderness, and six wild rivers. The National Park Service has been entrusted to manage this area to protect its physical resources and to maintain the intangible qualities of wilderness and the opportunity it provides for people to learn and renew its values.

ESTABLISHMENT OF GATES OF THE ARCTIC

National park system areas are created "to conserve the scenery and natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations" (Act of August 25, 1916).

In Alaska, several new units of the national park system were established by the Alaska National Interest Lands Conservation Act (ANILCA, P.L. 96-487, Dec. 2, 1980). The general purposes of the act, as defined by sections 101(a), 101(b), and 101(c) are as follows:

> In order to preserve for the benefit, use, education, and inspiration of present and future generations certain lands and waters in the State of Alaska that contain nationally significant natural, scenic, historic, archeological, geological, scientific, wilderness, cultural, recreational, and wildlife values, the units described in the following titles are hereby established.
>
> It is the intent of Congress in this Act to preserve unrivaled scenic and geological values associated with natural landscapes; to provide for the maintenance of sound populations of, and habitat for, wildlife species of inestimable value to the citizens of Alaska and the Nation, including those species dependent on vast relatively undeveloped areas; to preserve in their natural state extensive unaltered arctic tundra, boreal forest, and coastal rainforest ecosystems; to protect the resources related to subsistence needs; to protect and preserve historic and archeological sites, rivers, and lands, and to preserve wilderness resource values and related recreational opportunities including but not limited to hiking, canoeing, fishing, and sport hunting, within large arctic and subarctic wildlands and on freeflowing rivers; and to maintain opportunities for scientific research and undisturbed ecosystems.
>
> It is further the intent and purpose of this Act consistent with management of fish and wildlife in accordance with recognized scientific principles and the purposes for which each conservation system unit is established, designated, or expanded by or pursuant to this Act, to provide the opportunity for rural residents engaged in a subsistence way of life to continue to do so.

ANILCA established a complex and extensive system of public lands in Alaska to accomplish the purposes of the act. New units of the national park system were created, each with distinct purposes. Gates of the Arctic National Park and Preserve was established by ANILCA section 201(4)(a):

> Gates of the Arctic National Park, containing approximately seven million fifty-two thousand acres of public lands, Gates of

> the Arctic National Preserve, containing approximately nine hundred thousand acres of Federal lands, as generally depicted on map numbered GAAR-90,011, and dated July 1980. The park and preserve shall be managed for the following purposes, among others: To maintain the wild and undeveloped character of the area, including opportunities for visitors to experience solitude, and the natural environmental integrity and scenic beauty of the mountains, forelands, rivers, lakes, and other natural features; to provide continued opportunities, including reasonable access, for mountain climbing, mountaineering, and other wilderness recreational activities; and to protect habitat for and the populations of, fish and wildlife, including, but not limited to, caribou, grizzly bears, Dall sheep, moose, wolves, and raptorial birds. Subsistence uses by local residents shall be permitted in the park, where such uses are traditional, in accordance with the provisions of title VIII.

The importance of maintaining the wild and undeveloped character of the area was reemphasized as Congress further designated over 7 million of the 8 million acres as wilderness and six rivers as wild. Within the broad spectrum of resources and opportunities reserved in national parks, only Gates of the Arctic was established with such strong emphasis on wilderness purposes.

The plan strives to fulfill the intent of Congress, including the numerous other provisions of ANILCA (see appendix B: Summary of ANILCA Provisions).

PURPOSE AND ORGANIZATION OF THE PLAN

This plan has been prepared to guide programs and actions that the National Park Service will undertake to meet park purposes and resolve issues facing the area, as directed by Congress in ANILCA. Management objectives, developed with public involvement, are found in appendix A. The plan has been divided into three main elements (described below) because of varying requirements and time frames.

General Management Plan

The general management plan addresses a variety of management issues and actions required by ANILCA sections 604(d) and 1301. It covers existing conditions and resources; management of wilderness, wild rivers, natural resources, cultural resources, access and circulation, subsistence use, and recreational visitor use; and operational needs, general development, and estimated costs.

As its title implies, the general management plan is very general and calls for future, more detailed plans to address specific issues. Future plans may include resource management plans, subsistence management plans, development concept plans, minerals management plans, boundary

adjustment studies, and interpretive plans. These more detailed plans will be initiated as necessary to address specific problems. In some cases, specific issues may be addressed on a case-by-case basis, in lieu or in advance of formal plans. Plans and studies will be done as necessary recognizing resource needs and will be available for public review.

The general management plan is aimed at setting a course of action for the next 5 to 10 years. Specific parts of the plan may be amended to allow for changing conditions or needs, or when a significant new issue arises that requires consideration. Amendments to the plan would include public involvement and compliance with all laws, regulations, and NPS policies. If the amendments are minor and noncontroversial, public notice will be made prior to making decisions to incorporate the changes into the plan. If the amendments are significant or controversial, the public will be provided opportunities to review, propose, and comment on alternatives. A new plan will eventually be required by the passage of time and changing conditions. The public will be involved throughout the planning process.

Land Protection Plan

This plan addresses the treatment of nonfederal land within the unit and discusses adjacent lands and other requirements of ANILCA section 1301. This element of the document has been developed as a distinctly separate section because it will be reviewed and updated more frequently than the general management plan. The land protection plan will be reviewed every two years by the superintendent to determine if revisions are required. As changes are needed, all affected landowners and the general public will be notified and provided an opportunity to comment on the proposed changes.

Wilderness Suitability Review

Section 1317(a) of ANILCA directs that a review be made of the suitability or nonsuitability for preservation as wilderness of all lands not so designated by the act. This section provides this initial review. A separate wilderness designation study will be undertaken with public involvement to address section 1317(b), which specifies that "the Secretary shall conduct his review, and the President shall advise the United States Senate and House of Representatives of his recommendations, in accordance with the provisions of sections 3(c) and (d) of the Wilderness Act." The president is to make recommendations to the Congress.

ISSUES, PUBLIC COMMENTS, AND CHANGES

This plan has been developed in consultation and coordination with numerous agencies, organizations, and individuals. Issues were developed through the Statement for Management, of which over 600

copies were distributed for public comment. General scoping identified agencies and organizations who wished to be further involved. Open meetings were held in seven local communities and in Fairbanks. Following the meetings a newsletter outlining four conceptual alternatives was distributed to over 600 individuals and organizations on the mailing list. Questionnaires were developed for commercial operators and their clients. A consultation committee composed of over 65 individuals representing various agencies and organizations has been involved in many of the details of the plan.

Some 1,400 copies of the Draft General Management Plan/Environmental Assessment, Land Protection Plan, and Wilderness Suitability Review of March 1985 and 700 summaries were distributed for comment. Public meetings were held again in local communities, Anchorage, Fairbanks, and Barrow, with cumulative attendance exceeding 300 people. Some 300 letters were received from local people, guides, private landholders within the park, organizations and agencies, other Alaskans, and people all over the rest of the country.

The Revised Draft General Management Plan of December 1985 was made publicly available at libraries and communities around the state and outside Alaska, as well as available upon request. Letters announcing its availability were sent to the entire mailing list. Some 400 copies of the revised draft were distributed, and over 150 letters were received from reviewers.

The process of changing the plan involved careful analysis of public comments. All of the comments made at meetings and written in letters were considered. Most proposals presented in the draft plans received comments from many points of view. However, the process is not a simple vote. In preparing both the revised draft and the final plan, the various points of view were weighed with the need to meet the mandates of Congress and fully realize the high public values of Gates of the Arctic National Park and Preserve.

The following discussion presents issues in the order they appear in the plan, a summary of what the draft plan said, a synopsis of public comments (from meetings and letters) on that issue with the general number of people who brought it up, and a notation of changes made in the revised draft, comments on the revised draft, and additional changes. The public comment numbers are provided to give a general indication of the level of interest in each topic; however, the numbers are not precise because of the difficulty of recording the number of people making certain comments at public meetings.

Natural Resource Management

Issue:
Natural and healthy populations of fish and wildlife (park) and healthy populations (preserve)--maintaining such populations (as directed by ANILCA) while allowing authorized sport hunting, trapping, fishing, and subsistence use.

Draft Plan: Focuses research on the history of human use, presuming that other than traditional human use, man's effects on fish and wildlife are unnatural. Once unnatural effects are identified, they can be counteracted to maintain natural and healthy populations.

Public Comments: 18
Most commenters indicate that the National Park Service should ensure that consumptive uses do not disrupt natural balance, and some oppose sport or trophy hunting (comments on subsistence are discussed under "Subsistence Use Management"). Some express concern that the proposed approach will stop sport hunting, trapping, fishing, wildlife photography and viewing, and perhaps all human uses; man has a natural role.

Revised Draft: Sport hunting in the preserve and subsistence use in the unit are declared by ANILCA to be consistent at levels that do not adversely affect natural wildlife populations. Clarifies discussion to recognize that nonwasteful traditional subsistence use is a natural part of the ecosystem; outlines a research strategy.

Public Comments: 73
Two main points were made: Commenters support the Park Service for closure of the preserves to aerial wolf hunting, and numerous others affirm the NPS mandate and responsibility to maintain natural and healthy populations of wildlife. A few brought up previous points.

Final Plan: Same as revised draft.

Issue:
Cooperation--refine the roles for management of fish and wildlife by the state of Alaska and the National Park Service.

Draft Plan: States that consistent with ANILCA and in cooperation with the Park Service, the state of Alaska may establish hunting and fishing regulations; identifies the master memorandum of understanding between the National Park Service and the Alaska Department of Fish and Game; identifies cooperative research.

Public Comments: 42
Most commenters want the roles of state and federal government stated more clearly; many note primary federal responsibility in cases of conflict; some indicate that the state's authority is not fully defined.

Revised Draft: Substantially expands and clarifies.

Public Comments: 4
Some suggest that the rewrite weakens NPS responsibility, and some note improvement but want more consistency and clarification.

Final Plan: Minor adjustments to revised draft.

Issue:
Fishing--effects of unknown level and concentration of fishing on low productivity arctic waters.

Draft Plan: Advises and encourages recreational visitors to practice appropriate catch-and-release methods while studies are undertaken.

Public Comments: 22
Most commenters support the proposal or offer another method of limiting fish take, such as requiring that fish be consumed in the area. A few disagree with the proposal because there are not enough data to warrant any limits.

Revised Draft: No substantial change; advisory catch-and-release is still considered the best interim method to prevent depletion of fish populations while studies are being done.

Public Comments: 3
Commenters still urge requiring that fish be consumed in the area.

Final Plan: Visitors will be encouraged to either practice catch-and-release or consume fish in the area.

Issue:
Human-bear encounters--adverse encounters that may increase with visitation; loss of property and human injury; needless destruction of bears.

Draft Plan: Makes portable bear-proof food containers available (perhaps commercially); requires visitors to report discharge of firearms in the park.

Public Comments: 13
Most commenters object to the requirement to report the discharge of weapons, partly because it would be unenforceable and duplicate state requirements. Other commenters either suggest providing portable bear-proof containers at high use areas or support the proposal.

Revised Draft: Clarifies purposes of bear management; stresses importance of information, will make portable containers available (perhaps commercially), requires reporting of all adverse wildlife encounters and will cooperate with state to avoid duplication of reporting.

Public Comments: 2
Commenters suggest removal of problem bears may be appropriate, and only killing of bears should be reported.

Final Plan: Same as revised draft.

Issue:
Firewood collecting and campfires--potential for excessive consumptive use of slow-growing trees; visual impacts and fire rings at frequently used campsites.

Draft Plan: Allows campfires only on gravel bars in forested areas; prohibits them on tundra and in areas above treeline.

Public Comments: 14
Most commenters agree with the proposal, think campfires should be prohibited altogether, or offer other suggestions such as allowing fire pans, requiring stoves, or using information and education. Some commenters disagree with any restrictions because fires are necessary for emergencies and subsistence, and limits are unenforceable.

Revised Draft: Allows subsistence and emergency uses of campfires without limits; as in draft plan, limits campfires to forested areas for recreational visitors, with certain provisions.

Public Comments: 3
A few commenters still disagree with any restrictions; some suggest also limiting subsistence campfires.

Final Plan: Same as revised draft.

Issue:
Subsistence timber cutting--requires permit for trees greater than 3 inches in diameter; slow-growing trees, visual impacts.

Draft Plan: Reports existing regulations; identifies permit requirements.

Public Comments: 6
Some commenters disagree with requirements; some misunderstand requirements.

Revised Draft: Clarifies discussion but identifies same requirements.

Public Comments: 2
Similar to above comments.

Final Plan: Same as revised draft.

Issue:
Air and water quality--impacts from mining, development.

Draft Plan: Will work with state and the Environmental Protection Agency to monitor and enforce.

Public Comments: 11
Most commenters request that the air quality designation of class II be changed to class I; miscellaneous comments about water quality standards and monitoring.

Revised Draft: Does not recommend change in air quality designation; clarifies cooperative monitoring and enforcement.

Public Comments: 5
Similar to above comments.

Final Plan: Minor adjustments.

Issue:
Research--identify priorities.

Draft Plan: Identifies areas of top concern for natural and cultural resources; identifies carrying capacity studies.

Public Comments: 56
All commenters agree that the Park Service needs more baseline data, comprehensive scientific studies, and carrying capacity studies.

Revised Draft: Makes minor adjustments but continues to identify research as important.

Public Comments: 2
Similar to above comments.

Final Plan: Updated with current list of research needs.

Issue:
Research management--impacts of research activities, particularly helicopters, on solitude, subsistence uses, and wildlife.

Draft Plan: Certain research activities will be allowed only as a minimum tool outside of critical times and areas of wildlife subsistence and visitor use. Helicopter use is closely controlled.

Public Comments: 3
Commenters either do not want research restricted or support proposal.

Revised Draft: The intent of the draft was to manage and limit disruptive activities associated with research, but not prevent research. Clarifies discussion.

Public Comments: 41
Most commenters request that helicopter use be restricted to necessary NPS administrative purposes only, and that the mineral reconnaissance program rely primarily on fixed-wing aircraft; a few suggested that impacts of helicopter use can be minimized.

Final Plan: Same as revised draft.

Issue:
Minerals management--how minerals and mining within the unit will be managed.

Draft Plan: Minerals discussed in the "Affected Environment"; mining discussed in the "Land Protection Plan."

Public Comments: 11
Commenters say that the text and map on geology do not recognize mineral values and potential, the map is inaccurate, the schist belt should be identified, the plan does not recognize valid existing mining rights, and the description of placer mining is biased and wrong.

Revised Draft: Revises map and text in the "Affected Environment"; adds new section in the plan entitled "Minerals Management"; modifies discussion of mining in the "Land Protection Plan."

Public Comments: 9
Most commenters request reasonable regulations and point out that mining comprises a small percentage of the park; a few note the importance of continuing the Alaska mineral resource assessment program; some say the tone of the mining discussion is better but could be improved.

Final Plan: Similar to revised draft; discussion meets most of the above concerns.

Cultural Resource Management

Issue:
Identification and significance of archeological and historic sites--eligibility for National Register of Historic Places, appropriate treatment.

Draft Plan: Continues ongoing selective sampling of cultural resources; protects two cabins eligible for nomination to National Register of Historic Places; protects archeological sites; more sites may be eligible pending completion of study.

Public Comments: 6
A variety of comments include support for sampling and more research (especially cooperative), oppose excavating and collecting at archeological sites.

Revised Draft: Makes minor modifications, adds list of research needs.

Public Comments: 4
Some commenters support the program, some question NPS commitment to cultural resource research, and some want mining history to be interpreted.

Final Plan: Minor adjustments.

Issue:
Intangible cultural resources--potential loss of customs and traditions; oral history, native place names, names on maps, spiritual places.

Draft Plan: Recommends continuation and expansion of oral history program; collection of native place names, but leaving unnamed the features not already named on USGS maps.

Public Comments: 6
Most commenters support oral history and place names proposal, some do not.

Revised Draft: Makes minor adjustments and provides clarification.

Public Comments: 2
Commenters support proposal.

Final Plan: Same as revised draft.

Issue:
Present-day culture--recognition and protection of the culture and history of individuals residing in and around the unit when it was established.

Draft Plan: Addresses present-day culture in several sections of the plan, but not in one place.

Public Comments: 3
Commenters object to research focused on the past and want living cultures recognized and protected as directed by ANILCA.

Revised Draft: Adds section on present-day culture.

Public Comments: 0

Final Plan: Same as revised draft.

Access and Circulation Management

Issue:
Access--appropriate means, traditional means, valid existing rights.

Draft Plan: Provides discussion throughout plan in "Affected Environment," "Subsistence Use Management," "Visitor Use Management," "Land Protection Plan," and "Appendix I: Summary of Access Provisions."

Public Comments: 18
Some commenters agree with concept of no roads or trails, and state difficult access is a "plus" for protecting wilderness. Other commenters say the plan limits access, all efforts should make the park more usable, and trails are vital. Some commenters say the Ambler right-of-way provision was not adequately addressed. Miscellaneous concerns include organization of the access discussion, ANCSA 17(b) easements, and RS 2477 rights-of-way.

Revised Draft: Adds new section to address some general access concerns and cross-reference access discussions; includes Ambler right-of-way, RS 2477s, ANCSA 17(b) easements, and title XI provisions.

Public Comments: 63
Most commenters object to printing the maps provided by the state that identify possible RS 2477 rights-of-way. Many think the new section was an improvement and brought up specific clarifications or concerns, such as trespass on private property or access to inholdings.

Final Plan: Possible RS 2477 rights-of-way maps are still included with clarification that they are only possible and are based on information provided by the state of Alaska; other clarifications.

Subsistence Use Management

Issue:
Overall management of subsistence.

Draft Plan: Subsistence uses in the park and preserve will be managed as directed by title VIII of ANILCA and the implementing NPS and state of Alaska subsistence regulations and policies. Existing regulations and policies are reported, and the general management plan does not make any changes to these requirements.

Public Comments: 27
Most of the commenters say the Park Service must ensure opportunities for subsistence consistent with ANILCA and protect subsistence as well as wilderness. Many commenters say only qualified subsistence users should be allowed in the park. Many say the plan does not show a commitment to subsistence or the proposal is adverse to subsistence. Other comments include questions about subsistence qualifications and subsistence cabins.

Revised Draft: Clarifies NPS commitment to subsistence and incorporates direct language from ANILCA. No specific aspects of the proposal have been shown to have adverse effects on subsistence. Reorganizes section to identify items that will be addressed in a future subsistence management plan based on the approved subsistence hunting program and recommendations of the subsistence resource commission and in cooperation with all affected parties.

Public Comments: 31
Almost all commenters support continued subsistence use of the park but want it closely monitored and restricted as necessary to protect wilderness values; a few reiterate the importance of subsistence; the subsistence resource commission objects to NPS preparation of a subsistence management plan.

Final Plan: Same as revised draft, with expanded discussion of future subsistence management plan.

Issue:
Subsistence Resource Commission--identify responsibilities.

Draft Plan: The park's subsistence resource commission has been established and will devise and recommend a subsistence hunting program to the secretary of the interior with public involvement.

Public Comments: 12
Most commenters request that the recommendations of the subsistence resource commission should be a part of the general management plan, ask how the commission's program will be incorporated into the plan, or want to know the role of the commission. A few comments support the work of the commission, identify cooperative data collection needs, and request a Kobuk River resident on the commission.

Revised Draft: States that if any accepted recommendations of the subsistence resource commission conflict with the general management plan or other plans, these documents will be promptly amended or revised with appropriate public comment to be consistent with the accepted recommendations. Appointment of a Kobuk River resident depends on the appointing bodies established in title VIII.

Public Comments: 5
Commenters agree with revisions and request a few more clarifications such as public involvement.

Final Plan: Includes all of ANILCA section 808.

Issue:
Resident zones--changing populations resulting in subsistence use by those with no established, historical pattern of use; increasing pressures on resources.

Draft Plan: Identifies existing laws and regulations that allow residents of designated communities to collectively continue subsistence use in the park; discusses concerns, monitoring, and consultation with the subsistence resource commission.

Public Comments: 10
Some commenters want the zones extended to include Wiseman or other family members. Some disagree entirely with existing regulations and want the subsistence resource commission to work it out. Some want to eliminate loopholes that allow outsiders.

Revised Plan: Zones are directed by ANILCA, and the Park Service will continue to monitor existing regulations and consult with the subsistence resource commission on changes necessary to ensure consistency with the law and improve effectiveness.

Public Comments: 31
Most commenters encourage the Park Service to monitor resident zone communities for continued eligibility; some are still concerned about adverse impacts of zones.

Final Plan: Same as revised draft.

Issue:
Traditional use areas--need to identify as directed by ANILCA.

Draft Plan: States that based on the recommendations of the commission, the Park Service will make proposal.

Public Comments: 11
Commenters object to the identification of areas because people used all areas of the park for subsistence, there are not enough data, or the subsistence resource commission should identify any areas.

Revised Draft: Basic constraints are directed by ANILCA, but emphasizes the role of the subsistence resource commission in identifying areas.

Public Comments: 33
Most commenters support limiting subsistence uses to where they have traditionally occurred as required by ANILCA. Some still strongly oppose any such limit.

Final Plan: Reaffirms that the subsistence resource commission may address this issue, and the National Park Service will work with residents further following the commission's recommendations.

Issue:
Access--changing technologies; pressure to expand ORV use (which is not currently allowed on park lands).

Draft Plan: Discusses ANILCA section 811, traditional means, new technologies, aircraft.

Public Comments: 60
Most commenters recognize the dilemma of subsistence needs and resource protection, and cautiously support subsistence use of ORVs where absolutely necessary, under careful compromise, only near Anaktuvuk Pass, or very limited use that would prevent damage. Some commenters say ORVs are traditional, necessary, and should be allowed without restrictions for subsistence purposes. Many commenters say ORVs should be prohibited for subsistence use because they are inappropriate, not traditional, and cause too much damage. A few commenters support allowing aircraft for subsistence use, a few oppose it.

Revised Draft: Expands discussion of ORVs. ORVs for subsistence are not currently allowed, but new information is being collected and considered for consistency with ANILCA; the routine subsistence use of aircraft was not the congressional intent of ANILCA.

Public Comments: 79
Most commenters oppose the use of ORVs in the park by anyone for any purpose. Others still maintain they are traditional, cause little damage, and are unnecessarily restricted. A few commenters support allowing subsistence use of aircraft, a few oppose it.

Final Plan: Minor clarification, but similar to revised draft.

Issue:
Commercial trapping--not permitted in the park; need to distinguish from trapping conducted as a part of the subsistence way of life as directed by ANILCA.

Draft Plan: The Park Service will study and ask the subsistence resource commission to make recommendations.

Public Comments: 8
Commenters question how the Park Service will differentiate commercial from trapping for subsistence uses, say such differentiation is vague or inappropriate.

Revised Draft: Expands discussion with language from the legislative history of ANILCA and existing regulations.

Public Comments: 3
Commenters still disagree with the distinction as presented.

Final Plan: Minor adjustments.

Issue:
Other uses--conflicts between subsistence users and sport hunting, trapping, fishing, recreation, research, and mining.

Draft Plan: Conflicts will be monitored, and recreational users will be given information about subsistence to minimize conflicts.

Public Comments: 10
Most commenters say subsistence should be a priority over other uses; restrict floaters, sport hunters, and helicopters. Some want priorities spelled out, or suggest that conflicts may be more of a perception than an actual occurrence.

Revised Draft: Spells out priorities established by ANILCA; other conflicts will be resolved on a case-by-case basis.

Public Comments: 1
Still suggest that conflicts may be more of a perception than actual occurrence.

Final Plan: Same as revised draft.

Recreational Visitor Use Management

Issue:
Overall management of recreational visitor use--protecting resource values from concentrations of recreational visitors and increasing use while protecting visitors' freedom of choice.

Draft Plan: The Park Service will, as necessary, prescribe visitor behavior or use limitations to ensure that outstanding wilderness opportunities and natural resources remain undiminished. To establish visitor use limits (or carrying capacity), there is a need to clearly define the values to be protected. The draft plan outlines initial standards for evaluating management needs and making decisions and invites the public to comment. Field data and research will be needed to determine if such standards are being met or need adjustment. Some standards are currently exceeded and require management actions, such as limiting group size and length of stay. Additional measures may be developed as needed with public involvement.

Public Comments: 20
Most commenters say the standards are a good start, support sensible limits now while information is being collected, and support some regulations now to protect park values. Many are against restrictions, say the plan has a bias against human visitors, and say opportunities should be promoted rather than restricted. A few disagree with specific standards or express concern with how they would be applied.

Revised Draft: The overall approach in the draft plan is still considered to be the best balance of protecting resource values and visitor opportunities. Some adjustments have been made to specific standards, and their application is more fully explained. The most notable clarification is that this general management plan identifies the NPS intent to establish some limitations, but implementing them will require changes in existing regulations through the rule-making process with further public notice and opportunity for participation.

Public Comments: 18
Comments are similar to those on the draft; however, this time more are against any restrictions.

Final Plan: Minor changes for clarification.

Issue:
Recreational access--appropriateness of various methods of access, consistency with ANILCA, protection of park resource values.

Draft Plan: Limits group size to 12 for river running or winter use and to six for backpacking. Because of concern about the impact of hoofed pack animals on fragile permafrost soils and vegetation, the draft plan limits the number to eight animals per group and calls for close monitoring.

At this time the draft plan proposes no limits on the operation of fixed-wing aircraft within the park, although minimum altitudes and routes will be recommended. Landings may be made anywhere if vegetation and terrain are not altered.

The draft plan proposes that the recreational use of motorboats (limited to 10 horsepower) will only be allowed on Walker Lake, the only area where

such use has regularly occurred. The use of motorboats for subsistence and access to private land will continue to be guaranteed. Snowmachines will not be allowed for general recreational use, but will be allowed for local use on designated routes, subsistence use, and access for private property owners. ORVs are prohibited by current laws and regulations.

Public Comments:

Group Size Limits: 44 comments
Most commenters agree with group size limits, but many request that fewer people per group be allowed to travel in the park. Many express that 12 individuals in one river rafting party is excessive. Others express concern that the limit of six people per backpacking group is too restrictive, because it would exclude families of more than six members, and make it difficult for the guides to run a profitable operation. Some commenters suggest that no restrictions on group size would be the best policy.

Aircraft: 39 comments
Many commenters question the compatibility of existing aircraft users with the purposes of the park; these included suggestions for a total ban of aircraft use in the park, as well as restrictions on overnight aircraft camping and use of landing sites. Some express that the Park Service should not get involved in regulating air traffic in the park.

Pack Animals: 39 comments
Most commenters would like to see more restrictive regulations on the use of pack animals in the park, and many encourage closing the park to the use of all pack animals. A few expressed interest in using horses in the park.

Snowmachines, Motorized Vehicles, ORVs: 129 comments
Most commenters ask for more restrictive regulations concerning the recreational use of any motorized vehicles within the park. Some are concerned that traditional lifestyles will be adversely affected by the proposed regulations pertaining to the use of snowmachines, motorized vehicles, and ORVs.

Revised Draft: Reorganizes section into a fuller discussion of appropriate means of access, existing laws and regulations, and proposed limitations to certain means to protect park resource values.

Group Size: Increases group size for backpacking to seven and reduces the group size for river running and winter trips to 10 people per party.

Pack Animals: Reduces the number of hoofed pack animals to three per party; commercial use will not be authorized.

Aircraft: As in the draft, proposes no limitations at this time; the Park Service will monitor and if problems are found, the issue will be reevaluated with the public.

Motorboats: Guarantees motorboats for subsistence purposes, access to private property within the unit, and travel to and from villages and homesites, but prohibits them for recreational use.

Snowmachines: Drops the designated routes. Guarantees snowmachines for subsistence purposes, access to private property within the unit, and travel to and from villages and homesites, but prohibits them for recreational use.

ORVs: Expands discussion of existing laws and regulations that prohibit their use in Gates of the Arctic.

Public Comments:

Group Size: 47 comments
Most commenters support group sizes of 10 and 6; many say there is no justification for a limit, and a few offer other numbers.

Pack Animals: 13 comments
Commenters are split between advocating no limits on pack animals and no or very limited pack animal use; one wants more consistency between NPS units.

Aircraft: 6 comments
Most commenters still suggest that there should be aircraft restrictions now; one advocates more landing strip maintenance.

Snowmachines, Motorboats, ORVs: 47 comments
Most commenters do not want to see recreational use of snowmachines, motorboats, or ORVs in Gates of the Arctic. Some still object to any restrictions.

Final Plan:

Group Size: Set at 7 for backpacking and 10 for river running or winter use, with a provision for up to 2 or 3 extra people per group for large immediate families, handicapped groups, or other wilderness recreation groups by written permission in advance under specified conditions.

Pack Animals: Keep at 3 animals per party, plus require an individual permit obtained in advance so impacts can be monitored, then adjustments can be made.

Aircraft: Same as revised draft, with minor clarifications.

Snowmachines, Motorboats, ORVs: Same as revised draft, with minor clarifications. The National Park Service intends to pursue legislation that would discontinue the recreational use of snowmachines and motorboats in certain areas of the unit.

Issue:
Opportunities for handicapped visitors--provide in a manner consistent with the wilderness.

Draft Plan: Identifies opportunities for handicapped visitors, and requires one commercial operator to provide services for handicapped visitors.

Public Comments: 8
Some state that no special provisions are needed within the park, some feel that the handicapped are being unjustly ignored, and others support the proposal.

Revised Draft: Makes minor modification that at least one commercial operator will be sought, not required, to provide these services.

Public Comments: 2
Commenters support proposal, suggest additional incentives.

Final Plan: Similar to revised draft, with some additional provisions.

Issue:
Recreational visitor registration--would be a useful management tool for collecting and giving information and distributing use, but infringes on visitors' freedom of choice.

Draft Plan: Encourages all visitors to register voluntarily for the purpose of giving and receiving information.

Public Comments: 17
Most commenters acknowledge the need for a permit system. Some would like permits to be required now; others maintain that it will be a necessary aspect of the park as use increases. Many request that permits be issued to those going to Arrigetch Peaks and other high use areas.

Revised Draft: Mandatory registration or parkwide permits are not considered necessary at this time; encourages voluntary registration as in the draft.

Public Comments: 4
Some still support mandatory registration now; some support no check-in.

Final Plan: Same as revised draft.

Issue:
Camping--impacts of concentrated and increasing recreational visitor use.

Draft Plan: Limits maximum length of stay to three nights per campsite, spaces campsites at least ½ mile apart, and places further limits on a zone around Arrigetch Peaks, an area of high use with visible impacts. This zone limits use to three groups at any one time through permits issued on a first-come, first-served basis, and limits length of stay to 10 days.

Public Comments:

Length of Stay: 9 comments
Most of the commenters state that the three-night limit is too restrictive because of the unpredictability of wilderness travel.

Arrigetch Zone: 35 comments
Most commenters support proposal. Some are directly against proposal, contending it is unworkable for guides. Other commenters request more detailed proposals regarding how access to the Arrigetch area will be apportioned between guides and private citizens. Suggestions were made that a lottery and/or a reservation system might be ways of determining who will get permits for the high use areas.

Revised Draft: Modifies the three-night per site camping limit so that with advance written permission from the superintendent, longer periods for mountain climbing, research, or other wilderness activities could be obtained if impacts can be fully mitigated. Modifies Arrigetch zone so that within the limits, some permits would be available in advance by lottery, and some would be available on a first-come, first-served basis.

Public Comments:

Length of Stay: 2 comments
Do not limit.

Arrigetch Zone: 31 comments
Most commenters support the first draft plan policy of first-come, first-served basis.

Final Plan:

Length of Stay: Same as revised draft.

Arrigetch Zone: A registration system will be devised to maintain a fair balance between all users.

Issue:
Special events--appropriateness of events such as dog team race, impact on solitude, consistency with wilderness purpose.

Draft Plan: Special events are allowed in national parks only under certain conditions. Currently, the only requested special event has been a dog team race, which has been held in 1984 and 1985. While the event has much local interest, it has been a source of concern and public criticism. The plan proposes that such events may be allowed under strict conditions.

Public Comments: 48
Most commenters request that the race be discontinued. Many suggest that a course for the race could be located outside the park. Some feel that the race could continue with restricted or no use of snowmachines and planes. A few state that the race is being unjustly criticized and overly regulated by the National Park Service.

Revised Draft: After careful reexamination of this very complex issue, it has been determined that there are positive values of this event that are consistent with the purposes of the unit. Plan allows event in the future only under special conditions that protect resource values.

Public Comments: 5
Similar to first draft comments.

Final Plan: Similar to revised draft, with minor adjustments.

Issue:
Commercial services--what type and how many are consistent, necessary, and appropriate to the wilderness purpose.

Draft Plan: Proposes to limit guides and air-taxi operators to the 1984 level through concession permits.

Public Comments: 63
Comments on commercial services are split fairly evenly on five aspects. Many are concerned that as recreational visitor use limits are implemented, that guided parties be limited first or equitably with private parties. Many are opposed to any limits on guides and air-taxi operators, and say private enterprise should be expanded and encouraged. Many commenters support the idea of concession permits for the present level of services. Many others say the plan should go further and limit the number of commercial trips or parties that enter the park. Many commenters note that guiding is compatible with park purposes, and people need guides.

Revised Draft: Makes modifications to recognize the appropriateness and contribution of wilderness guides, and identifies that future commercial-private allocations will reflect the present 50-50 ratio. The concession permit system will be implemented as in the draft, with minor clarifications.

Public Comments: 11
Similar to first draft comments, with concerns about allocation between private and commercial users and interpretation of ANILCA section 1307 for guided hunting and fishing.

Final Plan: Clarifies that the present ratio of commercial-private trips is 50:50, but levels will be monitored to maintain a reasonable balance; ANILCA section 1307 is clear that hunting and fishing guides are excluded from grandfather rights or local preference.

Issue:
Commercial base camps--consistency with wilderness purposes and impacts of concentrated use.

Draft Plan: Considers the existing permanent commercial base camp inconsistent with wilderness purposes and the Wilderness Act and proposes discontinuation.

Public Comments: 57
Almost all commenters say the camp should be removed; a few say it should remain.

Revised Draft: Same as the draft. Allows the current operator to continue within the park on the same basis as all other licensed guides, from bases outside the park.

Public Comments: 80
Commenters are divided. Many support allowing the camp to remain because removal is arbitrary, unjustified, and the camp provides a compatible and rewarding experience. Many support the proposal to remove the camp, and all commercial operators should provide services from bases outside the unit.

Final Plan: Same as revised draft, with commitment to work with operator during transition to operation from outside the unit.

Issues:
Information--appropriate scope to protect resources and visitors without interfering with challenge, discovery, and self-reliance.

Interpretation--what themes or messages should be conveyed to visitors.

Methods and media--effectiveness, appropriateness, and enjoyment by visitors.

Publicity--adverse effects by promoting and concentrating recreational visitor use.

Draft Plan: Recommends that information be provided in a single, concise package that will be handed out during the voluntary visitor registration, in response to mail requests, or through commercial operators. Recommends that information be provided about regulations, minimum-impact techniques, boundaries, private property, subsistence use, protection of cultural resources, travel and camping in bear country, weather, crossing streams, general terrain conditions, and general access. Proposes that visitors be encouraged to rely on themselves to find out further information. The principal theme of interpretation will be wilderness values, and some exhibits, displays, and individual programs may be developed for field stations and other public facilities. To avoid adverse effects of publicity, the National Park Service will provide publishers with information about resources, issues, and park values, and make recommendations to minimize the adverse effects of publicity.

Public Comments: 44
Most commenters support the approach to information and publicity. Some say there should not be any park involvement in interpretation, displays, or audiovisual programs. A few express concerns with any information or publicity; a few request a bibliography with the information package.

Revised Draft: Same as the draft, with minor clarifications.

Public Comments: 2
Commenters support discussion, but no audiovisual programs.

Final Plan: Same as revised draft.

Operations

Issue:
Staff size--number and type of employees needed to accomplish plan.

Draft Plan: To accomplish the actions this plan proposes, the staff is expected to increase to 17 permanent and 25 seasonal employees.

Public Comments: 12
Most commenters say that the proposed increase in staff and facilities is unnecessary, a few strongly support the increase.

Revised Draft: Clarifies that increase is an estimate of the most needed at the end of 10 years, and adds more specifics about their duties.

Public Comments: 2
Too much staff.

Final Plan: Same as revised draft.

Issue:
Staff location--location of headquarters, field stations in or around park.

Draft Plan: Keeps the headquarters in Fairbanks most of the year, but moves the superintendent and chief of field operations to Bettles from June through August, where they will be closer to the park and more available to residents of the region. Proposes that field stations operate year-round at Bettles, Coldfoot, and Anaktuvuk Pass, and seasonal field camps operate in the Noatak River, Walker Lake, and Kobuk River areas.

Public Comments: 12
Each of these commenters object to one or two of these locations, but do not agree on eliminating any particular location.

Revised Draft: No change.

Public Comments: 0

Final Plan: Same as revised draft.

Issue:
Presence and visibility--effectively protect resources without interfering with solitude and visitors' freedom of movement.

Draft Plan: Recommends that NPS personnel strive to maintain a low profile in the park. Places focus of backcountry operations on monitoring and protecting resources, monitoring use, and responding to emergencies. To accomplish backcountry operations, field staff will generally gain access to the area by the same methods allowed for visitors, subsistence users, and private landholders. Aircraft will generally be flown on routes and at altitudes that minimize disruption to visitors and wildlife.

Public Comments: 13
Many commenters support rangers wearing uniforms, a few suggest no uniforms for a low profile. A few other commenters suggest other methods and equipment.

Revised Draft: No change.

Public Comments: 1
Make rangers very visible.

Final Plan: Same as revised draft.

Issue:
Local hire--use of ANILCA provision to hire local people.

Draft Plan: Cites authority, problems, future recruitment.

Public Comments: 10
Commenters request that local hire be more broadly incorporated into plan.

Revised Draft: Expands discussion.

Public Comments: 3
Commenters support local hire, want more commitment.

Final Plan: Expands discussion of past problems and future commitment.

Issue:
Radio Communications--effective and unobtrusive.

Draft Plan: Recommends that a communications system, including radios, repeaters, and base stations, be developed to support field staff.

Public Comments: 79
Almost all commenters oppose permanent radio-repeaters in the park for various reasons, including lack of need, visual impact, and availability now or in the future of less obtrusive technology. A few say good communications are essential for rangers.

Revised Draft: Proposes development of a system based on an evaluation of essential communication needs, and examination of available technology to determine the best systems to meet essential needs and minimize impacts on scenic or wilderness qualities.

Public Comments: 32
All commenters oppose permanent repeaters.

Final Plan: No permanent radio facilities will be employed.

Issue:
Search and rescue--provide adequate assistance without interfering with visitors' self-reliance.

Draft Plan: Proposes that the National Park Service maintain basic search and rescue capabilities, and if made aware of any emergency, respond with available resources. However, because Gates of the Arctic is a large, remote, rugged, and inherently hazardous area, visitors will be expected to be responsible for themselves.

Public Comments: 4
Commenters urge that visitors should be responsible for their own safety; some say they should bear any rescue costs, and some say there should be a no-rescue zone.

Revised Draft: No change.

Public Comments: 0

Final Plan: Same as revised draft.

General Development

Issue:
Operational and visitor facilities--need, size, location, lease, or construct.

Draft Plan: No structures (other than possibly a cabin), roads, or trails are to be built within the park and preserve by the Park Service. Facilities for field stations are to be constructed outside the unit at Bettles, Coldfoot, and Anaktuvuk Pass. Each field station is to include staff housing, offices, a visitor area, a garage, and a hangar. Headquarters facilities will continue to be leased in Fairbanks.

Public Comment: 76
Almost all commenters state that permanent NPS facilities should be located outside the unit.

Revised Draft: Same as draft except no cabins will be constructed by the Park Service.

Public Comments: 75
Same as for first draft.

Final Plan: Same as revised draft.

Issue:
Cabins, caches, and camps--need and compatibility of individual, subsistence, visitor, commercial, or government use.

Draft Plan: Use of approximately 16 existing cabins is subject to valid claims within applicable regulations. To date, two of these cabins are currently used under valid permits for subsistence. Another two existing cabins will be maintained and used for intermittent NPS operations, and one new cabin may be leased or constructed for NPS operations along the Noatak River. Remaining cabins will be left unmaintained by the Park Service for overnight public use on a first-come, first-served basis. There will be no permanent camps or caches in Gates of the Arctic.

Public Comments:

General cabins, camps, and caches: 37
Many commenters prefer maintaining and using existing cabins, but oppose any new cabins. Many other commenters suggest removal of unused cabins.

Noatak Cabin: 42
All commenters oppose constructing an NPS cabin along the Noatak; many suggest temporary structures.

Revised Draft: Clarifies use of public cabins and states they will be unmaintained. No cabin will be constructed on the Noatak; the National Park Service will seek to acquire an existing cabin on private land or use a portable shelter.

Public Comments: 8
In addition to comments similar to those on the first draft, commenters raised concerns about the prohibition of temporary facilities, cabin policy, and trespass on private property.

Final Plan: Remaining cabins that are not subject to valid claims will be left standing for emergency and intermittent authorized winter use. No new public use or administrative cabin will be constructed. The plan finds that new temporary facilities in the preserve for the purpose of taking fish and wildlife would constitute a significant expansion, as there has only been one such facility since before 1980.

Issue:
Estimated costs--general development and annual operation.

Draft Plan: To implement the proposal, plan estimates that construction costs for general development would total $5,578,000, and annual operating costs would be $1,369,000.

Public Comments: 28
Most commenters urge that more money be available for park management and land acquisition. Many say the proposal is too expensive.

Revised Draft: No change, but costs may be less because of construction in cooperation with other agencies.

Public Comments: 2
Disclose cost of planning.

Final Plan: More comprehensive "Implementation" section.

Alternatives Considered and Environmental Consequences

Issue:
Alternatives--develop feasible options, including status quo, and evaluate.

Draft Plan: Describes four alternatives, including the proposal, that were developed. Alternative A contains the minimum actions necessary to comply with existing laws and policies. Most existing uses would be assumed to be acceptable and would not be limited. Under alternative B, known areas of high and concentrated use would be monitored. The Park Service would respond to identified problems with specific actions intended to eliminate or mitigate the impacts, including hardening adversely affected areas to contain further damage. Alternative C is the plan, which proposes to maintain the wild and undeveloped character of the area by managing some recreational visitor uses now and initiating a specific research and monitoring program. Under alternative D, the Park Service would emphasize the anticipation and prevention of problems by collecting comprehensive baseline data on park resources and use and by intensive management of all park uses.

None of the alternatives proposed would have major adverse impacts, and in some cases would benefit and enhance park values. The process of selecting an alternative involved careful weighing of many factors, including ideas and concerns of the public, effectiveness, and cost. Alternative C was identified as the alternative that best balances these factors and protects the high public value and integrity of Gates of the Arctic National Park and Preserve.

Public Comments: 55
Most commenters favor alternative C, the proposal, because it will maintain the wilderness character and is sensitive to all needs. Many prefer alternative A because it is the least restrictive, least costly, and because they feel NPS operations will destroy wilderness. Some prefer aspects of alternative B, particularly site hardening of highly used areas and the no-landing zone near the Dalton Highway. A few support alternative D.

Revised Draft: Alternative C is still the selected alternative, with the modifications discussed in this section.

Public Comments: 3
Similar to comments on first draft.

Final Plan: Similar to revised draft.

Land Protection Plan

Issue:
Small tracts and native allotments--compatibility or threats from timber cutting, mechanized access, development of cabins or commercial lodges.

Draft Plan: There are 72 small tracts and native allotments totaling 6,499 acres. While most existing uses are compatible with park purposes, particularly subsistence uses and wilderness-related activities, significant changes would diminish the wild and undeveloped character of the area and other resources. Incompatible uses include timber cutting, road access, and new or increased commercial use. The minimum interest necessary to protect park purposes is fee acquisition of 50 small tracts and native allotments, primarily on an exchange, donation, or willing-seller basis. For 22 native allotments within or contiguous with native corporation lands, cooperative agreements will be sought for compatible land management. (Numbers and acres have been corrected to reflect current information.)

Public Comments: 81
Most commenters encourage the acquisition of all inholdings. Many very strongly oppose acquisition of small tracts and native allotments, question consistency with ANILCA, and fear condemnation. These commenters further state that present uses of small tracts are compatible and other options should be considered, such as conservation easements.

Revised Draft: Completely revises this section, identifying the minimum interest necessary as acquisition of a subsistence easement or conservation easement on small tracts and native allotments. General guidelines for acquiring these less-than-fee interests have been developed, listing compatible and incompatible uses for discussion with individual landowners.

Public Comments: 42
Most commenters support the revision and note great improvement. A few think the compatible use list is too restrictive, some too liberal. Some say the acquisition of easements on native allotments is not workable. Some still support fee acquisition, some oppose any acquisition. Concerns about trespass on private lands have been raised.

Final Plan: Similar to revised draft, with adjustments.

Issue:
Mining claims--threats to water quality, fish, vegetation, wild and undeveloped character.

Draft Plan: Validity of some 250 mining claims will be examined, and, if warranted, contested. Valid claims among some 213 undisturbed claims will be acquired. Valid claims among some 34 previously disturbed claims will be managed through existing regulations and plans of operation to minimize adverse effects.

Public Comments: 7
Many commenters say mining is compatible and claims should not be acquired. Some support acquisition of valid claims.

Revised Draft: Same as draft, with clarification of statutory obligations under the Mining in the Parks Act.

Public Comments: 6
Same as comments on first draft.

Final Plan: Minor adjustments.

Issue:
Native corporation lands--compatibility or threats from mining, oil and gas development, ATV use, commercial development, access.

Draft Plan: Several large tracts of native corporation lands have been examined for compatibility or threats from existing and future use, including oil and gas development, ATV roads, commercial development, and access. The land protection plan proposes to seek cooperative agreements for compatible land management of 164,019 acres of Arctic Slope Regional Corporation and Anaktuvuk Pass Village Corporation lands. The National Park Service will consider exchanges offered by landowners in this area if mutual benefits can be demonstrated and there is full involvement and consent of residents. Exchange is proposed for 91,624 acres of Doyon, Limited lands and 31,322 acres of Arctic Slope Regional Corporation subsurface rights. Relinquishment will be sought for 25 14(h)(1) sites claimed by NANA, on which cultural resources and spiritual values will continue to be protected, and adjacent park values will be protected (numbers adjusted to reflect current information).

Public Comments: 3
Miscellaneous comments include that NANA will seek cooperative agreements for 14(h)(1) sites, and may relinquish them.

Revised Draft: Makes modifications to reflect cooperative agreements for 14(h)(1) sites.

Public Comments: 1
Doyon is willing to exchange three Glacier River townships, but not North Fork township.

Final Plan: Acknowledges Doyon's comments.

Issue:
State lands--resolution of status, compatibility or threats from mining or development of submerged lands, RS 2477 rights-of-way.

Draft Plan: Upon resolution of navigability, development and mining on state-submerged lands could adversely affect park resources. The state will be requested to protect park values associated with riverbeds, waters, or adjacent lands.

Public Comments: 3
Commenters express concern for management intent regarding RS 2477 rights-of-way, want more information on navigable waters.

Revised Draft: Expands discussion.

Public Comments: 2
Do not preclude mining or gravel extraction on beds of navigable waters.

Final Plan: Same as revised draft.

Issue:
Adjacent lands--Compatibility or threats from transportation corridors, mineral developments, land disposals, residential and commercial developments, and oil and gas developments.

Draft Plan: Proposes boundary adjustment that would add 23,000 acres along the Nigu River. Proposes another boundary adjustment to protect the Reed River watershed (80,000 acres), which drains into the Kobuk River in the preserve. Identifies administrative sites totaling 12 acres in Bettles, Anaktuvuk Pass, and Coldfoot for acquisition. Recommends state classification and zoning for compatible uses for the adjacent Schwatka Mountains, Killik and Itkillik rivers, and Kobuk, Alatna, John, and North Fork rivers. Recommends cooperative planning for the trans-Alaska pipeline corridor and the Ambler mining district.

Public Comments: 28
Many commenters discuss the Reed River acquisition, and most of these say this area was deliberately left out by Congress to allow mineral development, and commenters oppose acquisition. A few support and a few oppose the Nigu addition. Some express interest in more Dalton Highway area planning, and many say the Park Service should not try to manage or acquire adjacent lands.

Revised Draft: Drops the proposed Reed River acquisition; issue may be addressed in the future if opportunities change. Nigu River proposal remains unchanged. Clarifies cooperative planning.

Public Comments: 9
Similar to comments on first draft.

Final Plan: Similar to revised draft, clarifies NPS concerns.

Issue:
Exchange--Park land or other federal land for nonfederal interests within the boundary.

Draft Plan: Discusses as an acquisition method, but identifies no park lands as eligible.

Public Comments: 67
Most commenters say that park lands should not be exchanged, and that the Park Service should work with the Bureau of Land Management to identify federal lands outside of parks for trading.

Revised Draft: Provisions for exchange are authorized by ANILCA. Expands discussion of exchange as a method of acquisition to reflect appropriate consultation and public involvement.

Public Comments: 44
Most commenters are still concerned about trading away wilderness or park lands; some suggest adjusting the boundary to delete private land; some miscellaneous concerns.

Final Plan: Adds discussion in "Compliance Considerations" section of the land protection plan.

Wilderness Suitability Review

Issue:
Wilderness suitability--or nonsuitability of land within the unit that is not designated as wilderness for such designation, as directed by ANILCA.

Draft Plan: States that of 1,209,302 acres of nonwilderness land, 1,009,638 acres are suitable for wilderness designation, 9,641 acres are suitable pending resolution of ownership, and 190,023 acres are not suitable for wilderness designation (acreage corrected to represent current information).

Public Comments: 94
Most commenters request that the Park Service take definitive steps to identify all areas eligible for wilderness designation. Some commenters feel that too much land is being considered for wilderness designation, especially the area known as "the boot" in the southwest corner of the park because of the right-of-way provision in the area.

Revised Draft: Clarifies criteria, no change in suitability. Future recommendations will fully consider the right-of-way provision to the Ambler mining district.

Public Comments: 12
Commenters are split between not wanting to see anymore wilderness designation and supporting the areas determined suitable. A few want criteria refined.

Final Plan: Similar to revised draft.

Other Public Comments

Issue:
Purpose of the area

Draft Plan: Cites sections 101(b) and 201(4)(a) of ANILCA.

Public Comments: 7
Some commenters say that subsistence is a purpose of the area and that other purposes of ANILCA should be included.

Revised Draft: Expands "Introduction" to include all of ANILCA sections 101(a), 101(b), 101(c), and 201(4)(a).

Public Comments: 3
Some support excerpts included, some disagree.

Final Plan: Same as revised draft.

Issue:
Extend the comment period

Draft Plan: Specifies that the original comment period is 90 days.

Public Comments: 49
All of these commenters request more time for public comments, and many request hearings outside Alaska. A few want the plan delayed until the subsistence resource commission has an approved plan.

Revised Draft: Extends the comment period on the draft for an additional 60 days. This revised draft will also be available for inspection for 60 days.

Public Comments: 2
Same as for first draft.

Final Plan: No change.

Issue:
Process of GMP

Draft Plan: Developed in consultation and coordination with numerous agencies, organizations, and individuals (see earlier discussion).

Public Comments: 19
Many commenters are impressed with the plan, its quality, and its clarity. Many others say it is difficult to understand, biased, meetings were inadequate, and the National Park Service doesn't listen. A few commenters say the plan needs an environmental impact statement. Some request more meetings or input before the plan is finalized.

Revised Draft: The "Revised Draft GMP" will be available for public review for 60 days.

Public Comments: 51
Most commenters request the title of the document be changed to "Conservation and Management Plan." Some praise the public process and response to comments, some do not believe communication has been effective, and some stress the importance of continuing communication beyond the general management plan. Some commenters do not think the ANILCA section 810 ("Subsistence Evaluation") is adequate (especially for the land protection plan).

Final Plan: Expands discussion of implementation, emphasizes continuing communication, clarifies compliance for the land protection plan; the plan satisfies ANILCA section 1301 without changing the title of the document.

Issue:
Local people

Draft Plan: Assesses impacts on local people, and finds no significant impacts.

Public Comments: 16
Commenters say the plan has dire consequences for local people, and that it is insensitive to local needs and valid rights.

Revised Draft: Makes numerous changes throughout to clarify proposals and recognize local needs, rights, and contributions. Revises discussions on present-day culture, access, commercial operators, staff and local hire, mining, and small tracts and native allotments within the boundary.

Public Comments: 2
Similar to first draft.

Final Plan: Similar to revised draft.

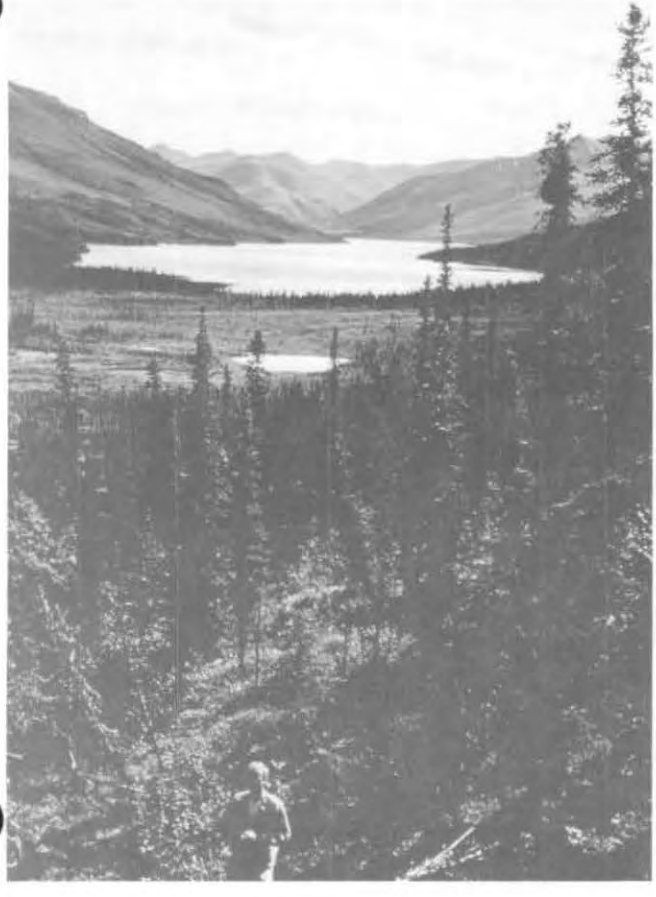
Issue:
Technical comments/corrections

Public Comments: 33
A variety of very specific comments or corrections are pointed out by commenters, such as fire protection concerns, questions about existing regulations, or the spelling of plant names.

Revised Draft: Makes corrections and addresses specific concerns.

Public Comments: 9
Additional corrections.

Final Plan: Makes corrections.



MAINTAIN THE WILD AND UNDEVELOPED CHARACTER OF THE AREA

REGIONAL SETTING

Gates of the Arctic National Park and Preserve is part of a vast region north of the Arctic Circle that has a scattered but growing population, diverse and changing economic bases, limited yet changing access, and a wide variety of landowners and political subdivisions.

Landownership and Political Subdivisions

The Alaska Native Claims Settlement Act (ANCSA) and ANILCA have defined much of the landownership of the region. The region contains two other national park system units, Noatak National Preserve and Kobuk Valley National Park, both west of Gates of the Arctic. The Bureau of Land Management manages the Alaska National Petroleum Reserve to the northwest and the trans-Alaska pipeline utility corridor to the east. The U.S. Fish and Wildlife Service manages four national wildlife refuges in the region: Selawik, Arctic, Kanuti, and Yukon Flats. State-selected lands border most of the southern boundary, and the northern boundary borders both state and native corporation lands.

The boundaries of three native regional corporations meet in Gates of the Arctic: Arctic Slope Regional Corporation, NANA Regional Corporation, and Doyon, Limited. The North Slope Borough's southern boundary crosses the northern third of the unit along the 68th parallel.

Regional Access and Land Use

Access and land use, both present and future, are closely linked. Most of the region is isolated from year-round surface access, and most land uses tend to be seasonal, but cyclic and recurring, such as subsistence use, mineral and oil and gas exploration, sport hunting and fishing, and recreation. The way adjacent land uses may affect the park and preserve are discussed in more detail later in the land protection plan.

The primary access to the region is by air. Regularly scheduled flights are available from Fairbanks to Allakaket, Bettles, and Anaktuvuk Pass, and from Kotzebue to Ambler, Shungnak, and Kobuk. Aircraft may be chartered from Fairbanks, Bettles, Kotzebue, and Ambler.

The Dalton Highway is a new major source of access into the region. It was built as a service road for the trans-Alaska pipeline. In 1976 the right-of-way began to be maintained by the state of Alaska, and it was first opened to the public from the Yukon River crossing to the North Slope Borough boundary in 1981. In 1982 the Bureau of Land Management granted a concession for the truckstop at Coldfoot. While traffic on the road is largely industrial, a significant amount of light-vehicle use, presumably recreational, has developed. Table 1 lists the preliminary state counts of use in the summer months. Tables 2 and 3 indicate recreational use and forecasts. While differences indicate a need for more data, recreational use is occurring and growing.

Table 1: Dalton Highway Traffic, 1981-1983

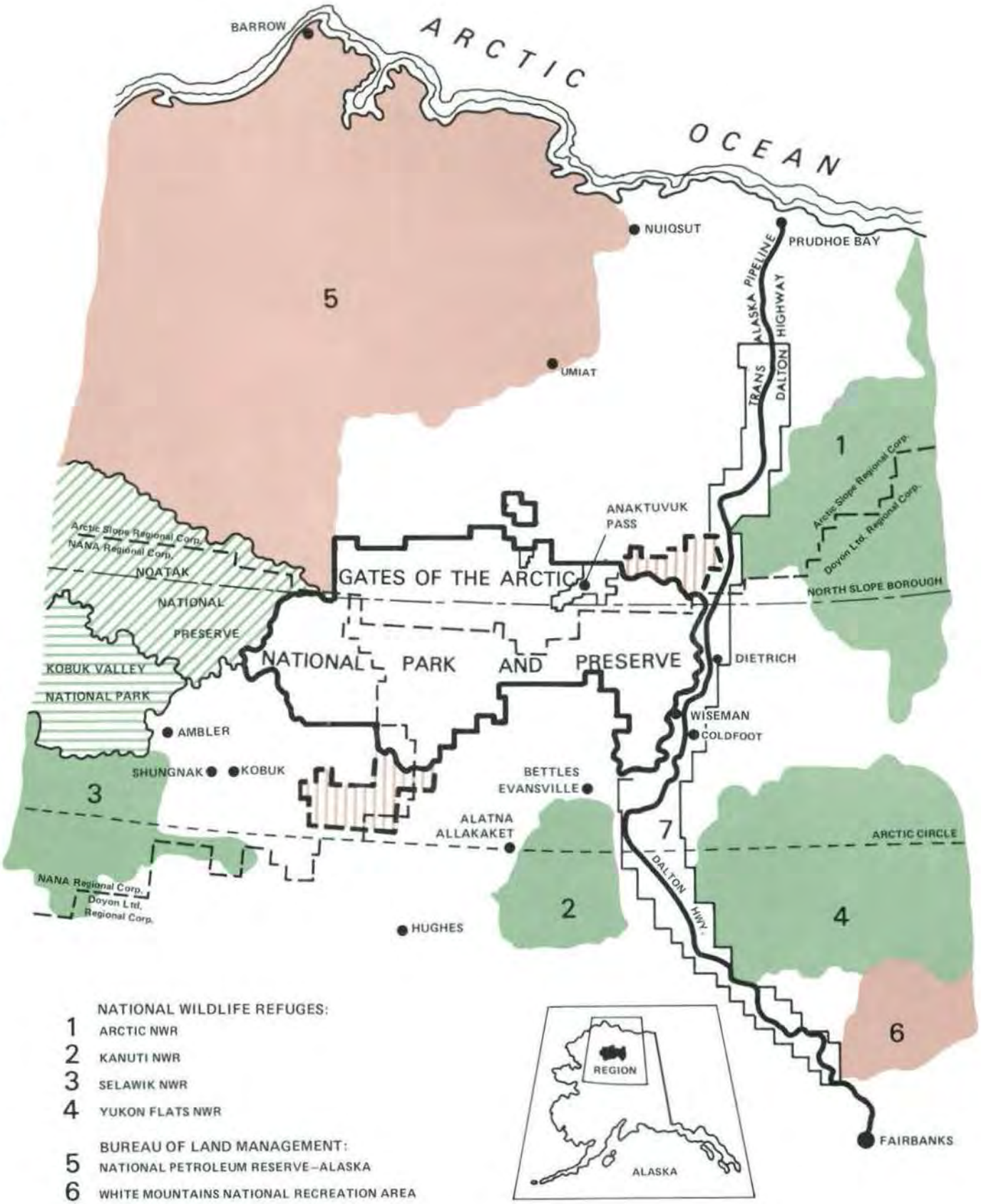
	Average Daily Traffic (ADT, no. of vehicles)			Percent Trucks			ADT, Vehicles Other Than Trucks (no. of vehicles)		
	1981	1982	1983	1981	1982	1983	1981	1982	1983
June	112	174	81	76	76	83	27	42	14
July	122	151	100	78	78	78	27	33	22
Aug.	139	137	104	75	75	77	35	34	24
Sept.	159	150	98	70	70	83	48	45	17

Source: Alaska Department of Transportation and Public Facilities (counted at Dietrich).

Table 2: Dalton Highway Tourist Traffic Forecast
(ADT, May 1 through September 30)

Scenario	1982	1985	1990	1995	2000	2005
Low	20	23	28	33	38	44
Medium	20	27	34	43	55	71
High	20	30	49	79	92	106

Source: Alaska Department of Transportation and Public Facilities, Interior Alaska Transportation Study, Vol. 3: Transportation Demand Forecasts, 1984.



REGION

GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE

UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

ON MICROFILM

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Table 3: Dalton Highway Recreational Use, 1983

Recreational Vehicles	Time Period
27	7 days in June
87	10 days in July
40	7 days in September

Source: Observations of NPS ranger stationed on Dalton Highway, summer 1983.

The Dalton Highway may spur new development and further recreational access. The road is a factor in the residential growth of the Wiseman-Nolan-Coldfoot area. The current BLM management plan for the corridor emphasizes its national utility purpose and focuses development into nodes. The state of Alaska has requested that the corridor withdrawal be amended to allow state selection. Future development pressures may include mining claims, homesites, recreation, and new communities. The growth and development of the corridor will continue to increase recreational use and access.

Bettles is connected to Dalton Highway by a winter road. There is some local interest in making the 40-mile route an all-season road, but the Alaska Department of Transportation and Public Facilities has no plans for this in the foreseeable future. Some local communities oppose the development of any east-west corridor in this area. If a road is developed, Bettles and the surrounding area may be significantly changed by growth and increased tourism.

The Ambler mining district contains rich deposits of copper, gold, silver, lead, zinc, and other minerals. Several major mining companies hold claims. Its development is at least 7-10 years away, depending on market conditions and access. Alternate access routes to the mining district are being studied. Three routes would travel west from the district and terminate at Cape Krusenstern, Cape Darby, and Cape Nome, and one route would travel east, crossing the Kobuk River within Gates of the Arctic National Park and Preserve and connecting to Dalton Highway (provision for a right-of-way for this route was reserved by ANILCA section 201(4)(b)). Methods of access could be road or rail. Development of both the mining district and the access route may have a significant influence in the region.

Other mining claims along the southern boundary are relatively small. Oil and gas exploration are taking place north of the Brooks Range, but no production is occurring. If reserves are developed, it is anticipated that

any transmission pipeline would be developed eastward to feed into the utility corridor.

Communities

The vast and rugged Brooks Range region has approximately 1,600 inhabitants, most of whom live in scattered, small communities. The regional economy may be characterized as a mixture of subsistence, wage employment, and other forms of income. Rural residents rely extensively on subsistence activities to meet dietary and cultural needs. The mountains divide the region into four culturally distinct areas with different histories, lifestyles, and political boundaries. These areas are the upper Koyukuk River drainage, the Kobuk River valley, the northern side of the Brooks Range, and the Dalton Highway vicinity. The regional population is shown in table 4. Subsistence activities are further discussed under "Subsistence Use."

The upper Koyukuk River area includes Bettles/Evansville, Alatna, Allakaket, and Hughes. The native inhabitants are largely Koyukon Athabascan Indians. Doyon is the native regional corporation for this area. The northernmost community of Bettles/Evansville is a small regional air hub with an improved, attended airstrip, classified as a "transport" airport by the state. The population is about one-third native. A winter road 40 miles to the Dalton Highway accommodates some transport of goods and materials. The local economy relies largely on government facilities, services to visitors, and mining. Government operations include an FAA flight service station, a BLM fire-fighting facility, an NPS field office, a state airfield maintenance operation, and a state fish and wildlife protection officer. Commercial operations include a lodge, a trading post, an air-taxi operation, and guiding services. Trapping provides cash income for some residents. Hunting and fishing supplement cash incomes to varying degrees. The population has increased by two-thirds from 1970 to 1980, but growth has now leveled off. Facilities available in the community include a 5,200-foot airstrip, central electricity from a local utility, and a school. Wells and septic fields, individual and shared, are scattered throughout the community.

The other Koyukuk communities of Allakaket, Alatna, and Hughes are primarily native. These communities are not connected by any all-season roads, and are accessible only by air, snowmachine, and river. Subsistence hunting, trapping, and particularly fishing continue to be major contributors to their economy. Wage employment is largely dependent on government or native corporation services and projects, such as construction of school and community facilities, maintenance of public facilities, operation of airfields and post offices, provision of health and social services, teaching, and working for the village or regional corporation. A few go to Fairbanks and Anchorage seasonally to find employment. The population of these communities has remained fairly stable over the last several years. All of these communities have new schools (Alatna and Allakaket share a school), community electricity, and a central well. Hughes has water service to each home and septic

Table 4: Regional and State Population

Region	1970	1980	% Change 10 Years	% Native	1983	% Change 3 Years
Allakaket/Alatna	168[a]	163	- 3	97	175[d]	+ 7
Ambler	159[a]	192	+ 21	81	281[d]	+ 46
Anaktuvuk Pass	99	203	+105	94	228[d]	+ 12
Bettles/Evansville	57	94	+ 65	29	110[e]	+ 15
Coldfoot	(-)[b]	(-)[b]	--	--	23[e]	--
Hughes	85[a]	73	- 14	97	99[d]	+ 36
Kobuk	56[a]	62	+ 11	95	84[d]	+ 39
Nuiqsut	(b)	208	--	87	324[d]	+ 56
Shungnak	165	202	+ 22	89	292[d]	+ 45
Wiseman	4[c]	7[c]	+ 75	03	28[e]	+300
State						
Fairbanks City	14,771	22,645	53	--	27,103[d]	+ 20
Fairbanks North Star Borough	45,864	53,983	17	--	65,311[d]	+ 22
Anchorage	126,385	174,431	38	--	230,864[d]	+ 32
State of Alaska	302,583	401,851	33	--	NA	--

Source: Bureau of the Census, U.S. Department of Commerce, Census of Population, Number of Inhabitants, 1981.

NA = Not available.

a. University of Alaska, Arctic Environmental Information and Data Center, Alaska Department of Community and Regional Affairs, Community Profiles, 1976.

b. Not established.

c. NPS estimate, National Park Service, U.S. Department of the Interior, Final Environmental Statement, Proposed Gates of the Arctic National Park and Preserve, 1974a.

d. Alaska Department of Community and Regional Affairs, "Population Data from FY84 State Revenue Sharing Program, Regional Education Attendance Areas Map," January 1984.

e. NPS estimate, 1984.

system. Alatna and Allakaket use pit privies. Hughes has a 5,200-foot airstrip, and Allakaket has a 3,000-foot airstrip.

The Kobuk River communities of Ambler, Kobuk, and Shungnak are inhabited primarily by Kuuvanmiit Eskimos. NANA is the native regional corporation for this area. Access is by air, snowmachine, and barge from Kotzebue; there are a few short intravillage roads. Subsistence harvests of resources are an important component of the economies of these villages. Employment opportunities are similar to those of the Koyukuk communities, and as described, the primary sources of cash are government or native corporation jobs. The nearby Bornite and Arctic mining camp is currently a small exploratory operation with little influence on the economy. In Ambler some residents craft baskets from local materials for sale throughout the state, offering another but small dimension to the local economy. A jade mine offers some seasonal employment. The population of these communities has increased during the past several years. All of these communities have airstrips and new school facilities. Shungnak and Kobuk take water from the Kobuk River and use pit privies and honeybuckets. Ambler has a well and distribution system that serves individual homes and a combination of septic fields, seepage pits, and chemical toilets. Ambler and Shungnak have community electrical generation, while Kobuk is served by an aboveground transmission line from Shungnak.

The two communities north of the Brooks Range are Anaktuvuk Pass, which is inhabited largely by Nunamiut people, or inland Eskimos, and Nuiqsut, inhabited by Tareumiut people. Both communities are part of the Arctic Slope Regional Corporation and the North Slope Borough. Anaktuvuk Pass is accessible by air or snowmachine only, while Nuiqsut sometimes has winter roads from Barrow and Prudhoe Bay. The state legislature has appropriated funds to construct a year-round road between Nuiqsut and the Dalton Highway. Residents of both communities engage in subsistence--the people of Anaktuvuk harvest caribou, sheep, furbearers, and other mountain resources, and Nuiqsut people supplement these with fish and marine mammals. While direct consumption of resources is important to both communities and the main source of food, cash is also vital. Costs of living, particularly for homes and heating, are extremely high in these areas. The government is the source of most wage employment, and other than the post office, all of the government jobs are associated with the North Slope Borough. A recent ambitious construction program by the borough provided numerous seasonal jobs directly and through contract. Although this program is nearing completion, some employment for maintaining these structures and providing services continues. There are also several jobs associated with the village and regional corporations. A few people work outside their communities at Prudhoe Bay. The people of Anaktuvuk Pass derive part of their income from producing skin masks made of caribou hide and fur.

The populations of these communities are growing. The population of Anaktuvuk Pass doubled between 1970 and 1980 and has been increasing slightly ever since. Nuiqsut was reestablished in 1973, had a 1980 population of 208, and had grown more than 50 percent by 1983. Both

communities have new schools, airstrips, community wells with water distributed by truck, and community electricity. The schools are served by sewage lagoons, but most people still use honeybuckets at home.

The Dalton Highway communities of Wiseman, Nolan, and Coldfoot are primarily nonnative. Airstrips supplement the year-round road access. Wiseman and Nolan are oriented toward mining, and this income source is supplemented by trapping and guiding. Coldfoot has changed since 1980 from a pipeline construction camp to a state highway maintenance facility and 24-hour truck stop with motel, fuel, and restaurant. There are no schools or other community facilities in the highway corridor. The state highway facility and the truck stop each have their own electrical generators, wells, and septic systems. All three communities and the surrounding area have a seasonal swell in population, largely because of summer mining activities.

The population of Alaska is growing rapidly, and most communities in the region are growing at similar or faster rates. The cash economy has substantially increased over the past decade and is expected to increase in the future, but this does not necessarily mean that subsistence use will decline. Subsistence remains a strong cultural, social, and economic need and will continue to be an integral part of the fabric of these communities.

NATURAL RESOURCES

Climate

The central Brooks Range has long severe winters and relatively short cool summers. There are no weather reporting stations within the park, and the nearest reporting station at Bettles is characteristic only of the southernmost edges of the park. The entire region receives continuous sunlight during the summer for at least 30 days.

The south side of the Brooks Range below 2,500 feet is generally a subarctic climate zone. Precipitation is low, averaging 12-18 inches in the west and 8-12 inches in the east. Snow falls 8 or 9 months of the year, averaging 60-80 inches. The average maximum and minimum July temperatures are 65° to 70°F and 42° to 47°F, respectively. Average maximum and minimum January temperatures are 0° to -10°F and -20° to -30°F. Thunderstorm activity is common during June and July, and generally June through September is the wettest time of year. Prevailing winds are out of the north.

The north side of the Brooks Range has an arctic climate. The influences of the Arctic Ocean and "north slope" weather patterns are more important, especially during the summer months. Mean annual temperatures are colder than on the south side. Average maximum and minimum February temperatures are -5° to -10°F. The warmest month, July, has a 55° to 65°F maximum and 35° to 45°F minimum. Precipitation is extremely light, about 5-10 inches a year, making this essentially an

"arctic desert." Snow has been recorded in every month of the year, and the annual average is 35 to 50 inches. Prevailing winds from the east in summer and west in winter are greatly modified by local terrain.

Air Quality

While comprehensive data have not been collected in this region, the air quality of the park and preserve and surrounding area is generally considered excellent. Smoke from forest and tundra fires can degrade air quality from June to August.

Geology/Paleontology

The central Brooks Range is a remote area of rugged, glaciated east-trending ridges that rise to elevations of 4,000 to 8,000 feet or more. This range is part of the Rocky Mountain system that stretches completely across the northern part of Alaska. Gates of the Arctic National Park and Preserve spreads across three physiographic provinces: Arctic Foothills, Arctic Mountain, and Western Alaska (NPS, USDI 1974a). Two primary mountain ranges make up the central Brooks Range--the Endicott and Schwatka mountains. Several episodes of uplift, deformation, and intrusion have produced complex patterns of folding, fracturing, and overlapping thrust fault blocks. Uplift, erosion, and heavy glaciation account for the rugged mountain profiles and U-shaped valleys evident today. Metamorphic rocks, primarily quartz mica schist and chloritic schists, belt the south flank of the range. There are also a few small bodies of marble and dolomites. Granitic intrusion created the rugged Arrigetch Peaks and Mt. Igikpak areas.

Four major glaciations have been recognized within this region of the Brooks Range. The first glaciation (Anaktuvuk River) took place more than one-half million years ago. The second (Sagavanirktok River) is thought to be broadly equivalent to the Illinoian glaciation of central North America. The last two glacial periods (Itkillik and Walker Lake) are thought to correlate with the Wisconsin advance in central North America (Geological Survey, USDI 1979b). Glaciers were generated at relatively high altitudes near the crest of the range during the more extensive glaciations. Ice flowed from these sources southward through the major valley systems to terminate at and beyond the south flank of the range. Terminal glacial moraines created dams that formed large lakes along the southern foothills.

The primary metallic minerals found within the region include copper, gold, lead, and zinc. The major known deposits of minerals occur in a schist belt that generally lies south and west of the park in the Ambler mining district and may extend into the unit. The only known mineral produced in the park is gold. Placer mines operated historically in the Nolan-Hammond River areas near Wiseman, the North Fork (Glacier River), and Wild Lake. During the past five years, gold has been recovered from mining claims on Mascot Creek. A trend of gold placer

deposits extends from Wiseman southwestward across the North Fork of the Koyukuk River to Wild Lake (Bureau of Land Management, USDI n.d.). There has also been some limited gold production in the Noatak River drainage near Midas Creek.

The northern portion of the park includes parts of two provinces that are known to contain petroliferous rocks within drilling depths. An area north of the Brooks Range has been designated the Southern Foothills Potential Petroleum Province. The principal reservoir rock within this province is the upper Paleozoic Lisburne formation. There are some potentially large hydrocarbon-bearing structures north of the range front, and petroleum may also exist in Cretaceous or Devonian formations. Geochemical sampling indicates an ample source for petroleum and also a wide range of source rock richness. The current economic situation will not encourage a great deal of interest in this petroleum potential in the near future; however, eventually it may be more economically feasible to investigate further.

The Alaska mineral resource assessment program was established by ANILCA section 1010 to assess the oil, gas, and other mineral potential on all public lands in Alaska in order to expand the data base. The U.S. Geological Survey and their designated agents are conducting this assessment in Gates of the Arctic subject to regulations ensuring that such activities are carried out in an environmentally sound manner.

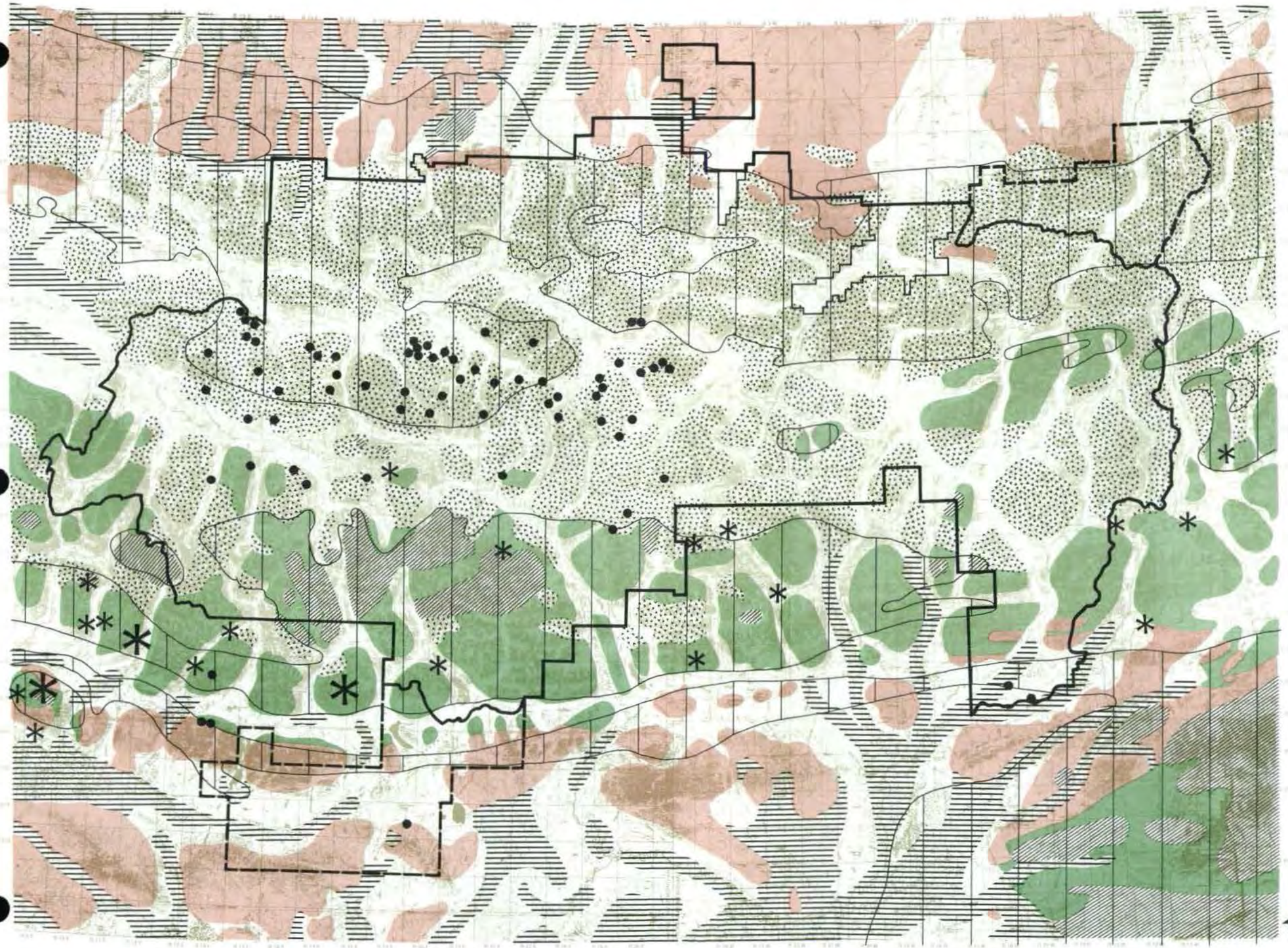
The federal lands within the park and preserve have been withdrawn from additional mineral location, entry, and patent under the United States mining laws and disposition under the mineral leasing laws. However, the unit was also established subject to valid existing rights, including existing recorded unpatented mining claims established under the U.S. mining laws (see "Minerals Management" and "Land Protection" sections of this plan). Federal lands in the unit are closed to oil and gas leasing.

The paleontological resources of Gates of the Arctic National Park and Preserve consist of small fossils of invertebrates, shells, and corals found in the metamorphosed rocks of the Brooks Range. A few plant fossils have been found in sandstones near the divide. Most of these fossils are inconspicuous and difficult to identify.

The value of these fossils is largely scientific. They have been examined and collected by scientists, particularly by members of the U.S. Geological Survey, over the past 30 years. They provide information useful in dating rocks and establishing the geological sequence related to life forms.

Soils

Soils within the park are highly variable, depending on topography, drainage, aspect, fire history, permafrost, and parent material. The classification used by the U.S. Department of Agriculture, Soil Conservation Service (1979) indicates that most of the park lies within a



GATES OF THE ARCTIC NATIONAL PRESERVE BOUNDARY

GATES OF THE ARCTIC NATIONAL PARK BOUNDARY

UNCONSOLIDATED DEPOSITS

GLACIAL – MORAINE AND DRIFT

ALLUVIAL (FLOODPLAIN)/UNDIFFERENTIATED

BEDROCK

INTRUSIVES (IGNEOUS) – CRETACEOUS GRANITIC ROCKS

PERMIAN TO CRETACEOUS (SEDIMENTARY)

Upper Cretaceous marine shale, sandstone, conglomerate, bentonite, clay, and coal north of the Brooks Range; Upper Cretaceous nonmarine shale and siltstone in the upper Kayukuk basin

Early Cretaceous graywacke sandstone, shale, siltstone, and conglomerate

Triassic and Permian sandstone, siltstone, and shale

DEVONIAN TO PERMIAN (SEDIMENTARY)

Pennsylvanian and Mississippian conglomerate, shale, limestone, dolomite, and chert

Late Devonian shale, sandstone, chert, conglomerate, limestone, dolomite, and some quartzite and schist

DEVONIAN AND OLDER (SEDIMENTARY)

Precambrian to Devonian-aged rocks; cherty limestone, dolomite, marble, shale, sandstone, phyllite, argillite, quartzite, schist; locally includes Devonian volcanics

SOURCE: Alaska Regional Profiles by Skelregg for Alaska Office of the Governor and the Joint Federal-State Land Use Planning Commission, 1975.

PALEONTOLOGY

PALEONTOLOGICAL RESOURCES

SOURCE: U.S. Geological Survey geologic maps – Patton and Miller 1973; Nelson and Greybeck 1980b.

MINERAL TERRANES AND DEPOSITS

TERRANES FAVORABLE FOR MINERAL DEPOSITS WHICH ARE GENETICALLY RELATED TO THE EMPLACEMENT OR DEPOSITION OF THE HOST ROCK UNIT

LARGE MINERAL DEPOSIT: COPPER-LEAD-ZINC-SILVER-GOLD-MOLYBDENUM

SMALL OR UNEVALUATED MINERAL DEPOSIT

SOURCE: Mineral Terranes of Alaska, Arctic Environmental Information and Data Center, University of Alaska, 1982.

Generalized

GEOLOGY, PALEONTOLOGY, AND MINERAL TERRANES AND DEPOSITS

GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE

UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

NORTH

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ON MICROFILM

zone characterized by rough mountainous land with thin, sandy soils on hilly to steep topography. The soils are often composed of poorly drained, very gravelly loam on hilly moraines and south-facing colluvial slopes. A thin peaty mat is underlain by sandy loams and occasional lenses of permafrost.

Lower elevation benches and rolling uplands are covered by a gray to brown silty loam overlaid by a peaty organic layer that varies in depth depending on the local environment. The soil surface is irregular, with many low mounds, solifluction lobes, and tussocks.

Soils in the park overlie thick continuous permafrost zones that are sometimes located within a few inches of the surface. These soils have been subjected to millions of years of gradual downslope creep by frost-shattered rock and to a constant seasonal pattern of freezing and thawing. Lower elevation sediments have combined over time with windblown silts, river and glacial deposits, and peat accumulations. The processes of frost heaving and sorting, ice lens or wedge formation, and stream erosion have worked these soils into a complex mosaic of roughly textured tundra polygons, pingos, oxbows, and terraces. Almost totally underlain by permafrost, the soils adjacent to the valley floodplains are highly susceptible to any kind of ground disturbance, since melting of the permafrost can result in subsequent soil collapse.

The northern area of the park, primarily the upper Noatak River drainage, contains poorly drained soils formed from very gravelly glaciofluvial material derived from limestone rock in the surrounding mountains. A few well-drained soils are found in very gravelly, nonacid and calcareous drift on hilly moraines. Fibrous peat soils are located in shallow depressions on terraces.

Hydrology

Permafrost, or ground that remains frozen for more than two years, lies under virtually all of the park and preserve. Atop the permafrost lies a thin layer of ground that thaws during the summer. This thin mantle, ranging from 6 inches to several feet in depth, supports plants that tend to hold the thawing soil in place, or at least slow and modify its movement. Solifluction (soil creep) is common, even on moderate slopes.

Alluvial deposits are the principal aquifers for groundwater, which is greatly restricted by permafrost. When under pressure from frost, groundwater bursts to the surface in places, forming conical hills of mud and debris called pingos. Examples of these can be seen in the upper valley of the North Fork of the Koyukuk and the upper Noatak River valley.

Tributaries of four major river systems originate in the park and preserve. To the north the Nigu, Killik, Chandler, Anaktuvuk, and Itkillik rivers drain to the Colville River. The Noatak River flows west and the Kobuk River southwest, both from the headwaters in the western

Lichens

Shooting Star

Blueberries

Boreal Forest

Ice Wedge

part of the park. The John, Alatna, and North Fork of the Koyukuk rivers drain south to the Yukon. There are only a few small glaciers in the park, so the rivers normally run clear except after rains and during spring ice breakup. There are no water runoff gauges in the park, and water quality has been sampled only minimally. The U.S. Geological Survey found the quality of water in the Kobuk and Noatak rivers within the park to be unaffected from their natural state (GS, USDI 1981 and 1983), and most of the other surface waters in the park remain almost totally unaffected except for the John River, which may show some effects from the village of Anaktuvuk Pass, and the Middle Fork and North Fork of the Koyukuk, which may show some effects from placer mining.

Giardia lamblia, an intestinal parasite carried by mammals, has been reported in water from the park. The extent of occurrence is not known at this time.

Three warm springs are located within the park and preserve. The Reed River spring is located near the headwaters of the Reed and had a measured water temperature of 122°F at the warmest pool (NPS, USDI 1982). A warm spring is also located on the lower Kugrak River and another near the Alatna River.

Vegetation

Three major vegetation associations occur in the park and preserve--the taiga (boreal forest), tundra, and shrub thicket. Alpine and moist tundra are the most extensive vegetation types. The taiga reaches its northernmost limit along the southern flanks of the Brooks Range within the park.

Alpine tundra communities occur in mountainous areas and along well-drained rocky ridges. The soils tend to be coarse, rocky, and dry. A community of low, mat-forming heather vegetation is characteristic of much of the area. Exposed outcrops of talus sustain sparse islands of cushion plants, such as moss campion and saxifrage, interspersed with lichens. The low-growth forms of these plants protect them from snow and sand abrasion in this windswept environment. Other important plants include dryas, willows, heather, and lichens, especially reindeer lichens. Grasses, sedges, and herbs are also present.

Moist tundra is found in the foothills and in pockets of moderately drained soils on hillsides and along river valleys. Cottongrass tussocks, 6-10 inches high, predominate the landscape. Tussocks form as a cottongrass clump which grows then dies back each year, accumulating dead leaves that decompose slowly in the cold temperatures. Mosses and lichens grow in the moist channels between the tussocks. Other plants include grasses, small shrubs (dwarf birch, willow, and Labrador tea), and a few herbs.

The taiga, or boreal forest, reaches its northern limit at about latitude 67°30'N along the river valleys of the south slope of the Brooks Range.

The extensive forest cover found south of the mountains thins into scattered stands of spruce mixed with hardwoods that follow the river valleys north into the mountains to an elevation of about 2,100 feet. This spruce-hardwood forest takes two forms. White spruce usually in association with scattered birch or aspen is commonly found on moderate south-facing slopes. Heaths, such as bearberry, crowberry, Labrador tea, blueberry, and cranberry are common, as are willows. Lichens and mosses cover the forest floor along with a variety of herbs. Some large, purer stands of white spruce occur along rivers such as the Kobuk; balsam poplar are found with spruce in such areas. On the north-facing slopes and on poorly drained lowlands, black spruce is predominant. These trees, which grow very slowly, are usually stunted and often scattered. It is not uncommon to find a 2-inch diameter tree that is 100 years old. The understory in these areas is spongy moss and low brush.

As the tree line is approached, the forest thins out until spruce are scattered among the shrub thicket community. In one type of shrub thicket, dwarf and resin birch, willows, and alder may be extremely dense or open and interspersed with reindeer lichens, low heath-type shrubs, or patches of alpine tundra. Alder is usually found on moister sites and birch on drier sites. Such shrub thickets typically occur up to 3,000 feet in elevation. A second type of shrub thicket association occurs along the alluvial plains and gravel bars of braided or meandering streams. Willows and alders predominate and are associated with dwarf fireweed, horsetails, prickly rose, and other herbs and shrubs. These thickets develop rapidly in floodplains that are newly exposed after breakup and spring flooding.

Interior Alaska is a lightning fire region. Wildfire plays an important role in maintaining a variety of habitats. Successional plant communities, which are beneficial for wildlife habitat and diversity, are induced by fire. Fire also plays a role in recycling nutrients. The successional stages that follow a fire vary, depending primarily on topography, seed source, severity of the burn, and moisture. Studies during the next five years will detail fire histories and model post-fire successional stages for the park and preserve.

Generally, successional stages following a fire include pioneer species such as fireweed, Labrador tea, willows, and alders, followed by quaking aspen on upland, south-facing slopes, paper birch on east- or west-facing slopes, and balsam poplars on river plains. Eventually the white or black spruce association will invade and begin to dominate. The recovery rate of the boreal forest zone is relatively slow, and spruce and reindeer lichen may require 100-150 years to recover.

The forests within the park are not considered commercially valuable. Trees are occasionally harvested under permit for house logs, and firewood is cut by local residents.

There are no known threatened or endangered plant species within the park and preserve. The candidate plants Erigeron muirii and Oxtropis glaberrima have been reported from the Anaktuvuk Pass and the Kurupa

Lake areas, respectively. Either or both may be present within the boundaries of the park (see appendix K).

Adverse effects on vegetation from human use--bare areas, tree-cutting, fire marks--can be found at high visitor use areas, such as Arrigetch Peaks, and other human use sites, such as mines and ATV routes (see Existing Effects of Human Use map in the "Access and Circulation" section). Tree-cutting for subsistence use occurs infrequently--less than one permit per year.

Wildlife

The wildlife of Gates of the Arctic National Park and Preserve is representative of northern Alaska and the Brooks Range. A variety of arctic habitat types are available, but species are relatively few, and their populations are frequently low compared to numbers in more temperate regions. Many populations, such as lynx and hare, are characterized by local, seasonal, or cyclic abundance. There are no known threatened or endangered wildlife species within the park and preserve (see appendix K).

Mammals. A total of 36 species of mammals occur within the park and preserve, ranging in size from voles and lemmings to brown bears and moose. Small mammals form the base of the arctic food chain and are a critical element in the survival of many raptors and large mammals. Singing, tundra, and red-backed voles and brown and collared lemmings convert plant resources to flesh on which a variety of predators depend. Collectively, small rodents may have a profound localized effect on tundra vegetation. Larger rodents include the arctic ground squirrel and Alaskan marmot. Arctic ground squirrels occur primarily on well-drained soils along rivers or on slopes. They are commonly observed and can often be a problem at cabins, food caches, and camps.

The furbearers common to Alaska are present, although many, such as marten and lynx, are mostly limited to the forested areas in the southern half of the park. Beaver, mink, and otter are present but are limited by a scarcity of low-gradient aquatic habitats. Red foxes, including the silver, black, and cross fox color phases, occur throughout the area, and arctic foxes occur occasionally in the northernmost parts of the park and preserve. Wolverines are also present throughout. Very little information is available on the status of furbearer populations. The most important species trapped by subsistence users within the park are marten, lynx, wolverine, fox, and wolf. No assessment of the impacts of trapping on these populations has been made.

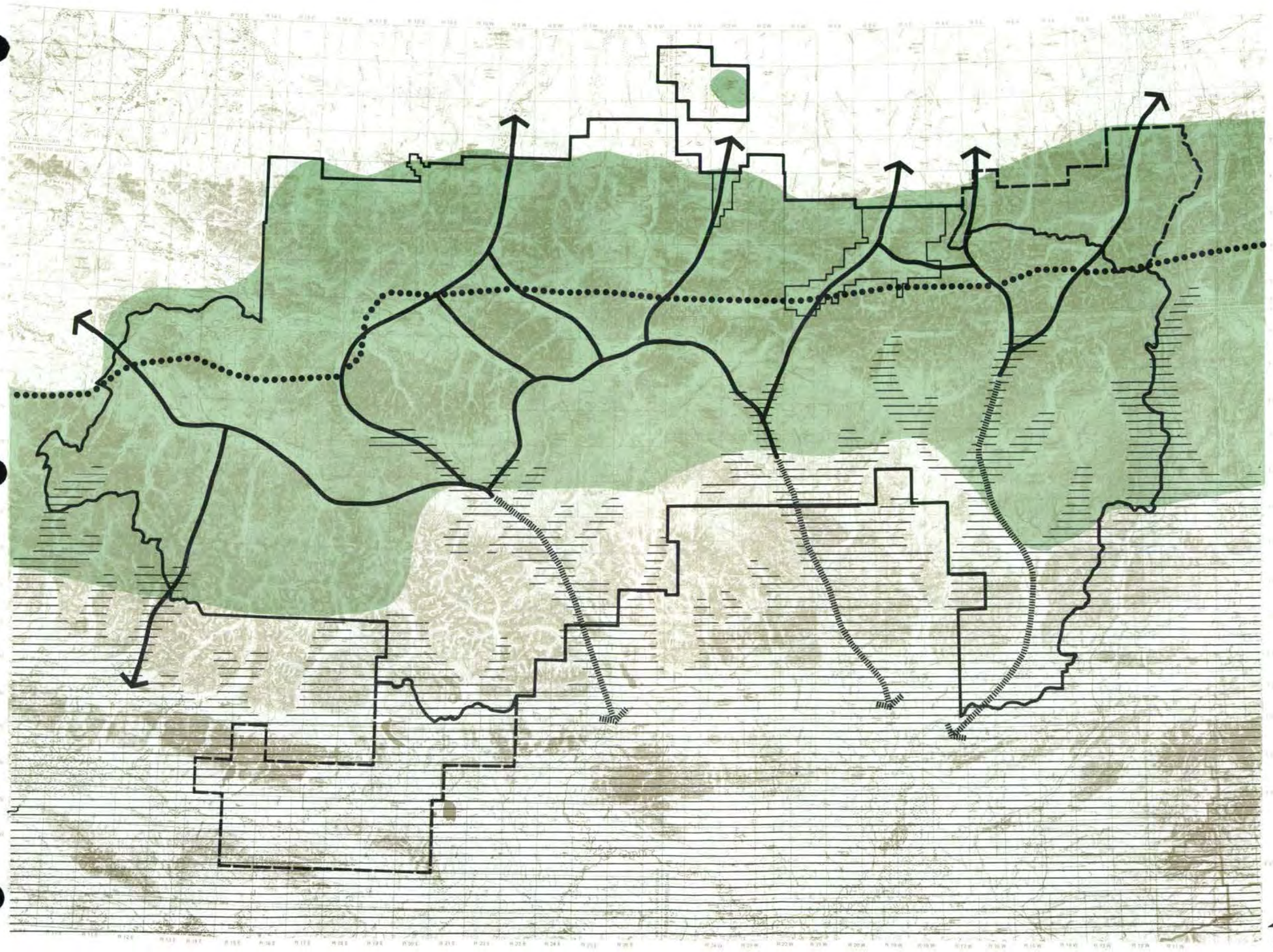
Wolves occur throughout the park and preserve, traveling in packs or family groups as they hunt. The main prey of wolves in the central Brooks Range and on the arctic slope is caribou; however, other prey species may be used extensively if caribou are not available, principally Dall sheep and small mammals in the north, and moose, snowshoe hare, and beaver in the southern forested areas. Denning usually occurs on

dry, well-drained slopes where excavation of soils is not hindered by frozen ground. Litters average five or six pups.

Wolves are a source of income for the residents of Anaktuvuk Pass and other villages, who trap and hunt them from snowmachines. There is also aerial trapping (land and shoot) of wolves occurring legally in the preserves and illegally in the park. The combined harvest is possibly affecting the status of wolf populations in the area, but good park baseline population distribution data are lacking. Management actions are currently limited to establishment and enforcement of areawide hunting and trapping regulations. Bounty payments have previously been funded by the Alaska legislature, but not in this area since the late 1960s nor statewide since the summer of 1974. Wolf control is considered an appropriate management tool by the Alaska Department of Fish and Game (ADF&G). However, no control measures have been taken recently near the park and preserve, and none are currently being considered (ADF&G 1984a).

Brown bears (barren-ground grizzlies) occur throughout the park and preserve. They are among the earth's largest predators, but in the Brooks Range they feed mostly as vegetarians, eating berries, sedges, hedysarum, and other plants. They also feed on small mammals and may spend hours excavating ground squirrel burrows, locally disrupting much of the ground surface in the pursuit of their prey. The bears will kill moose calves and caribou fawns and occasionally adults. Some scavenging also occurs. Brown bear populations concentrate along most of the major streams and rivers within the park and preserve, but especially the Chandler, North Fork, Anaktuvuk, John, Natuvuk, Killik, and Itkillik rivers in spring and fall. There is an average of one brown bear for each 100 square miles of habitat in the Arctic; however, the central Brooks Range may have higher populations than the average.

Although brown bears range through all habitat types, they are most commonly found in open alpine or tundra habitats. Black bears, which are more common in the southern forested regions, have similar food habitats and behavior. Both black and brown bears come into conflict with people in the park, and bear-human interactions are a future management concern. Currently, two to four incidents occur each year involving destruction of property by bears (no human injuries have been reported to date). Populations of both species are extremely difficult to count, making it difficult to assess the impact of sport and subsistence hunting in the park and preserve. Currently, 20 registration permits are available for subsistence harvest of brown bears in the park within state game management units 24 and 26A. The southern preserve lies within units 23 and 24, where one bear is allowed every four regulatory years; hunters need a drawing permit to hunt. The northern preserve, in unit 26A and B, is by drawing permit only, and in 26A one bear is allowed every four regulatory years. In addition, one to two bears are killed each year in defense of life and property. Firearms may be carried within Gates of the Arctic for personal protection.



GATES OF THE ARCTIC NATIONAL PRESERVE BOUNDARY

GATES OF THE ARCTIC NATIONAL PARK BOUNDARY

CARIBOU, COMMON MIGRATION ROUTE

CARIBOU, INTERMITTENT MIGRATION ROUTE

CARIBOU, GENERAL DIVIDE BETWEEN SUMMER AND WINTER RANGES

DALL SHEEP, GENERAL DISTRIBUTION

BLACK BEAR HABITAT (IN FORESTED AREA)

BROWN BEAR, MOOSE, AND WOLF HABITAT THROUGHOUT PARK AND PRESERVE

FURBEARERS, INCLUDING MARTEN, LYNX, FOX, AND WOLVERINE THROUGHOUT PARK AND PRESERVE BUT PRIMARILY IN FORESTED AREA

SOURCE: ADAPTED FROM ALASKA DEPARTMENT OF FISH AND GAME, ALASKA'S WILDLIFE AND HABITAT, VOLUMES 1 AND 2, 1978.

WILDLIFE

GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE

UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

NORTH

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ON MICROFILM

Moose, Dall sheep, and caribou are the three ungulate mammals occurring in the area. Moose are most common in the forested regions south of the Brooks Range, but their range extends up mountain valleys and into the larger northern drainages wherever trees and shrubs provide food and critical winter habitat. In summer moose frequently move into alpine habitat, although they are uncommon at the crest of the range. The most important moose concentrations are found along the Alatna, John, North Fork of the Koyukuk, Killik, and Itkillik rivers.

Moose are an important subsistence resource for villages south and west of the park and residents of Anaktuvuk Pass harvest moose occasionally. Sport hunting for moose along the Kobuk River in the preserve is becoming a more popular activity. Hunters gain access by air or boat.

Dall sheep are widespread throughout the mountainous alpine areas of the park and preserve. Rugged terrain with cliffs, steep slopes, and rocky outcrops is essential escape habitat. Mineral licks are seasonally very important, and the sheep may travel some distance to reach a lick site. An average of two licks have been identified in each sheep census unit in the area, which averaged 370 square miles per unit (NPS, USDI 1982). This is a high abundance of natural licks for Alaska. Sheep find critical winter forage on windblown ridges where the snow has been blown away, leaving the vegetation exposed. The current sheep population in the park and preserve is estimated at 12,000-14,000 animals.

Sheep were harvested by the people of Anaktuvuk Pass under a registration hunt established for the village from 1981 to 1983. In 1984 this registration hunt was expanded to include the whole park, and is available to any qualified subsistence user. The harvest quota is 50 sheep of either sex; 30-40 has been the usual harvest. Sheep have also been hunted occasionally by residents of Alatna, Allakaket, and Bettles/Evansville. Sporthunting for sheep occurs in the northeastern preserve, where two hunting guides have exclusive guide areas granted by the state.

Caribou of the western arctic herd today range over the entire region. The herd declined from a population of at least 242,000 animals in 1970 to an estimated 75,000 animals in 1976. Since that time the herd has increased in size, and in 1982 it was estimated at 171,699 animals (ADF&G 1984). In 1984 the herd size was projected to number approximately 200,000 (Davis, pers. comm. 1985a). The herd migrates through the park and preserve as it moves from wintering grounds south and west of the park to calving areas northwest of the park and to summer range north of the park. Some of the animals use summer range along the northern reaches of the park, and some winter in the southern part of the park, especially in the Kobuk River valley.

The western arctic caribou herd is most widely dispersed in midwinter, when bands are scattered throughout the forests on the south slopes of the Brooks Range and in the adjacent lowlands, and again in midsummer, when they are scattered over the arctic slope west of the Sagavanirktok River. Spring movement to summer ranges begins in March, when bands

of females travel northward up the Alatna, John, and North Fork of the Koyukuk drainages and cross the summit of the Brooks Range into the valleys of such rivers as the Killik, Chandler, and Anaktuvuk, which they follow or cross in a generally westward movement to calving grounds at the head of the Utukok and Colville. Males and some yearlings begin moving somewhat later. After calving in late May, the animals join increasingly larger groups to move to higher country on the North Slope and in the foothills of the Brooks Range. Once there they gradually disperse, using summer range from the Arctic Ocean to the summits of the Brooks Range by late July. A southward drifting of caribou begins in August, and in the park it is directed toward the Anaktuvuk Pass and Killik River areas. Migration continues through the rut in October, until the wintering grounds are reached.

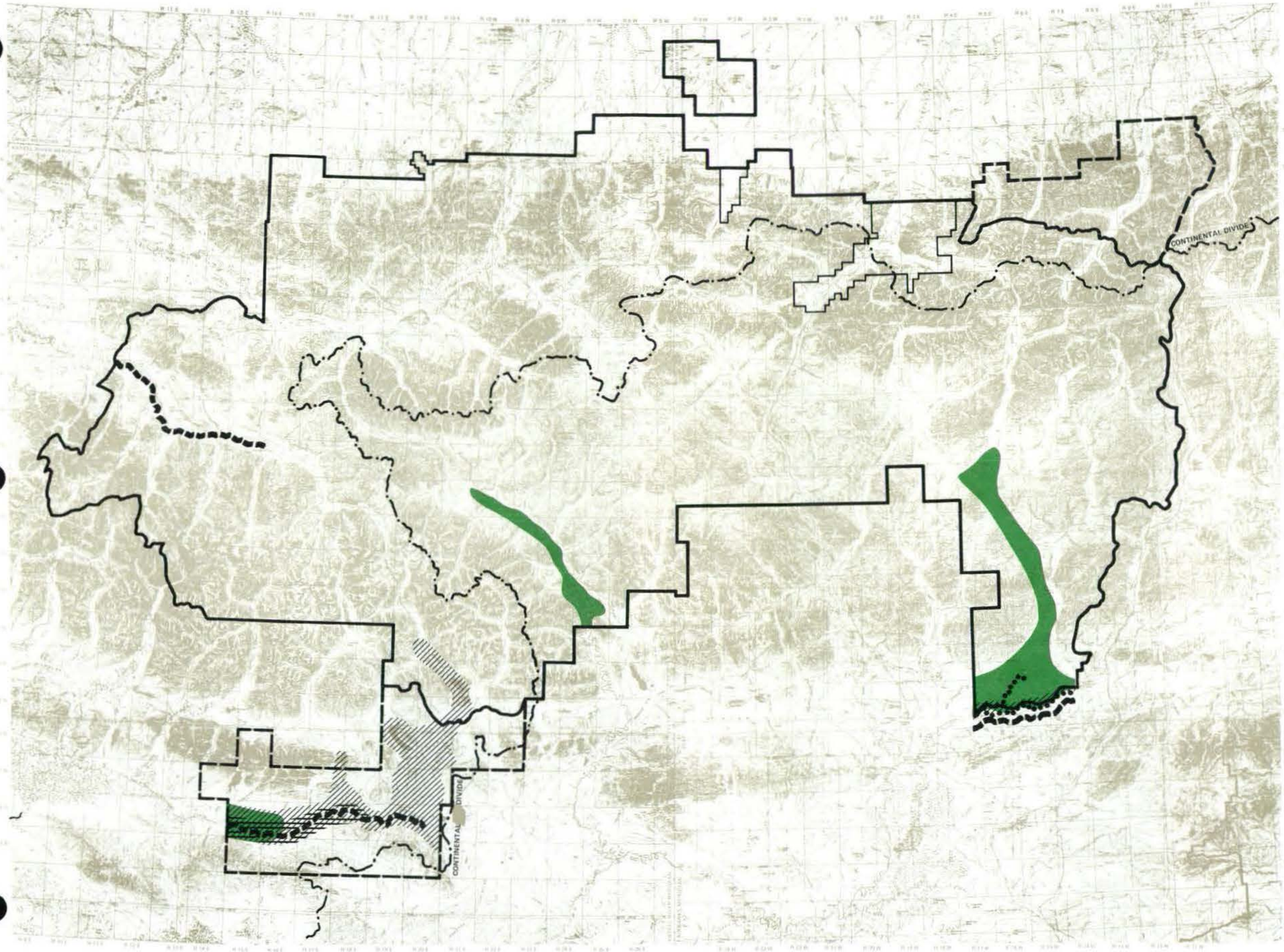
Caribou of the central arctic herd occasionally use the northeastern part of the park during winter. This herd numbered about 14,000 in 1983 and has increased at a rate of 14 percent per year. The primary year-round range of this herd is on the north slope of the Brooks Range between the Colville and Canning rivers. As this herd increases, it may expand its range to include a segment of the park. Wintering in the park may also increase (ADF&G 1985b).

Caribou have historically played an important role in human survival in arctic regions. Subsistence users still rely heavily on caribou. Since the range of the western arctic herd extends across many landownerships, management of the herd will require careful coordination between the Alaska Department of Fish and Game and the various landowners, as well as the hunters who harvest the herd.

Birds. A total of 133 species of birds have been observed in the park and preserve over the past 25-30 years (NPS, USDI 1973). Nearly half of those recorded are normally associated with aquatic habitats. A summary of bird species can be found in the Final Environmental Statement, Proposed Gates of the Arctic National Park and Preserve (NPS, USDI 1974a).

Raptors inhabiting the park include species of eagles, hawks, falcons, and owls, three jaegers, and the northern shrike. Because of their place high in the food chain, raptors are more susceptible to environmental disturbance and population fluctuations. Arctic peregrine falcons, a threatened species only recently removed from the endangered list, nest north of the park in the Colville River drainage and probably pass through portions of the park or preserve during migration. Suitable nesting habitat occurs within the area, and although no active nests have been confirmed, the possibility of nesting falcons exists. If populations continue to increase and occupy new habitats, the area may play a more important role in future nesting.

Fish. The fish populations in arctic waters, although seemingly abundant, have very low growth rates and productivity, and are therefore highly susceptible to overfishing. The most widespread species in the park and preserve is the arctic grayling, which is found in nearly



GATES OF THE ARCTIC NATIONAL PRESERVE BOUNDARY

GATES OF THE ARCTIC NATIONAL PARK BOUNDARY

KING SALMON

CHUM SALMON

BURBOT

NORTHERN PIKE

SHEEFISH

DOLLY VARDEN/ARCTIC CHAR – DEFINITELY PRESENT IN WATERS NORTH AND WEST OF THE CONTINENTAL DIVIDE, OCCASIONALLY ELSEWHERE

GRAYLING/WHITEFISH – FOUND THROUGHOUT AREA

LAKE TROUT – FOUND IN SOME LAKES THROUGHOUT AREA

SOURCE: ALASKA DEPARTMENT OF FISH AND GAME, ALASKA'S FISHERIES ATLAS, VOLUMES 1 AND 2, 1978.

FISH

GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE

UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

NORTH

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ON MICROFILM

all the permanent watercourses and those lakes that have an outlet stream. Lake trout, northern pike, arctic char, whitefish, sheefish, salmon, long-nosed sucker, burbot, nine-spined stickleback, and slimy sculpin also occur.

The Kobuk and Koyukuk rivers are the major chum salmon spawning streams. Sheefish also spawn in the Kobuk. These fish, along with the whitefish, are the most important subsistence fishes. Some lake trout and arctic char are also taken from lakes for subsistence use. Recreational fishing is primarily for arctic grayling, arctic char, sheefish, and lake trout.

National Natural Landmarks

In 1962 the secretary of the interior established the National Natural Landmarks Program as a natural areas survey to identify and encourage the preservation of geologic features and biotic communities that best illustrate the natural heritage of the United States. Two sites within Gates of the Arctic were designated national natural landmarks in April 1968--Arrigetch Peaks (37,400 acres) and Walker Lake (181,120 acres).

In addition, 16 sites have been identified as potential natural landmarks: Anaktuvuk River, Castle Mountain, Fortress Mountain, Monotis Creek, and Sagavanirktok-Itkillik (Detterman 1974); and Alatna, Nigu and Killik rivers headwaters, Anaktuvuk, Cocked Hat and Limestone mountains, Kipmuik Lake, Kurupa and Cascade lakes, Hickel Highway, Mount Igikpak and the Noatak River headwaters, North Fork Koyukuk Pingos, Redstar Mountain, Reed River Hot Springs, and Wild Lake (Bliss and Gustafson 1981).

Biosphere Reserve

The entire Noatak River drainage, of which the headwaters are in Gates of the Arctic, is internationally recognized as a biosphere reserve in the United Nation's "Man in the Biosphere" program.

CULTURAL RESOURCES

Although a number of studies have been conducted within Gates of the Arctic National Park and Preserve, the extent and character of the cultural resources within the park are not yet fully documented. The several archeological investigations undertaken within the park and preserve have produced a basic outline of prehistory, but only a small fraction of the vast area has been studied. Similarly, a systematic inventory of the historic sites within the park has only recently begun. Additionally, intangible cultural resources, notably the oral histories of past human use of park lands, are only beginning to be assembled and recorded. Nevertheless, there is enough information about the cultural resources of the park to generally guide the future management and research for these resources.

Prehistory and Resources

Archeological investigations have been conducted in the Brooks Range for nearly 40 years. Many of these investigations have focused on areas within park and preserve boundaries. To date nearly 600 archeological sites have been located within the boundaries, though less than 5 percent of the area has been investigated systematically. Nonetheless, an overall picture of the prehistory of the park and preserve is emerging. It is a picture consistent with and a part of the larger pattern of the prehistory of the Brooks Range as a whole and northern Alaska in general (see Archeological Cultural Sequence in Northern Alaska chart).

Northern Alaska is not the trackless wilderness that many people perceive it to be. Humans have continuously explored and lived in the region and used its resources for more than 12,500 years.

It has been well established (Hopkins 1967) that the great continental glaciers of the last ice age locked up vast amounts of water as ice, and consequently lowered sea levels, creating a large land mass between Alaska and Siberia, called the Bering Land Bridge or Beringia. This land mass, more than 1,000 miles wide at one point, was above sea level from 25,000 to 14,000 years ago. Even though the rising seas broke through this land mass about 14,000 years ago (Anderson 1981), the present sea levels were not reached until 4,500 years ago. It was across the Bering Land Bridge and later across the strait itself that cultural groups entered northwest Alaska. As successive waves of immigrants arrived in the Arctic, earlier immigrants moved southward across North America. Other groups stayed to explore, settle, and adapt to Alaska and the Arctic.

The earliest traces of human occupation in the central Brooks Range are still somewhat controversial. Artifacts from the Brooks Range, similar to those found in Paleo-Indian sites of temperate North America which contain the remains of extinct mammoths and bison, have led some to argue for an ancient Indian tradition over 12,000 years in age (Alexander 1973; Clark 1974). Other archeologists believe these finds to be later in time, or only about 8,000 years old. The Putu site, located just northeast of the park and estimated to be over 11,000 years old, may be an example of a Paleo-Indian site in the vicinity of the park and preserve.

This controversy aside, the first demonstrable use of the area is by people of the American Paleo-Arctic tradition, which probably has its origins in northern Asia (Anderson 1970). They were nomadic hunters and gatherers, living off the land and traveling in small groups. Unlike many later groups, these early people did not depend on sea mammal hunting for their subsistence, but hunted caribou and other land animals. Northern Alaskan examples of this tradition include the Akmak and Kobuk assemblages from the Onion Portage site on the Kobuk River that are between 7,800 and 9,600 years old (Anderson 1970, 1981), and an assemblage from the Gallagher Flint Station, just northeast of the park, that is 10,500 years old (Dixon 1971). Within the park and preserve,

ARCHEOLOGICAL CULTURAL SEQUENCE IN NORTHERN ALASKA

United States Department of the Interior
National Park Service

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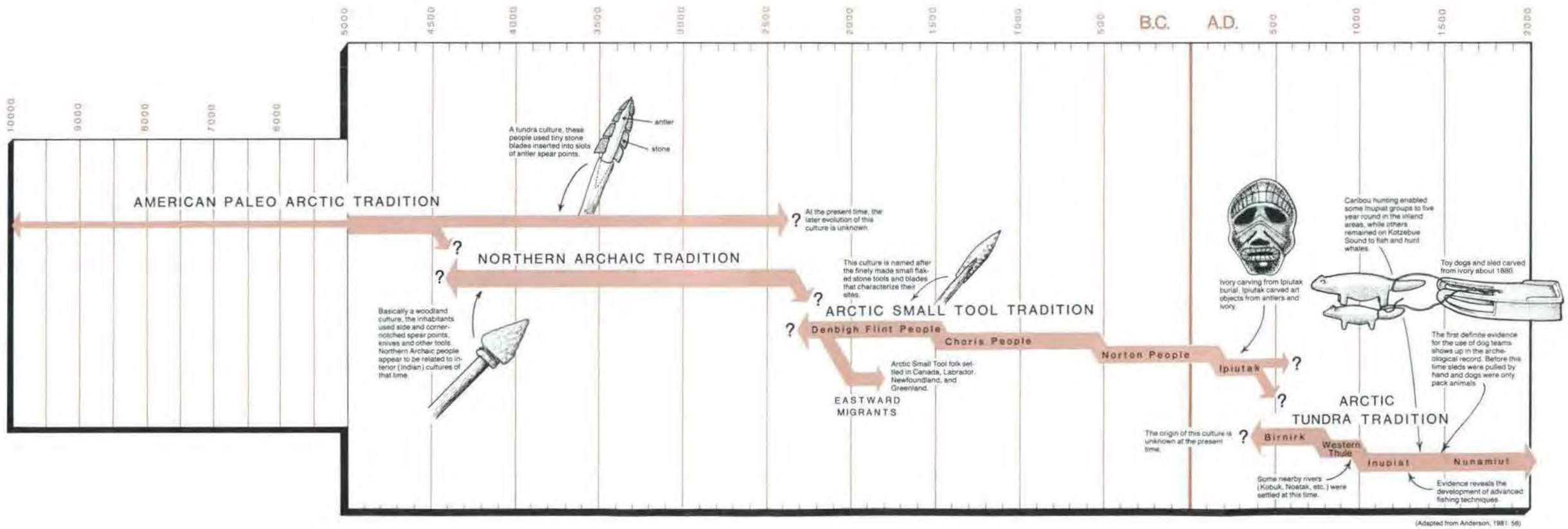


(Adapted from Anderson, 1981: 56)

ON MICROFILM

undated sites related to the American Paleo-Arctic tradition have been found in the vicinity of Itkillik Lake, the upper Kobuk River, Anaktuvuk Pass, Kurupa Lake, the general upper Noatak River area, and other areas.

The next wave of people apparently moved into northern Alaska from the forested regions to the south and east. These Northern Archaic people, arriving about 6,500 years ago, had a distinctively different material culture, and apparently depended on caribou and fishing in rivers and streams for their livelihood, staying inland and near the trees most of the time. Many archeologists believe that these people represent an Indian culture rather than an Eskimo culture.

At Onion Portage the Northern Archaic tradition persists from 6,000 to 4,200 years ago. Within the park the Tuktu-Naiyuk site (near Anaktuvuk Pass), with radiocarbon dates from 6,500 years ago is a site from this time. Elsewhere within the unit, undated sites relating to the Northern Archaic tradition have been found along the upper Kobuk and the North Fork of the Koyukuk rivers, Kurupa Lake, and others.

About 4,200 years ago, arctic-oriented cultures again appeared in northern Alaska. Either a new wave of people or new ideas came into Alaska from Asia. The Arctic Small Tool tradition, so named because of their finely made stone tools, was a dynamic one, adapting to make efficient use of a wide range of arctic resources. The earliest culture of this tradition spread as far south as Bristol Bay and as far east as Greenland, occupying interior and coastal areas. These people moved throughout the Arctic over a long time span (the tradition lasted over 1,000 years). They were adept at the use of both the coast and the interior.

The earliest of these cultures, the Denbigh Flint complex, lasted at Onion Portage from 4,200 to 3,800 years ago (Anderson 1968), while at Mosquito Lake, just northeast of the park, it has been dated at about 2,200 years ago (Kunz 1977). The subsequent Choris and Norton complexes, which have pottery in addition to stone tools, are not well known from the park area. The Ipiutak complex, the last complex of the Arctic Small Tool tradition, is represented at sites at Itkillik Lake and near Anaktuvuk Pass (Campbell 1962) and continued until about 1,500 years ago.

By about 1,000 years ago, with the development of the Western Thule culture, the beginnings of modern Eskimo culture became visible in the archeological record. Over the centuries, these people learned to fully exploit both the resources of the coast and the interior. They spread across the Arctic, eventually reaching as far east as Greenland and Labrador and as far south as the Alaska Peninsula. Local specializations developed. The people who lived along the coast of the Arctic Ocean were the Northern Maritime culture, while those who lived along the Noatak and Kobuk rivers are named the Arctic Woodland culture (Giddings 1952). The group that lived mostly in the interior part of northern Alaska--in the Brooks Range and on the North Slope--are called the Arctic Tundra culture.

Within the park area, the historic Nunamiut Eskimos were the descendants of these groups. They spent most of their time in the mountains and on the tundra. However, they maintained cultural ties, through extensive travel and trading, with the other groups in northern Alaska.

The south side of the Brooks Range and central Alaska has been inhabited by Athabaskan peoples for at least a thousand years. Several times in those centuries Athabaskan groups have moved into the Brooks Range. The Kavik archeological site (Campbell 1962; Alexander 1968) probably represents such an occupation. In historic times, such groups as the Dihai Kutchin also lived in the central Brooks Range and on its southern flanks.

Thus, the park and preserve contain archeological sites representative of every cultural tradition known in northern Alaska. This important record will be expanded as cultural resource inventory and research programs progress in the coming years, providing a more complete understanding of the complicated history of human use of the region. The second year of a five-year cultural resources selective sample program has been completed. So far this inventory has resulted in the discovery of nearly 400 archeological sites in the valleys of the Kobuk, Itkillik, and North Fork of the Koyukuk rivers.

Based on ongoing inventory and evaluation, there are at least 50 archeological sites and districts that are potentially eligible for inclusion on the National Register of Historic Places, including the Bateman site on Itkillik Lake, the Kurupa Lake district (50 sites), and the Selby Lake site.

History and Resources

In 1850 the central Brooks Range was still largely isolated from influences from European and Euro-American culture. The core mountain fastness was occupied by seminomadic bands of Nunamiut (inland Eskimo) hunters who entered the area from the upper Noatak and Colville/Itkillik drainages. Kobuk Eskimos and Koyukon and Kutchin Athabaskans made seasonal journeys into the area from the Kobuk, Koyukuk, and Chandalar River basins. Principal native activities within the area were hunting and fishing, which followed the seasonal movement of game and fish concentrations. Trading among these and coastal people along extensive travel routes allowed cultural exchange and the balancing of inland and coastal products, particularly caribou skins and seal oil. What is now Gates of the Arctic National Park and Preserve was an area of shifting cultural boundaries and periodic migrations to richer riverine and coastal environments when game concentrations shifted.

In the mid-1880s American explorers began probing the central Brooks Range. In 1885 and 1886, Lt. G.M. Stoney's and the U.S. Navy's expedition ascended the Kobuk River and explored the western and central Brooks Range, traveling near Anaktuvuk Pass (Stoney 1899). Lt. John Cantwell's Revenue Marine Service expedition explored the region via

the Kobuk and Noatak rivers at the same time. The first white men to enter the Koyukuk River drainage north of the Arctic Circle were Lt. Henry Allen and Pvt. Fred Fickett of the U.S. Army in 1885 (Allen 1887). In some cases, native people guided these explorers. Allen's expedition resulted in the beginning of prospecting on the upper Koyukuk River. Gold was discovered in paying quantities at Tramway Bar on the Middle Fork of the Koyukuk River in 1893. Trading posts and riverboats began to appear on the mid-reaches of the Koyukuk, and the stage was set for the gold rushes of 1898, which overflowed from the Klondike to the Kobuk and Koyukuk rivers. In sequence, "Old" Bettles, Coldfoot, and Wiseman became established mining and trading camps. For the next three decades miners scoured the southern flanks of the central Brooks Range with varying success. A marginal lobe of mining activity centered around the North Fork of the Koyukuk and its tributary Glacier River within the southeastern sector of what is now the national park. These placer workings were relatively unimportant compared to those on the Middle and South Forks of the Koyukuk and the upper Chandalar just to the east.

Also, around the turn of the century, prospectors reached the area of the Noatak River headwaters. Records of miners are left in place names of the region, such as Midas and Lucky Six creeks. These names were based on hope rather than results because no worthwhile gold strikes were ever made in the area.

Cabins from the various waves of miners and the trappers who followed provide the few tangible historic resources of the park area. Most have been rendered to ruins by time and weather. They are being identified and evaluated by the ongoing cultural resource survey. To date, numerous ruins have been identified as well as two standing cabins, the Yale cabin on the Glacier River built by a prospector and the Vincent Knorr cabin on Mascot Creek, a carefully constructed early miner's cabin. Both are eligible for nomination to the National Register of Historic Places. Historic studies of the Coldfoot and Wiseman mining area have been completed by Thompson (1972) and Will (1981) for the Bureau of Land Management. A historic resource study for the Gates of the Arctic National Park and Preserve will be produced at the conclusion of research currently underway. The location of historic cabins and sites may be found on the Existing Effects of Human Use map (see "Access and Circulation" section).

The flurry of mining activity triggered a series of significant U.S. Geological Survey expeditions. Beginning with the F.C. Schrader and T.G. Gerdine expedition in the Chandalar/Koyukuk region in 1899, a heroic tradition of surface transits of the central Brooks Range was established by the leading field men of the Geological Survey. Mendenhall, Maddren, Mertie, and P.S. Smith are only a few of those who, with Schrader and Gerdine, mark this period of scientific exploration. Parallelling the geographic, geologic, and mineral studies and mapping of the Geological Survey, the work of noted biologists, such as the Murie brothers, and later anthropological studies furthered the scientific tradition in this vast mountain laboratory.

A profound event in the Brooks Range was the exploratory saga of Robert Marshall. Beginning in 1929 he joined some of the old hands in extensive explorations into the North Fork country and, at the mountain portal leading to the inner recesses of the range, bestowed the name Gates of the Arctic. Based largely on information gathered from local informants, he wrote popular books about his sojourns and about the social structures in this isolated region. More than this, Marshall established a philosophy and a literature of ultimate wilderness for the central Brooks Range. His work and perceptions over an intense decade before his early death influenced the development of wilderness preservation ideals in America and the creation of Gates of the Arctic National Park and Preserve.

Throughout the historic period, native and nonnative people mingled in cultural and social dynamics shaped by isolation and interdependence. Mining, transportation, trapping, and trading patterns were, in turn, shaped by this integration of people and economic interests in the evolving communities of the region. This is a major theme of social history on the brink of the Gates wilderness.

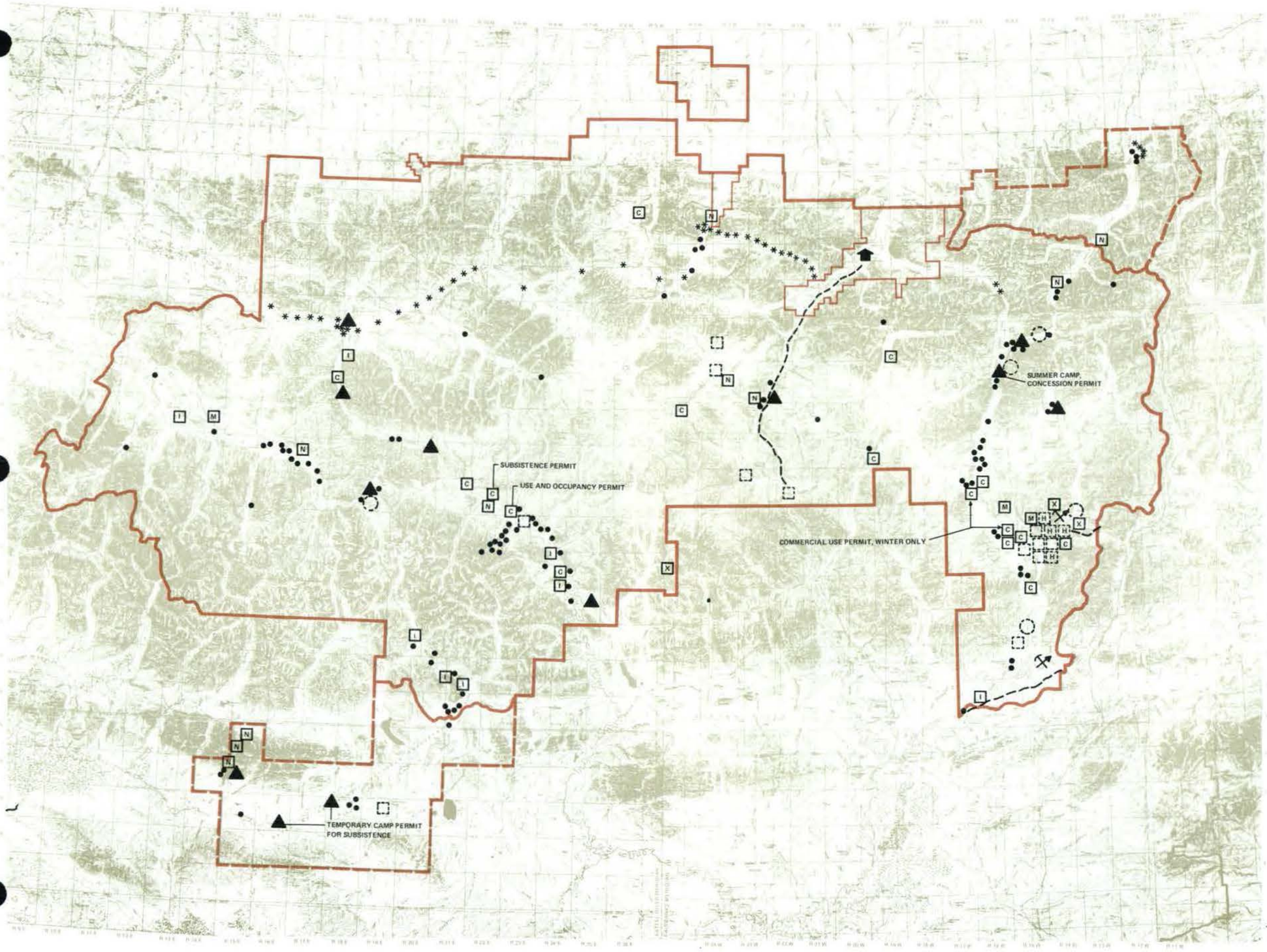
ACCESS AND CIRCULATION

Access to the park and preserve and circulation within it are generally by foot, raft, canoe, kayak, motorboat, snowmachine, and aircraft. There are no maintained roads, trails, or airstrips, although there are some traces of human activities (see Existing Effects of Human Use map). ANILCA contains numerous provisions for access to Gates of the Arctic for subsistence, recreation, private landholders within the park, a future right-of-way to the Ambler mining district, other valid existing rights, and future transportation corridors, and provides for protection of park resources and values. Because access and circulation is integral to many activities, it is largely discussed as a part of that activity, such as subsistence (also see Summer Use and Recreational Access map). Some of the broader aspects of access are discussed here and in the "Access and Circulation Management" section of the general management plan. A summary of all access provisions is contained in appendix I.

Easements

Pursuant to section 17(b) of ANCSA, easements have been reserved on native lands where necessary to provide for continued access to public lands. Generally, there are three types of 17(b) easements reserved around Gates of the Arctic:

> 25-Foot Trail - The uses allowed on a 25-foot-wide trail easement are travel by foot, dogsleds, animals, snowmobiles, two- and three-wheel vehicles, and small ATVs (less than 3,000 pounds gross vehicle weight).



GATES OF THE ARCTIC NATIONAL PRESERVE BOUNDARY

GATES OF THE ARCTIC NATIONAL PARK BOUNDARY

CAMPS AND CABINS

- CAMP LOCATION
- CABIN RUINS
- HISTORICAL CABIN RUINS
- HISTORICAL CABIN
- CABIN
- MINING CABIN
- NATIVE ALLOTMENT CABIN
- INHOLDING CABIN

COMMUNITY DEVELOPMENT

- VILLAGE OF ANAKTUVUK PASS

HUMAN USE IMPACTS

- VISITOR IMPACTS (CACHES, TRASH, FIRE RINGS, TRAILS, ETC., NOTED BY NPS PERSONNEL IN FIELD)
- ACTIVE MINE
- WINTER TRAIL IMPACTS (EROSION, VEGETATION)
- SUBSISTENCE USE IMPACTS (TRAIL FORMATION FROM ATV'S, SNOW MACHINES, ETC., NOTED BY NPS PERSONNEL IN FIELD)
- OTHER ACCESS IMPACTS (VEGETATION, DAMAGE, EROSION)

SOURCE: NPS FIELD REPORTS.

EXISTING EFFECTS OF HUMAN USE

GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE

UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

NORTH

0 5 10 15 20 MILES

0 5 10 15 20 25 30 KILOMETERS

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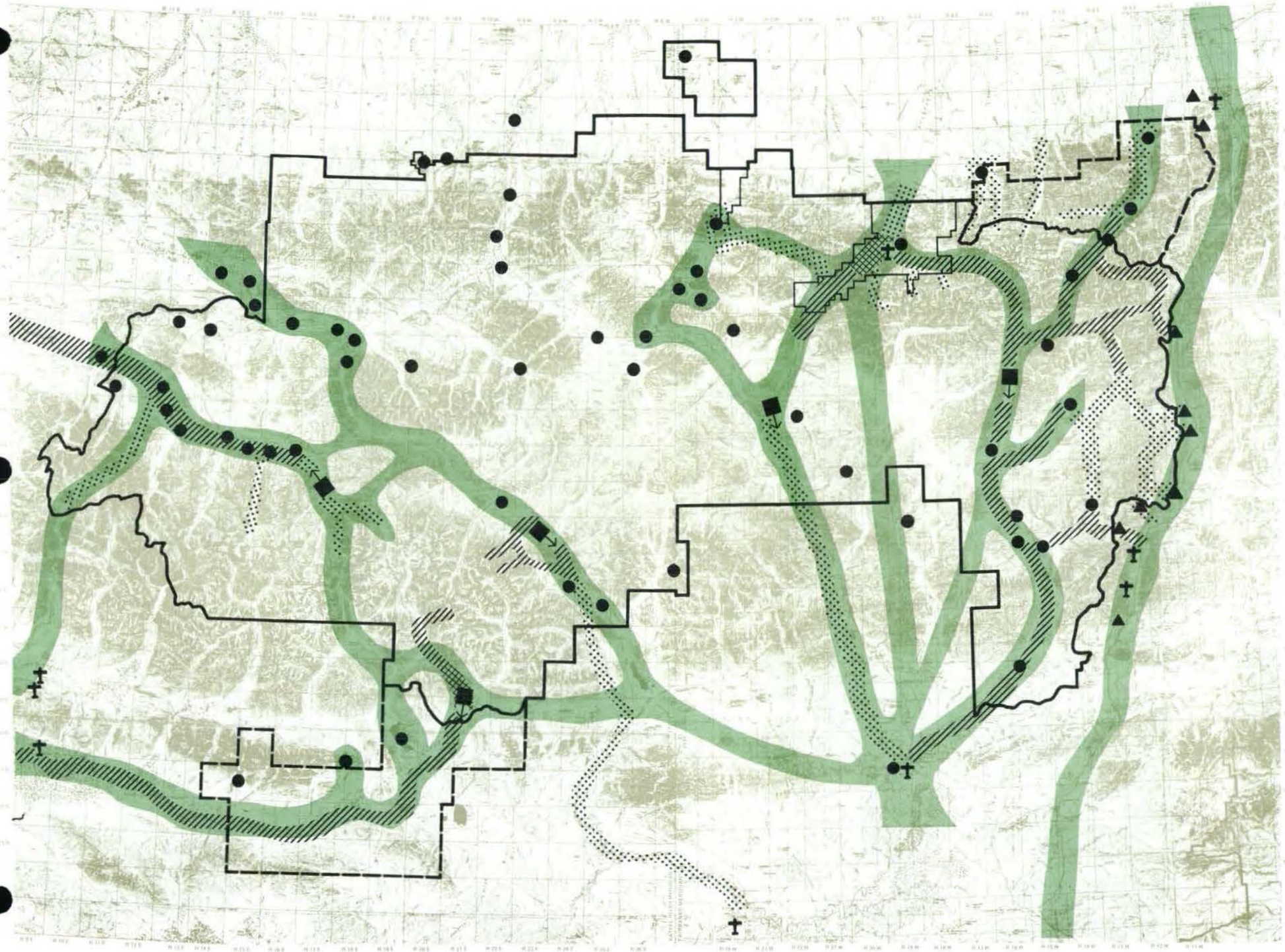

GATES OF THE ARCTIC NATIONAL PRESERVE BOUNDARY

GATES OF THE ARCTIC NATIONAL PARK BOUNDARY

HIGH (30+ GROUPS PER YEAR)

MODERATE (15–30 GROUPS PER YEAR)

LOW (5–15 GROUPS PER YEAR)

REGULARLY USED AIRCRAFT CORRIDORS

SURFACE ACCESS FROM DALTON HIGHWAY

DEVELOPED AIR STRIP

UNDEVELOPED AIR ACCESS (SUBJECT TO CONDITIONS, AIRCRAFT TYPES)

UPPERMOST RIVER TRIP ACCESS (AIR)

ELSEWHERE – LESS THAN 5 GROUPS PER YEAR
GROUP SIZE = 5.3 PEOPLE PER YEAR

SOURCES: NPS MONTHLY USE REPORTS, COMMERCIAL OPERATOR REPORTS.

SUMMER RECREATIONAL USE AND ACCESS

GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

NORTH

0 5 10 15 20 MILES
0 5 10 15 20 25 30 KILOMETERS

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50-Foot Trail - The uses allowed on a 50-foot-wide trail easement are travel by foot, dogsleds, animals, snowmobiles, two- and three-wheel vehicles, small and large ATVs, track vehicles, and four-wheel-drive vehicles.

One-Acre Site - The uses allowed for a 1-acre site easement are vehicle parking (e.g., aircraft, boats, ATVs, snowmobiles, cars, trucks), temporary camping, and loading or unloading. Temporary camping, loading, or unloading will be limited to 24 hours.

There are ANCSA 17(b) easements reserved on the lands of Arctic Slope Regional Corporation, Nunamuit Village Corporation, Doyon, Limited, and NANA Regional Corporation. Table 5 provides a list of these easements, and their general locations are shown on the Land Status map. Specific routes and locations of these easements, as well as specific terms and conditions, are identified in conveyance documents.

There may be additional 17(b) easements designated in the park and preserve in the future as additional lands are conveyed to native corporations. Maps and descriptions of 17(b) easements are also available at NPS offices in Fairbanks and Anchorage. The management of 17(b) easements is discussed in the "Access and Circulation Management" section of the general management plan.

A similar type of public recreation easement was reserved on native lands along the Killik River at the time of the Chandler Lake land exchange in August 1983. It is a linear streamside easement extending 100 feet each side of the ordinary high water mark for recreational purposes, including boating, hiking, fishing, and camping, but expressly prohibiting hunting. There are also two lakes and a segment of the river included for floatplane access. Specific terms and conditions are identified in conveyance documents.

RS 2477 Rights-of-Way

Gates of the Arctic National Park and Preserve is subject to valid existing rights, including rights-of-way established under RS 2477. The following list identifies potential rights-of-way that the state contends may be valid under RS 2477 (also see map in appendix M that illustrates list):

Trail 51A - from junction of Trail 51 Wiseman/Chandalar River Trail
Trail 56 - Ned's Lake/Smith Creek Dome Trail
Trail 56A - Nolan/Mascot Creek Trail
Trail 60 - Bettles/Quartz Creek
Trail 60A - Spur connecting Trails 60 and 56
Trail 289 - Hickel Highway
Trail 164 - Alatna/Shungnak/Kotzebue

Table 5: ANCSA 17(b) Easements

Number	Easement Type	General Location
ARCTIC SLOPE REGIONAL CORPORATION AND NUNAMUIT VILLAGE CORPORATION:		
EIN 3 C1	25-ft. streamside	Anaktuvuk River
EIN 6a C4,L	25-ft. trail	John River
EIN 6b C4,L	50-ft. trail	Kollutarak Creek
EIN 6c C4,L	50-ft. trail	Ekokpuk Creek
EIN 6e C4,L	50-ft. trail	Chandler Lake
EIN 6f C4,L	50-ft. trail	Chandler Lake
EIN 9 D9	25-ft. river	Chandler River
EIN 10 D9	1-acre site, 50-ft. shore, and 25-ft. trail	Chandler Lake
EIN 15a C5	1-acre site and 25-ft. trail	Shanin Lake
EIN 15b C5	1-acre site and 25-ft. trail	Anaktuvuk River
EIN 15c C5	1-acre site and 25-ft. trail	Chandler River
EIN 17a C5	50-ft. shoreline	Shanin Lake
EIN 19a C5	25-ft. trail	Amagolik Creek
EIN 19b C5	25-ft. trail	Akvalutak Creek
EIN 19c C5	25-ft. trail	Anaktuvuk Pass
EIN 19d C5	25-ft. trail	John River
EIN 19g C5	25-ft. trail	Grayline Creek
EIN 19h	25-ft. trail	Anaktuvuk River
EIN 22 C5	25-ft. streamside	John River
EIN 25a C2	1-acre site	Anaktuvuk River
EIN 25b C2	1-acre site	Anaktuvuk River
DOYON, LIMITED:		
EIN 28 C2,D9	50-ft. trail	Glacier River
EIN 30a C2,D5, D9	25-ft. trail	Glacier River
EIN 31 C2	50-ft. trail	Glacier River
EIN 32 C5	1-acre site	Glacier River
NANA REGIONAL CORPORATION:		
EIN 18 C5	1-acre site	Kobuk River

Ambler Right-of-Way

ANILCA provided for a right-of-way across the "boot" area of the unit to the Ambler mining district: "Congress finds that there is a need for access for surface transportation purposes across the Western (Kobuk River) unit of the Gates of the Arctic National Preserve (from the Ambler Mining District to the Alaska Pipeline Haul Road) and the Secretary shall permit such access in accordance with the provisions of this subsection" (ANILCA section 201(4)(b)).

The remainder of this ANILCA section describes the process for an environmental and economic analysis to be prepared by the secretaries of the interior and transportation for determining the most desirable route and the terms and conditions for this right-of-way.

SUBSISTENCE USE

Gates of the Arctic National Park and Preserve is part of a broader area used by local residents for subsistence. A long history of subsistence use of the region has evolved with changing land use and technology. Subsistence use will continue to be an important cultural and economic force in the lives of rural residents.

History of Subsistence Use

The first European explorers of north-central Alaska found the area occupied by natives representing both the Eskimo and Athabascan cultures. The lands now encompassed by the Gates of the Arctic National Park and Preserve were and continue to be used for subsistence purposes by Koyukon Athabascan Indians generally residing in the upper drainages of the Koyukuk River, Kuuvanmiit Eskimos generally occupying the Kobuk River valley, and several subgroups of Nunamiut Eskimos inhabiting the continental divide highlands and major north-flowing streams. While the cultural groups tended to use resources within vaguely defined territories, boundaries were not distinct and contact between the groups occurred.

The native inhabitants used a host of resources within various portions of what is now the Gates of the Arctic National Park and Preserve, including fish, waterfowl, marmot, mountain sheep, bear, moose, ptarmigan, hare, furbearers, a variety of plant life, and even a few mineral deposits. However, the most important resource shared by all was caribou. Like the buffalo of the plains, the caribou provided the raw materials for food, clothing, shelter, and tools. Its numbers and tendency to seasonally gather into large herds provided the opportunity for native groups to obtain considerable stores of the essentials for survival. It was the movement and availability of caribou that largely determined the subsistence strategy of peoples within the central Brooks Range prior to contact by white men.

The latter 19th century and early 20th century saw profound changes taking place among the inhabitants of the central Brooks Range. European incursion into the area in the form of explorers, gold seekers, traders, missionaries, and government agents created a new reality to which the aboriginal inhabitants interacted. Modern technology, including firearms, lessened the importance of cooperative hunting patterns. Emphasis shifted to harvesting furbearers to obtain the cash necessary to acquire imported goods. Disease decimated the aboriginal populations. Declining caribou numbers caused famine among the more remote groups forcing them to abandon traditional use territories. Most sought new lives on the coast or worked for wages for miners and traders in the interior. The free-roaming, seminomadic lifestyle gradually died out giving way to village-based living from which residents ranged into the surrounding lands for resources. Schools and other demands of modern living eventually reduced seasonal family camp life to brief summer outings.

The early nonnatives who moved into the central Brooks Range area were prospectors, suppliers, freighters, and others who swept into the area in search of riches. Camps sprang up wherever gold or the promise of gold was found. These men often harvested wildlife for food and as a cash source to supplement and/or support mining activities. By the mid-1940s the number of miners had declined significantly with only a few remaining year-round residents in Old Bettles and Wiseman. To varying degrees, these inhabitants continued to rely on wild, renewable resources to support their lifestyle.

A second major period of social and economic change for the central Brooks Range residents began in the mid-1960s and, to a certain degree, continues today. Efficient mechanical overland vehicles, snowmachines, became available and rapidly became the primary mode of winter surface travel. These machines revolutionized access and modified resource use, allowing rural residents to travel with speed and ease not previously available. The passage of the Alaska Native Claims Settlement Act and subsequent building of the trans-Alaska pipeline caused major political and economic developments in the area. The concept of private landownership forced rural residents to rethink traditional concepts of land and resource use. The pipeline construction and related statewide economic boom injected large amounts of money into rural Alaska resulting in new housing, community services, and other additions. Electricity, television, telephones, central heating, and other modern conveniences became commonplace in rural Alaska, further emphasizing the need for cash income. The all-weather road to Prudhoe Bay directly affected Wiseman by connecting it with urban centers and allowing more economic development of mining claims.

Current Subsistence Use and Access

Although the Gates of the Arctic is vast by conventional park standards, the total area that may be effectively and efficiently used for subsistence purposes is somewhat limited by rugged mountainous terrain. While sheep

harvest is possible on the rocky slopes, most of the resource base, particularly in the northern half of the park, is thin and tends to be concentrated within narrow margins along valley floors.

The areas of resource use are largely determined by the physical geography, the distribution of resources, and capabilities and limitations of available technology, as well as by socioeconomic realities. The primary modes of travel for subsistence activities are outboard-powered riverboats during the summer (except for Anaktuvuk Pass) and early fall and snowmachines during the winters. The waterways within the Gates of the Arctic tend to be shallow, particularly during periods of limited rainfall. Waterways within the park used for subsistence include the Kobuk up to the lower canyon for hunting, fishing, and gathering; the Alatna to the vicinity of the Unakserak River for hunting moose, sheep, and bear; and the John to the vicinity of Wolverine Creek for hunting moose, bear, and sheep.

Winter is the time of greatest travel and resource use within the Gates of the Arctic. Usually by early November the waterways are sufficiently frozen, and snow cover has accumulated enough to allow for snowmachine travel. However, within the park a number of natural factors such as the rugged terrain and deep snow limit the use of this technology.

Surveys and observations made over the past seven years indicate that winter subsistence use occurs on a regular basis over some 500 linear miles of valleys within the park boundaries. The majority of this use occurs in the northern half of the park, where the land is treeless and has a shallow covering of wind-packed snow. With regards to distances covered, the greatest amount of travel takes place from late February through early April.

A third type of transportation has recently come into widespread use by the people of Anaktuvuk Pass. ATVs, a type of off-road vehicle, are used to travel overland when there is no snow on the ground. Their use is confined to designated easements or native and village corporation lands. These easements are further discussed in the land protection plan. Some residents of Anaktuvuk Pass travel by ATV to Chandler Lake on easements for the purposes of netting fish, gathering edible vegetation, and hunting sheep, caribou, bear, and marmot, and out toward Ernie Pass to hunt sheep and caribou.

All access provisions, including subsistence, are summarized in appendix I.

RECREATIONAL VISITOR USE

Types of Activities

The park/preserve is a vast wilderness that naturally constrains the types of recreational activities. Recreational activities include river float or canoe trips, backpacking, photography, mountaineering, wildlife

viewing, and fishing. Trapping and sport hunting occur in the two preserve areas.

Winter recreational activities include cross-country skiing, snowshoeing, and dog sledding. While there are only a few such trips each year in the park, their popularity is expected to increase. The most attractive time for these winter activities is from late February to mid-April.

Levels and Season of Use

The pattern of recreational use through the year is characterized by an extremely sharp peak in July and August, as shown on the Monthly Recreational Visitation chart. Approximately 64 percent of recreational visitation occurs during those two months.

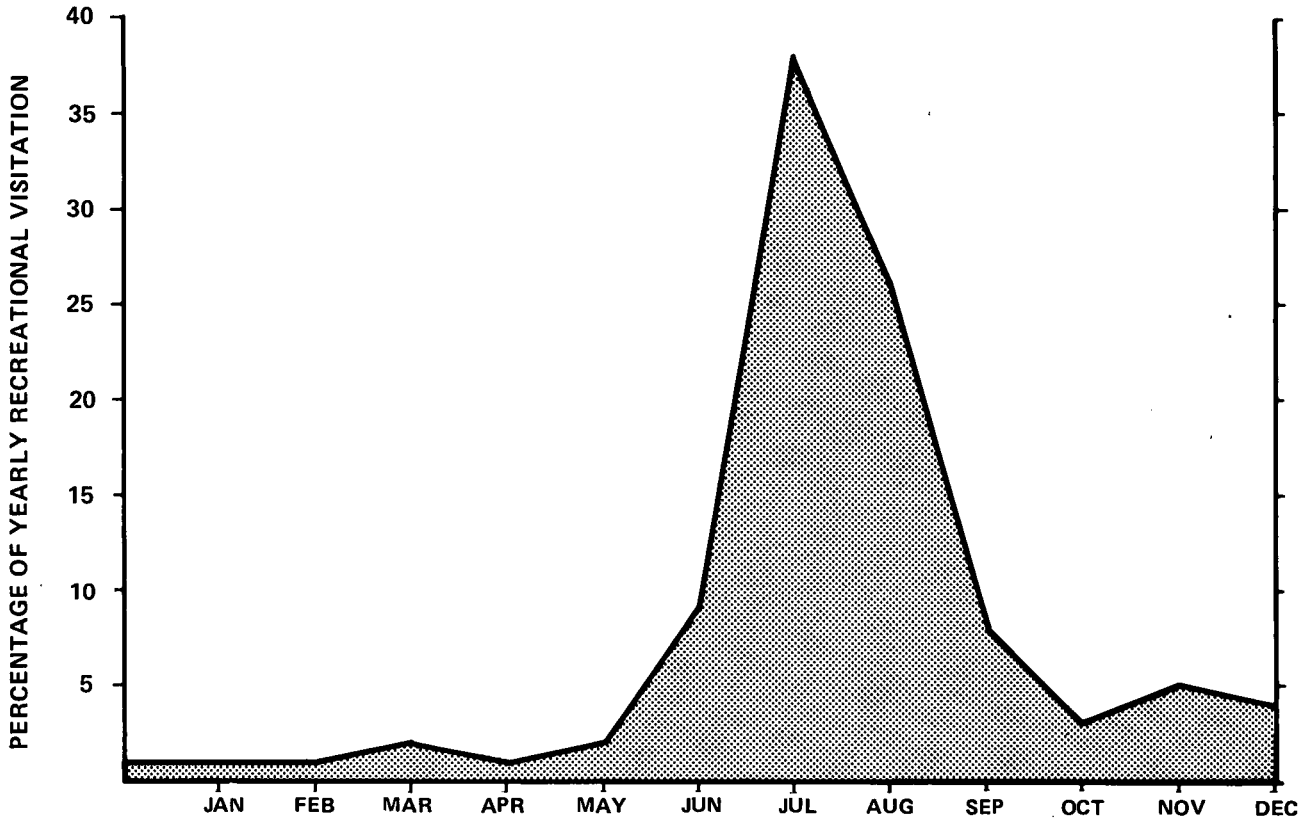
Yearly recreational visitation for 1983 and 1984 averaged about 2,500 visits. The average group size from 1981-83 was 5.3 people per group, and the average number of groups was about 470 per year. Trips averaged 10.1 days in length. While the number of visitors is extremely low for an area millions of acres in size, the group sizes and trip lengths are some of the largest recorded for any area in the national park system, including the large natural area parks. These statistics reflect the remote nature of the area which requires a greater time and financial commitment for expeditions into it.

To estimate future visitation trends for a newly designated park like Gates of the Arctic, one reasonable analysis that can be made is to examine the trends of an established northern, remote park. This approach assumes that there are enough similarities between the two parks that the trends observed at the established area will be reflected by Gates of the Arctic.

Kluane National Park in Canada has many similarities to Gates of the Arctic National Park. It has a road along one boundary, a northern and remote location, comparable distances from the region's major population centers (Fairbanks and Anchorage), wilderness and scenic attractions, and fish and wildlife resources. However, the road along Kluane is currently traveled more. From 1979 to 1983 backcountry use in Kluane National Park increased an average of 7.3 percent a year. If visitation to Gates of the Arctic increased at this rate, there would be 4,550 visitors by 1990, 6,450 by 1995, and 9,200 by 2000.

This comparison with Kluane may be conservative. Visitation increases at Gates of the Arctic from 1982 to 1984 exceeded 14 percent per year. There are insufficient data to determine if this is a trend that will last, or simply a short-term phenomenon that implies no trend. If the 14 percent increase per year holds and becomes the trend, there would be 6,150 visitors by 1990, 11,850 by 1995, and 22,850 by 2000.

Future trends are dependent on the world, national, and state economies and social trends that are not easily predicted. Using the comparison



MONTHLY RECREATIONAL VISITATION

SOURCE: NPS Monthly Use Reports

with Kluane and the recent observations at Gates of the Arctic, during the expected 10-year life of the general management plan, visitation could easily double, and may triple, compared to existing levels.

Distribution and Access

Most recreational visitors gain access to the park by light aircraft. Even those who fly into Anaktuvuk Pass on regularly scheduled flights are relying on aircraft for their access. Others backpack into the park from the Dalton Highway. Visitors must drive the narrow gravel highway for over 250 miles from Fairbanks.

Once in the park, most recreational visitors travel on rivers by raft, canoe, or kayak (see table 6). Most other visitors travel by foot or a combination of float and foot travel. There has been only one party of horse use known in the unit since 1981, along the Dalton Highway. During winter dogsled or cross-country ski trips allow access. General public use of snowmachines for recreation has not been widely established. Similarly, general public use of motorboats for recreation has not been widely established, except at Walker Lake. All access provisions, including recreation, are summarized in appendix I.

Table 6: Primary Mode of Recreational Access
(averaged for 1981-1983)

Float	42%
Foot	36%
Float/foot	19%
Dogsled/ski	2%
Horse	1%

Visitation is distributed unevenly throughout the park. Availability of small plane landing sites for light aircraft affects distribution, as does the selection of areas used frequently by commercial guides for their trips. Transportation costs vary with destination and group size, and may in turn influence visitor choices. Based on the summer of 1984, a float trip to the Noatak with three people may cost $770 per person in transportation costs from Fairbanks, while a backpacking trip from the Dalton Highway with five people may cost $50 per person for transportation. Commercial airfare to Anaktuvuk Pass from Fairbanks is $230. From Fairbanks, commercial fare plus air charter costs into the park generally range from $250 to $600 per person. However, another significant factor that influences where visitors go within the park is information and reputation. Books, magazine articles, and suggestions from a friend, an air-taxi operator, or a ranger all influence where visitors decide to go.

The most heavily used areas for recreational activities are around Walker Lake and Anaktuvuk Pass (see Summer Recreational Use and Access map). Other heavily used areas are float trip routes or traversable corridors near the Dalton Highway. They include Walker Lake/Kobuk River, Upper Noatak River, Summit Lake/North Fork of the Koyukuk River, and Arrigetch Peaks areas.

The amount of use these areas receive is very low compared to most other backcountry areas managed in the national park system, especially considering the large acreages involved. However, resource damage is already occurring, and these impacts of modern man are distinguishable from natural disruptions. This damage occurs because the tundra and boreal forest ecosystems are sensitive to repeated, concentrated use and take exceptionally long periods for visible recovery. Visitors tend to concentrate in certain areas of the park, as previously described, and within those areas they concentrate even further along easily traversable valley bottoms, at aircraft landing sites, primary campsites, etc. Accordingly, a high percentage of use is concentrated in a very small acreage out of the park total. Known problem areas are noted on the Existing Effects of Human Use map.

Visitor Survey

In 1984 a voluntary questionnaire was distributed to people who had visited Gates of the Arctic (see appendix C for sample). While the sample was small, it provides useful indicators about visitors. Additional visitor surveys will be needed in the future, as discussed in the "Recreational Visitor Use Management" section. All 56 respondents had gained access to the park by small aircraft, and 95 percent visited in July or August. Most were led by a guide (78 percent), and 22 percent were on an independently led trip. Their length of stay ranged from 1 to 41 days, with an average stay of 14 days. Average group size was 7.8. Both group size and length are larger than the same figures for 1981-83 mentioned earlier (5.3 people/group and 10 days), which was calculated from air-taxi and guide use reports. The reason for these differences is unknown.

Other results of the survey follow on tables 7 through 13. Some are discussed, while other straightforward ones are simply displayed without comment.

Table 7: Primary Methods of Travel

	Percentage
Boat/raft/kayak/canoe	41
Backpacking/hiking	27
Both of the above	31
	100

Table 8: Participation in Activities
(Other than floating or hiking)

	Percentage
Photography	98
Wildlife viewing	91
Fishing	66
Mountaineering	20

Table 9: Trip Location

	Percentage
Arrigetch Peaks/Alatna River	29
Walker Lake/Kobuk River	22
North Fork Koyukuk River	18
Noatak River	15
John River	11
Other	5
	100

The trip locations in table 9 are representative except that surveys were not distributed to visitors at Anaktuvuk Pass or on the Dalton Highway, thus those two areas are not included.

The average number of other groups encountered was 2.1 (see table 10). The average number of groups encountered was much larger for the group of respondents who indicated they saw "too many" other groups, than for the respondents who indicated "just right." Clearly, these visitors' experiences were affected by the number of other groups encountered. However, it would take extensive research to determine how significant the effect of encounters with other groups are on visitors' overall experience. Their expectations upon entering this "ultimate wilderness" may be more demanding than for other backcountry areas.

Table 10: Reaction to Number of Groups Encountered

	Percentage	Average Number of Groups Encountered
Too many	18	4.6
In between	13	2.9
Just right	67	1.4
Too few	2	1.0
Total	100	2.7

Table 11: Perceived Threats to Wilderness Character of Park

	None	Minor	Major
Other people seen	13	61	26 = 100%
Fire rings	6	51	43 = 100%
Bare spots on tundra	4	37	59 = 100%
Trails	10	35	55 = 100%
Aircraft	10	68	22 = 100%
Cabins/permanent camps	4	14	82 = 100%

A great majority of the respondents felt that all of the perceived threats in table 11 could jeopardize the park's wilderness character. Bare spots in the tundra (from campsites), trails, and cabins/camps were perceived as major threats by a majority of respondents. These visitors were extremely sensitive to physical intrusions that could degrade the park's wilderness character. Seventy percent of the respondents reported encountering trash, cabins/camps, or other signs of man's activities.

This concern is further emphasized by the fact that 87 percent preferred regulations, and only 13 percent preferred minor facilities as means of controlling use, if use levels ever threatened the wilderness character of the park. When asked about specific regulations or facilities that might be used to control impacts from visitor use, the overwhelming preference for regulations is again obvious.

Table 12: Minor Facilities as a Management Tool
(If minor facilities had to be used to control impacts from increasing visitor use, which best represents your feelings)

	Approve	Neutral	Disapprove
Trails	39	24	37 = 100%
Campsites	23	31	46 = 100%
Cabins	8	14	78 = 100%

Trails and campsites that are traditionally used to manage visitor use in wilderness were more acceptable, but most responses were still neutral or disapproved. As indicated in table 12, cabins were largely disapproved.

Table 13: Regulations as a Management Tool
(If regulations had to be used to control impacts from increasing visitor use, which best represents your feelings)

	Approve	Neutral	Disapprove
Inform and educate users by requiring free permit	92	6	2 = 100%
Limit number of people or groups that can start from a given access point	87	8	5 = 100%
Use temporary zone closures	70	20	10 = 100%
Limit number of people or groups by zone	80	10	10 = 100%
Limit commercial guide operations	60	33	7 = 100%
Eliminate selected public cabins where use problems have accumulated	90	6	4 = 100%
Limit group size	87	9	4 = 100%
Limit types of uses	73	23	4 = 100%

A substantial majority favored each of the specific regulatory options listed in table 13.

COMMERCIAL VISITOR SERVICES

Privately owned companies provide a variety of services to visitors to Gates of the Arctic National Park and Preserve. Services are available for aircraft transportation to and from the park and preserve and for guided river running, hunting, fishing, backpacking, and mountaineering. The companies currently supply needed and/or desired services to a significant segment, about 50 percent, of the visiting public to Gates of the Arctic. Most are guides highly trained and knowledgeable in wilderness skills, values, and resources, and provide rewarding and safe trips for the park visitors who are their clients. Many guides are well versed in minimum-impact camping techniques and assist in minimizing the adverse effects that result from some recreational activities.

A total of 34 companies were authorized in 1984 (when the draft general management plan was developed) to provide visitor services within Gates

of the Arctic National Park and Preserve. That number increased to 53 in 1985. There were 5 air taxis in 1984 (14 in 1985) and 29 guides when the draft plan was developed (39 in 1985). Most of the guiding companies are authorized to provide more than one type of service. Services are summarized below.

Air-Taxi Services

Air-taxi services are authorized to drop off and pick up clients within Gates of the Arctic. These companies are located in Bettles, Ambler, Fairbanks, Anaktuvuk Pass, and Kotzebue.

Air-taxi services provide the majority of access to both the guided and unguided visitor. Also, through their particular knowledge of the area in combination with the limitations of their aircraft, air-taxi operators and pilots contribute greatly to the overall use patterns of the area.

River Runners

Many companies conduct guided river float trips. Although the rivers within Gates of the Arctic are not characterized by significant whitewater, inflatable rafts carrying three to six passengers are used almost exclusively since all boats and equipment must fit into air-taxi service airplanes having capacities of three to five passengers. It is likely that commercial river running will continue to be a high demand service due to the high costs associated with transporting private equipment to the Gates of the Arctic for a single trip.

River trips tend to have four to seven clients and are of six- to ten-days' duration with one or two guides accompanying each trip. River trips are the most popular of guided activities in the Gates.

While there are innumerable rivers that are technically "runnable," the majority of guided trips occur on the Noatak, Kobuk, North Fork of the Koyukuk, John, and Alatna rivers. Many river trips, especially those on the North Fork of the Koyukuk, are in combination with extended backpacking trips to the put-in point at which rafts and equipment have been previously staged. The put-in points have been identified by licensees as the areas having the most significant concentrations of visitors and related impacts.

Because of the substantial equipment involved, the majority of river running companies are Alaska-based or conduct enough business in Alaska to have seasonal Alaska bases.

Hunting Guide Service

Three state-recognized guide services offer commercially guided sport hunting trips in the preserve. The state recognizes hunting guide

services through the State Guide Licensing and Control Board. The board issues a guide a license for particular game management units. The guide must then request either exclusive or joint use of specific guide areas within each game management unit.

The National Park Service has recognized the actions of the board by issuing commercial use licenses to guides who have been assigned guide areas and licenses by the state. The Park Service's reliance on the actions of the board is particularly important because Congress specifically excluded hunting and fishing guide services from the grandfather provision of ANILCA section 1307.

The state requires nonresidents to be accompanied by a guide or a relative who is an Alaska adult resident to hunt Dall sheep or brown/grizzly bear. Further, nonresidents must hire a guide to hunt any big game animals. Species hunted in Gates of the Arctic National Preserve include grizzly bear, caribou, Dall sheep, wolf, and moose. In 1983 guides reported having 10 clients who stayed an average of seven days.

An undetermined number of unguided sport hunters are brought into the preserve by air-taxi operators; however, sport hunters of caribou, sheep, and moose are required to return a harvest ticket to the Alaska Department of Fish and Game at the close of the season.

Fishing Guide Service

Unlike most other NPS-administered areas in Alaska, there are no companies offering fishing guide services exclusively. However, fishing is an important part of other guided activities, especially river float trips, hunting, and backpacking. Air-taxi operators also drop off clients whose primary purpose is to fish. The guided fishing that does occur seems to be centered primarily around Walker Lake, the upper Alatna, and in conjunction with river float trips in the upper Noatak, Kobuk, and Alatna rivers.

Two lodges--one at the headwaters of the Alatna River and the other on Walker Lake--specifically advertise fishing as one of the primary activities to be enjoyed.

Guided Backpacking

Guided backpacking rivals river running as the most popular way to tour Gates of the Arctic National Park and Preserve. Most companies lead guided backpacking trips in association with float trips. Trips are similar in makeup to river trips with float trips. Trips are similar in makeup to river trips with an average of five clients and one guide. Trips tend to be 7-14 days in length.

While backpacking provides much greater flexibility in dispersing visitors than river running, there are areas according to licensees that are receiving the predominant amount of use. These areas are Walker Lake, Arrigetch Peaks, and Summit Lake.

Overnight Facilities

Several limited facilities for overnight accommodations exist both inside the boundaries and within reasonable proximity outside the boundaries of Gates of the Arctic.

Concession Permit. Located on the North Fork of the Koyukuk just above the Gates of the Arctic (Frigid Crags and Boreal Mountain) near the confluence of Kackwona Creek is a small semipermanent base camp consisting of three Coleman-type tents and a limited cache used solely as a staging area for backpacking and river float trips on the Koyukuk. As a condition of a concession permit, its existence may not be advertised by the operator.

Private Land and Accommodations within the Boundaries. At the headwaters of the Alatna there is a cabin that is used as a secondary base for clients of the main lodge at Iniakuk Lake (outside the park). Clients enjoy activities on park land--fishing, hiking, and river float trips on the Alatna River. This cabin was used as a base for guided sport hunting activities prior to the lands being designated a national monument in 1979.

A lodge is located on the southeast end of Walker Lake. This lodge will likely continue to be used primarily for fishing clients and float trips into the park.

Accommodations outside the Boundaries. There is a lodge at Bettles with approximately 10 rooms. Small lodges with a few rooms are found at Kobuk, Shungnak, and Ambler. At Coldfoot over 50 rooms and associated facilities accommodate Dalton Highway users. A lodge at Iniakuk Lake offers fishing, floatings, and backpacking as the primary activities.

Other Services Available to Visitors

A scheduled shuttle service has operated on the Dalton Highway providing drop-off and pick-up services for those wishing to gain access to the western portion of the park, but it was not operating in 1984. There are two companies--one in Kotzebue and one in Bettles--that provide equipment including canoes and raft (outfitting). One company now conducts trips into Gates of the Arctic for the primary purpose of birding. While several companies are authorized to conduct commercially guided mountaineering, there appears to have been only one or two trips over the last three years that have provided this service.

OPERATIONS

NPS administration of Gates of the Arctic National Park and Preserve began in the summer of 1980. Ten permanent staff members are currently employed--eight in Fairbanks and two in Bettles. Three employees are primarily responsible for field operations and visitor services; four are responsible for lands, natural resources, and cultural resources; and the other three include the superintendent and administrative positions. The summer 1984 seasonal staff consisted of nine employees, of which eight were involved in field operations and visitor services and one was responsible for maintenance of facilities. Three of these seasonals were employed through the local hire provision of ANILCA section 1308.

Field operations are conducted primarily to collect information about park resources and use. Seasonal employees worked primarily along the Dalton Highway and access points, North Fork of the Koyukuk, Anaktuvuk Pass, and Walker Lake. Bettles is the staging area for placing employees in the field. Two NPS-piloted and -owned aircraft provide most of the access. A helicopter on contract provides access for the ongoing archeology and history study, sheep counting, and other NPS activities. Other forms of transportation used include a truck on the Dalton Highway, a small motorized boat on Walker Lake, rafts, and hiking. Field communication is via high-frequency radio to Walker Lake (intermittent at best), air-to-ground radios, and emergency signaling devices.

Jurisdiction is proprietary, which means both the National Park Service and the state of Alaska have law enforcement authority.

The management and operation of many aspects of the unit depend on cooperation with other agencies. The following cooperative agreements (among others) have been developed and implemented for certain aspects of park management.

> There is a statewide master memorandum of understanding between the National Park Service and the Alaska Department of Fish and Game (see appendix D). The Park Service also agreed to consult with the Department of Fish and Game before entering into any cooperative land management agreement.
>
> A cooperative agreement exists between the National Park Service and the Rescue Coordination Center (Alaska Air Command) regarding high-altitude search-and-rescue operations.
>
> The National Park Service has secured a cooperative agreement with the Alaska State Troopers (Alaska Department of Public Safety) for search-and-rescue operations.
>
> The "Departmental Manual" (910 DM 3.1) provides for the Bureau of Land Management to conduct wildland and fire suppression activities on all Interior lands in Alaska. Suppression activities will be conducted within the framework of approved fire suppression plans. An approved fire suppression plan (Alaska Interagency Fire

Management Plan: Kobuk Planning Area) exists between Gates of the Arctic National Park and Preserve and the Bureau of Land Management, Bureau of Indian Affairs, NANA Regional Corporation, Doyon Regional Corporation, Alaska Department of Fish and Game, Alaska Department of Natural Resources, U.S. Fish and Wildlife Service, and the Arctic Slope Regional Corporation.

An interagency agreement between the National Park Service, U.S. Fish and Wildlife Service, and Federal Aviation Administration was established in 1984 concerning aircraft overflights. While the agreement does not mandate any restrictions on overflights, it provides a framework for identifying and resolving conflicts between low-flying aircraft and resource values of area.

There is a cooperative agreement between the National Park Service and the Alaska Natural History Association that provides support to interpretive programs. The association, a nonprofit organization, produces and sells books and other publications about national parks in Alaska.

GENERAL DEVELOPMENT

Major NPS facilities are located outside the park and preserve and are a combination of leased and NPS-owned structures.

Headquarters facilities in Fairbanks are leased from Doyon, Limited, and include a conference room, a visitor contact area, 12 offices, and storage. Bulk storage space is also leased.

The Bettles ranger station is locally leased from the Bettles Lodge. It includes a shop, two offices, a visitor contact area, and bunk space. Two duplexes in Bettles were recently acquired from the Federal Aviation Administration to provide permanent and seasonal employee housing.

Two structures are leased in Anaktuvuk Pass. The Naval Arctic Research Laboratory is used as a visitor contact station, and a home leased from an individual provides seasonal employee housing.

At Coldfoot, the National Park Service has a right-of-way reservation from the Bureau of Land Management for two parcels of land, 2.3 acres and 4.6 acres, for administrative sites. The Park Service has purchased a small precut structure to be placed on the smaller site for visitor information and temporary ranger quarters.

There are over 30 standing cabins within Gates of the Arctic National Park and Preserve, of which half are privately owned on native allotments or inholdings. About 16 cabins on federal lands are governed by regulations currently under revision (36 CFR 13.17). Two of these cabins are currently under valid use and occupancy and subsistence permits, and two are authorized for commercial winter use for dog team trips. One of the latter has also been used intermittently to house a

seasonal ranger. One cabin is used by a valid operating miner and has been determined to have historical value, as well as one cabin on Doyon land (see "Cultural Resources" section). There are at least another 30 cabin sites, locations of ruins and unusable structures, some of historical significance.

There are about seven camps or remains of camps throughout the park, including a semipermanent base camp of a commercial operator on the North Fork of the Koyukuk (see "Commercial Visitor Services" section). There has been one temporary camp in the preserve.

No roads, trails, or airstrips are maintained in the unit except for Anaktuvuk Pass and those associated with the operating mine. Three abandoned roads or winter trails are highly visible along the John River (Hickel Highway), Middle Fork of the Koyukuk, and access to the Glacier River. There are several abandoned airstrips within the unit.

Dog Team

Cross-Country Skiing

Floating

Sportfishing

Access

Sporthunting (In the Preserve)

RECREATIONAL USE

This plan is the result of the general management planning process that began with the publicly reviewed Statement for Management in 1982, which identified issues and management objectives. The Draft General Management Plan of March 1985 was a milestone in this process. It offered four alternative management strategies, identifying alternative C as the selected proposal. All alternatives, including the proposal, were evaluated for their impacts in the "Environmental Assessment" portion of the draft plan. The draft plan was widely distributed and received extensive public comment (see "Consultation and Coordination" section). Public ideas and concerns were carefully weighed with the charge to protect the high public value and integrity of Gates of the Arctic National Park and Preserve. A revised plan modified the proposal in the draft plan with elements from the other alternatives, and was circulated for public review in December 1985. Further modifications have been made as a result of public comments and are reflected in this plan.

WILDERNESS MANAGEMENT

The clear wilderness preservation mandate of Gates of the Arctic is reinforced by the designation of approximately 7,052,000 acres, the entire park unit, as wilderness. ANILCA section 701 directs that this wilderness be managed in accordance with the Wilderness Act of 1964 (78 Stat. 890) except as otherwise expressly provided for in ANILCA.

The Wilderness Act states that wilderness areas "shall be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness." The act prohibits commercial enterprise and permanent roads, and it generally prohibits temporary roads, use of motor vehicles, motorized equipment or motorboats, landing of aircraft, and development of structures unless they are deemed essential for the management of the area.

ANILCA makes certain exceptions to the Wilderness Act that apply only to management of wilderness areas in Alaska. Section 1315 of ANILCA permits the continuation of existing public use cabins and the construction of a limited number of new public use cabins or shelters if appropriate and under certain restrictions. Section 1310 allows for navigation aids and research facilities. Section 1110 permits the use of snowmachines, motorboats, airplanes, and nonmotorized surface transportation for traditional activities and for travel to and from villages and homesites, and specifies that such use will not be prohibited unless, after local public hearing, such use is found to be detrimental to the resource values of the park and preserve. The decision-making process established in title XI of ANILCA for siting of transportation and utility systems applies to designated wilderness in Alaska. These exceptions to the Wilderness Act are summarized in appendix E.

Because the vast majority of Gates of the Arctic is designated wilderness and has wilderness purposes, this general management plan for the park

is, in many aspects, a wilderness management plan. Accordingly, the details of wilderness management are covered throughout the plan.

WILD RIVER MANAGEMENT

Six rivers within Gates of the Arctic National Park and Preserve are designated as units of the national wild and scenic rivers system by section 601 of ANILCA: the Alatna, John, Kobuk, Noatak, North Fork of the Koyukuk, and Tinayguk. These rivers are to be administered as wild rivers pursuant to the Wild and Scenic Rivers Act, as amended (16 USC 1274(a)), which establishes the following direction for management:

> Certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and . . . they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations.

Section 605(d) of ANILCA calls for the establishment of boundaries for each river and for the preparation of river management plans in accordance with the provisions of the Wild and Scenic Rivers Act. However, because the mandates for management of Gates of the Arctic National Park and Preserve and for designated wilderness within the park meet and are compatible with the management standards established by the Wild and Scenic Rivers Act, the purpose of river corridor boundaries has been provided for. Similarly, no separate management plans will be prepared at this time. The river management proposals have been fully integrated with other aspects of visitor use and resource management in subsequent sections of this plan. Management of the rivers will also follow guidelines developed in "The Synopsis for Guiding Management of Wild, Scenic, and Recreational River Areas in Alaska," which was adopted by the Alaska Land Use Council in November 1982.

Because Congress gave special recognition to the Alatna, John, Kobuk, Noatak, North Fork of the Koyukuk, and Tinayguk rivers, their outstandingly remarkable values are acknowledged and will be monitored and protected (see table 14). As use increases and the potential for impacts becomes clear, more detailed river management plans may be developed with the public. Management of the Noatak and Kobuk rivers will continue to be coordinated with Noatak National Preserve and Kobuk Valley National Park.

NATURAL RESOURCE MANAGEMENT

The natural and wilderness values of Gates of the Arctic National Park and Preserve are virtually unimpaired. Pursuant to ANILCA section 201(4)(a), Congress directed that this unit be managed for the following natural resource purposes, among others:

Table 14: Outstandingly Remarkable Values of Designated Wild Rivers

River	Approx. Length (miles)	Scenic Quality	Recreational Opportunities	Geologic Features	Fish, Wildlife, and Plants	Cultural Resources
Alatna	83	High; variety from snowcapped mountains to spruce-hardwood forest	Plentiful sightseeing, nature study, hiking, photography, fishing, and floating	Rugged mountains of central Brooks Range, including Arrigetch Peaks	Easily observed, variety of large and small mammals, migration route for arctic caribou herd	*
John	52	Outstanding; high relief, vegetative variety, exposed rock, cliffs, and out-croppings	Numerous, family float stream, excellent hiking and backpacking in upper river area	Wide glacial valleys dissecting central Brooks Range	Variety of large and small mammals, important migration route for arctic caribou herd, unique habitat for William's milk vetch	*
Kobuk	110	Wide valley with sweeping vistas of nearby hills and low mountains, Walker Lake, two canyons	Exceptional float river, a few short stretches of extremely rugged rapids (up to class V), good opportunities for sport hunting (in the preserve only), wildlife observation, and backpacking	Endicott Mountains of central Brooks Range, upper and lower Kobuk canyons	Variety of fish and wildlife, one of largest concentrations of sheefish, wintering grounds for western arctic caribou herd, one of the largest continuous spruce forest areas in the Brooks Range	Highly significant potential for archeology because of continuous occupation and links between inland Eskimo people
Noatak	65**	Glacial valley with snowcapped peaks	One of longest designated wild rivers in Alaska, good floating, sightseeing, and wildlife viewing opportunities	Mount Igikpak and Schwatka Mountains of west-central Brooks Range, narrow glacial valley	Plentiful caribou, Dall sheep, grizzly, several species of raptors	Transportation route by natives for thousands of years
North Fork of the Koyukuk	102	Glacial valleys bordered by rugged peaks of Endicott Mountains in central Brooks Range, Frigid Crags, and Boreal Mountain (Gates of the Arctic)	Access at headwaters, outstanding wilderness backpacking, clear water and challenging whitewater	South flank of the arctic Continental Divide through glacial valleys bordered by Endicott Mountains	Variety of wildlife, major caribou migration route	*
Tinayguk (tributary of the North Fork of the Koyukuk)	44	Broad, glacial valley bordered by rugged peaks of Endicott Mountains	High potential for hiking and backpacking, access more difficult than North Fork	South flank of the arctic Continental Divide, glacial valleys bordered by Endicott Mountains	Variety of wildlife	*

* Unidentified at the time of designation.
** The designation continues for approximately 265 miles in Noatak National Preserve.

> To maintain the wild and undeveloped character of the area, . . . and the natural environmental integrity and scenic beauty of the mountains, forelands, rivers, lakes, and other natural features; . . . and to protect habitat for and the populations of, fish and wildlife, including, but not limited to, caribou, grizzly bears, Dall sheep, moose, wolves, and raptorial birds.

The overall natural resource management objective is to maintain natural and wilderness conditions, environmental integrity, and the dynamics of natural processes operating within the park and preserve.

The direction of management will be to monitor resources and conditions, gather baseline data, and monitor human uses to determine if damage to resources is occurring or possible. Actions will primarily be aimed at managing uses for the purpose of protecting resources. The only direct management of natural resources will be to restore natural conditions to damaged areas, not to improve or enhance resources for ongoing consumptive uses such as hunting or fishing.

Resource management plans are prepared to describe the scientific research, surveys, and management activities that will be conducted in each national park system unit. Information obtained from research described in the resource management plan is used by park managers to better understand the unit's cultural and natural resources and is used in making resource-related decisions and funding requests. Resource management plans are evolving documents that respond to the changing requirements of managing a unit's resources. They are reviewed at least once each year and updated as necessary. The most elementary resource management plan is essentially a list of proposed research projects that are required to better understand the resources of a national park system unit. More fully evolved resource management plans may include detailed management strategies for addressing specific resource issues.

A resource management plan is being prepared for Gates of the Arctic. The National Park Service will consult with interested parties, including the state of Alaska, during the preparation and subsequent revisions of the plan. Draft plans will be transmitted to the state, and will be available to the general public for a 60-day review and comment period. Adequate notification of the availability of the draft plan will be provided. If significant changes are made in the resource management plan during the annual review, the same public involvement practices as described above will be followed.

Fish and Wildlife

The National Park Service is mandated by ANILCA and other laws to protect the habitat for, and populations of, fish and wildlife within the park and preserve (ANILCA section 201(4) and 16 USC 1). The National Park Service will strive to maintain the natural abundance, behavior,

diversity, and ecological integrity of native animals as part of their ecosystems. NPS management of fish and wildlife will generally consist of baseline research and management of the human uses and activities that affect such populations and their habitat, rather than the direct management of resources.

The Alaska Department of Fish and Game, under the constitution, laws, and regulations of the state of Alaska, is responsible for the management, protection, maintenance, enhancement, rehabilitation, and extension of the fish and wildlife resources of the state; and in accordance with the state constitution, the department manages fish and wildlife using the recognized management principle of sustained yield. Within conservation system units, including Gates of the Arctic, state management of fish and wildlife resources is required to be consistent with the provisions of ANILCA; therefore, some aspects of state management may not apply within the park and preserve.

The National Park Service and the state of Alaska will cooperatively manage the fish and wildlife resources of the park and preserve. A memorandum of understanding between the National Park Service and the Alaska Department of Fish and Game (see appendix D) defines the cooperative management roles of each agency. The "Department of the Interior, Fish and Wildlife Policy: State-Federal Relationships" (43 CFR 24) further addresses intergovernmental cooperation in the protection, use, and management of fish and wildlife resources. The closely related responsibilities of protecting habitat and wildlife populations, and of providing for fish and wildlife utilization, require close cooperation of the Alaska Department of Fish and Game, the National Park Service, and all resource users.

Sportfishing and subsistence fishing, hunting, and trapping are allowable uses in the park; and hunting, fishing, and trapping are allowable uses in the preserve (ANILCA sections 1313 and 1314 and applicable state law). Trapping in national park system units can be conducted only using implements designed to entrap animals, as specified in 36 CFR 1.4 and 13.1(u). Subsistence uses are permitted in the park where such uses are traditional (ANILCA section 201(4)(a)). ANILCA requires that such harvest activities remain consistent with maintenance of healthy populations of fish and wildlife in the preserve and natural and healthy populations in the park (ANILCA section 815(1)).

Congress recognized that programs for the management of healthy populations may differ between the National Park Service and the U.S. Fish and Wildlife Service because of differences in each agency's management policies and legal authorities; therefore "the policies and legal authorities of the managing agencies will determine the nature and degree of management programs affecting ecological relationships, population dynamics, and manipulation of the components of the ecosystem" (Senate Report 96-413, p. 233).

The state of Alaska, through the boards of game and fisheries, establishes fishing, hunting, and trapping regulations for the park and

preserve, consistent with the provisions of ANILCA. The National Park Service will cooperate with the state wherever possible to establish regulations that are compatible with park and preserve management goals, objectives, and NPS policies.

Section 805(d) of ANILCA authorizes the state to manage the taking of fish and wildlife for subsistence purposes on federal lands if state laws that satisfy certain criteria in sections 803, 840, and 805 of ANILCA are enacted and implemented.

A subsistence resource commission has been established for the park in accordance with section 808 of ANILCA. The commission is charged with devising and recommending a subsistence hunting program for the park. Submission of a program is anticipated in 1986 (see "Subsistence Use Management" section for a more complete discussion of the commission).

Regarding customary and traditional subsistence uses in parks, monuments, and preserves in Alaska, the legislative history of ANILCA states,

> The National Park Service recognizes, and the Committee [on Energy and Natural Resources] agrees, that subsistence uses by local rural residents have been, and are now, a natural part of the ecosystem serving as a primary consumer in the natural food chain. The Committee expects the National Park Service to take appropriate steps when necessary to insure that consumptive uses of fish and wildlife populations within National Park Service units not be allowed to adversely disrupt the natural balance which has been maintained for thousands of years (Senate Report 96-413, p. 171).

The Park Service "may temporarily close any public lands . . ., or any portion thereof, to subsistence uses of a particular fish or wildlife population only if necessary for reasons of public safety, administration, or to assure the continued viability of such population" (ANILCA section 816(b)). Except in emergencies, all such closures must be preceded by consultation with the appropriate state agencies. If it becomes necessary to restrict the taking of populations of fish and wildlife in the park and preserve, nonwasteful subsistence uses will be accorded priority over the taking of fish and wildlife for other purposes.

The state has developed resource management recommendations containing management guidelines and objectives that are generally developed for broad regions. Therefore, some of the guidelines and objectives may not be applicable to the park and preserve. The state has also developed fish and wildlife management plans. The master memorandum of understanding indicates that the Park Service will develop its management plans in substantial agreement with state plans unless state plans are formally determined to be incompatible with the purposes for which the park and preserve was established.

Habitat and animal populations manipulation will not be permitted within the park and preserve except under extraordinary circumstances and when consistent with NPS policy, as described in the master memorandum of understanding. Congressional intent regarding this topic is presented in the legislative history of ANILCA as follows:

> It is the intent of the Committee that certain traditional National Park Service management values be maintained. It is contrary to the National Park Service concept to manipulate habitat or populations to achieve maximum utilization of natural resources. Rather, the National Park Service concept requires implementation of management policies which strive to maintain the natural abundance, behavior, diversity, and ecological integrity of native animals as part of their ecosystem, and the Committee intends that that concept be maintained (Senate Report 96-413, p. 171).

In recognition of mutual concerns relating to protection and management of fish and wildlife resources, the National Park Service and the Alaska Department of Fish and Game will continue to cooperate in the collection, interpretation, and dissemination of fish and wildlife data. The Park Service will continue to permit and encourage the Alaska Department of Fish and Game to conduct research projects that are consistent with the purposes of the park and preserve.

The park's informational programs will inform visitors about the allowable uses of the park and preserve, including consumptive uses of fish and wildlife, in order to prevent or minimize user conflicts. Information will also be provided to visitors about ways to avoid or minimize adverse effects on fish and wildlife populations and their habitats.

Congress directed that natural and healthy fish and wildlife populations will be maintained in the park. Congress recognized that nonwasteful, traditional subsistence uses by local rural residents have been a natural part of the ecosystem, and that man thus has a role in the natural and healthy ecosystem dynamics. The general definition of "natural and healthy" encompasses the natural abundance, behavior, diversity, and ecological integrity of native animals as part of their ecosystem, but it is difficult to measure and apply. The development of criteria for maintaining natural and healthy populations will depend on gathering more information. Baseline data will be gathered both on the natural condition of fish and wildlife (including population dynamics, nonwasteful traditional subsistence use) and unnatural, human-caused disruptions. Some research, therefore, will be focused on human activities such as recreation, methods of access, mining, and consumptive uses that have the potential to cause unnatural effects on fish and wildlife populations.

Studies of human use will include a compilation of past and current hunting and fishing regulations and harvests. Such studies will also be correlated with histories of trapping and the use and sale of furs. Other studies will include impacts on fish and wildlife from access routes and means, impacts of ORVs, recreational use, and mining; and general

subsistence use areas, primary resource sites, and subsistence customs and traditions. Many of the studies will be done in cooperation or consultation with the Alaska Department of Fish and Game.

Along with the study of human uses, selected samples of fish and wildlife species, habitats, population dynamics, and ecological relationships will be studied in consultation with the Alaska Department of Fish and Game to establish baseline data. The wildlife species to be studied will include caribou, black bear, wolf, brown bear, Dall sheep, moose, various raptors, and small mammals. Findings may result in recommendations of seasons and bag limits to the Alaska Boards of Fisheries and Game.

Aquatic habitat of the park and preserve will be protected to maintain natural, self-sustaining aquatic populations. The introduction of eggs, fry, or brood stocks, and the alteration of natural aquatic habitat, will not be allowed. Artificial stocking of fish in park and preserve waters will be considered only if necessary to reestablish species extirpated by man's activities.

Because of the low productivity of arctic waters, slow growth rate, and the concentration of fishing in certain locations, the goal in managing sportfishing will be to maintain natural and healthy populations by minimizing fish take while thorough baseline research is being done. State fishing regulations will still apply; however, visitors will be advised and encouraged to either practice catch-and-release methods or consume fish in the area. If fish are to be eaten, visitors will be encouraged to keep only younger and smaller fish of more abundant species. Visitors will be given information on careful handling techniques to increase survivability. In consultation with the Alaska Department of Fish and Game, a selected sample of lakes and streams will be studied to establish baseline data on populations, ecology, age, growth, production, and harvest. If the research indicates that management is warranted, seasons and bag limits specific to species or areas will be recommended to the Alaska Board of Fisheries.

The goal of the bear management program will be to maintain natural and healthy populations of bears and avoid adverse human-bear encounters. Human encounters with bears may result in property loss, human injury or death, and needless destruction of bears. To minimize these conflicts between humans and bears, the Park Service will initiate a program of information, portable bear-proof food storage, and nonduplicating incident reporting in cooperation with the state. Problem bears will not be relocated.

Information will be provided to visitors about bears and bear behavior, and portable bear-proof food storage containers will be available for use, preferably through private vendors, and may be required for travel in certain areas. In addition to authorized hunting in the preserve and subsistence use, people are permitted to use firearms in defense of life and property, as allowed by state law. To protect visitors from wounded bears and to protect wildlife, visitors will be required to notify park personnel of all bear and other wildlife incidents involving human injury

or death, damage to property, harm to wildlife, or discharge of firearms in adverse wildlife encounters. This will not apply to subsistence or sport hunting. The state of Alaska also has reporting requirements for the taking of game in defense of life and property. The Park Service will work with the state to develop cooperative reporting and enforcement to avoid unnecessary duplication. Black and grizzly bear-human interactions will continue to be monitored at selected locations. New technologies to minimize human-bear encounters will be applied. Recreational use may be further managed if adverse encounters persist--see discussion of visitor use limits (carrying capacity) in "Recreational Visitor Use Management" section. Implementation of the reporting requirement will follow established closure procedures, which specifies notice and hearing requirements (36 CFR 13.30).

Another concern is the possible effects of recreational visitors and recreational methods of access on wildlife, particularly at critical times of nesting, lambing, denning, or calving. These effects will be studied and monitored, and recreational use may be further managed if there is disturbance (see discussion of visitor use limits in "Recreational Visitor Use Management" section).

Fish and game regulations will continue to be enforced within the park and preserve by the Alaska State Troopers Division of Wildlife Protection and the National Park Service. The Park Service will routinely patrol the park and preserve to prevent the unauthorized taking of fish and wildlife. Rangers will be stationed in known and suspected problem areas at certain times of the year.

Vegetation

Management will strive to maintain the natural diversity, dynamics, and ecological integrity of the native plant mosaic as part of the complete ecosystem. Activities that will be monitored for their effects on the natural condition of vegetation include hiking, camping, campfires, snowmachines, suppression of wildfire, and subsistence harvest of vegetation.

An overall baseline inventory will be established with satellite imagery. Primary areas of human use and impact will be monitored. Research will be initiated to determine the relationship between levels of use and the formation of trails and campsites. Recreational use may be further managed as a result of these studies to prevent new or additional damage to vegetation (see visitor use limits discussion in "Recreational Visitor Use Management" section).

Attempts will be made to reclaim existing damage of placer mines, ATVs, winter roads, campsites, trails, and areas damaged by snowmachines, possibly by controlling erosion and transplanting or seeding hardy local native species. Future mining activities are discussed in the land protection plan.

Existing regulations allow the use of dead or downed wood and driftwood for campfires. However, in some areas there is a scarcity of burnable wood, and fire rings, stumps, and stripped dead trees have an adverse visual impact on the wild and undeveloped character of the area.

Campfires disrupt delicate nutrient cycles. A 2-inch diameter dead tree in the Arctic may represent 100 years or more of acquiring nutrients, and be important for decomposition of these nutrients over future centuries, a natural cycle that is altered in only a few minutes when it is used in a campfire. Driftwood and leaf-litter decomposition are important to aquatic ecosystems. Heat generated by campfires may be sufficient to sterilize soils, and the nutrients released are concentrated in one small area. To protect natural cycles, visitors will be encouraged to carry stoves and adequate fuel throughout the park and preserve. Collection of wood and fires will not be allowed except for subsistence purposes or emergency situations anywhere above forested areas because of the scarcity of vegetation. In forested areas, recreational visitor fires will only be allowed using dead or downed wood and driftwood on gravel bars and beaches unless contained in a fire pan, wood stove, or other such device that will not disturb the vegetative mat or lichens. Implementation of this limitation will follow established closure procedures, which specify notice and hearing requirements (36 CFR 13.30).

Wildfire has been recognized as a natural phenomenon that must be permitted if natural systems are to be perpetuated, but also as a threat to private properties managed for residential or economic use. To accommodate both of these concerns, the National Park Service adopted a limited fire suppression policy as part of the recently completed interagency fire plan. This plan is accompanied by a detailed analysis of impacts (environmental assessment) from the implementation of the interagency fire plan (Alaska Interagency Fire Planning Team 1982). Only fires that threaten human life or private property, or that will enter another suppression zone, will be suppressed to the degree necessary according to the plan. Some prescribed burns may be conducted in cooperation with landowners and the Alaska Fire Service to protect private property. Private and neighboring lands include native allotments and native regional and village corporation lands that are managed for full or modified fire suppression. ANCSA section 21(e) provides native lands with wildland fire protection services from the United States at no cost subject to some limitations.

Fruits, berries, and mushrooms may be collected for personal or subsistence use. A specific regulation allows subsistence users to collect plant materials along the Kobuk River for use in the making of handicraft articles (36 CFR 13.64).

Subsistence use of live standing trees is permitted in accordance with existing regulations (36 CFR 13.49). If such cutting is determined to be compatible with park purposes, a permit from the superintendent is required for live standing trees greater than 3 inches in diameter. In Gates of the Arctic, because of the slow growth of trees and the impacts of cutting on the wild and undeveloped character of the area, permits for

the cutting of live trees greater than 3 inches in diameter will be granted only when there are no alternate sources outside the unit and will be limited to the amount necessary for basic subsistence needs. Permits will require selective cutting, flush cutting, scattering of slash, and setbacks to avoid scenic impacts on rivers and lakes. Subsistence use of trees less than 3 inches in diameter or the gathering of dead or downed wood for firewood will not require a permit.

Threatened or Endangered Species

Threatened or endangered species will be identified and protected in accordance with the Endangered Species Act of 1973, as amended (16 USC 1531 et seq.). No threatened or endangered species are known to occur within the Gates of the Arctic National Park and Preserve (see appendix K). The current list of threatened or endangered species will be continually checked against known species within the unit. The park and preserve will be surveyed for threatened or endangered species found within the region.

National Natural Landmarks

Further evaluation of potential natural landmarks by the National Park Service, which has not yet occurred, may result in their designation as national natural landmarks. Such evaluation will consider that the two designated national natural landmarks are among the most highly publicized and most frequently visited areas of the park and exhibit some of the most visible impacts from that use. Further designations will not be recommended if they are likely to result in more publicity and adverse impacts on these areas.

National natural landmarks will be monitored for impacts and their condition described in an annual report to Congress. Managed to the same standards afforded all park resources in this wilderness, their nationally significant features will be protected.

Shorelands, Tidelands, and Submerged Lands

The Submerged Lands Act of 1953, the Alaska Statehood Act of 1958, and the state constitution provide for state ownership of the water (subject to the reservation doctrine discussed below in the "Water Rights" section), shorelands (the beds of navigable waters), tidelands (lands subject to tidal influence), and submerged lands (lands seaward from tidelands).

Determinations of what waters are navigable is an ongoing process in Alaska at both the administrative and judicial levels. At present the North Fork of the Koyukuk River upstream to township 26 north, range 16 west (Fairbanks meridian), has been determined navigable by the Bureau of Land Management. Other water bodies may be determined navigable in the future.

The National Park Service will work cooperatively with the state to ensure that existing and future activities occurring on these shorelands underlying the waters within and adjacent to the unit boundary are compatible with the purposes for which the unit was created. Any actions, activities, or uses of nonfederal lands that will alter the beds of these lands or result in adverse effects on water quality or on the natural abundance and diversity of fish and wildlife species will be opposed by the Park Service. The Park Service will manage the park/preserve uplands adjacent to shorelands to protect their natural character.

Additionally, the National Park Service recommends that the state close these areas to new mineral entry or to extraction of oil, gas, sand, and gravel resources, and the Park Service will apply to the state for these closures. The Park Service will also pursue cooperative agreements with the state for the management of lands under navigable water bodies (shorelands).

Management of Watercolumns

ANILCA, sections 101 and 201, and 16 USC 1a-2(h) and 1c direct the National Park Service to manage all waters within the boundaries of Gates of the Arctic. The state of Alaska has authority to manage water, based on the laws cited in the previous section. These laws provide for water management by both the state and the National Park Service.

The National Park Service will oppose any uses of waterways that will adversely affect water quality or the natural abundance and diversity of fish and wildlife species in the unit. The National Park Service will work with the state on a case-by-case basis to resolve issues concerning the use of the various waterways where management conflicts arise. Cooperative agreements for the management of uses on the water will be pursued if a case-by-case resolution of management issues proves unacceptable to the National Park Service and the state.

Water Rights

In Alaska, two basic types of water rights doctrines are recognized: federal reserved water rights and appropriative water rights. The reservation doctrine established federal water rights on lands reserved, withdrawn, or set aside from the public domain for the purposes identified in the documents establishing the unit. State appropriative rights exist for beneficial uses recognized by the state, including instream flows, and are applied to lands where federal reserved water rights are not applicable. No appropriative rights (federal or state) have been applied for in the unit.

For waters available under the reservation doctrine, unless the United States is a proper party to a stream adjudication, the National Park Service will quantify and inform the state of Alaska of its existing water

uses and those future water needs necessary to carry out the purposes of the reservation. When the reserve doctrine or other federal law is not applicable, water rights will be applied for in accordance with Alaska laws and regulations. In all matters related to water use and water rights, the Park Service will work cooperatively with the state of Alaska.

Air and Water Quality

The park and preserve is currently classified as a class II airshed under provisions of the Clean Air Act amendments (42 USC, 7401 et seq.). The park and preserve will be managed so as to achieve the highest attainable air quality levels and visibility standards, consistent with the Clean Air Act designation for the respective area and mandates specified by enabling legislation, e.g., ANILCA and the NPS organic act. The National Park Service will work with the Alaska Department of Environmental Conservation and the Environmental Protection Agency to achieve this. The National Park Service will also seek to participate in regional plans for development that might affect the air quality of the park and preserve and in the review of the effects of wildfire smoke on regional air quality.

In the future it may be necessary to establish an air quality monitoring program in the park and preserve. The feasibility of establishing air quality monitoring will be determined in consultation with the Regional Air Quality Coordinator, the National Park Service's Air Quality Division, and the Alaska Department of Environmental Conservation.

Water quality will be monitored on all major lakes, rivers, and other water bodies that receive higher amounts of use or are otherwise of concern. The National Park Service will work with the Alaska Department of Environmental Conservation and the Environmental Protection Agency to ensure compliance with standards. The highest state and EPA water quality classifications will be maintained for all the waters within the park and preserve boundaries and sought for all waters flowing into the park and preserve.

The National Park Service will work with other federal and state agencies to ensure compliance with all state and federal laws and regulations that relate to air and water quality.

Paleontological Resources

Paleontological resources are protected primarily by their inherent inaccessibility and their inconspicuous nature. Research involving disturbance or collections of these resources will require a permit, as described in the "Research Management" section of this plan, and will be in accordance with regulations concerning the "Preservation of American Antiquities" (43 CFR 3).

Natural Resource Research Needs

The following list of research projects is current at the time of printing of this document; however, proposals and priorities for research projects are reviewed annually and updated as necessary.

Priority	Project Title
1	Study methods for ORV access and use
2	Study lake fish populations and harvest impacts
3	Effects of trapping on furbearers
4	Wolf density and pack study
5	Moose population and ecology study
6	Brown bear population and habitat study
7	Subsistence use management
8	Monitoring of wildlife populations and habitats
9	Ambler transportation corridor study
10	Natural resource data base management
11	Water quality
12	Backcountry/visitor use study
13	Vegetation management program
14	Dall sheep harvest effects and habitat preference
15	Mining/minerals management
16	Aircraft effects on wildlife
17	Baseline caribou study
18	Geographic information system
19	Raptor distribution study
20	Predator/prey interactions
21	Endangered/threatened species
22	Wild river carrying capacity study
23	Fire management plan
24	Black bear study
25	Abundance and distribution of small mammals
26	Air quality
27	River fish populations
28	Brooks Range geology
29	Glacial/paleoenvironmental studies
	Ongoing - Fire protection

Research Management

The National Park Service will conduct all priority research that is not accomplished by others; however, the Park Service will actively seek the

assistance of universities, state and federal agencies, and other organizations to conduct or cooperatively supplement this research. The Park Service will consult with appropriate state and federal agencies on research conducted.

Research will be allowed if the methods and activities used to conduct the research conform with general public use. Activities associated with research that are not generally allowed, such as landing helicopters, collecting specimens, exceeding visitor length of stay, or other requirements will require a permit. In such cases, research activities will generally be approved under the following conditions: The research must be within the scope of the park's resource management plan, be a part of another federally mandated program (such as the Alaska mineral resource assessment program of USGS required by ANILCA section 1010), or be legitimate scientific or educational research that cannot be conducted at another location. The requested activities must also be the minimum necessary to accomplish the research and be confined to the minimum time and area necessary.

Requests to collect specimens will be subject to existing research specimen regulations (36 CFR 2.5). Requested activities may be limited or denied in high public use or critical resource and subsistence areas or times. For example, multiple helicopter landings near wolf dens would not be allowed during the denning season. The annual deadline for permit applications will be April 15 of each year for the following summer season (June 1-September 30), 45 days in advance of the activity for other times of the year. This will allow coordination with other planned NPS and permitted research. The permit will generally require follow-up information, including a summary of the number of people involved, the places visited, and period of research, and a reprint of what is published and a copy of the raw data.

A study repository will be provided at headquarters for research results. This information will be made available to qualified researchers and government agencies. Some data will be summarized for use by the public. Materials collected will be cataloged into the park collection in accordance with established regulations and guidelines.

Minerals Management

The federal lands within the park and preserve have been withdrawn from additional mineral location, entry, and patent under the United States mining laws and disposition under the mineral leasing laws. However, the unit was also established subject to valid existing rights, including existing recorded unpatented mining claims established under the U.S. mining laws.

The Mining in Parks Act of 1976 (16 USC, sec. 21-54) precipitated promulgation of regulations (36 CFR 9A) in 1977 for the Park Service to manage all mining activities on patented or valid unpatented mining claims in all areas of the national park system. These regulations enable the

Park Service to prevent or minimize potential damage to the environment and resource values through control of mining activities.

Typically, these NPS regulations require the mining operator to submit a proposed plan of operations to the Park Service for evaluation. If the proposed mining activities are in accordance with the regulations, afford adequate protection of park resources, and do not compromise the purposes for which the park was established, operating authority may be granted.

There are approximately 250 unpatented placer claims within the park and preserve. Many are currently under contest, and the remainder have not yet had mineral examinations to determine validity. One plan of operation for mining was approved in 1985. The land protection plan proposes acquisition of the interest in undisturbed valid claims and protecting park resources in previously disturbed valid claims through approved plans of operations. In 1983 the National Park Service prepared an Environmental Overview and Analysis of Mining Effects for the park and preserve, which assesses the effects of existing and future mining activities and gives guidance for the evaluation of the effects of proposed mining operations.

Locatable mineral claims may be filed anywhere on state lands inside the unit (the submerged lands beneath the navigable rivers). Requests for use of adjacent park lands for access to mining claims on lands beneath navigable waters within unit boundaries will be carefully evaluated under the provisions of title XI of ANILCA. Support facilities will not be authorized. This is further discussed in the land protection plan.

CULTURAL RESOURCE MANAGEMENT

The Brooks Range has been occupied and traversed by people for at least 12,500 years, yet the land bears little visible evidence of their presence. Gates of the Arctic has survived as a wild and undeveloped area because its rugged, remote geography and limited productivity landscape have kept human activity transient. Native people moved within and through the mountains and valleys, following the seasonal rhythms of their prey. Evidence of their occupation is found throughout the area but usually detected only by archeologists. Explorers, scientists, and natural philosophers harvesting the intangibles of knowledge and inspiration similarly have traversed the landscape and left little behind. Miners, trappers, and guides have left the most visible remnants, but these are thinly scattered. Within the context of this legacy, highly visible cultural resources represent only a small part of the full story of people in the Brooks Range.

A major purpose of Gates of the Arctic is to maintain the wild and undeveloped character of the area. But the National Park Service is also mandated to identify, record, and evaluate cultural resources and to preserve those of significance, integrity, and exemplary value. The overall objective for the management of cultural resources is to

understand the long-term human use of the area, recognizing the importance of both physical remains and intangible associations in the story of the Gates of the Arctic wilderness.

All management actions will be in compliance with appropriate federal laws and NPS policies, including the "Cultural Resource Management Guidelines" (NPS-28) and other applicable standards. Specific plans and actions will be described in a separate resource management plan (see discussion in "Natural Resource Management" section).

Though some areas of the park have been the subject of intensive archeological research, overall the park is not well known archeologically. There is also no complete historical overview. To provide the needed data, a five-year program has been undertaken to conduct a selective sampling of cultural resources throughout the park and preserve. This project consists of historical and archeological components, with reconnaissance level surveys in different areas of the unit each year. Three years of this project are nearly completed, and the remainder is subject to future funding limitations.

Based on the results of the parkwide cultural resource selective sampling, specific in-depth research needs and protective measures will be identified. The National Park Service will actively seek other organizations to conduct or cooperatively accomplish research. Research results will be available at a study repository at park headquarters. Public availability of specific information will be guided by a need to protect these sites under the Antiquities Act.

Following completion of the inventory and as future survey work is done, a list of classified structures (LCS) and a cultural sites inventory (CSI) will be prepared. The LCS is an inventory of all historic and prehistoric structures that have archeological, historical, architectural/engineering, or cultural value and in which the Park Service has or will acquire legal interests. The purpose of the CSI is to document the location, description, significance, threats, and management requirements for archeological resources in the preserve. The LCS and CSI assist NPS managers in planning and managing cultural resources. Potential LCS and CSI sites will be evaluated for adaptive and interpretive uses. Those properties under NPS jurisdiction that meet the criteria for listing on the National Register of Historic Places will be nominated to the register. All properties will be protected and interpreted as mandated by federal preservation laws and NPS policies.

Archeological Sites

The ongoing cultural resource selective sampling of Gates of the Arctic will provide more detail about locations, contents, and significance of historic and prehistoric period archeological sites, including information that can lead to their eligibility for nomination to the National Register of Historic Places.

Many known archeological sites and very probably many undiscovered sites occur in areas of concentrated visitor use. These high-use areas will be monitored for baseline conditions and changes. Any impacts or changes will be evaluated by professional archeologists who will make recommendations to protect the sites.

Archeological research by others will be managed according to NPS management policies and applicable federal laws and regulations, which recognize archeological resources as irreplaceable resources that cannot be duplicated elsewhere. Archeological research that involves excavating or collecting will be allowed only if it is essential to visitor understanding of the area, or essential to understanding anthropological or historical concerns that cannot be resolved outside the boundary or if the site is threatened with loss. Field techniques must have the least possible impact on natural and cultural resources. Research that involves activities not generally allowed for visitors, such as using helicopters or exceeding visitor group size or length of stay, will be subject to the stipulations described for research management in the "Natural Resource Management" section of this plan.

Copies of documents, records, maps, and photographs incident to archeological projects will be filed at park headquarters. Artifacts and materials recovered from excavations will be treated and preserved at an appropriate institution, where provisions will be made for their additional scientific study. To the greatest extent possible, artifacts will be made available for display in appropriate local museums with adequate protection.

Historic Sites

The ongoing selective sampling of cultural resources is identifying and evaluating historic sites, artifacts, and structures. Historic structures in Gates of the Arctic consist primarily of cabins and other structures associated with mining, trapping, and recent guiding activities. Few structures or artifacts identified so far remain intact enough to warrant physical preservation efforts. Time and harsh weather have taken their toll on those that have survived. Another factor to weigh in the evaluation and treatment of these resources is that they represent only a segment of the area's history; most historic and prehistoric events did not result in structural remains. In addition, the remote locations of many sites place them beyond feasible preservation and protection limits.

All historic structures will be professionally evaluated for their integrity, significance, and eligibility for nomination to the National Register of Historic Places. To date, two structures have been identified as eligible for nomination to the register: the Yale cabin on Glacier River and the Vincent Knorr cabin on Mascot Creek. The Yale cabin is on Doyon land within the park, and the Knorr cabin is associated with the mining operation on Mascot Creek. Additional sites will be surveyed and evaluated.

The historic Yale cabin is eligible for nomination to the register and will be maintained. It is the one standing cabin in the park that has both structural and site integrity illustrating the mining history of the early 20th century. After mining declined, the cabin became an important link along the overland route between Wiseman and the North Fork-Wild Lake area, and was communally maintained. Travelers who used the cabin included Robert Marshall. The site and structure are architecturally representative of such activities, although not outstanding. The National Park Service will seek a cooperative agreement with Doyon offering technical assistance to protect the cabin, and it will seek a land exchange to obtain the land and cabin. If the cabin is transferred to NPS ownership, it will be maintained to preserve original work, materials, and character consistent with the recommendations that will be developed in a historic structure report and maintenance preservation guide. It will be available for emergency or intermittent authorized winter use (see discussion on cabins in the "General Development" section).

The National Park Service will encourage and work with the owners of the Mascot mine to protect the Vincent Knorr cabin. When or if the cabin becomes NPS property, it will be further surveyed and appropriately protected.

All historic structures, sites, and remains that are determined by qualified professionals to be infeasible for preservation will be recorded by photographs, site plans, and measured drawings. Those sites not preserved will have value as "discovery sites" until they eventually revert to a natural condition. In the historic site investigation process, the archeological deposits (historic archeology) will be clearly identified and protected.

Selective collection of exemplary artifacts relating to ways-of-life, mining technology, and other themes will occur during surveys according to criteria such as vulnerability to theft or natural destruction, significance, and interpretive value. Collection will be limited by the policy and principle that artifacts have highest value in historical and archeological context.

Museum Collection Management

The park has a "Scope of Collections Statement" that gives direction for the collection and preservation of museum objects (for both natural and cultural resources). All collected artifacts and specimens will be treated, cataloged, and protected by qualified professionals in accordance with NPS guidelines. Artifacts and specimens will be maintained at headquarters or deposited at appropriate institutions, where they will be available for future study. Interest in developing local museums has been expressed in Anaktuvuk Pass, Bettles, and Wiseman. The National Park Service is interested in actively participating in the planning and development of any facilities and, provided these facilities offer adequate protection, may lend artifacts and specimens for display.

Intangible Cultural Resources

The National Park Service will strive to preserve the area's numerous intangible cultural resources through sensitive management policies and practices. Native customs and traditions, including the ways native people related to the land in previous generations, are in danger of being lost to rushing change. Many native peoples continue to maintain strong ties to the land and its resources. Intangible cultural resources, place names, spiritual associations, and customs and traditions can be obtained from the memories of elders and discussions with other local residents. More information about the other intangible themes of the park, such as mining and trapping methods, bush culture, scientific exploration, the wilderness philosophy and ethic of Robert Marshall and others, transportation, and development of the park, are being collected from the memories of people who were directly involved or from their descendants. The Park Service has been involved in and supported the Arctic John, Joe Sun, and 105(c) studies.

The Park Service will continue to support and expand the collection of park and environs documentary and oral history in cooperation with government, native, and private organizations. Collected data and research reports will be available at park headquarters.

Native place names have frequently been left off maps or changed to English names on USGS maps. This represents a loss of significant cultural resources because native place names often provide detailed descriptions of the landscape and insight into man's relationship with, and use of, the land. They may also identify spiritual values and special places. Recordation of native place names through oral history projects is important to resource management, but the National Park Service will request that the U.S. Board of Geographic Place Names leave any currently nameless features unnamed to maintain the wild and undeveloped character of the area. If for various reasons existing names are considered for change, the Park Service will request changing the names of important traditional features to native names.

Through the active participation of local native American groups, sacred resources within the park and its general vicinity will be identified and protected. To the extent possible, visitor and management activities will be scheduled to avoid conflicts with ceremonial or shrine activities. To assist management in this realm, an ethnohistorical summary, based on existing data, is required. This is in accordance with the American Indian Religious Freedom Act of 1978.

Historic and Cemetery Areas

Until native land conveyances have been completed, the National Park Service will protect, preserve, and manage all Alaska native historic sites identified under the provisions of section 14(h)(1) of ANCSA as properties eligible for the National Register of Historic Places.

Present-Day Culture

ANILCA directs encouraging the recognition and protection of the culture and history of the individuals residing in and around the unit when it was established (section 1301(b)(5)). The ongoing inventory of cultural resources and oral history programs are yielding recent history and information on continuing activities through interviews with local people. Subsistence research identified in the "Natural Resource Management" section will also provide information about local culture. The Park Service will continue to build such information collection into research, cooperative studies, and operational activities.

While managing Gates of the Arctic for purposes set forth in ANILCA, the Park Service will protect existing cultural patterns through many management actions in this plan. The "Subsistence Use Management" section outlines current provisions which preserve the opportunity for subsistence. The "Operations" section provides a commitment for recruiting local residents for park jobs. Further, all employees will be encouraged to learn about the culture and history of individuals residing throughout the area. The land protection plan identifies existing uses of small private tracts and native allotments, which generally complement park purposes, and provides for protecting such uses through conservation easements. The National Park Service will work to continue and improve communication with local residents in both directions on matters of mutual concern.

Cultural Resource Research Needs

The following list of cultural resource research needs are not in order of priority:

Complete selective sampling of cultural resources throughout the park and preserve.

Continue and expand the collection of park-related documentary and oral history.

Develop ethnohistoric studies relating to native concerns.

Complete National Register nomination forms for all properties eligible for the National Register of Historic Places.

Develop documented historical base maps.

ACCESS AND CIRCULATION MANAGEMENT

Access to and circulation within Gates of the Arctic National Park and Preserve is critical for wilderness recreational opportunities, subsistence use, private landholders within the unit, and other valid existing rights. Traditional means of access have left only a few marks upon the

landscape, and management of access and circulation will encourage traditional means that protect park resources and values, including maintaining the wild and undeveloped character of the area. The Park Service will not construct or support the construction of any roads, trails, or other transportation facilities except for those provided for by federal law. Valid existing rights and ANILCA provisions for access will be recognized. Appendix I contains a summary of all access provisions.

Planning for the various topics described in this access section will be an ongoing process. The National Park Service will continue to document past and current uses of the park/preserve inventory access routes and study special issues as described below. This process will of necessity be accomplished in phases over a period of several years. In carrying out this process of inventorying and collecting information, the National Park Service will consult with interested agencies, organizations, and individuals. When sufficient information has been gathered on a particular topic, the National Park Service, in consultation with others, may propose further action. Actions may include developing further management policy; proposing closures, restrictions, or openings; proposing access improvements; or proposing revisions to existing policies or regulations. Pursuant to section 1110(a) of ANILCA, 36 CFR 13.30 and 13.46, 43 CFR 36.11(h), and NEPA where applicable, adequate public notice and opportunity to comment will be provided.

Subsistence Access

Access for subsistence is guaranteed in accordance with the provisions of ANILCA section 811 and implementing regulations (see discussion in "Subsistence Use Management" section).

General Public Access

Under specific conditions, certain methods of motorized access and nonmotorized surface transportation are currently allowed within the unit:

> Notwithstanding any other provision of this Act or other law, the Secretary shall permit, on conservation system units, national recreation areas, and national conservation areas, and those public lands designated as wilderness study, the use of snowmachines (during periods of adequate snow cover, or frozen river conditions in the case of wild and scenic rivers), motorboats, airplanes, and nonmotorized surface transportation methods for traditional activities (where such activities are permitted by this Act or other law) and for travel to and from villages and homesites. Such use shall be subject to reasonable regulations by the Secretary to protect the natural and other values of the conservation system units, national recreation areas, and national conservation areas, and shall not be prohibited unless, after notice and hearing in the vicinity of the affected unit or area, the Secretary finds that such use

would be detrimental to the resource values of the unit or area (ANILCA section 1110(a)).

There are regulations now in place governing the use of snowmachines, motorboats, nonmotorized surface transportation, and aircraft. Regulations may be found in appendix J. A definition of "traditional" may be found in appendix N. To protect resource values of the unit, this plan identifies some proposed changes to existing regulations regarding recreational access (see "Recreational Visitor Use Management" section).

Access to Inholdings

Access is guaranteed to nonfederal land, subsurface rights, and valid mining claims, but any such access is subject to reasonable regulations to protect the values of the public lands that are crossed (ANILCA sections 1110 and 1111). Existing regulations (43 CFR 36.10) govern access to inholdings. Generally, traditional methods of access such as hiking, dog team, snowmachine, motorboat, and aircraft are compatible with park purposes. Certain methods of access could adversely affect park values, such as ATV trails or roads that destroy permafrost and tundra vegetation and erode soils. If adequate and feasible access is not provided by those methods generally allowed, a permit must be obtained from the superintendent specifying routes and methods. Mining access must also have an approved plan of operation. To prevent incompatible methods of access, acquisition of less-than-fee interests or easements are discussed in the land protection plan.

Easements

Campsite and linear access easements may be reserved on native corporation lands that are within or adjoin the park/preserve, as authorized by section 17(b) of ANCSA. The National Park Service will be responsible for the management of these public access easements inside the park unit and for those assigned to the National Park Service outside the unit. Pursuant to part 601, chapter 4.2 of the Department of the Interior "Departmental Manual" (601 DM 4.2), where these easements access or are part of the access to a conservation system unit, the easements will become part of that unit and administered accordingly. The purpose of these easements is to provide access from public lands across these private lands to other public lands. The routes and locations of these easements are identified on maps contained in the conveyance documents. The conveyance documents also specify the terms and conditions of use, including periods and methods of public access. A list of 17(b) easements and authorized uses is included in the "Access and Circulation" section of the affected environment. These easements appear on the Land Status map, which is located in the back pocket of this document. Further record keeping by the National Park Service may result in revision of the locations and authorized uses of 17(b) easements presented in the general management plan.

The National Park Service will work cooperatively with the affected native corporation and other interested parties, including the state of Alaska, to develop a management strategy for the easements. Management of these easements will be in accord with the specific terms and conditions of the individual easements and applicable park regulations (pursuant to 43 CFR 2650.4-7(d)(4) and 36 CFR 1.2). As the easements are reserved and the National Park Service assumes management responsibilities for them, the locations, mileages, and acreages will be compiled, and management strategies will be formulated. This information will be maintained at park headquarters.

As authorized in 601 DM 4.3G, an easement may be relocated to rectify a usability problem or to accommodate the underlying landowner's development of the lands if both the National Park Service and the landowner agree to the relocation. Easements may also be exchanged if an acceptable alternate easement or benefit is offered by the underlying landowner and the exchange would be in the public interest. An easement may be relinquished to the underlying landowner if an alternate easement has been offered by the landowner or termination of the easement is required by law. The National Park Service may also propose to place additional restrictions (to those authorized in the conveyance document) on the use of an easement if existing uses are in conflict with the purposes of the unit. In all cases where a change is proposed in authorized uses or location from the original conveyance, the National Park Service will provide adequate public notice and opportunity to participate and comment to the affected native corporation and other interested parties, including the state of Alaska. Any NPS proposals for changing the terms and conditions of 17(b) easements will include justification for the proposed change, an evaluation of alternatives considered, if any, and an evaluation of potential impacts of the proposed action.

The National Park Service will request the reservation of public (nonexclusive) use easements from the Bureau of Land Management on lands being conveyed under the Native Allotment Act of 1906, where important public use trails cross the lands being conveyed. The public use easements will ensure continued public access to public lands and resources in the unit.

RS 2477 Rights-of-Way

RS 2477 (formally codified as 43 USC 932; enacted in 1866) provides that "the right of way for the construction of highways over public lands, not reserved for public uses, is hereby granted." The statute was repealed by PL 94-579 as of October 21, 1976, subject to valid existing claims.

Gates of the Arctic National Park and Preserve is subject to valid existing rights, including rights-of-way established under RS 2477. The validity of these potential rights-of-way will be determined on a case-by-case basis. A map and list found in appendix M identify potential rights-of-way that the state contends <u>may be</u> valid under RS 2477. This

list and map are not necessarily all-inclusive. Private parties or the state of Alaska may identify and seek recognition of additional RS 2477 rights-of-way within the unit. Supporting material regarding potential rights-of-way identified by the state may be obtained through the Alaska Department of Transportation and Public Facilities or the Alaska Department of Natural Resources.

Identification of potential rights-of-way on the list and map does not establish the validity of these RS 2477 rights-of-way nor does it provide the public the right to travel over them. The use of ORVs in locations other than established roads or designated routes in units of the national park system is prohibited (EO 11644, EO 11989, and 43 CFR 36.11(g)). Identification of possible rights-of-way does not constitute the designation of routes for ORV use.

Ambler Right-of-Way

No applications have been made for a surface transportation access across the Kobuk preserve unit of Gates of the Arctic to the Ambler mining district. The National Park Service will continue to collect baseline data in this area. When or if an application is made, an environmental and economic analysis for determining the most desirable route and terms and conditions will be prepared consistent with ANILCA section 201(4).

Future Transportation and Utility Systems

Title XI of ANILCA sets procedures for application and approval of transportation and utility systems in and across conservation system units. Approval requires that a proposal is compatible with purposes for which the unit was established and that no economically feasible and prudent alternative route exists. The National Park Service is concerned about adverse effects of future transportation and utility systems on the wild and undeveloped character of the area, natural values, and valid uses of Gates of the Arctic.

Other Access Provisions

For state and private landowners not covered by general access and access to inholdings, the superintendent will permit temporary access across the unit for survey, geophysical, exploratory, or similar temporary activities on nonfederal lands when it has been determined that such access will not result in permanent harm to park area resources (ANILCA section 1111).

Access is provided to existing air and water navigation aids, communication sites, and facilities for weather, climate, and fisheries research and monitoring, subject to reasonable regulation. Access is also provided to facilities for national defense purposes (ANILCA section 1310).

Access for assessment activities for the U.S. Geological Survey and its designated agents is permitted by ANILCA section 1010, subject to regulations ensuring that such activities are carried out in an environmentally sound manner.

In accordance with the memorandum of understanding between the National Park Service and the Alaska Department of Fish and Game (see appendix D), the Park Service recognizes the need of the department to enter onto park lands after timely notification to conduct routine management activities that do not involve construction, disturbance to the land, or alterations of ecosystems.

SUBSISTENCE USE MANAGEMENT

Many Alaska native people continue to live a subsistence way of life similar to that pursued by their forefathers. In addition, there are many nonnatives living in rural Alaska who maintain a subsistence lifestyle.

In setting up a system of public lands throughout Alaska, Congress declared that "it is further the intent and purpose of this Act consistent with management of fish and wildlife in accordance with recognized scientific principles and the purposes for which each conservation system unit is established, designated, or expanded by or pursuant to this Act, to provide the opportunity for rural residents engaged in a subsistence way of life to continue to do so" (ANILCA section 101(c)).

In providing for the administration of new areas of the national park system in Alaska, Congress directed that "hunting shall be permitted in areas designated as national preserves under the provisions of this Act. Subsistence uses by local residents shall be allowed in national preserves and, where specifically permitted by this Act, in national monuments and parks" (ANILCA section 203).

In establishing Gates of the Arctic, Congress directed that "subsistence uses by local residents shall be permitted in the park, where such uses are traditional, in accordance with the provisions of title VIII" (ANILCA section 201(4)(a)).

Section 805(d) of ANILCA directs the secretary of the interior not to implement portions of the subsistence provisions if the state of Alaska enacts and implements subsistence preference laws that provide for the taking of fish and wildlife on federal lands for subsistence purposes, and that are consistent with the other applicable sections of ANILCA. The state did enact a law that meets the above criteria within the specified time. Consequently, the state of Alaska's fisheries and game boards set the bag limits, methods of take, seasons of take, and other factors related to the taking of fish and wildlife for subsistence purposes within Alaska, including the park units. Insofar as state laws and regulations for the taking of fish and wildlife remain consistent with the provisions of ANILCA and applicable federal regulations, the state will continue to regulate the subsistence harvests of fish and wildlife within the park units (see discussion in the "Natural Resource Management" section).

The National Park Service recognizes subsistence uses by local rural residents as a natural part of the ecosystem that has been in a dynamic equilibrium with all other parts for thousands of years. The Park Service is directed to take appropriate steps when necessary, in consultation with the state of Alaska, the park's subsistence resource commission (described below), and affected users, to ensure that continued consumptive uses of fish and wildlife populations within Gates of the Arctic National Park and Preserve do not disrupt the natural balance. Neither habitat manipulation nor control of other species will be undertaken for the purpose of maintaining subsistence uses within the park and preserve (see discussion in "Natural Resource Management" section).

Sections 805 and 808 of ANILCA authorize the establishment of subsistence advisory councils and subsistence resource commissions, respectively. The councils and commissions have been established and are executing their duties as defined by ANILCA. The regional subsistence advisory councils currently advise on subsistence matters on both federal and state lands. Section 808 of ANILCA states the following:

> The Secretary and the Governor shall each appoint three members to a subsistence resources commission for each national park or park monument within which subsistence uses are permitted by this Act. The regional advisory council established pursuant to section 805 which has jurisdiction within the area in which the park or park monument is located shall appoint three members to the commission each of whom is a member of either the regional advisory council or a local advisory committee within the region and also engages in subsistence uses within the park or park monument. Within eighteen months from the date of enactment of this Act, each commission shall devise and recommend to the Secretary and the Governor a program for subsistence hunting within the park or park monument. Such program shall be prepared using technical information and other pertinent data assembled or produced by necessary field studies or investigations conducted jointly or separately by the technical and administrative personnel of the State and the Department of the Interior, information submitted by, and after consultation with the appropriate local advisory committees and regional advisory councils, and any testimony received in a public hearing or hearings held by the commission prior to preparation of the plan at a convenient location or locations in the vicinity of the park or park monument. Each year thereafter, the commission, after consultation with the appropriate local committees and regional councils, considering all relevant data and holding one or more additional hearings in the vicinity of the park or park monument, shall make recommendations to the Secretary and the Governor for any changes in the program or its implementation which the commission deems necessary.
>
> (b) The Secretary shall promptly implement the program and recommendations submitted to him by each commission

> unless he finds in writing that such program or recommendations violates recognized principles of wildlife conservation, threatens the conservation of healthy populations of wildlife in the park or park monument, is contrary to the purposes for which the park or park monument is established, or would be detrimental to the satisfaction of subsistence needs of local residents. Upon notification by the Governor, the Secretary shall take no action on a submission of a commission for sixty days during which period he shall consider any proposed changes in the program or recommendations submitted by the commission which the Governor provides him.

The commission for Gates of the Arctic is proceeding with the formulation of a program. If any of the recommendations of the commission, which are accepted by the secretary of the interior, are in conflict with components of the general management plan, land protection plan, or other park planning documents, these planning documents will be amended or revised to incorporate the commission's recommendations.

The National Park Service will prepare a subsistence management plan for Gates of the Arctic to provide additional clarification in the management of subsistence uses. This management plan will address the major topics related to management of subsistence, such as timber cutting, shelters and cabins, trapping, resident zones, traditional use areas, access, acquisition of resource and user data, and resolution of user conflicts and possible closures. The approved subsistence hunting program of the subsistence resource commission will be a primary component of the subsistence management plan. The subsistence management plan will incorporate the approved subsistence hunting program of the subsistence resource commission, and will be revised as necessary to incorporate any future revisions to the approved subsistence hunting program.

The subsistence management plan will be developed in cooperation with all affected parties, including the state of Alaska, and the appropriate regional advisory councils and subsistence resource commission. Following adequate notification, a draft plan will be available for public review and comment for a minimum of 60 days prior to its approval. Significant revisions to the plan require the same public involvement procedures.

Resident Zones

Local rural residents who have customarily and traditionally engaged in subsistence uses of the park are eligible to continue those activities. To spare the expense and inconvenience of an extensive permit system, "resident zone communities," where significant concentrations of qualified local residents have been identified, they are collectively allowed to continue to engage in subsistence uses of the park without permits. These communities include Alatna, Allakaket, Ambler, Anaktuvuk Pass, Bettles/Evansville, Hughes, Kobuk, Nuiqsut, Shungnak, and Wiseman. Individuals who do not reside in the park or in one of these communities must obtain a subsistence permit by documenting their established,

historical subsistence use of the park and their permanent local residency.

Some resident zone communities are changing, and some individuals with no established, historical pattern of use within the park are engaging in subsistence uses of park resources. The National Park Service is charged with monitoring the resident zone communities for their continued eligibility. If a designated community no longer appears to meet the criteria, a process of public notice, hearing, and consultation with the subsistence resource commission will be initiated to consider deleting the community from the designated resident zone. If this occurs, individuals within the community who can demonstrate an established or historical pattern of park use prior to 1980 by themselves or their immediate families will be issued permits to continue subsistence use.

Traditional Use Areas

ANILCA limits subsistence use in Gates of the Arctic National Park to those areas where it has traditionally occurred. NPS regulations reiterate this limitation and provide for the delineation of these traditional use areas (36 CFR 13.41). The subsistence resource commission may address the issue of designation of traditional use areas. Based on their recommendations, the National Park Service will further explore the designation of traditional use areas for resident zone communities with the affected communities and the general public.

Subsistence Access

Access to subsistence resources is provided for in section 811 of ANILCA which states:

> (a) The Secretary shall ensure that rural residents engaged in subsistence uses shall have reasonable access to subsistence resources on the public lands.
>
> (b) Notwithstanding any other provision of this Act or other law, the Secretary shall permit on the public lands appropriate use for subsistence purposes of snowmobiles, motorboats, and other means of surface transportation traditionally employed for such purposes by local residents, subject to reasonable regulations.

In the Gates of the Arctic, subsistence uses by local residents are allowed, where such uses are traditional, in accordance with the provisions of title VIII of ANILCA. Authorized means of access for subsistence uses in Gates of the Arctic are snowmachines, motorboats, and dog teams, and they are governed by existing regulations (36 CFR 13.46). If another means of surface access is shown to have been traditionally employed in the unit for subsistence purposes, it may be permitted in that unit subject to reasonable regulations. The existing

regulations contained in 36 CFR 13.46 do not allow for transportation modes other than snowmobiles, motorboats, and other means of surface transportation traditionally employed. Any additional information about traditional means will be reviewed on a case-by-case basis. A definition of "traditional" may be found in appendix N.

The legislative history of ANILCA indicates that it was not Congress's intention to foreclose the use of new or currently unidentified means of surface transportation (Senate Report 96-413, p. 275). New modes of access that are developed and implemented for general use in rural Alaska and originate from technological advances that cannot be shown to have been traditionally employed may be allowed in the future for subsistence purposes under circumstances that prevent waste or damage to fish, wildlife, or terrain and would not degrade other park resources or values. The effect of new technology on areas and intensity of subsistence use would also need to be addressed.

In Gates of the Arctic, the use of ORVs for subsistence is not allowed because the use has not been shown to be a traditional means of access. Further, it has not been demonstrated that adverse impacts can be avoided. Information has been presented to the National Park Service regarding use of ORVs in Gates of the Arctic prior to establishment of the unit; however, no sufficient evidence has been submitted to warrant reconsideration. The Park Service is seeking more data on this use, along with cooperative studies with the Bureau of Indian Affairs on the vegetative impacts of ORVs. New information related to the traditional use of ORVs for subsistence will be reviewed for consistency with ANILCA.

The use of aircraft as a means of access to areas within the park for purposes of taking fish or wildlife for subsistence purposes is prohibited except in cases of extraordinary hardship, when a permit may be granted by the superintendent pursuant to 36 CFR 13.45 and 13.64. In allowing for exceptions to the ban on aircraft use for subsistence activities, the legislative history of ANILCA states that "these types of situations are the exception rather than the rule and that only rarely should aircraft use for subsistence hunting purposes be permitted within National Parks, National Monuments and National Preserves" (House, Nov. 12, 1980, Congressional Record, H 10541).

General provisions for subsistence access are summarized in appendix I.

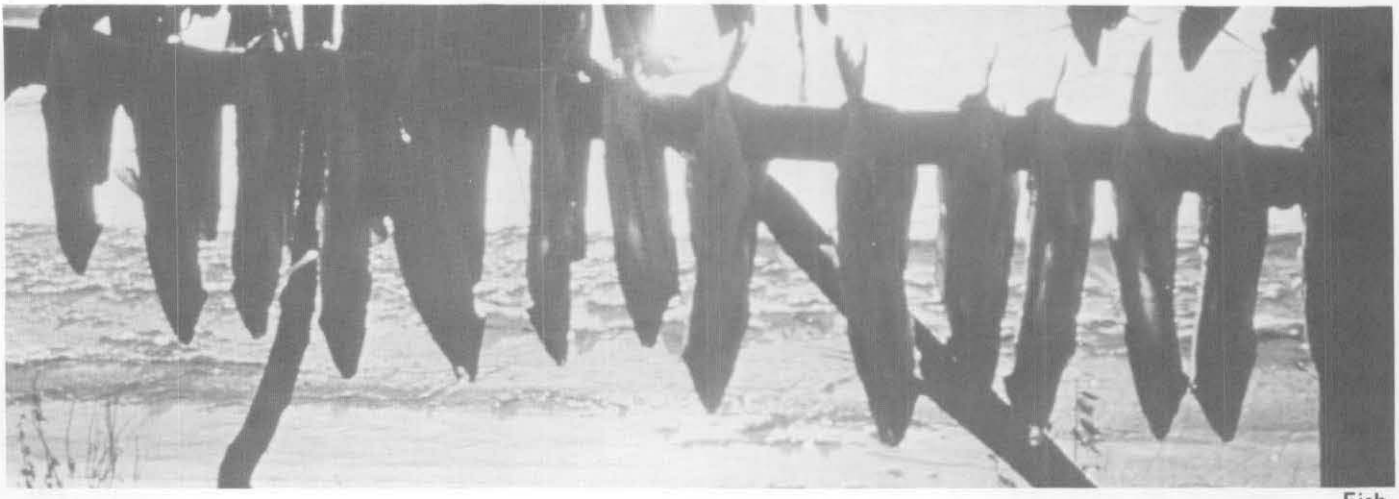
Timber Cutting

The use of plant materials and trees are also allowed for subsistence purposes. Any cutting of live trees greater than 3 inches in diameter requires a permit from the park superintendent, which will be issued if alternate resources do not exist outside the park. Timber-cutting permits require dispersed cutting, flush cutting, scattering of slash, and river and lakeshore setbacks to avoid unnecessary scenic and resource impacts.

Subsistence Hunting

Anaktuvuk Mask

Caribou



Fish

SUBSISTENCE USE

Subsistence Shelters and Cabins

Permits may also be issued for the temporary use, occupancy, construction, or maintenance of new or existing cabins and other structures. However, it must be determined that such a requested use is reasonably necessary to accommodate subsistence. Each request will be evaluated on its individual merits.

Trapping for Subsistence Uses

Subsistence primarily involves rural Alaska residents' customary and traditional uses of wild renewable resources for personal consumption; however, barter and customary trade are also recognized as being a part of the subsistence lifestyle and economy. Customary trade largely centers around the sale of furs, although other items are also part of trade networks. Fur trapping is understood and expected to occur as one of the many subsidiary activities that make up an individual's subsistence lifestyle, providing the cash to purchase the basic tools necessary to maintain that lifestyle. Congress did not intend, however, that trapping ever become a significant commercial activity: "The Committee does not intend that 'customary trade' be construed to permit the establishment of significant commercial enterprises under the guise of 'subsistence uses.' The Committee expects the Secretary and the state to closely monitor the 'customary trade' component of the definition and promulgate regulations consistent with the intent of the subsistence title" (Senate Report 96-413, p. 234). The Park Service will work closely with the state of Alaska in monitoring the "customary trade" aspects of subsistence, including trapping. The subsistence resource commission will be asked for recommendations consistent with ANILCA, which further clarifies trapping for subsistence uses as part of their hunting recommendations. The National Park Service will promulgate regulations consistent with the intent of title VIII, in accordance with the legislative history. Trapping in the preserve is authorized without this qualification. Customary trade at Gates of the Arctic also includes the sale of baskets made from plant materials collected along the Kobuk River.

Use Conflicts

There have been reports by local residents of conflicts between subsistence use and sport hunters and fishermen, commercial operations, floaters, aircraft, and helicopters. Conflicts will be minimized by proposals in this plan. Visitors will be encouraged to register at field stations, where they will be given information about subsistence users and asked to avoid critical times and places of subsistence activities. Air-taxi operators and others operating fixed-wing aircraft will be requested to avoid flying below a specified altitude and to avoid subsistence use areas at critical times. The National Park Service will similarly adhere to these standards and will not allow unnecessary or disruptive helicopter use (see "Research Management").

The taking of fish and wildlife for nonwasteful subsistence uses in the park is accorded priority over the taking of fish and wildlife for other purposes, such as sport hunting and fishing (ANILCA section 804). Any situations involving conflict between subsistence uses and nonconsumptive uses, such as hiking or boating, will be addressed on a case-by-case basis. The National Park Service will seek to resolve all situations of conflicting uses in ways that allow all valid uses to continue.

Closures

Closures to subsistence uses are authorized by section 816 of ANILCA and implementing federal regulations (36 CFR 13.50). Closure of areas to subsistence uses of a particular fish or wildlife population may be effected only if necessary for reasons of public safety, administration, or to ensure the continued viability of such a fish or wildlife population.

RECREATIONAL VISITOR USE MANAGEMENT

Gates of the Arctic National Park and Preserve offers visitors opportunities that are rare in the modern world. The natural integrity of a large arctic area and the scenic beauty of glacier-cut lands are features protected in the Gates of the Arctic. Even rarer is the opportunity for boundless solitude. Mountain climbing and wilderness recreation attract some visitors; others are local residents who, by tradition, use the park for subsistence. Wildlife habitat is protected and, with it, the opportunity for visitors to view raptors, caribou, grizzly bears, Dall sheep, moose, and wolves in the wild. Gates of the Arctic is destined to be America's premier wilderness, and it will remain a wild, undeveloped land.

Visitors can tame a wild place. Just as shy animals flee when a person intrudes, less obvious elements of wilderness also slip away as people prevail on the landscape. Visitor use will change the wilderness experience and the natural environmental integrity, yet the National Park Service must continue to provide opportunities for wilderness recreation. Thus, managers must contend with the question, "What degree of change is acceptable?"

Recreational Visitor Use Limits (Carrying Capacity)

The National Park Service will, as necessary, encourage compatible visitor behavior or set use limitations to ensure that the outstanding wilderness opportunities and natural systems available at Gates of the Arctic remain undiminished now and in the future. This is a difficult task. There is a need to clearly define the values to be protected, and there are many ways to protect them. There are probably as many reasons why people value wilderness as there are people who value wilderness. For example, some people wish to blend unobtrusively into a wholly natural environment, while others are enticed by the challenge of self-reliance.

For still others, freedom from routines and workaday concerns is all important. From each unique perspective on the value of wilderness, a different standard for limiting use might emerge, a different degree of tolerance for other people and the traces they leave behind.

There are many possible ways the National Park Service could protect visitor and resource values, and park managers are not unaware that intrusive regulations can impair the experience for the visitor. The Park Service might limit the number of hiking starts from more popular starting places or the number of put-ins for river floats. Also, it could limit commercial operators, perhaps by rationing the number of trips per year per outfitter. Another way of protecting park values could be to encourage changes in visitor behavior in such ways as interpreting objectives and problems, providing minimum-impact camping information or requiring the use of camp stoves.

Generally, current visitor use causes few problems and does not approach levels that demand restriction except in a few areas where use is most concentrated. In the Arrigetch Peaks, human impact is reflected by vegetation damage, fire rings, trails, and litter and is beginning to alter the wilderness.

Management Objectives and Standards. Management objectives and standards describe what the park and preserve should be like. They are based on the directions of Congress. The management objectives that follow were identified in the park's Statement for Management, which was publicly reviewed in 1982, revised to incorporate public comments, and approved in April 1984. Specific standards were reviewed by the public in the Draft General Management Plan of March 1985. These standards are intended to provide clear measures to monitor conditions, identify research projects, and initiate the evaluation and selection of appropriate management actions to prevent serious problems before they develop.

Goals and standards for resource and visitor use management are identified below. These standards are judgment calls, a product of experience, limited research data, basic inventory information, public review, and common sense. The National Park Service will be working to increase the body of information on which these judgments are based, and managers anticipate that they will be refined and modified as knowledge and experience grow.

Natural Resources

Objective: Maintain the wild and undeveloped character of the park and preserve (many of the following standards apply to this objective).

Objective: Determine and only allow levels of human use that park resources can withstand without impairing their integrity or condition.

Standards:

Disturbed/impacted campsites and fire rings do not occur along lakeshores or river/hiking corridors. *

Undesignated trail is not discernible as a distinctly human-caused trail. *

Objective: Maintain free-flowing rivers and water quality.

Standards:

Any degradation of water quality from Alaska Department of Environmental Conservation drinking water standards is not acceptable.

Dams or water diversions are not acceptable.

Objective: Establish clear standards and maintain natural and healthy populations of fish and wildlife and their associated habitats within the park.

Standards:

Critical areas for caribou, grizzly bears, Dall sheep, moose, wolves, raptorial birds, and other wildlife are not significantly disturbed by visitors during times of nesting/calving/denning/lambing.

Objective: Identify and protect threatened or endangered species.

Standards:

Significant disturbance to any threatened or endangered species or their habitats is not acceptable.

Objective: Promote human understanding and behavior which minimizes hazardous or destructive encounters with wildlife.

Standards:

Maximum of one wildlife encounter occurs on park land, that results in the death of an animal per year (other than authorized hunting activities); no encounters occur that result in serious human injury or death; and maximum of two threatening encounters are reported or observed in each of the two management districts per season.

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*Standard currently exceeded in some areas; may indicate appropriate management action and further evaluation.

Cultural Resources

Objective: Protect significant cultural resources on park land with methods that are compatible with the wilderness purposes of the area.

Standards:

Known significant cultural resources are not damaged by visitors.

Subsistence Use

Objective: Minimize conflicts between subsistence activities and recreational uses.

Standards:

Conflicts between subsistence and recreational users are reported and substantiated no more than one year in five in any given subsistence locale (Kobuk/Koyukuk/Anaktuvuk regions).

Recreational Visitor Use

Objective: Provide for park purposes and wilderness recreational activities by maximizing a visitor's opportunity to experience solitude, self-reliance, challenge, wilderness discovery, and freedom of movement through the use of the park, without intrusive regulation or unreasonable jeopardy.

Standards:

Recreational visitors encounter a maximum average of one other group per week during each trip (Note: different rivers/hiking corridors could be assigned different standards).

Recreational visitors encounter a maximum of seven people per backpacking group, 10 per river running group. *

Maximum of three documented complaints in one season about unwanted encounters with other groups. *

Recreational visitors encounter no littered sites.

Visitors encounter no recreational use of snowmachines or motorboats.*[1]

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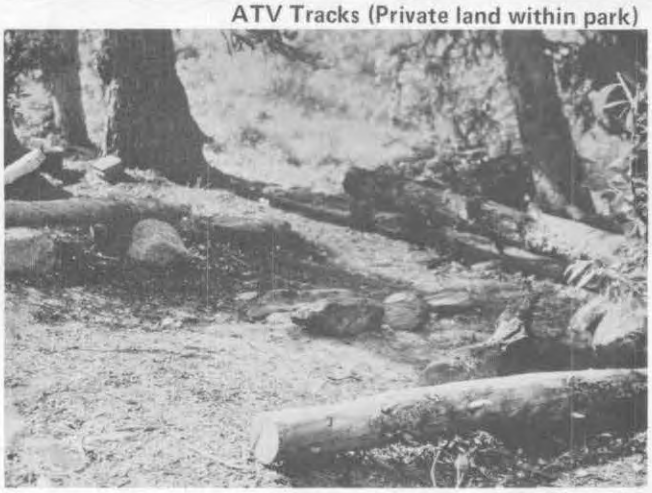
[1] Any application of this standard that would propose restrictions or closures must be consistent with the provisions of ANILCA section 1110(a).

ATV Tracks (Private land within park)

Abandoned Airstrip



Campsite

Cache

Hiking Trail

IMPACTS OF HUMAN USE

Objective: Monitor aircraft operations (including access planes, commercial, military, and private overflights) and mitigate visual and audible intrusions on visitors' wilderness experience.

Standards:

Visitors hear/see average of one low aircraft (below 2,000 feet above ground level) per week once they are away from access points and out of regularly used aircraft corridors[1] shown on the Summer Recreational Use and Access map.

Land Protection

Objective: Recognize fully the rights of private inholders and promote understanding among inholders and neighbors of compatible use, development, and access.

Standards:

Intrusions on private landowners within the park caused by visitors occur less frequently than twice in five years in each of the two management districts.

Administration

Objective: Keep park management activities, requirements, and regulations from unnecessarily interfering with valid recreation, subsistence, and private property uses.

Standards:

Conflicts between recreational visitor uses and NPS operations is documented less frequently than two per year in each of the two management districts.

Field Data and Information. Field data and information will be needed to determine existing conditions and places where standards are not being met. Collection of this data will include monitoring and inventory of use areas, systematic recordation of field reports, and research.

Monitoring and Inventory - Areas of visitor use, notably those shown on the Summer Recreational Use and Access map, will be inventoried and monitored for the following conditions identified in the standards:

campsites - condition, location, number, and distribution

human-caused trails - condition, location, and length

water quality - effects of human use

significant cultural resources - condition and impact from human use

littered sites - sites with five or more items of refuse, number extent, location, distribution, and individual litter

Systematic Recordation - Much information is currently collected by NPS staff in the field and at ranger stations, and will be recorded by location and date for evaluation with respect to the standards:

adverse wildlife encounters - human injury or death, destruction of wildlife

identifiable conflicts between subsistence and recreational users

identifiable conflicts between private landholders and recreational users

complaints of unwanted encounters with other groups by visitors

identifiable unnecessary interference between NPS operations and recreational users

Research - More extensive research will be needed to monitor and adjust standards and prescribe management. Research will be conducted in a statistically and scientifically sound manner. Some research requires visitor opinions, and its collection will respect visitor desires for no interference. The following areas have been identified:

critical times and areas of nesting/calving/lambing/denning of caribou, grizzly bears, Dall sheep, moose, wolves, raptorial birds, and other wildlife; effects of visitors

threatened or endangered species and habitats

critical times and areas of subsistence use

number of other groups encountered by visitors, visitor reactions, expectations, and satisfaction

number of aircraft encountered by visitors, height, noise, visitor reactions, expectations, and satisfaction

relationship between levels of use and campsites, trail formation, water quality degradation, cultural resource impacts, and littered sites

evaluation of management actions, effectiveness, and acceptance

Application of Standards. Management standards will be used to guide management in preventing problems from developing and devising a response that fits the situation. When a standard is exceeded, it will trigger a look at the cause. Certain tools provided within this plan may be applied, such as information, reclamation, working with commercial operators, or research. Those standards marked with an asterisk (*) are currently being exceeded in certain areas and are the basis of several actions in this plan to prevent parkwide spread of impacts. Actions such as group-size limits and campfire limits will require changes in existing regulations through the rule-making process with further public notice. Existing federal regulations for national park system units in Alaska (36 CFR 13) and a list of proposed changes may be found in appendix J.

The monitoring, recordation, and research outlined in this plan may reveal additional standards that have been exceeded, and may lead to further management actions. New information, in some cases, may lead to adjusting standards higher or lower. For problems that appear to be isolated situations, the cause would be investigated and existing tools provided within this plan would be applied. For example, if three impacted/disturbed campsites are found within a 10-mile stretch of the North Fork, they would be restored to a natural condition and monitored. If the problem resulted from sheer carelessness of recreational visitors, the visitor information package given during voluntary visitor registration may be fortified with preventative information. If the problem resulted from numerous commercial trips into the area, the National Park Service would work with commercial operators to prevent impacts.

For recurring and growing problems, further management steps would be developed with public involvement. Site-specific problems or minor modifications to regulations would be handled individually. For example, if the problem grew to 12 impacted/disturbed sites on this river segment, an additional special zone such as the Arrigetch zone may be proposed through the rule-making process, which includes public comment.

If monitoring and research indicate numerous standards are being exceeded at a variety of locations throughout the unit, despite reasonable management actions, a new approach to recreational visitor use management may be needed. Should this occur, the public will be invited to offer suggestions in designing the best approach to backcountry management.

Recreational Access

Access is essential for wilderness recreational activities. Appropriate means are those that stress self-reliance and solitude, cause no adverse impacts on resources, and are consistent with the Wilderness Act or otherwise provided by ANILCA. The following discussion outlines reasonable access for wilderness recreation in Gates of the Arctic National Park and Preserve. It does not apply to subsistence activities, access to privately owned lands, or travel to and from villages and homesites.

Access for subsistence is guaranteed in accordance with the provisions of ANILCA section 811 and implementing regulations (see discussion in "Subsistence Use Management" section). Adequate and feasible access for owners of privately owned land within the unit is guaranteed by provisions of ANILCA section 1110(b) and implementing regulations. A summary of all access provisions may be found in appendix I.

Under specific conditions, certain methods of motorized access and nonmotorized surface transportation are currently allowed within the unit subject to reasonable regulations (ANILCA section 1110(a)).

There are regulations now in place governing the use of snowmachines, motorboats, nonmotorized surface transportation, and aircraft. Regulations are identified in each discussion and may be found in appendix J. Charged with protecting park areas in a manner that will leave them unimpaired for future generations, the National Park Service must apply available knowledge and tools to prevent predicted damage, and not wait until demonstrated damage to park resources or values has occurred. To protect resource values of the unit, closures are proposed, but not implemented, in this general management plan. All proposed closures would be implemented only after following the applicable closure procedures contained in 36 CFR 13 and 43 CFR 36.11. Complete analyses of proposals will be developed prior to initiating closure proceedings. Closure proposals may require revision prior to initiation of closure proceedings if more detailed information indicates that different measures (for example, less than unit-wide closures) are required to remedy resource problems.

Foot. Foot access is a highly consistent and appropriate means of access into the park and preserve. This includes hiking from access points along the Dalton Highway, Anaktuvuk Pass, and the numerous aircraft landing points in and around the unit in the summer. In the winter, this form of recreational access consists of snowshoeing and cross-country skiing.

To maintain the wild and undeveloped character of the area and offer recreational visitors a wilderness experience found in few areas, no trails will be constructed. To protect solitude and minimize the possibility of other resource impacts, group sizes will be established. Groups that are within the recommended size will not need to register or contact the National Park Service. For slightly larger groups, two or three extra people, advance written permission from the superintendent may be obtained under certain conditions. Large immediate families, handicapped groups, or other wilderness recreation groups, where a slightly larger group is essential, may be issued these permits if they can demonstrate that they will not impair solitude, conflict with other users, or cause other resource impacts. Group sizes for recreational backpackers will be set at six during the summer months of June through September. In the winter, because vegetation is usually protected with snow, the group size will be slightly higher but set at 10. These numbers are based on existing use patterns, management experience in other national park areas, and public involvement during the draft general management plan.

Implementation will follow established closure procedures, which specify the notice and hearing requirements (36 CFR 1.5 and 13.30 and 43 CFR 36.11(h)).

The Dalton Highway, not envisioned as a public road when the park was established, will continue to grow as a popular foot access point for recreational visitors. It offers a valuable alternative to those who do not wish or cannot afford to fly into the park. This eastern portion of the unit will be managed similar to the rest of the park and preserve to ensure that outstanding wilderness opportunities and natural systems remain undiminished. Information will be a key tool for management as elsewhere in the park. The ranger station at Coldfoot will provide these visitors with information about general access, purposes of the area, general terrain conditions, hazards, subsistence uses, and private property to help recreational visitors plan a safe trip and avoid conflicts with others.

NPS staff at Coldfoot will also be important for monitoring and applying the standards set forth in this plan. Because of the special opportunities of this area, additional solutions to any problems identified may be explored. Cooperative solutions will be sought with the other land managers of the region to meet the recreational needs of the area.

Anaktuvuk Pass will also probably continue to have an increasing number of recreational visitors begin their trips there. There are ANCSA 17(b) easements to provide for public access across the native corporation lands to park lands. The ranger station and staff at Anaktuvuk Pass will provide recreational visitors with information to plan a safe trip and avoid conflicts with others.

Rafts, Canoes, and Kayaks. These forms of access and travel are common in the summer and most appropriate for wilderness recreational activities. They are silent methods having little impact and that stress self-reliance and personal effort. To protect solitude and minimize the possibility of other resource impacts, group sizes will be established as described for foot access, with a provision for up to two or three extra people per group through written permission in advance under specified conditions. Recreational river running group size will be set at 10 people per party. This number is based on existing use patterns, management experience in other national park areas, and public involvement in the draft general management plan. Implementation of this limit will follow established closure procedures, which specify notice and hearing requirements (36 CFR 1.5 and 13.30 and 43 CFR 36.11(h)).

Pack and Saddle Animals (Nonmotorized Surface Transportation). Federal regulations (43 CFR 36.11(e)) permit the use of domestic dogs, horses, and other pack or saddle animals subject to restrictions or closures by the superintendent to avoid any use that is determined to be incompatible with the purposes of the park. The use of dogsleds is a highly traditional, low-impact method that involves high levels of self-reliance and personal effort and tends to have a small group size. It is both reasonable and appropriate for wilderness recreational access and travel

in Gates of the Arctic. Harnessed and/or restrained dog teams and pack dogs will be the only dogs allowed in the unit.

The use of horses, llamas, mules, and other hoofed pack animals has not been widely established in Gates of the Arctic. While this method of access does not impair solitude, there are concerns that concentrated or increasing use would be detrimental to other resource values. These concerns include impacts on the fragile arctic vegetation and soil structure, the introduction of nonnative plant seeds through feed or fecal matter, the attraction of bears to visitors using pack animals, and the transmission of diseases to native wildlife. Horses, llamas, mules, and other hoofed pack animals will be limited to three pack animals per recreational group, and will require a permit obtained in advance by an individual or guide. The permit will let the National Park Service know when and where pack animals are being used, so the situation can be closely monitored for the previously listed impacts. Based on this information, adjustments can be made to the limitation. Recreational visitors using pack stock must comply with all other backcountry regulations. Implementation will follow established closure procedures, which specify notice and hearing requirements (36 CFR 1.5 and 13.30 and 43 CFR 36.11(h)).

Aircraft. Fixed-wing aircraft may be landed and operated on lands and waters within the park and preserve, except where such use is prohibited or otherwise restricted by the superintendent pursuant to 36 CFR 1.5 and 13.30 and 43 CFR 36.11(f) and (h). The use of aircraft for access to or from lands and waters within a national park for purposes of taking fish or wildlife for subsistence uses therein is generally prohibited as set forth in 36 CFR 13.45.

The use of fixed-wing aircraft for recreational access is appropriate and necessary in Gates of the Arctic; however, there are concerns about adverse effects of aircraft use on resource values. At this time no limits will be placed on fixed-wing aircraft landings within the unit. Other management actions in this plan, such as visitor information, working more closely with air-taxi operators, and group size and camping limits are expected to adequately control impacts on resources that will otherwise result from unconstrained fixed-wing aircraft access. However, the National Park Service will monitor for the effects of aircraft use, and if problems are identifed, such as damage to vegetation, concentrated use, or deterioration of solitude, the National Park Service will propose restrictions or closures through the procedures outlined in 36 CFR 1.5 and 13.30 and 43 CFR 36.11(f) and (h).

An area that will be specifically monitored is the area between the North Fork of the Koyukuk and the Dalton Highway. This is an area of anticipated increasing recreational visitor use from the Dalton Highway. The Draft General Management Plan of March 1985 considered an alternative that would designate this area as a no-landing zone to protect solitude and the quality of the recreational experience. The state of Alaska supported this concept with some conditions, such as protecting access to inholdings. While designation of this zone does not appear

necessary at this time, recreational visitor use and impacts will be monitored, and if problems are identified, the issue will be reevaluated with the public.

The National Park Service inventoried the unit for landing strips, where maintenance is necessary and appropriate for continued safe public use of the area. Few landing strips exist, and none are necessary or appropriate because adequate landing areas are available on lakes or gravel bars where alteration of vegetation or terrain is not required. In Gates of the Arctic, there are no designated or maintained landing strips, and no alteration of vegetation or terrain is authorized for landings and takeoffs except in emergency situations.

The National Park Service does not propose to construct or maintain any landing strips. The construction of new landing strips on federal land may be allowed under one of the following circumstances:

(1) when the need has been identified, assessed, and approved in an amendment to the general management plan or a new general management plan

(2) when approved under title XI of ANILCA, which provides a process for approval or disapproval of applications for the development of transportation and utility systems across conservation system units

(3) for access to inholdings pursuant to 43 CFR 36.10

The National Park Service is concerned about the adverse effects of future landing strips on the wild and undeveloped character of the area, natural values, and valid uses of Gates of the Arctic.

The use of a helicopter in Gates of the Arctic, other than at designated landing areas or pursuant to the terms and conditions of a permit issued by the superintendent, is prohibited (43 CFR 36.11(f)(4)). Landing areas for helicopters are designated pursuant to special regulations. At the present time, there are no designated landing areas for helicopters in Gates of the Arctic. In certain circumstances, permits may be issued for research (see discussion on research management in the "Natural Resource Management" section. Aviation fuel caches will not be allowed except under extraordinary circumstances and with the written permission of the superintendent. This will be implemented in accordance with regulations governing unattended or abandoned property (36 CFR 13.22).

The National Park Service will actively advise that all aircraft maintain a minimum altitude of 2,000 feet, whenever possible, to avoid disruption of wildlife movement as well as subsistence and recreational activities. The suggested altitude minimums over any national park system unit have been printed on the sectional aeronautical charts (scale 1:500,000) since the mid 1970s. The Park Service will also advise that aircraft not be flown directly over major river drainages, wherever possible, especially during periods of high recreational use, subsistence use, and caribou migration

(June-September), nor over improved private property. These flight advisories will become a stipulation in all special use permits and concession permits subject to the requested use. It is recognized that these minimum altitude suggestions are advisory only (except for permits mentioned above) since the Federal Aviation Administration regulates air space, and lower altitudes may be required due to weather conditions and emergencies.

Information about the locations of regularly used air corridors will be available to visitors who are concerned about the opportunities for solitude. Plane camping will be subject to all parkwide backcountry regulations. The National Park Service will work with air-taxi operators to develop and implement guidelines to avoid recreational visitor or subsistence conflicts and concentrations of use. The Park Service will also work with the Federal Aviation Administration through an interagency agreement (1984) to mitigate adverse effects of overflights.

Motorboats. Motorboat use is currently allowed on park waters (43 CFR 36.11(d)). At Gates of the Arctic, the use of motorboats for subsistence purposes, access to private property within the unit, and travel to and from villages and homesites will continue to be guaranteed. Nonlocal, general public use of motorboats for recreation has not been widely established on most rivers and lakes in the unit. Motorboats have been used for recreation on Walker Lake, and, occasionally on some rivers, small auxiliary motors have been used on rafts. Motorboat use on Walker Lake contributes to concentrated fishing pressure on fish populations that have low productivity. It also contributes to shoreline erosion and vegetation damage from the concentration of campers at motorboat access points. Cultural sites along the shores of Walker Lake are threatened with loss from such use. NPS staff patrolling Walker Lake in the summer months have observed several motorboats operating simultaneously, impairing the solitude of this national natural landmark. Recreational motorboat use elsewhere is not known to occur, but similar adverse impacts on pristine lakes and designated wild rivers are predictable if such use becomes established and increases.

The recreational use of motorboats on park waters is neither traditional nor necessary for wilderness recreational activities. To protect the wilderness values of the unit, the Park Service intends to pursue legislation that would prohibit motorboat use in certain areas. The establishment and proliferation of recreational motorboat use would decrease opportunities for solitude because lakes and rivers usable for motorboats coincide with popular visitor use areas for floating, kayaking, and canoeing. In addition, regular motorboat use could disturb wildlife in river valleys, increase poaching, cause riverbank and shoreline erosion, increase conflicts with subsistence, and concentrate fishing pressure on lakes and rivers where boats can run.

Snowmachines. The use of snowmachines is currently allowed on adequate snow cover or frozen rivers for subsistence and other traditional activities, for access to private property, and for travel to and from villages and homesites (43 CFR 36.11(c)). At Gates of the Arctic, the

use of snowmachines for subsistence purposes, access to private property within the park, and for travel to and from villages and homesites will continue to be guaranteed. Nonlocal, recreational use of snowmachines has not traditionally occurred and is not an accepted wilderness activity. There is some such use occurring from the Dalton Highway. The northern treeless portion of the park is quite windblown and frequently does not have adequate snow cover; damage to the tundra mat has been observed from existing recurring use. In the southern portion of the park where there are more willows and trees, damage to vegetation has occurred from cutting to make routes passable, evident when snowmachines were used to break trail for the dog team race. Snowmachines can avoid some of these vegetative impacts by following frozen rivers, but must frequently leave the rivers to avoid overflow areas. Subsistence users have expressed concern about nonlocal snowmachine use from the Dalton Highway conflicting with subsistence activities and disturbing wildlife. Nonlocal, general public recreation use elsewhere in the park is very intermittent, but similar adverse impacts are predictable elsewhere if such use increases and becomes established.

Snowmachines are neither traditional nor necessary for wilderness recreational activities. To protect the wilderness purposes of the unit, the Park Service intends to pursue legislation that would ban this type of mechanized access in specific areas. Proliferation of this mechanization, where it has not been widely established, would not be consistent with maintaining the wild and undeveloped character of the area and would infringe on solitude, which is integral to the purposes of the unit. Increasing snowmachine use could also disturb wildlife in river valleys, increase poaching, and increase conflicts with subsistence.

Off-Road Vehicles. The recreational use of ORVs off established roads, parking ares, or designated routes is prohibited. The random use of ORVs causes resource damage that is contrary to existing laws, executive orders, regulations, and policy. Section 1110(a) of ANILCA provides for the use of snowmachines, but not for ORVs other than snowmachines. Consequently, the recreational use of other ORVs is subject to the provisions of Executive Order 11644, "Use of Off-Road Vehicles on the Public Lands." The executive order requires the designation of specific areas for ORV use in national park system areas and a determination that ORV use in these areas will not adversely affect the cultural, aesthetic, or scenic values. The executive order specifically prohibits ORV routes in designated wilderness areas.

The research at Wrangell-St. Elias National Park and Preserve was designed to measure the effects of various types of ORVs in tussock-shrub terrain and document the amount of damage that occurs to the vegetation and terrain as the number of vehicle passes increases. The findings of this study are that the use of ORVs off established roads does result in substantial resource damage even at the lowest traffic levels (10 passes) and that resource damage increases with additional use. Research into exact levels of impact in other areas and terrain is continuing.

An exception to the general prohibition on the use of ORVs off established roads and parking areas is access to inholdings allowed under section 1110 of ANILCA. Section 1110(b) guarantees the right of access to inholdings within park areas, subject to reasonable regulations to protect natural and other values of park lands. Access to inholdings is covered in existing regulations (43 CFR 36.10). The use of ORVs for access to inholdings may be allowed under 43 CFR 36.10 by the superintendent on a case-by-case basis on designated routes. In determining what routes and restrictions should apply to the use of ORVs for access to inholdings, the superintendent will consider the potential for resource damage and user conflicts, and the availability of alternate routes and methods of transportation. The use of ORVs for access to inholdings will only be allowed upon a finding that other customary and traditional methods of access will not provide adequate and feasible access. All ORV use will be subject to applicable state and federal laws and to permits and restrictions necessary to prevent resource damage. These restrictions may limit the size and type of vehicle, vehicle weight, season of use, number of trips, and other conditions necessary to protect park resources and values.

Access for subsistence purposes is discussed in the "Subsistence Use Management" section of this plan.

The use of ORVs on rights-of-way and easements established under various authorities, including RS 2477 and section 17(b) of ANCSA, will be determined as their validity is determined (e.g., RS 2477 rights-of-way), or as they come under management authority of the National Park Service (e.g., 17(b) easements). Whether ORV use will be allowed on a particular right-of-way or easement will depend on the specific terms and conditions of the right-of-way or easement, the history of use, and other environmental factors.

Other uses of motorized access may be requested in the future as technologies change. Each request will be evaluated by the superintendent for consistency with laws, regulations, NPS management policies, the wilderness designation and the purposes of the area, and for its effect on park resources, and each will be managed accordingly.

Opportunities for Handicapped Visitors. It is the policy of the National Park Service to recognize disabled people as members of the visitors at large and to provide for their access to existing facilities and programs to the greatest degree possible and feasible. Separate access or special assistance may be provided when access to existing programs is not reasonable or feasible. The determination of what is possible or feasible must include a consideration of the obligation to protect park resources. This policy is in compliance with the intent of the Architectural Barriers Act of 1968 (PL 90-480) and with title V of the Rehabilitation Act of 1973, as amended (PL 93-112).

In Gates of the Arctic National Park and Preserve, opportunities for visitors to experience solitude and wilderness recreational activities extend to all people. In accordance with the strong wilderness mandate

of Congress, the area is to be experienced on its own terms. Therefore, the wild and undeveloped character of the area will not be modified with paved trails or other special facilities for the accommodation of handicapped visitors. Nevertheless, many types of access and activities are suitable for less able-bodied visitors, including the elderly, blind, and wheelchair-bound people. Information will be available upon request about the opportunities and the basic skills needed to enjoy them. Activities include river trips, camping, hiking, flight-seeing, plane camping, dogsled trips, sport hunting in the preserve, sportfishing, and commercially guided activities. Information and technical assistance related to the accommodation of handicapped visitors will be provided to commercial operators, and at least one operator will be sought to provide special services for the handicapped. Where essential for certain groups or activities, proposed group sizes or length of stay requirements may be slightly extended by advance written permission if it can be demonstrated that they will not impair solitude, conflict with other users, or cause resource impacts.

Recreational Activities

Backpacking, mountaineering, scenery and wildlife viewing, fishing, hunting (in the preserve), photography, and camping are all appropriate wilderness recreational activities. They stress self-reliance and solitude, and cause few adverse impacts on resources.

Voluntary Recreational Visitor Registration. All recreational visitors will be encouraged to register voluntarily for the purpose of giving and receiving information. All commercial operators will be requested to similarly give and collect information. Each person who registers will receive basic information about minimum-impact techniques, safety, group-size limits and other regulations, boundaries, private property, and subsistence use. Visitors will be asked to avoid areas and actions that would be disruptive to private landowners and subsistence users. In addition, visitors will be asked the size of their parties and where and how long they will be in the park. This information will be used to keep track of the levels of use in various areas and will be available to visitors to help them find the level of solitude they are seeking. Visitors will also be asked to volunteer information on the condition of the park that relates to the proposed standards discussed previously.

Camping. Camping is currently permitted (36 CFR 13.18) unless prohibited or otherwise restricted in accordance with closure procedures (36 CFR 13.30). Some changes in regulations have been identified to prevent damage to park values, such as destruction of fragile lichens, soil erosion, fire rings, or loss of solitude. Campsites must be at least ½ mile apart, and the length of stay will be limited to no more than three nights at any one campsite. Special written permission may be obtained in advance for longer periods where essential for mountain climbing, research, or other wilderness recreational activities if impacts from extended camping can be fully mitigated. Limitations on campfires were identified in the "Natural Resource Management" section.

To prevent further resource damage to a high use area of about 9,000 acres around Arrigetch Peaks (the Arrigetch Creek valley and Circle Lake), use will be limited to three groups at any one time, and the length of stay will be limited to 10 days. Within this limit, a registration system will be devised to maintain a reasonable balance between first-come, first-served opportunities and advance reservation, and a balance between unguided and guided parties. Similar limitations may be applied to other high use areas if resource impacts are observed or if solitude is threatened. The limited use zone is shown on the Plan map in the "Operations" section.

Implementation of these proposed limits will follow established closure procedures, which specify notice and hearing requirements (36 CFR 13.30).

Special Events. Special events are allowed in national parks provided there is a meaningful association between the park and the event, the observance contributes to visitor understanding of the area, and a permit has been issued by the superintendent (36 CFR 2.50). However, a permit will be denied if such activities would

cause injury or damage to park resources

be contrary to the purposes for which the natural, historic, development, and special use zones were established; or unreasonably impair the atmosphere of peace and tranquility maintained in wilderness, natural, historic, or commemorative zones

unreasonably interfere with interpretive, visitor service, or other program activities, or with the administrative activities of the National Park Service

substantially impair the operation of public use facilities or services of NPS concessioners or contractors

present a clear and present danger to the public health and safety

result in significant conflict with other existing uses (36 CFR 2.50)

Further, NPS policies do not permit use of park lands or facilities for competitive recreational events that are characterized as public spectator attractions. Recreational activities that do not necessarily depend on park resources for their realization and that do not constitute traditional or customary park uses will not take the form of special events or be provided primarily for the benefit of spectators. They will not be practiced for material or financial gain by the participants, either directly or indirectly, and there will be no commercialization, advertising, or publicity by the participants (NPS "Management Policies").

Currently, the only requested special event has been the "Coldfoot Classic" dog team race, which has been allowed in 1984 and 1985. The use of dogs does have a meaningful association with the area and the

event has much local interest. The event has stimulated a renewed interest in dog teams in a region where snowmachines (iron dogs) have increasingly replaced the use of dogs. This event presents an extremely rugged and unpredictable competition against the wilderness elements of the Brooks Range, and can be more than a competition between other entrants. Participants have returned from this challenge with an appreciation of undisturbed wildlife, the awesome forces of nature, and an immense and unspoiled landscape.

Organizers and participants have worked closely with NPS staff to protect park values. However, there are aspects of this race that marginally meet the criteria for special events and have been a source of NPS concern and public criticism. One concern is the appropriateness of the organized, competitive nature of this event in a park with wilderness purposes. Another concern is that the race could become a public spectator attraction because of the publicity, promotion, and support services surrounding the event. There have been documented problems of resource damage from the use of snowmachines to break trail in areas without enough snow, cutting of vegetation to clear trail, and trail markers have been left behind. The issuance of permits with specific stipulations and the resultant monitoring in the field has consumed significant staff time and has not been completely successful in mitigating all of these problems.

Because of these concerns and review of the scope and scale, this event will be allowed inside the unit in the future only if special conditions, including 36 CFR 2.50, can be met. This dog team event must meet the standards of wilderness values and management. It must not become another race on the commercial and professional circuit, but rather a locally organized and sponsored activity emphasizing the positive values of the traditional use of dogs in the Brooks Range wilderness if it is to occur on park and preserve lands. This means trees will not be cut to make, maintain, or mark a route, snowmachines will not be used to break trail or provide logistical support, checkpoints must be outside the unit, the number of participants will not exceed 30, insurance will be required, and there will be no commercial advertising or monetary purse (noncash prizes related to mushing or wilderness activities could be appropriate). The National Park Service will continue to work with organizers and the public to identify methods to manage this event which will emphasize wilderness values and perpetuate the special value of the traditional use of dog teams in Gates of the Arctic.

Applications for any special events will be available for public comment and will be evaluated with the existing criteria.

Commercial Services

Any service made available for a fee or charge to any persons visiting a conservation system unit is considered a commercial visitor service. ANILCA provides for persons who were adequately providing any type of visitor services in Gates of the Arctic prior to January 1, 1979, to

continue to do so if the services are consistent with the purposes of the area. The Concessions Policy Act of 1965 (16 USC 20 et seq.) establishes guidelines the National Park Service will follow:

> To permit concessions (commercial services) in park areas only under carefully controlled safe-guards against unregulated and indiscriminate use so that heavy visitation will not unduly impair park values and resources. Concession activities in park areas shall be limited to those that are necessary and appropriate for public use and enjoyment of the park areas in which they are located and that are consistent to the highest practical degree with the preservation and conservation of the park areas.

The Park Service recognizes the valuable contribution made by commercial wilderness guides and air-taxi operators who protect resources and serve visitors. Wilderness guides assist many visitors to the Gates of the Arctic in realizing their potential in an unfamiliar environment and by instructing them on protecting resources and developing an appreciation for this wilderness. Air-taxi operators provide most access for recreational visitors. These services are necessary and appropriate for public use and enjoyment of the area.

To ensure that commercial operations are consistent to the highest practical degree with park purposes, certain terms and conditions will be required. Operators must first meet the minimum licensing requirements of liability insurance, Alaska state business license, hunting guide license, air-taxi certificate, and compliance with federal regulations (36 CFR). Guides and air-taxis will be required to provide information to clients concerning safety and environmental ethics, submit advertising literature for review, and collect statistical information. The Park Service will work with air-taxi operators to develop and implement guidelines to avoid visitor or subsistence conflicts and concentrations of use.

In return for these additional requirements, which are beyond the normal practices of these businesses, the existing commercial license system will be converted to a concession permit system, which will tend to limit the amount of future competition. The concession permit system will result in a manageable number of commercial operators sufficient to ensure public enjoyment and safety and protect park resources.

The number of companies licensed to provide commercial visitor guide services in 1984 when the draft general management plan was developed was 30, and this has been determined to be the necessary and appropriate level of service for competition and quality services for visitor. However, to provide fair opportunity to all guides, the total number of guides will not be limited until January 1, 1987. At that time, all the guides who have valid commercial licenses may exchange them for concession permits. It is expected that the number of companies providing services will have grown to slightly more than 30. To get back to the desired level, permits that are not used during the term of the

permit will not be renewed. No new permits will be issued until attrition has reduced the number of permits to less than 30. New permits will then be available on a yearly lottery basis to qualified guides interested in taking clients into Gates of the Arctic. Pursuant to ANILCA section 1307, preference will be given to directly affected native corporations and local residents.

Section 1307 of ANILCA states that persons who were providing visitor services on or before January 1, 1979, in any conservation system unit established by ANILCA, under certain conditions, will be permitted to continue providing them if they are consistent with the purposes for which the area was established. Section 1307 also specifies that in selecting additional persons to provide any type of visitor service (except guided sport fishing and hunting activities) for any conservation system unit, preference will be given to affected native corporations and local residents. Every effort will be made to carry out these two ANILCA provisions. This section will be further implemented through a future rule making and published in the Federal Register.

The same procedure will be followed to convert air-taxi operators to a concession permit system. There were five licensed air-taxi operators in 1984, and they represent eight different operators in the last few years. The goal is to allow up to eight air-taxi operators at Gates of the Arctic.

The National Park Service will continue to recognize state-assigned hunting guide areas in the preserve. No other assignments of lands or exclusive use of structures on lands administered by the Park Service are currently considered necessary and appropriate.

In recognition of the special wilderness purpose for which Gates of the Arctic National Park and Preserve was established, the Park Service will discourage guides from relying on a few highly structured and repetitive trip packages for a substantial portion of their incomes. Instead the Park Service will encourage guides to fit their routes and services to their clients' choices of what they want to see and do. In this manner, the Park Service will attempt to reduce the perception of "processed" or "canned" trips. At the same time guides will be encouraged to provide their clients with a truly unique experience.

The existing permanent camp and land assignment for a commercial operator on the North Fork of the Koyukuk will be discontinued. The Wilderness Act of 1964 as amended prohibits commercial enterprise on public lands designated as wilderness. It does allow for commercial services to be performed to the extent necessary for realizing the recreational or other wilderness purposes of the area. While guiding and air-taxi operations are both necessary and appropriate, fixed facilities in support of these commercial operations are not consistent with the purpose of maintaining the wild and undeveloped character of the area. In particular, this camp is located on a designated wild river adjacent to the mountain formations for which Gates of the Arctic National Park and Preserve was named, and an area that receives a relatively high number of recreational visitors. Every other commercial guide and air taxi

operates from facilities outside the park. The National Park Service will work with the commercial base camp operator to make the transition to a transient operation without fixed facilities in the park.

For similar reasons, standing public use cabins may only be used by commercial guides on an emergency basis along with the general public.

The Park Service also recognizes that another segment of society may not be able to afford the services of a guide or may wish to be challenged and experience this remarkable wilderness as an individual or member of a group without the services of a guide. At present this split is approximately fifty-fifty.

As use limitations are developed, the Park Service will monitor the levels of guided versus unguided use to assure that a reasonable balance is maintained so that both opportunities will continue to be readily available.

Information and Interpretation

Interpretation and education activities are important to the protection and use of the natural and cultural values of the park. Professionals and volunteers will carry out these important functions of interpretation and education by using a variety of media to reach park visitors and the general public.

The National Park Service traditionally provides information and resource interpretation in the form of literature, audiovisual programs, ranger-guided walks, exhibits, museums, etc., for the enjoyment and enrichment of people visiting the national parks. In a park with a wilderness mandate, however, a traditional approach may interfere with visitors' opportunities for discovery and self-reliance, and it may have the adverse effect of concentrating visitors in certain areas.

To avoid or mitigate these problems, information will be provided in a single concise package to be handed out during the voluntary visitor registration or through commercial operators. The park brochure will be straightforward and informative, describing the purposes and values of the area and basic information, with no promotional message. Information on regulations, minimum-impact techniques, boundaries, private property and trespass, subsistence use, protecting cultural resources, traveling and camping in bear country, weather, crossing streams, flood hazard, general terrain conditions, and general access will be provided to help visitors who are unfamiliar with the area to plan a safe trip.

In response to people's desire for discovery and self-reliance, visitors will be encouraged to obtain further information on their own. In response to questions, park personnel will provide general information about the full range of opportunities, routes, heavily used areas, access, field conditions, wildlife, opportunities for handicapped visitors, and commercial operators. For specific route selection, access selection, and detailed resource information, visitors will be encouraged to explore maps

and other sources of information. People who inquire about activities not available in Gates of the Arctic will be informed of what is available in other conservation system units.

The principal theme of interpretation will be the Gates of the Arctic wilderness: the history of the wilderness movement in the United States, the work of Robert Marshall, the Wilderness Act of 1964, and the wilderness purposes of Gates of the Arctic National Park and Preserve. The intent of this message will be to foster an understanding and appreciation of wilderness values. Audiovisual programs concerning wilderness values may be developed for presentation at the field offices, headquarters, schools, and other public facilities. Exhibits and displays containing basic information on topics described for the park brochure may be installed at field offices and headquarters. A library containing research documents, legislation, natural and cultural history references, planning documents, and the memorial Hans van der Laan Brooks Range Library (upon approval by the Hans van der Laan Committee) will be available to the public at headquarters.

Displays of prehistoric and historic artifacts may become available if local communities develop museums in cooperation with the National Park Service (see "Cultural Resource Management" section).

Certain areas of Gates of the Arctic--those that receive the most publicity--attract enough visitors that trail formation and campfire rings are visible and the solitude is periodically disrupted. There is concern that future guidebooks developed by others could result in concentrating use and impacts in highlighted areas. The Park Service will encourage anyone developing a publication or program to be sensitive to the potential impacts of publicity by providing information about the purpose and the values of the park, its resource problems, and recommendations to minimize adverse effects.

The Park Service will notify organizations, communities, and the media about what NPS administrative and management activities will be occurring in specific locations within the park and preserve so that interested or affected persons can plan accordingly or notify the National Park Service of any potential conflicts.

OPERATIONS

To minimize intrusions on people's wilderness experiences, NPS personnel will strive to maintain a low profile in the park. The focus of backcountry operations will be on monitoring and protecting resources, monitoring use, and responding to emergencies. While contacting visitors inside the park will not be a goal of staff fieldwork, some contacts will be made while protecting resources and monitoring use. Informational conversations with visitors will normally be initiated at field stations outside the park and preserve. The methods of operation will be based on what will be least disruptive to resources and visitors as well as cost and effectiveness. Inside the park and preserve the staff will strive to

minimize the impacts of their activities, just as visitors will be expected to do.

Staffing Plan

Staff increases will be required over the next 10 years to implement proposed monitoring and resource protection, issue permits, provide visitor information, and maintain facilities. The total staff at the end of 10 years is envisioned to be no more than 17 permanent and 25 seasonal employees. The distribution of staff by function is shown in table 15. This estimate indicates the general level and distribution anticipated over this period, but there may be reductions or adjustments from interagency cooperation, from budgetary constraints, and from new knowledge gained through management experience.

Table 15: Ten-Year Staffing Plan

	Permanent	Seasonal
Resource management and visitor services	5	20
Lands, research, and permits	5	2
Management and administration	5	--
Maintenance	2	3
	17	25

The headquarters will remain in Fairbanks for most of the year, but the superintendent and chief of field operations and visitor services will move to Bettles from June through August, where they will be closer to the park and more available to the residents of the region. The headquarters may eventually be moved closer to the park on a year-round basis, pending the resolution of a number of regional planning issues and the development of the needed infrastructure. Such a move is probably beyond the life of this plan, however. For now field stations will be operated year-round at Bettles, Coldfoot, and Anaktuvuk Pass. Seasonal camps for backcountry field operations will be used in the Noatak River, Walker Lake, and Kobuk River area. The staffing proposed for each area is shown in table 16.

Table 16: Staff Locations

	Permanent	Seasonal
Fairbanks	7 (10 winters)	3
Bettles	5 (8 summers)	3
Coldfoot	1	2
Anaktuvuk Pass	1	2
Backcountry	--	15
	17	25

The number of seasonal employees will increase from 9 to 25. Most of the increase (from 4 to 15) will be for backcountry seasonals needed to provide for monitoring and protection of resources and documentation of use. The background and experience sought in these seasonals may vary with the yearly research and management programs. They will be important for collecting field data and information identified in the "Carrying Capacity" section, among other activities. These activities will be conducted in a manner that respects visitor solitude and self-reliance to the greatest degree possible.

One new permanent employee each in Coldfoot, Anaktuvuk Pass, and Bettles will be needed to implement the voluntary visitor registration program, provide vital visitor information, coordinate backcountry seasonal activities, and implement other programs identified in the plan. An important aspect of their jobs will be communication with local residents, both hearing and forwarding local concerns to appropriate officials and providing local people with current information about existing and proposed NPS regulations, policies, and management actions.

A maintenance staff will be developed to include two permanent employees at Bettles and three seasonal laborers to maintain proposed operational facilities. Remaining staff increases are planned for headquarters, where the permanent staff will be increased from 8½ to 10 positions to provide for managing land status and mining issues, permits, administration, and associated clerical needs. Two seasonal natural resource researchers will be added.

The park will generally be administered in two districts--an east and a west district--and both will be managed from Bettles. Several subdistricts will be established as shown on the Plan map. Employees in the northwest areas will also provide information for Gates of the Arctic. The general staff distribution is shown on the Plan map, but there may be adjustments or shifts from interagency cooperation or new knowledge gained through management experience.

Local Hire

The National Park Service will continue to carry out ANILCA section 1308 and 320 DM (local hire). Furthermore, the Park Service will work to advance these employees into permanent staff positions as they obtain the necessary experience. This program recognizes the unique lifestyle of Alaska bush residents and is designed to use a wide variety of local skills and knowledge for employees working in seasonal and year-round jobs. To date, the program has had limited success. It has been difficult to recruit and retain local people because of comparatively low pay scales and a difference between the perception of NPS managers and perception of local people of the land, its resources, and the mission of the National Park Service. There is a continual need for NPS supervisors to learn about cultural differences, as well as a need to inform local people about the National Park Service and the local hire program. The Park Service will work to improve such two-way communication, develop attractive local hire positions, and utilize training and cooperative education programs to enhance opportunities for advancement for local hire positions.

The Park Service recognizes the special values of the region and its people. All employees will be encouraged to learn about the culture and history of individuals residing in the area through local community colleges and other resources.

Methods of Access

Where possible, NPS employees will walk, snowshoe, ski, raft, or kayak to destinations inside the park and preserve. Dog teams may be borrowed or leased when their use would be advantageous, but the National Park Service does not plan to develop a team. Motorboats and snowmachines will generally be used only in areas where they are utilized for subsistence, access into inholdings, or village and homesite travel. Fixed-wing aircraft will be used to place staff in the field and to conduct research or law enforcement; they will be flown on routes and at altitudes that minimize disruption to visitors and wildlife (minimum of 2,000 feet above ground level for routine point-to-point travel). Lower level flights and helicopters will be used only in emergencies or when they are the minimum tool necessary to accomplish management activities.

Radio Communications

In order to safely and effectively manage the park, personnel conducting some types of field operations must be able to contact and communicate with personnel in other locations in the park or outside the park. Reliable radio communications will be made available to these field personnel.

An evaluation will be conducted to determine the specific radio communication needs of NPS operations within the park. Not all operations require radio communications. For example, some patrols have

little likelihood of encountering members of the public in need of assistance or situations requiring law enforcement functions. The evaluation will identify the park operations that do require radio communication.

Available radio technology will be examined to determine what radio systems will best serve operational needs with the least impact on scenic and wilderness qualities of the park. The location of field operations may change from year to year, and therefore portable equipment, including HF or portable repeater stations, may be employed. Because of the importance of maintaining the wild and undeveloped character of the area, and because of recent developments in technology, management will be accomplished without any permanent radio facilities.

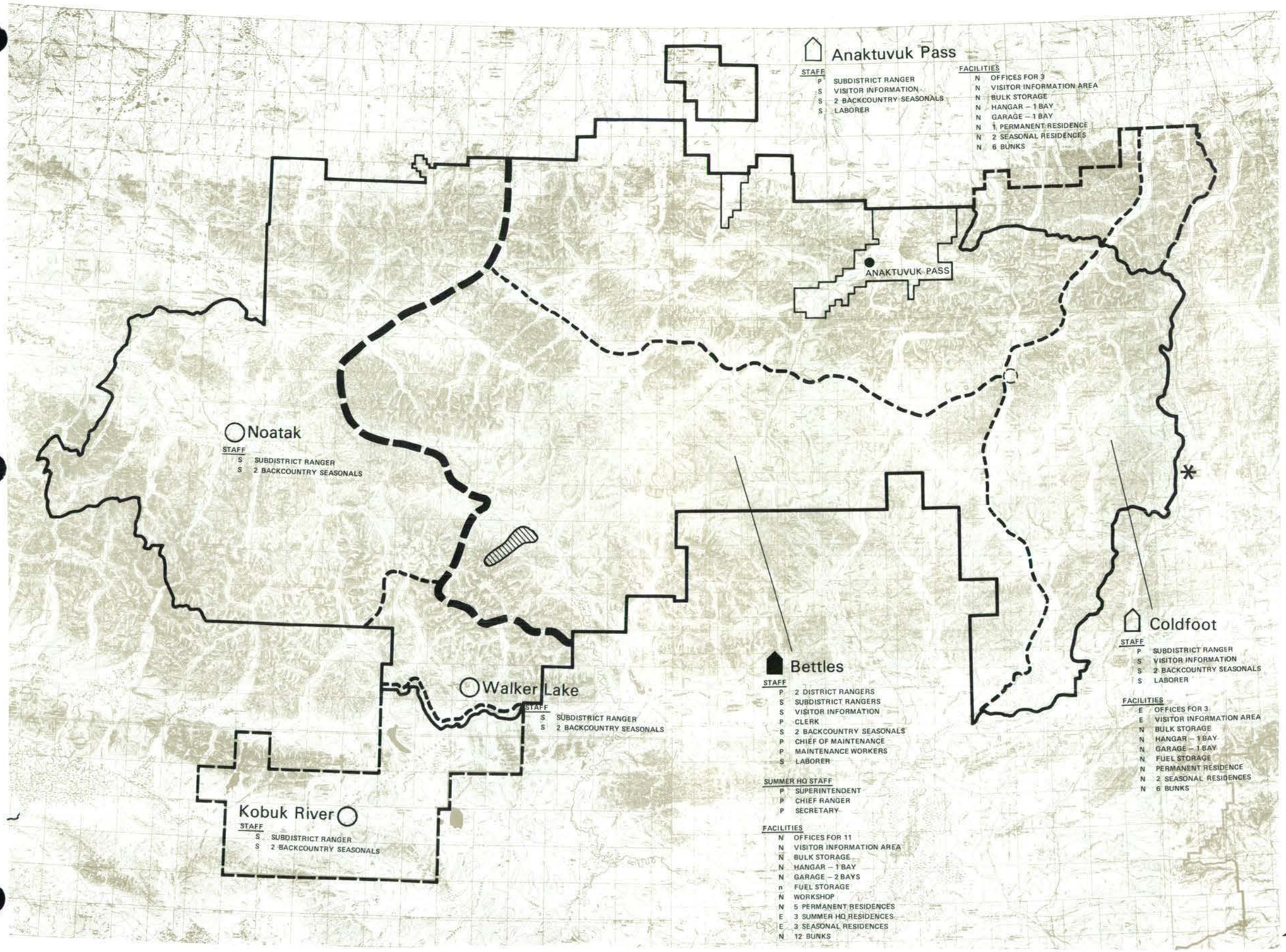
Search and Rescue

It is the policy of the National Park Service to develop and execute a public safety program with search-and-rescue assistance for visitors. Gates of the Arctic is a large, remote, rugged, and inherently hazardous area. Visitors will be informed and expected to be responsible for themselves. Information will be a key tool for safe visitor trips and reduce the potential for life-threatening emergencies. The information provided to visitors will include known hazards and safety techniques.

The National Park Service will maintain basic first-aid and search-and-rescue equipment. All NPS personnel will receive first-aid and safety training, and some employees will be trained in advanced emergency medical skills. The Park Service will not routinely attempt to keep track of visitors throughout the park. Visitors who are concerned about emergency assistance will be encouraged to leave an itinerary with a friend or relative who can contact help if they are overdue. If made aware of any emergency situation, the Park Service will respond with all available resources as well as notify the Rescue Coordination Center, the Alaska State Troopers, and the North Slope Borough.

Jurisdiction

In the General Authorities Act of October 7, 1976, Congress set forth the following: "The Secretary shall diligently pursue the consummation of arrangements with each State, Commonwealth, territory, or possession within which a unit of the National Park System is located to the end that insofar as practicable the United States shall exercise concurrent legislative jurisdiction within the units of the National Park System." Pursuant to this legislation, the National Park Service will request concurrent legislative jurisdiction with the state of Alaska regarding national park units in Alaska enabling authorized park rangers to enforce state laws on park lands.



Fairbanks

STAFF

WINTER ASSIGNMENT
- P SUPERINTENDENT
- P CHIEF RANGER
- P SECRETARY

YEAR-ROUND ASSIGNMENT
- P MANAGEMENT ASSISTANT
- P NATURAL RESOURCE MANAGER
- S 2 BIOLOGISTS
- P CULTURAL RESOURCE MANAGER
- P PERMITS CLERK
- P CLERK-TYPIST
- P ADMINISTRATIVE OFFICER
- P PROCUREMENT AGENT
- S CLERK-TYPIST

FACILITIES
- E OFFICES FOR 16 (LEASE)
- E VISITOR INFORMATION AREA (LEASE)
- E BULK STORAGE (LEASE)
- N HANGAR – 2 BAYS (LEASE)
- N RESEARCH REPOSITORY/LIBRARY (LEASE)

GATES OF THE ARCTIC NATIONAL PRESERVE BOUNDARY

GATES OF THE ARCTIC NATIONAL PARK BOUNDARY

OPERATIONS AND GENERAL DEVELOPMENT

MANAGEMENT DISTRICT BOUNDARY

MANAGEMENT SUBDISTRICT BOUNDARY

HEADQUARTERS

DISTRICT RANGER STATION – EAST AND WEST DISTRICTS

SUBDISTRICT RANGER STATION

SUBDISTRICT SEASONAL CAMP – NPS STAFF

REMOVE COMMERCIAL OPERATOR PERMANENT CAMP

E EXISTING FACILITY

N NEW FACILITY

P PERMANENT EMPLOYEE

S SEASONAL EMPLOYEE

RECREATIONAL VISITOR USE MANAGEMENT

LIMITED VISITOR USE ZONE AT ARRIGETCH PEAKS

PLAN

GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE

UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

NORTH

0 5 10 15 20 MILES

0 5 10 15 20 25 30 KILOMETERS

185 | 20043B

DSC | FEB 86

ON MICROFILM

Fees

No fees will be charged for entrance or admission to Gates of the Arctic, as directed by ANILCA section 203. Fees in park areas can be considered for specialized recreation sites, facilities, equipment, or services furnished at federal expense, or for recreation permits such as special events. At this time, only some services may be considered. For example, if the National Park Service directly provides portable bear-proof food containers for visitors, a fee will be considered. Criteria include cost to the government, benefit to the user, public benefit, and feasibility. Establishment of such fees will be in accordance with regulations (71 CFR).

Cooperative Agreements

The National Park Service will seek cooperative agreements with several agencies for the purpose of undertaking mutually beneficial programs. Typical examples of agreements are indicated below.

Agreements with the village of Anaktuvuk Pass, the North Slope Borough, and the Arctic Slope Regional Corporation for the purpose of developing a museum or museums for the preservation and display of regional artifacts.

An agreement with the Alaska Department of Fish and Game to conduct biological and subsistence research in the park.

An agreement with the U.S. Fish and Wildlife Service, the Bureau of Land Management, and the Alaska Department of Transportation and Public Facilities regarding the possible joint development and operation of sites and facilities.

An agreement with the NANA corporation for the analysis and management of sites established under section 14(h)(1) of ANCSA.

An agreement with the Doyon, Ltd., corporation to protect the Yale cabin.

An agreement for cooperative management with the state of Alaska regarding lands beneath navigable rivers.

An agreement for cooperative management with the state of Alaska regarding water rights.

An agreement for cooperative management with the state of Alaska regarding public uses on waterways in Gates of the Arctic. To be pursued only if case-by-case resolution of management issues proves unacceptable to the National Park Service and the state.

An agreement for cooperative management with Doyan, Ltd., Arctic Slope Regional and Nunamuit Village native corporations for

Research And Monitoring

Access

Ranger Station, Anaktuvuk Pass

NPS Employee Housing, Bettles

OPERATIONS AND GENERAL DEVELOPMENT

management of 17(b) easements when they are transferred to NPS management.

An agreement with the North Slope Borough to coordinate search and rescue activities.

GENERAL DEVELOPMENT

No structures, roads, or trails will be built within the park and preserve for recreational visitor use or NPS operations. As allowed by ANILCA section 1306, facilities needed to support visitor services and park operations will be developed outside the park and preserve (to the extent practicable and desirable on native lands), where they will not interfere with maintaining the wild and undeveloped character of the area. These facilities are described below, and the estimated costs and the implementation schedule are contained in the "Implementation" section.

Operational and Visitor Facilities

Space for offices and a visitor information area will continue to be leased in Fairbanks. Additional space will be needed for four more offices and a research repository and library. Bulk storage will continue to be leased, and a two-bay hangar will be leased.

At Bettles, the existing housing acquired from the Federal Aviation Administration will be used to house seasonals and the summer headquarters staff. Five new housing units for permanent employees will be constructed, along with a 12-person bunkhouse, 11 offices, a visitor information area, a workshop, bulk storage, a one-bay hangar, a two-bay garage, and fuel storage area. To the greatest extent possible, the National Park Service will coordinate its facility needs with the needs of the U.S. Fish and Wildlife Service and the Alaska Fire Service (BLM), which will also be developing new facilities.

At Coldfoot, a new shelter scheduled for construction during the summer of 1985 will initially be used as an office, visitor information area, and quarters for one seasonal employee. Eventually that structure will be used for a visitor information area and three offices, and the following new housing will be constructed: one permanent residence, two seasonal residences, and a bunkhouse for six backcountry and transient employees. Bulk storage, a one-bay garage, a one-bay hangar, and fuel storage will also be built. To the greatest extent possible, new facilities will be coordinated with the facilities needed by the U.S. Fish and Wildlife Service, Bureau of Land Management, and state of Alaska.

Facilities at Anaktuvuk Pass will include one permanent residence, two seasonal residences, a bunkhouse for six backcountry and transient employees, four offices, a visitor information area, bulk storage, a one-bay hangar, and a one-bay garage. Fuel is available from the village corporation, so NPS storage facilities will not be needed.

Whenever practicable and desirable, the Park Service will locate its facilities on native-owned lands in conformance with ANILCA section 1306.

Cabins

The National Park Service has proposed revisions to the existing regulations contained in 36 CFR 13.17 that deal with cabins and other structures authorized under sections 1303, 1315, and 1316 of ANILCA. The revised regulations would further establish policy, criteria, and procedures for issuing cabin permits as authorized by ANILCA. The proposed regulations have undergone a separate public review process. They were made available for public review on April 3, 1984, with the comment period being extended through January 10, 1985. Three public hearings were held during that time. The National Park Service and the Department of the Interior were in the process of finalizing the regulations at the time of publication of this plan.

The National Park Service has made an inventory of the location and description of cabins located in Gates of the Arctic, which will be periodically updated. There are currently 16 standing cabins on federal land that are available for emergency public use. Cabins will be evaluated for potential historical significance pursuant to the National Historic Preservation Act, as amended in 1980 (see discussion in "Cultural Resource Management" section). The National Park Service will actively seek to determine any valid claims within applicable regulations for cabins on federal lands. The use of cabins is a concern because of the potential adverse effects of concentrating human use in one area, such as loss of vegetation, soil compaction or erosion, wildlife disturbance, disruption of subsistence activities, or disruption of solitude. In Gates of the Arctic, cabins are not necessary for general wilderness recreation nor for NPS staff in the field. Portable camping gear can provide necessary shelter for these activities, and can be easily moved to avoid the adverse effects of concentrated human use. Cabins may be necessary in emergency situations or for intermittent authorized winter activities such as subsistence or village-to-village travel.

Unclaimed cabins will be left standing for emergency situations or intermittent authorized winter activities, but those that do not have potential historical significance will not be maintained by the National Park Service. Maintenance by others for cabins that are necessary for emergency use or intermittent authorized winter activities may be permitted (specifying appropriate materials and workmanship) by the superintendent, but no possessory interest or exclusive use rights will be acquired. As a result, those cabins that serve an ongoing need for emergency or intermittent authorized local winter use will continue to be used or maintained. Other cabins will melt into the landscape over time.

Any unclaimed cabins that have adverse effects on park resources or other valid uses will be proposed for removal, in accordance with section 1315(d) of ANILCA and section 106 of the National Historic Preservation Act, as amended in 1980, where applicable. For example, a cabin that

regularly attracts recreational visitors to an area during a season of important subsistence use will be proposed for removal. If the National Park Service proposes to remove a cabin, public notice, and congressional notification in the case of public use cabins in wilderness, will be provided.

No new public use cabins are considered necessary or appropriate to fill the wilderness recreation purposes of the park and preserve.

Camps and Caches

Three seasonal camps for NPS field operations will be used in the Noatak River, Walker Lake, and Kobuk River subdistrict areas. Their configuration and season of use will remain flexible. At the maximum, at any one location they will consist of tents and equipment caches that may be at one location for up to three months, or camps may be moved regularly. All equipment will be removed at the end of an operation.

In accordance with NPS management policies, no fuel caches or other permanent caches will be allowed in the park or preserve except under extraordinary circumstances and with the written permission of the superintendent. Commercial operators may be allowed to establish temporary caches of food and stove fuel under specific terms of their concession permits. Visitors will also be allowed personal, temporary caches of food and stove fuel in approved containers for up to one month. A permit will be required for leaving unattended property at highly used visitor destinations (Walker Lake and Arrigetch Peaks zone). Implementation of these limits will be in accordance with established regulations for unattended or abandoned property (36 CFR 13.22).

Permanent camps will not be permitted within Gates of the Arctic. Without written permission from the superintendent, recreational visitors, researchers, and commercial guides will not be allowed to remain longer than three days in any camp. This does not apply to subsistence camps. The existing commercial base camp will be discontinued (see "Recreational Visitor Use" section).

Temporary Facilities in the Preserve

Section 1316 of ANILCA addresses temporary facilities related to the taking of fish and wildlife in national preserves in Alaska--not parks and monuments. This determination of applicability is based on the legislative history of ANILCA, which indicates that only preserve units of the national park system were covered by section 1316 (Senate Energy Committee Mark-Up, 96th Congress, Oct. 9, 1979, p. 65). Temporary structures in support of subsistence activities are authorized under other authorities (section 1303 of ANILCA and 36 CFR 13.17).

In accordance with section 1316(b), the National Park Service has determined that the establishment of new temporary facilities (as defined

below) in the preserve would constitute significant expansion of existing facilities and would be detrimental to the purposes for which the preserve was established, including the scenic, wilderness, and other natural values. This determination maintains the number of these facilities at present levels (1978 or 1985, whichever is higher), but it does not preclude or otherwise restrict authorized hunting and fishing activities in the preserve.

Those facilities to which this ceiling applies are defined as follows (definitions approved by Alaska Land Use Council, February 1982):

> "Temporary facility" means any structure or other man-made improvement that can be readily and completely dismantled and/or removed from the site when the authorized use terminates. This definition should not be construed to include cabins.
>
> "Tent platform" means a structure, usually made of manufactured timber products, constructed to provide a solid, level floor for a tent. Partial walls not exceeding 3 feet in height above the floor may be employed. Only the tent fabric, the ridge pole, and support poles may extend higher than 3 feet above the floor.
>
> "Shelter" means a structure designed to provide temporary relief from the elements. A shelter is characterized as a lean-to having one side open.
>
> "Cache" means a small structure designed and constructed solely for the storage of equipment and food. A cache may be raised on poles to keep supplies away from bears or other animals. Existing regulations cover unattended or abandoned property (36 CFR 13.22).

In Gates of the Arctic preserve units, only one temporary facility is known to have existed prior to 1980 and it has not been used in the last few years. None has been added since that time. This is based on ranger patrols, aerial overflights, and discussions with local residents.

Section 1313 directs that a national preserve in Alaska be administered and managed as a unit of the national park system in the same manner as a national park with certain exceptions, including the taking of fish and wildlife for sport purposes. In addition, section 203 directs that the preserve be managed under the act of 1916, as amended and supplemented, which states that the primary purpose, among others, of a national park system unit is "to conserve the scenery . . . and leave [it] unimpaired for the enjoyment of future generations." In establishing the preserve, Congress stated in section 201(4)(a) of ANILCA that the purposes of the unit include maintaining the wild and undeveloped character of the area, opportunities for visitors to experience solitude, and the natural environmental integrity and scenic beauty. The National Park Service has determined that additional temporary facilities above the current level would be detrimental to these purposes for the following reasons: Such new facilities would concentrate use in one area, which can cause vegetation damage, soil compaction or erosion, disturb wildlife,

impair visitor solitude, and alter the wild and undeveloped character of the area. Further, there has been no demonstrated need for such facilities. Authorized taking of fish and wildlife in the preserve can occur with more portable camping equipment, which reduces the problems of concentrating use in one location.

This policy is not intended to limit the use of tents that do not require platforms or other structures, temporary campsites normally a part of recreational outings, or shelters needed in emergency situations. ("Temporary campsite" means a natural, undeveloped area suitable for the purpose of overnight occupancy without modification.)

The existing tent camp site has not been recently used, but upon request the superintendent will work with the facility user to locate a site for a replacement facility of similar size and type in a suitable area of the preserve.

In the future, if changing use patterns and further analysis indicate that adjustments in this ceiling on temporary facilities are necessary, the National Park Service may propose, with adequate public notice and opportunity to comment, to adjust this ceiling upward or downward. In developing such proposals, the Park Service will consider whether adequate alternative means are readily available and whether there is a potential for adverse impacts on park resources and uses, including subsistence.

The National Park Service will maintain an ongoing inventory of the location and description of temporary facilities. The inventory will be available for review at park headquarters.

IMPLEMENTATION

General Checklist

The following provides a general checklist for implementation of the major points of the general management plan. Because funding requests govern implementation to such a large degree, presentation of a dated implementation schedule is not practical at this time.

Natural Resource Management:
- Natural resource research (list in plan)
- Natural resource management plan

Cultural Resource Management:
- Cultural resource research (list in plan)
- Cultural resource management plan

Access and Circulation Management:
- Continue to inventory access

Subsistence Use Management:
- Subsistence hunting program by subsistence resource commission
- Subsistence management plan

Recreational Visitor Use Management:
- Monitor and study standards (list in plan)
- Voluntary visitor registration and information program
- Propose some regulatory changes (list follows)
- Convert commercial use licenses to concession permits

Operations:
- Cooperative agreements (list in plan)
- Staff increases

General Development:
- Facilities at Bettles, Coldfoot, and Anaktuvuk Pass

Public Involvement in Plan Implementation

The planning for and management of the units of the national park system in Alaska is an evolving and dynamic process. The general management plan provides overall guidance and direction for the management of the park and preserve and announces the intent of the National Park Service to undertake a variety of actions pursuant to established law, regulation, and policy. Some of the actions proposed in this plan, such as closures, use restrictions, boundary adjustments, and new or revised regulations do not become effective upon approval of the general management plan. In these cases, further information collection and analysis and appropriate public involvement are needed before these actions become final. The other actions identified in the plan can be implemented upon plan approval.

It is recognized that involving the public in the development of significant policies and management practices and in further planning for the Gates of the Arctic can result in more comprehensive and better proposals and actions by the National Park Service, as well as better public understanding of them.

This section outlines the means by which the National Park Service will ensure continued public involvement in the ongoing planning for and management of Gates of the Arctic. Described here are the procedures that the National Park Service will use for public involvement in the areas of policy development, action plans, closures, restrictions or openings, new or revised regulations, and amendments to this general management plan. The superintendent is expected to consult with all affected and interested parties as an integral part of the management of the area.

It is the policy of the Department of the Interior to offer the public meaningful opportunities for participation in decision-making processes leading to actions and policies that may significantly affect or interest them (301 DM 2.1). Accordingly, the National Park Service will integrate

public participation and the decision-making process. Public participation activities will be scheduled with other elements of the decision-making process to ensure that the timing of information both to and from the public results in the expression of public comment at points in the decision-making process where it can make the greatest contribution. The overall public participation process, closely tied to the decision-making process, will be flexible enough that methods may be added or deleted as public input shows a new level of need or interest.

Policy Development. The National Park Service manages the parks, monuments, and preserves in Alaska for the national interest and recognizes that the policies and management practices implemented by the Park Service can be of great interest to the people of Alaska and the nation. These policies and practices can also affect the lives of individuals living in or near the areas and the public using the areas.

To the extent practicable, when a new policy or management practice that affects the public is to be developed or an existing policy or practice is to be revised, there will be public notification, ample opportunity for comment, and thorough consideration of comments received. If significant changes are made to the proposed policy or management practice as a result of public comment, there will be additional review prior to the policy or practice being adopted.

Action Plans. Several specific action plans are identified in this general management plan. Future plans include a resource management plan, development concept plans, wilderness recommendations, revisions to the land protection plan, a subsistence management plan, and boundary adjustment recommendations. These plans and the required public involvement are described in the appropriate management sections of this document, and the major ones are summarized in appendix L (ANILCA Requirements and NPS Planning Process). These more detailed plans will be initiated by the superintendent over the life of the general management plan. Although it is the intention of the National Park Service to initiate all of the implementing plans identified in the general management plan in a timely manner, the undertaking of these plans will depend on funding and other considerations that cannot be accurately forecast at this time.

As part of the ongoing planning and management for the area, internal planning documents will be prepared. These include an interpretive plan (prospectus) and a scope of collections statement. Formal public review of these types of plans and studies is not anticipated; however, parties expressing an interest in these plans will be involved as appropriate in their preparation and invited to comment on them before they are finalized. Copies will be available upon request from the superintendent.

Closures, Restrictions, and Openings. In cases where the closure of areas within the unit or restrictions on activities are proposed in the general management plan, the procedures of 36 CFR 1.5 and 13.30 (13.46, 13.49, and 13.50 in the case of subsistence) and 43 CFR 36.11(h) must be followed before any proposed closures or restrictions take effect. These procedures also apply to any future proposals to open an area to

public use or activity that is otherwise prohibited. The procedures of 36 CFR 1.5, 13.30, 13.46, 13.49, and 13.50 and 43 CFR 36.11(h) are contained in appendix J. Specific proposals contained in this plan to close an area or restrict an activity are as follows:

Proposed Restrictions or Closures	Section Discussed
Recreational use of snowmachines	Recreational Visitor Use Management
Recreational use of motorboats	Recreational Visitor Use Management
Pack animals	Recreational Visitor Use Management
Recreational visitor group size	Recreational Visitor Use Management
Recreational camping length of stay	Recreational Visitor Use Management
Recreational campfires	Natural Resource Management
Arrigetch zone	Recreational Visitor Use Management
Reporting requirements for wildlife incidents	Natural Resource Management
Unattended or abandoned property	Recreational Visitor Use Management

Regulations. New regulations and revisions to existing regulations will be proposed in accordance with the requirements of the Administrative Procedure Act (5 USC 553). The National Park Service will provide a minimum 60-day comment period.

Amendment of the General Management Plan. Specific parts of the general management plan may be amended to allow for changing conditions or needs, or when a significant new issue arises that requires consideration. Amendments of this general management plan will include public involvement and compliance with all laws, regulations, and policies. If the proposed amendments are minor and not highly controversial, public notice and a 60-day waiting period will take place prior to making decisions to incorporate the changes into the plan. If the amendments are significant or highly controversial, the public will be provided opportunities to participate in the development and review of alternatives and the proposed action. This will include a minimum 60-day public comment period and public meetings as necessary and appropriate. All amendments to the general management plan must be approved by the regional director.

In the future, changing conditions will warrant preparation of a new general management plan. The public will be involved throughout the development of a new plan.

Estimated Costs

Tables 17 and 18 show the annual operating costs and construction costs and schedule, respectively, for the park and preserve.

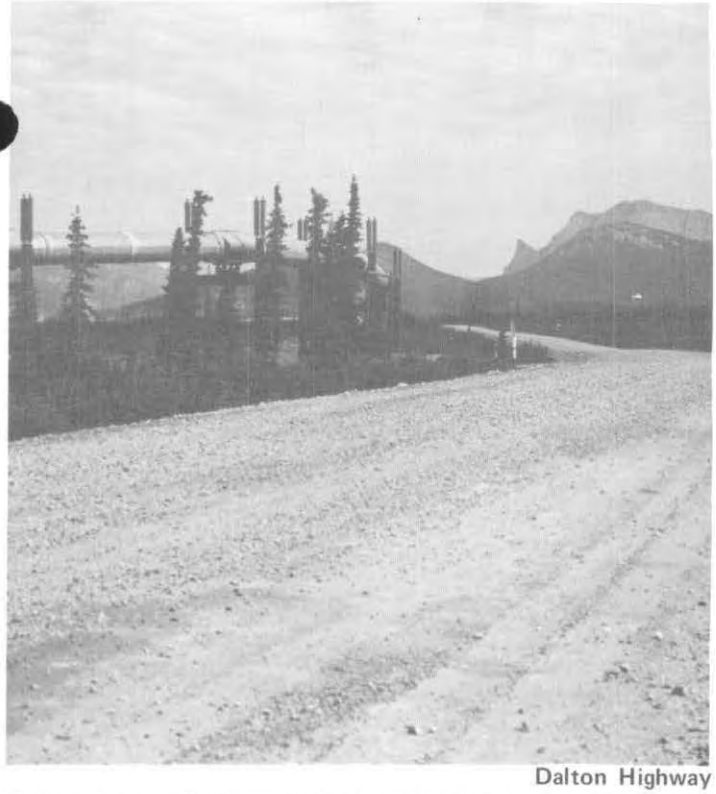
Table 17: Maximum Estimated Annual Operating Costs (in 1985 dollars)

Personnel	
Salary-17 permanent employees	$ 568,000
Salary--25 seasonal employees	210,000
Travel, overtime, uniforms	124,000
Rent, communications, and utilities	117,000
Services and supplies	
OAS aircraft operation	171,000
Printing and reproduction	18,000
Other services	67,000
Consumable supplies	73,000
Capitalized equipment (amortized)	21,000
Total	$1,369,000
Maximum possible increase over 1984 operating budget	$ 656,000

Table 18: Estimated Construction Costs and Schedule

Development by Area	Phase I 1986-1990	Phase II 1991-1995	
Anaktuvuk Pass			
NPS housing - 1 permanent employee	$ 321,000		
NPS housing - 2 seasonal employees	164,000		
NPS housing - 6 bunks	197,000		
Offices for 3, visitor area		$ 172,000	
Work space - bulk storage, 1-bay hangar, 1-bay garage		314,000	
Utilities-electric	16,000	16,000	
Subtotal	$ 698,000	$ 502,000	$1,200,000
Bettles			
NPS housing - permanent employees	$1,376,000		
NPS housing - rehab. existing	39,000		
NPS housing - 12 bunks	314,000		
Offices for 11, visitor area		$ 384,000	
Work space - bulk storage, 1-bay hangar, 2-bay garage, workshop		295,000	
Fuel storage area		105,000	
Utilities - well, septic, electric	443,000		
Subtotal	$2,172,000	$ 784,000	$2,956,000
Coldfoot			
NPS housing - 1 permanent employee	$ 229,000		
NPS housing - 2 seasonal employees	157,000		
NPS housing - 6 bunks	118,000		
Cabin/office	46,000		
Work space - bulk storage, 1-bay hangar, 1-bay garage		$ 170,000	
Fuel storage area		105,000	
Utilities - well, septic, electric	372,000		
Subtotal	$ 922,000	$ 275,000	$1,197,000
Miscellaneous			
Communications system	$ 225,000		
Subtotal	$ 225,000		$ 225,000
TOTAL	$4,017,000	$1,561,000	$5,578,000

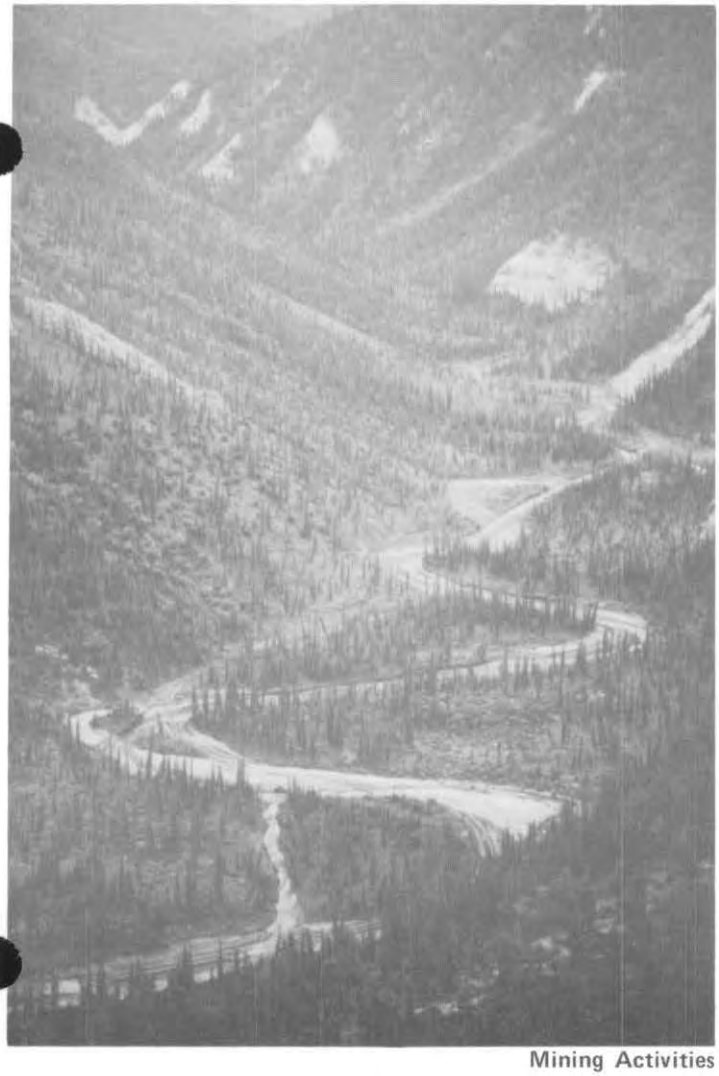
Note: Estimated construction costs include supervision, cultural resource compliance, and contingencies in 1985 dollars. Significant savings may be realized through establishing cooperative facilities with the Bureau of Land Management, the Fish and Wildlife Service, the state, and other local agencies.



Dalton Highway

Dalton Highway

Walker Lake Lodge



Mining Activities

Cabin on Small Private Tract

SUMMARY

Current Ownership:	Acres
Federal land	8,171,026
Private land (pending and approved)	269,349
State interests (beds of navigable waters)	455
Other interests (subsurface, easement)	31,687
Total	8,472,517

Proposed Land Protection:	Tracts or Parcels	Acres
Fee acquisition		
Native corp. lands (Doyon)	2	91,624
Native corp.-subsurface (ASRC)	1	31,322
Adjacent: Upper Nigu River (BLM)	1	23,000
Adjacent: Admin. sites BTT, AKP, CFT	4	12
Less-than-fee acquisition		
Native allotments	40	3,750
Small tracts	10	99
Mining claims (undisturbed valid claims among 213)		
Agreements/Alaska Land Bank		
Native allotments	22	2,650
Native corp. lands and easement (ASRC and AKP)	7	164,019
14(h)(1) (NANA)	25	10,694
Regulation		
Mining claims (disturbed valid claims among 34)		
State Classification and Zoning		
State (beds of navigable waters)		455
Adjacent: Schwatka Mountains (state)		
Adjacent: Killik-Itkillik rivers (state, ASRC)		
Adjacent: Kobuk, Alatna, John, and North Fork rivers (state)		
Cooperative Planning		
Adjacent: Trans-Alaska pipeline corridor (BLM)		
Adjacent: Ambler mining district (state, claimants)		
Statutory Acreage Ceiling:		none

Funding Status:
- Authorized acquisition ceiling - none
- Appropriated to date - none

Top Priorities:
1. Walker Lake and Administrative Sites
2. North Fork of the Koyukuk River
3. Alatna River
4. Noatak River

INTRODUCTION

The Department of the Interior adopted a new land protection policy in May 1982. Briefly, this policy addresses the treatment of nonfederal land within units of the national park system to achieve the purposes of the area as established by Congress and how this relates to land protection needs. Cost-effective alternatives to direct federal purchase of private lands are to be implemented to the fullest extent practical. When acquisition is deemed essential, it is to involve only the minimum interests necessary to meet the management objectives of the area. The policy calls for cooperation among federal agencies, state and local governments, and the private sector. Sociocultural impacts are fully considered. In addition, a plan for acquiring land and proposed modifications to the boundary is directed by section 1301(b)(6), (7), and (8) of ANILCA.

In response to policy, this land protection plan has been prepared to

- identify purposes of the unit and management objectives
- identify nonfederal lands and interests within the boundary, land uses, compatibility or threats, current and potential
- identify existing authorities and alternatives and assess sociocultural impacts of alternatives on local residents
- determine what land or interest in land needs to be in public ownership and what means of protection in addition to fee acquisition are available to achieve unit purpose as established by Congress
- inform landowners about NPS intentions for buying or protecting land through purchases or other means within the unit
- identify priorities for making budget requests and allocating available funds to protect land and unit resources
- identify external activities that have a direct bearing on park resources and land protection requirements
- find opportunities to help protect the unit by cooperating with state and local governments, landowners, and the private sector

This plan does not constitute an offer to purchase land or interest in land; neither does it diminish the rights of nonfederal landowners. The plan is intended to guide subsequent land protection activities subject to the availability of funds and other constraints.

The land protection plan will be reviewed every two years by the superintendent to determine if revisions are required. The superintendent will maintain current land status information, which will be available for review at the park headquarters. If the plan requires revision other than routine updating of land status information, all affected landowners and the general public will be notified and provided a 60-day comment period.

LAND PROTECTION ISSUES

The following land protection issues have been identified for Gates of the Arctic National Park and Preserve:

Lands within the Boundary

Native corporation lands - compatibility or threats from mining, oil and gas development, ATV use, commercial development, access

State lands - resolution of status, compatibility or threats from mining or development of submerged lands, RS 2477 rights-of-way

Mining claims - threats to water quality, fish, vegetation, wild and undeveloped character

Small tract entries - compatibility or threats from timber cutting, mechanized access, development of cabins or commercial lodges

Adjacent Lands

Lands south - compatibility or threats from Ambler mining district, future transportation corridors, land disposals for private development

Lands east - compatibility or threats from the Dalton Highway, disposal of land for mining, residential and commercial development

Lands north - compatibility or threats from oil and gas development, transmission corridors

Lands west - compatibility or threats from oil and gas development

PURPOSE OF THE UNIT AND RESOURCES TO BE PROTECTED

The purpose of the unit and the resources to be protected are described in the general management plan. Integral to the purposes of Gates of the Arctic National Park and Preserve, among others, is the mandate to maintain the wild and undeveloped character of the area. Management objectives may be found in appendix A.

LEGISLATIVE AUTHORITIES

In establishing the park and preserve, Congress specified the land protection authorities available to the National Park Service. Section 907 of ANILCA establishes a significant cooperative authority in the Alaska Land Bank. Numerous additional sections of ANILCA repeatedly encourage federal land managers to undertake cooperative agreements with other landowners for the achievement of mutual benefits.

The following acquisition authority is granted by section 1302 of ANILCA (this authority extends to both fee and less-than-fee interests):

> Lands inside the boundary may be acquired without restriction so long as the owner consents. If the owner of land inside the boundary is not willing to sell, acquisition is constrained as follows:

State lands may not be acquired.

Native corporation lands may not be acquired unless native stockholders no longer retain the controlling interest in the corporation.

Lands that were conveyed pursuant to sections 14(c)(1) and 14(h)(5) of ANCSA may not be acquired unless they are no longer occupied for the purposes specified in ANCSA and the secretary of the interior determines that activities on the tract would be detrimental to the purposes of the park and preserve.

No improved property may be acquired unless the secretary of the interior determines that the acquisition is necessary for the fulfillment of the purposes of ANILCA (generally section 101), or necessary for the fulfillment of the purposes of the conservation system unit. "Improved property" is defined in section 1302(f) as lands developed for noncommercial recreational uses or with a detached, noncommercial single-family dwelling constructed before January 1, 1980.

For unwilling sellers other than the state, native corporations, and 14(c)(1) owners, if appropriate land of similar characteristics and like value is available outside the unit, it will be offered.

The owner of an improved property being acquired by the United States may elect to retain a right of use and occupancy for an assignable term of either no more than 25 years, or the life of the owner or spouse. If the exercise of this right becomes inconsistent with the purposes of ANILCA, the secretary may acquire the portion that remains unexpired for fair market value.

Section 1302(h) contains sweeping exchange provisions and waives other related law so long as the authority is used to acquire lands and interests for the purposes of ANILCA. Lands offered for exchange may be, but do not have to be, within the conservation system unit. Exchanges must be for equal value unless the secretary determines that other than equal value is in the public interest.

Acquisition authority is generally restricted to lands inside the boundary with the following exceptions:

Section 1302(i) provides that if the state agrees, contiguous state lands may be acquired by donation or exchange. No further congressional action is necessary.

Section 103(b) authorizes boundary adjustments that add or delete up to 23,000 acres per unit without further congressional action other than prior notification of intent.

Section 1306 authorizes the acquisition of land inside or outside the boundaries for the purposes of administrative sites or visitor facilities by any method except condemnation. If practical and desirable, such sites outside the boundaries are to be located on native lands in the vicinity of the park and preserve.

Section 1431 allows for exchange or purchase of certain lands with the Arctic Slope Regional Corporation (ASRC).

In recognition of the Bureau of Indian Affairs' responsibility to owners of native allotments, the National Park Service will notify the bureau before taking actions relating to native allotments, such as securing agreements, acquiring easements, acquiring property, or leasing the property for administrative purposes.

LANDOWNERSHIP AND USES

Current Land Status/Compatibility with Park Purpose

Current land status is indicated in table 19 and on the Land Status map (located in the back pocket of this document). Most of the nonfederal lands within the park and preserve boundaries are currently undeveloped or minimally developed with cabins, camps, or caches. Existing uses and activities on nonfederal lands are largely compatible with the management of adjoining park lands, particularly subsistence activities and wilderness related activities. However, future land use changes such as new or increased commercial development would not be compatible with park values. Specific examples of compatible and incompatible uses are discussed in the following section and in the discussion of land protection priorities.

Native Corporation Lands. Native corporation lands include Arctic Slope Regional Corporation and village corporation lands around Anaktuvuk Pass, Doyon lands, and cemetery and historical sites selected by NANA under section 14(h)(1) of ANCSA. The types of interest include surface estates, subsurface rights, and easements. They are largely undeveloped (except for the village of Anaktuvuk Pass), and lands are currently being managed in a manner essentially consistent with park, wilderness, and subsistence values.

Village corporation and Arctic Slope lands in the vicinity of Anaktuvuk Pass are currently used for the village site and subsistence. Arctic Slope Regional Corporation also owns ATV easements, which provide access for subsistence uses. Anaktuvuk Pass is one of the two most widely used access points in the park for recreation. ANCSA 17(b) easements provide for public access across corporation lands (see "Access and Circulation Management" section for a discussion of these easements).

Doyon lands embrace part of the North Fork of the Koyukuk drainage and contain known historical sites. There is some recreational access from the

Table 19: Current Land Status
(July 1985)

Category	Acreage
Gates of the Arctic National Park and Preserve	8,472,517
Gates of the Arctic National Park	7,523,888
Gates of the Arctic National Preserve	948,629
Federal lands within the boundary	8,171,026
Nonfederal lands within the boundary	301,491
Arctic Slope Regional Corporation	
Application pending	3,791
Patent and interim conveyance	90,391
Subsurface estate or interest	31,322
ATV easements (60 miles)	365
Doyon Limited Regional Corporation	
Application pending	10,428
Patent and interim conveyance	81,196
Anaktuvuk Pass Village Corporation	
Patent and interim conveyance	66,275
Small private tracts	
Native allotments (27 allotments, 33 parcels, approved)	4,000
Native allotments (22 allotments, 29 parcels, application)	2,400
Headquarters sites (6 tracts patent)	30
Homesites (1 tract patent)	10
Homesteads (1 tract patent)	3
Trade and manufacturing sites (2 tracts patent)	56
NANA cemetery/historical sites (25 tracts application)	10,694
Mining claims	
Unpatented placer (237 claims)	
Townsite of Anaktuvuk Pass	75
State of Alaska--beds of navigable waters	
North Fork of the Koyukuk River	455
Federal less-than-fee interests	
Coldfoot administrative right-of-way (2 tracts)	7
ANCSA 17(b) public easements - Kobuk River, Glacier River, Anaktuvuk Pass, Chandler Lake, Shanin Lake	(undetermined)
Other public recreation easements - Killik River	(undetermined)

Note: Acreages are approximate and subject to change as various conditions affecting land status are resolved (for example, navigability determinations; state and native land conveyances, rejections, or relinquishments; rights-of-way, easement, and small tract adjudication) and as surveys are completed.

Dalton Highway on ANCSA 17(b) easements across these lands. These lands are undeveloped and are currently being managed in a manner consistent with park, wilderness, and subsistence values. NANA 14(h)(1) sites are used to preserve cultural values. These scattered tracts have been selected and applied for under section 14(h)(1) of ANCSA on the basis that they contain cemeteries or historical values of local or regional native concern. These sites, if conveyed, must protect these values and may involve specific rights of reasonable access.

Most of the existing uses of native corporation lands are compatible with park purposes. The National Park Service is concerned about water quality below Anaktuvuk Pass and about damage to vegetation and soils caused by ATV use outside the easement corridors. Doyon lands contain many unpatented, undisturbed mining claims. Park resources could be additionally affected by future changes such as oil and gas development, mining (particularly placer mining), development of lodges and hotels, and provisions for access to these activities on Anaktuvuk Pass, Arctic Slope Regional Corporation, and Doyon lands. Incompatible uses could affect wildlife, vegetation and soils, water quality, cultural resources, opportunities for solitude, and the wild and undeveloped character.

Small Private Tracts. There are 10 small tracts and 49 native allotments (62 parcels) totaling 6,400 acres within the park and preserve. A total of 22 native allotments (29 parcels) are still under application. These small private tracts represent the most recent in a long pattern of human presence and subsistence culture within the park. Most existing uses of these properties serve to exemplify subsistence traditions and complement the wilderness purposes of the park. Privately used cabins or homes are on 15 tracts. There is one small cabin at the headwaters of the Alatna and a two-story structure on Walker Lake that are both used as commercial lodges. Existing developments and levels of use, particularly subsistence activities and low-key personal use are largely compatible with park management objectives.

However, while most current uses of these properties are compatible with the park's wilderness purposes, significant and abrupt changes in land use could occur which would diminish the wild and undeveloped character of the region and significantly impair park purposes and resources. Commercial use, especially expanded or new activity or development, on small private tracts is a concern of the National Park Service. Such activity usually depends on the use of surrounding park lands and waters. Clients are concentrated in specific areas, causing impacts on fish and wildlife, vegetation and soils, subsistence activities, and opportunities for solitude. Associated development further affects adjacent park land by impairing scenic vistas, water quality, cultural resources, and the wild and undeveloped character of the area. Future commercial development which would be incompatible is most likely to occur on small tracts with good access by plane or boat. Tracts with such potential are located in the area of Walker, Takahula, Narvak, Selby, and Nutuvukti lakes; the lower Alatna and John rivers; and the upper North Fork and Noatak rivers.

The existing privately used cabins or homes on small tracts are compatible with park purposes, and small changes or adaptations of existing facilities would also be compatible. For properties that have no development, the addition of a small cabin or cache to be used, for example, for subsistence purposes would generally be compatible. To be compatible, such a structure would need to be located and constructed in ways that would minimize visual intrusions, and would not be visible from wild and scenic rivers or national natural landmarks.

Significant alterations on small tracts such as clear cutting would not be compatible, but selective tree cuttings that would not impair scenic vistas or significantly affect resources would be compatible.

Certain methods of access to small tracts would adversely affect park resources, such as ATV trails or roads that destroy permafrost and tundra vegetation and erode soils. Generally, motorized access to private lands using snowmachines, motorboats, and airplanes is compatible.

General guidelines for acquiring less-than-fee interests are outlined in the recommendations for small private tracts.

Mining Claims. There are approximately 250 mining claims within the boundary; all are unpatented placer claims, and there are only two currently active mines. Park and preserve lands are no longer available for new mineral entry and location, and if the existing unpatented claims are abandoned, the lands will revert to full administration by the National Park Service. Currently, however, locatable mineral claims may be filed anywhere on state lands inside the unit (the submerged lands beneath the navigable rivers).

The Mining in the Parks Act of 1976 (16 USC, Sec. 21-54) precipitated promulgation of regulations (36 CFR 9A) in 1977 for the Park Service to manage all mining activities on patented or valid unpatented mining claims in all units of the national park system. These regulations are intended to enable the Park Service to prevent or minimize potential damage to the environment and resource values through control of mining activities. Management of mining activities is discussed in the "Natural Resource Management" section.

The development and operation of valid claims, especially those that have been inactive, has the potential to threaten the wild and undeveloped character of the area, wildlife habitat and populations, environmental integrity, scenic beauty, or designated wilderness and wild rivers. Placer mining as it has occurred in Gates of the Arctic alters soils, vegetation, and wildlife and fisheries habitat, degrades water quality, disrupts stream flow, displaces fish populations, disrupts solitude, impairs scenery, and may conflict with subsistence activities, and may destroy cultural resources. Soil erosion and vegetation destruction caused by access vehicles can be seen in the vicinity of past mining operations. Adverse effects of mining on park resources can be reduced if mitigating measures are applied to mining activities.

State Lands and Interests. The Submerged Lands Act of 1953, the Alaska Statehood Act of 1958, and the state constitution provide for state ownership of shorelands (the beds of navigable waters). Determinations of what waters are navigable is an ongoing process in Alaska at both the administrative and judicial levels. At present the North Fork of the Koyukuk River upstream to township 26 north, range 16 west (Fairbanks meridian), has been determined navigable by the Bureau of Land Management (see also "Natural Resource Management" section).

The state of Alaska contends that certain rights-of-way are valid under RS 2477 (see discussion in "Access and Circulation" section). The validity of these rights-of-way has not been determined. Any valid rights-of-way will be included in future land protection plans as nonfederal interests and appropriate protection strategies will be identified. These are more fully discussed in the "Access and Circulation Management" section and in appendix M.

The state of Alaska has identified several selections within Gates of the Arctic which, according to NPS information, do not appear to constitute valid selections. These are along the boundary in the vicinity of Ernie Lake drainage (BLM serial number F 15184). Final resolution will be appropriately adjudicated.

Ambler Right-of-Way. When Gates of the Arctic National Park and Preserve was established, a provision was made for a right-of-way to link the Alaska pipeline haul road to the Ambler mining district across the western Kobuk River preserve unit (ANILCA section 201(4)). Any other developed right-of-way requests must be pursued under title XI of ANILCA.

Recent Land Status Changes

Since the establishment of Gates of the Arctic National Park and Preserve, certain land status changes have occurred. A land exchange with the Arctic Slope Regional Corporation resulted in the NPS acquisition of 102,000 acres of surface estate in the vicinity of Anaktuvuk Pass and a recreation easement along the Killik River to the confluence with the Colville River. Air and ATV access easements were retained by the corporation in the vicinity of Anaktuvuk Pass. The subsurface estate beneath these lands was acquired through provisions of the Barrow Gas Field Transfer Act of 1984. A second land exchange with the Arctic Slope Regional Corporation under section 1431 of ANILCA resulted in the addition of 6,500 acres, including Kurupa Lake along the park's northwestern boundary, with the corporation retaining some subsurface rights.

Sociocultural Characteristics

Sociocultural characteristics of the area are described in the "Regional Setting" section.

PROTECTION ALTERNATIVES

A number of existing authorities and alternative methods are available for protecting the values of the park and preserve from potentially damaging activities on nonfederal lands. Each alternative is analyzed for its applicability, effectiveness, and sociocultural impacts on nonfederal landholders and communities. This analysis is the basis for the recommendations of which methods are used to protect specific areas.

Existing Authorities

Activities and developments on nonfederal land in the preserve must meet applicable state and federal environmental protection laws. Regulations based on these laws provide some authority to protect park resources. While the NPS regulations stemming from ANILCA do not generally apply to private land in the park and preserve, there are federal and state laws that do apply. These include but are not limited to the Alaska Coastal Management Program, Mining in the Parks Act, Alaska Anadromous Fish Act, Clear Water and Clean Air acts, and Protection of Wetlands. These laws and regulations can assist in minimizing harm to park resources, but do not prevent an activity that might adversely affect the area.

Mining operations within the park are addressed by the Mining in the Parks Act of 1976 (16 USC 21-54) and its implementing regulations (36 CFR 9A). The regulations intend to minimize resource impacts by requiring operations to adhere to an approved plan of operations. Operations are monitored by NPS staff for compliance. Existing claims, environmental effects of mining, mitigating measures, and current regulations are described fully in the "Environmental Overview and Analysis of Mining Effects, Gates of the Arctic National Park and Preserve, Alaska" (NPS 1983).

All private resource development activities on private, state, and federal lands must meet applicable state and federal environmental protection standards. These standards are cooperatively enforced by the Alaska Departments of Environmental Conservation and Natural Resources, the Environmental Protection Agency, and the National Park Service.

The Coastal Zone Management Act (PL 92-583), as amended in 1976 (PL 94-370) and 1980 (PL 96-464), establishes a national policy and develops a national program for the management, beneficial use, protection, and development of the land and water resources of the nation's coastal zones.

While this act establishes national goals for coastal zones, it also provides substantial state discretion in interpreting and achieving its goals. A state program has been approved by the Office of Coastal Zone Management. NANA is developing a regional coastal zone management plan that includes the Kobuk River preserve unit and Walker Lake. The draft of September 7, 1984, emphasizes the importance of subsistence use. The Kobuk area is identified as an area meriting special attention, noting that

the Ambler mining district should receive special planning by an interagency task force. The North Slope Borough is also preparing a coastal zone management plan that includes the upper reaches of the Anaktuvuk, Nanashuk, and Itkillik rivers adjacent to Gates of the Arctic.

The Alaska Anadromous Fish Act (Alaska Statute 16.05.870) provides protection to specific rivers, lakes, and streams or parts of them that are important for the spawning, rearing, or migration of anadromous fish. Rivers currently listed by the state include portions of the Itkillik, Anaktuvuk, Noatak, Kobuk, and North fork of the Koyukuk rivers (ADF&G 1985c). The act requires that any person, organization, or government agency proposing construction that involves or uses one of the above water bodies must notify the commissioner of the Alaska Department of Fish and Game of this intention. Approval must be received from the Alaska Department of Fish and Game before beginning such construction or use.

Section 1104 of ANILCA specifies the procedure for reviewing requests for rights-of-way for any transportation or utility system across public lands, and it establishes the criteria for approving or disapproving such requests. However, because of the special wilderness and other purposes of Gates of the Arctic, future transportation or utility systems across the unit may be inconsistent with the congressional mandate. The access provision of section 1110 of ANILCA assures private landowners that they will be given "such rights as may be necessary to assure adequate and feasible access for economic and other purposes to the concerned lands," subject to reasonable regulations to protect park values.

Alternatives

Agreements (including the Alaska Land Bank). Agreements are legal instruments that define administrative arrangements among two or more parties, usually an exchange of services or other benefits. From the NPS viewpoint, the purpose of this protection tool is to encourage the management of private lands in a manner consistent with park purposes. Agreements are flexible and may include provisions for access, facility use and maintenance, protection of property, and visitor services.

The Alaska Land Bank provides for agreements in which private owners of lands conveyed under ANCSA agree to manage their lands consistently with the purposes of the park. Certain landowners receive exemptions from property taxes and certain corporate liabilities and also receive technical land management assistance. Native corporations would receive two types of benefits from the land bank: First, land-banked properties would be immune from judgments to recover corporate debts or penalties; and second, the National Park Service would offer technical assistance in matters of fire control, trespass control, resource and land use planning, and fish and wildlife management. The waiver of property taxes for land-banked lands would provide no incentive to untaxed native corporations.

Applications: Agreements could be developed with Arctic Slope and Doyon native corporations, owners of small private tracts, and the state.

Effectiveness: Advantages of agreements include their flexibility, relative low cost, and ability to establish cooperative management arrangements. Disadvantages include funds to continue agreements, the ability of one party to terminate on short notice, the lack of a legally binding commitment, and the lack of permanent protection. The effectiveness of agreements to ensure compatible management relies on common or compatible goals between landowners and would depend on the incentives offered to landowners.

Agreements with individual landowners to ensure compatible management might be difficult to obtain because of the lack of incentives. The state and native corporations may have a range of incentives for entering into agreements.

Sociocultural Impacts: Specific impacts would be defined by the terms of each agreement. It is unlikely that any negative or adverse impacts would result since parties must reach agreement. In addition, private ownership would be retained.

Coordination with Other Agencies. Actions by federal and local agencies to permit, license, or provide financial assistance may have significant impacts on park resources. Under provisions of the National Environmental Policy Act, major federal actions are subject to public review processes to ensure adequate consideration of possible impacts on the environment. The draft NANA Region Coastal Zone Management Program also provides opportunities for review of permit and funding activities that may have a significant impact on park resources.

As a concerned land manager and neighbor, the park can assure that other agencies are fully aware of any impacts proposed actions may have on park resources. Participation in public hearings and review processes is one means of expressing park concerns. Coordination may also be improved by memoranda of understanding or advance requests to agencies that the park be notified when certain actions are being considered. Participation by the park in project designs, locations, and operating requirements for new construction may be undertaken wherever possible.

Application: Coordination would particularly apply to state lands and lands outside the unit.

Effectiveness: Effectiveness relies on similar or common goals of agencies and continual communication.

Sociocultural Impacts: Coordination would usually improve public notice and participation. It is unlikely that negative or adverse impacts would result.

State Land Classification and Zoning. The state government and local jurisdictions have the power to protect public health, safety, and welfare

by regulating land use. Zoning directs orderly development rather than preventing it. Zoning by state and local jurisdictions is possible; however, the North Slope Borough is the only entity near the unit using zoning at this time.

The Alaska Department of Natural Resources, Division of Land and Water Management, is responsible for managing state lands that are not specifically designated. This division classifies the state lands it manages. Types of classifications include resource management, public recreation, and wildlife habitat. Classifications establish primary uses for state lands; however, multiple uses of classified lands can occur as long as these other uses are compatible with the designated primary use.

Application: Land classification would apply to state lands, and zoning would apply to lands within North Slope Borough.

Effectiveness: The effectiveness of state land classification and zoning as a tool to protect park values depends primarily on mutual objectives between all landowners and the zoning entity. Zoning is most effective when it has the widespread support of the citizens it affects and when it is enforced by the zoning entity. However, local zoning has been criticized as a long-term protection tool because of the potential for changes in local governing bodies and problems in enforcement of regulations.

The North Slope Borough has a Comprehensive Plan (Wickersham and Flynn, Planning Consultants), which includes "Land Use Zone Districts" adopted in 1983. Public and private lands within the borough, including a significant area of the park, are zoned primarily in the "conservation district," which is intended to preserve the natural ecosystem for all of the various species upon which residents depend for subsistence. The conservation district can accommodate resource exploration and development on a limited scale, case-by-case basis, but major resource development projects would require rezoning. Anaktuvuk Pass is within a "village district" that encourages development which reinforces traditional values and lifestyles, is in accord with village planning, and is in accord with the desires of village residents.

North Slope Borough zoning does indicate some mutual objectives near Gates of the Arctic National Park and Preserve, and zoning may be an effective short-term tool for protecting park values within the boundary of the borough. Effectiveness of zoning on allotments inside the borough depends largely on the borough's ability to enforce zoning regulations.

The effectiveness of state classification of submerged lands to protect park values depends on state support of common objectives.

Sociocultural Impacts: With the adoption (generally through broad-based public participation) and enforcement of zoning regulations, individual landowners may be prevented from using their land in some manner, but this restriction on individual freedom is imposed for the benefit of the community as a whole. The impact can be regarded as beneficial to and supported by the public at large.

Classification of state lands is established through a public process. Any impacts on the people of the region and state would be identified and could be eliminated or minimized during the process. The uses of the lands subject to classification and the type of classification determine what impacts result.

Less-than-Fee-Acquisition. Landownership may be envisioned as a package of rights. Less-than-fee acquisition conveys only specified rights from one owner to another.

Easements convey some rights, while all other rights of ownership remain unchanged. Easements can be positive--conveying a right of access, or negative--limiting specific uses of the land. Specific easement terms can be constructed to fit the topography, vegetation, visibility, and character of existing or potential developments on each tract.

Easements can be acquired in various areas of the park to ensure the preservation of scenic values, to maintain compatible land uses, and to provide public access. An easement remains with the land when it is transferred to another owner. The amount of consideration depends on the interest being acquired.

Mineral interests are a specific right that can be acquired from the owner.

Application: Easement acquisition could be applied to small private tracts where some, but not all, existing or potential uses are compatible with park purposes. Acquisition of mineral interest could be applied to valid, unpatented mining claims.

Effectiveness: Easements are extremely flexible, and they could be drafted to fit the specific characteristics of the land, NPS management objectives, and the special concerns of the owner. They would be effective in protecting key elements of scenic landscapes, such as trees to buffer developments and improvements, while still allowing the continuation of traditional uses. Easements would also be an effective way of limiting motorized access to snowmachines, motorboats, and fixed-wing aircraft to protect wilderness values on the park lands adjacent to small private tracts. Particularly on undeveloped tracts where most timber development and access rights would be purchased, the easement's cost could conceivably be as great as the acquisition of fee interest. Cost advantages of easements, as opposed to fee, can be determined on a case-by-case basis. There are additional long-term costs to the National Park Service to monitor and enforce the conditions and terms of easement provisions. In remote areas this is an especially difficult problem.

Acquisition of mineral interests would preclude any mining activities.

Sociocultural Impacts: Individual and collective impacts would vary, depending on the rights acquired. In most cases, an easement would continue the current conditions while compensating owners for the loss of

potential uses. Acquisition of valid unpatented mining claims could affect local employment working these claims. Currently, there are only two claims with approved plans of operations.

Fee Acquisition. When all of the interests in land are acquired, it is owned in fee simple. Methods of acquisition include donation, exchange, purchase, relinquishment, and eminent domain.

Application: Fee acquisition could be employed for native corporation lands and small private tracts. Fee acquisition is most often appropriate when the land is needed for heavy public use, must be maintained in pristine natural condition, which precludes reasonable private use, is owned by individuals who do not wish to sell less-than-fee interest, or when alternatives would not be cost-effective.

Effectiveness: Fee acquisition would ensure the achievement of park purposes; however, it would be expensive unless land exchanges or donations occurred. Exchanges would depend on the availability of comparable lands outside the boundary.

Sociocultural Impacts: Acquisition of native corporation lands by exchange would not result in a net loss of corporation lands; however, fee simple purchase would result in a loss of lands. Exchanges involving lands near Anaktuvuk Pass could result in the loss of residents' areas rights if easements were not retained.

Individual landowners could be adversely affected by loss of livelihood, loss of home, problems of moving property, and inability to pass land on to their heirs. However, ANILCA contains several provisions that significantly mitigate the severity of these impacts. For example, sellers of improved noncommercial property could retain a right of continued use or occupancy for a set period of time or for the lifetime of the owner or surviving spouse (however, ANILCA does not provide for continued use or occupancy of commercial properties). All sellers would be fairly compensated for their properties, and land exchanges might be available if the owners preferred. Native allottees who use their lands for subsistence purposes could sell the lands or exchange them for lands of equal value outside the boundary and continue to use the park for subsistence activities so long as they were local rural residents.

Combination. Probably no single land protection method would be best for all nonfederal lands within the boundary. A combination of alternatives could be used to obtain the minimum interest necessary to achieve park purposes.

Methods of Acquisition

There are five primary methods of acquisition of fee and less-than-fee interests in lands: donation, purchase, exchange, relinquishment, and eminent domain proceedings.

Donation. Landowners may be motivated to donate their interests in the land to achieve conservation objectives. Tax benefits of donation also may be an important incentive. Donations of fee are generally deductible from taxable income. Easement donations may also provide deductions from taxable income, but are subject to certain IRS requirements to qualify as a charitable contribution.

Landowners are encouraged to consult their own qualified tax advisors to discuss the detailed advantages of donations. NPS representatives may be able to provide some general examples of tax advantages, but cannot provide tax advice or commitments of what deductions will be allowed by the IRS.

Exchange. Interests in land may be acquired by exchange. The land or interest to be exchanged should be of equal value. Differences in value may be resolved by making cash payments. Exchanges may be made for other than equal value if the secretary determines it is in the public interest.

The National Park Service may also consider other federal lands within the authorized boundary as potential exchange lands to consolidate NPS jurisdiction.

Other federal lands in Alaska that become surplus to agency needs would normally go through disposition procedures, including public sale. The National Park Service will work with the Bureau of Land Management and the General Services Administration to determine if any additional federal land may be available for exchange purposes.

Land exchanges require extensive consultation with all affected parties. Exchanges will be in compliance with all applicable laws and regulations, which in some cases may direct public involvement, environmental impact statements, notification of Congress, or other measures.

Purchase. Acquisition by purchase requires funds to be appropriated by Congress or donated by private sources. Further funding for purchases depends primarily on future appropriations, and it is anticipated that funding will be limited over the next 10 years. Potential donations of funds or purchase by individuals or organizations interested in holding land for conservation purposes will be encouraged.

Relinquishment. State and native corporation selections may be relinquished resulting in ownership remaining with the United States. The relinquishing entity can use the acreage being relinquished to acquire other selected lands outside the unit.

Condemnation. Where it is determined that land or interests in land must be acquired, the National Park Service will negotiate with the owner to reach a compatible settlement for purchase. If the land use activities produce an imminent threat or actual damage to the integrity of park/preserve lands, resources, or values, the Park Service will diligently negotiate for acquisition of sufficient interest to prevent such

damage. If a negotiated settlement cannot be reached, the secretary of the interior may exercise the power of eminent domain to preclude or cease activity damaging to park resources. Condemnation proceedings, where allowed by law, will not be initiated until negotiations to achieve satisfactory resolution of the problem have been exhausted. Under certain circumstances, condemnation action may be used during the process of acquisition involving willing sellers to overcome defects in title.

Designation of Acquired Lands

Potential additions to the park or preserve by exchange with the state pursuant to section 1302(i) of ANILCA or boundary adjustments or additions pursuant to section 103(b) will be designated either park or preserve, whichever is adjacent to the addition. Potential acquisitions within the park or preserve will similarly be designated the same category as surrounding lands. If such an addition or acquisition is adjacent to both park and preserve lands, the tract will have a split designation following the extension of the park or preserve boundary, adjusted wherever possible to follow hydrographic divides or embrace other topographic or natural features. For additions to the park or preserve beyond the 23,000-acre limit of section 103(b), congressional action will be required and park or preserve designations will be determined by the legislation. Public and congressional notification and review of proposed additions pursuant to sections 1302(i) and 103(b) will be provided as appropriate.

Additions to the park or preserve or acquisitions that are within the congressionally established wilderness boundary will automatically become wilderness upon acquisition, pursuant to section 103(c) of ANILCA.

Lands added or acquired will be managed in the same manner as other unit lands of the same designation.

RECOMMENDATIONS

Native Corporation Lands

Doyon Lands. The National Park Service will seek fee acquisition of fee interest in the three Glacier River townships, and exchange is the preferred method of acquisition. Acquisition of these lands is considered necessary to protect the watershed, wild character, recreational use and access, and known historical sites. For the township at the juncture of the North Fork and the Middle Fork of the Koyukuk, the Park Service will also seek acquisition of fee interest, and the preferred method is by exchange. It is not as high a priority as the Glacier River lands. These lands embrace the designated wild river. Doyon has expressed interest in exchanging the Glacier River townships, but is not interested in exchanging the North Fork/Middlefork township at this time. If Doyon should change its position, the National Park Service would be interested in pursuing this exchange.

Arctic Slope/Anaktuvuk Pass Lands. The National Park Service will encourage comprehensive community planning for Anaktuvuk Pass and will seek agreements for compatible land management in exchange for technical assistance. The Park Service is also interested in identifying common goals with the North Slope Borough zoning commission. The Park Service will not actively seek to acquire lands in this area, but will consider exchanges offered by landowners if mutual benefits can be demonstrated and there is full involvement and consent of residents.

Acquisition of subsurface rights near Itkillik Lake and Kurupa Lake will protect the archeological resources, natural character, and subsistence resources of the area. The preferred method of acquisition is donation or exchange.

NANA 14(h)(1) Sites. NANA intends to initiate cooperative agreements with the National Park Service on all 14(h)(1) sites within Gates of the Arctic National Park and Preserve. Agreements would include protection of the cultural values for which these sites were selected and protection of adjacent park resources. Subsequent to the agreements, NANA may relinquish its selections made pursuant to section 14(h)(1) of ANCSA. The National Park Service is mandated to protect cultural values and would manage these sites with sensitivity to native concerns if they remain in federal ownership, or if conveyed to NANA, through agreements.

Small Private Tracts

The minimum interest necessary to protect the wild and undeveloped character and the other purposes of this national park and preserve is the acquisition of development rights or a "conservation" easement on most small private tracts.

The majority of existing uses of small tracts are compatible with the purposes of the park and preserve. During the public review of the draft land protection plan, many private landowners strongly expressed the view that present uses of their land are compatible with park purposes. Many landowners are subsistence users who intend to use their lands primarily as a base for subsistence activities within the park. The National Park Service agrees that the continuation of the traditional human presence and private landownership for the purposes of subsistence, low-key personal use, or other wilderness-related uses is acceptable. At the same time, different, higher intensity future uses could damage park and subsistence resources. Therefore, the protection recommendation is to continue private landownership in the park while ensuring the protection of park values and purposes through acquisition of less-than-fee interests. The interest acquired would, for instance, allow subsistence activities and related, small facilities to occur, while preventing activities and developments that would be detrimental to park values.

The National Park Service is required to examine existing and potential uses of nonfederal lands within the park in order to determine if these uses are compatible with the purposes for which the park was established (ANILCA section 1301). For example, one of the purposes Congress assigned for Gates of the Arctic National Park and Preserve is the protection of caribou habitat and populations, and the Park Service must attempt to ensure that uses on federal and nonfederal lands within the park do not cause harm to caribou habitat or populations. If a private landowner were to subdivide his property and sell parcels for recreational development so that extensive caribou habitats were destroyed or migrations were interrupted, this would be contrary to the purpose of protecting caribou and would be an incompatible use of private land in the park.

The following lists of compatible and incompatible uses of nonfederal lands in the park are presented to publicly inform landowners about what uses of nonfederal lands are generally compatible with the purposes of the park, and what uses will cause the National Park Service to initiate actions to protect park resources and values. These lists are intended to serve as general guidelines for both park managers and nonfederal landowners. Because all possible uses of nonfederal lands cannot be anticipated, and other compatible and incompatible uses may exist, the following lists of uses cannot be all-inclusive (see table 20).

These general guidelines are not intended to restrict the uses of private land, and they will help define in more detail, during discussions with landowners, the minimum interest that needs to be acquired on each tract.

Table 20: General Guidelines for Acquiring Less-than-Fee Interests

Compatible	Incompatible
One modest cabin on most small tracts; develop design guidelines specific to each tract such as siting, color, height of structure to minimize intrusion	New cabins in view from wild rivers or national natural landmarks; more than one cabin on a tract
Existing low-key commercial operations and modest structures	Large scale, new or increased commercial developments or use
Selective tree cutting with minimal adverse visual or natural resource impacts	Clear cutting of forested areas
Multiple ownership in common	Subdivision of ownership by tract
Repair, replacement, or modification of existing noncommercial structures	Significant increase in size of existing noncommercial structures

New or existing airstrips with minimal alteration to vegetation, terrain, or visual qualities	Construction of airstrips that significantly alter vegetation, terrain, visual qualities
Access by snowmachine, dog team, motorboat, foot, aircraft	ATV access or road access (will consider cases along Hickel Highway, existing easements, or cases where there would be no damage to park values)

To implement this protection policy, the National Park Service will negotiate with individual owners of patented or approved small tracts or native allotments to further define compatible and incompatible uses and developments for each tract. An appraisal of the less-than-fee interest will be based on the detailed definition of compatible and incompatible uses for each tract. In the meantime, landowners with plans for developments or uses, which, based on the above guidelines appear to be incompatible, are urged to discuss their plans with the park staff. Often, small modifications in design or location may make a desired facility compatible or achieve needed access without significantly impairing park values and purposes.

In the course of the discussions, the National Park Service will consider the cost-effectiveness of the less-than-fee interest. If the interests being acquired by the Park Service include overland motorized access in summer, and commercial development interests, and a scenic buffer using an existing stand of trees, the cost of a conservation easement may exceed 75 percent of the value to the fee interest. There may be additional NPS costs over time in administering the easement. In such cases the Park Service may negotiate for fee acquisition if it is in the public interest.

Similarly, if negotiations for less-than-fee ownership are unsuccessful, and the owner is willing to sell in fee, the National Park Service may consider fee acquisition if it is in the public interest.

Landowners who no longer wish to retain their land for the purposes for which it was acquired and wish to sell property within the Gates of the Arctic are encouraged to contact the superintendent. The National Park Service is interested in the opportunity to review all proposed land offerings or proposals. These proposals would be reviewed for their priority in the land protection plan recommendations and for their potential contribution to the enhancement of scenic values, resource protection, continuance of community subsistence opportunities, enhancement of recreational opportunities, and maintenance of the wilderness or undeveloped character of the area. Extenuating circumstances including hardship as defined in section 1302(g) would also be considered. The availability of appropriated funds would determine the Park Service's ability to act on proposals from willing sellers.

When an owner of improved property offers to sell to the United States, the owner may retain a right of use and occupancy for noncommercial residential or recreational use by agreement with the National Park Service for a period of up to 25 years or for life.

Negotiations and purchases will depend on the availability of funds appropriated by Congress. Such funds are expected to be limited. Protection priorities have been established based on resource values and potential threats (see "Land Protection Priorities").

In cases where significant land use changes producing resource damage are imminent, the unit's integrity is threatened, and negotiations with the landowner are unsuccessful, exercise of the power of eminent domain may be initiated. However, this power would only be used in cases that would severely damage the unit's integrity and where no other method will prevent damage to park resources, not for slightly exceeding the general guidelines.

The land protection plan will be reviewed every two years by the superintendent to determine if revisions are required. This review will include consideration of the cost-effectiveness of acquiring easements in protection, park values, and its workability with local concerns.

The minimum interest necessary for approved native allotments within or contiguous to native corporation lands are cooperative agreements because such lands have access from corporation lands. Agreements would be sought in which landowners would manage lands in a manner compatible with park purposes. In return, the National Park Service could provide services such as technical assistance for fire protection and trespass enforcement.

Mining Claims

The National Park Service will acquire the interest in valid undisturbed claims through donation whenever possible, or purchase. The validity of all unpatented mining claims will be tested, and mineral contests will be recommended as appropriate. The highest priorities for acquisition will be given to undisturbed claims along Bonanza, Ipnek, O'Malley, O'Houlihan, and Nigikphalugurvak creeks to protect these undisturbed wildlands.

For valid claims in already disturbed areas, protection can be provided by working cooperatively with claimants to assure that plans of operation meet federal and state regulations to minimize impacts on clean water, fish populations, and habitat; avoid destruction of vegetation by overland vehicle travel; and improve reclamation. The advice and cooperation of the Alaska Department of Environmental Conservation and the Environmental Protection Agency will be sought in developing and monitoring plans of operation. Where regulatory authorities are insufficient to prevent damage and the operation of valid claims threatens park resources, acquisition of mineral interests will be needed to adequately protect resources.

State Lands and Interests

The National Park Service recommends that the state close the beds of navigable waters to new mineral entry, extraction of oil and gas, and sand and gravel resources, and will apply to the state for these closures. The Park Service will also pursue cooperative agreements with the state for the management of lands under navigable water bodies (shorelands). A complete discussion of management may be found in the "Natural Resource Management" section.

ADJACENT LANDS

Gates of the Arctic National Park and Preserve is a significant land area in northern Alaska, encompassing some 8.5 million acres. ANILCA section 1301(b)(8) requires a plan indicating the relationship of this unit to surrounding areas. The National Park Service is interested in maintaining good communication and ongoing cooperation with its neighbors. External conditions and activities have a direct bearing on park resources, values, and uses, including fish and wildlife, subsistence customs and resources, and recreational opportunities. The Park Service is regularly asked to participate in and comment on the land use plans and development proposals of adjacent public land management agencies and corporate landowners. The land protection plan comprehensively addresses lands adjacent to the park and preserve to develop the basis for our comments and concerns well in advance and in a public forum. The Park Service is interested in participating in any planning effort in the region and in being good neighbors, rather than establishing any zone or buffer around the unit.

Lands South

Existing and Potential Uses. Most of the lands south of the park and preserve are owned by the state of Alaska. Current uses of the lands have little impact on park resources. However, future uses could result in significant changes. Potential uses include mining and associated transportation and community development, all of which could adversely affect resources inside the park and preserve. Of concern are park resources in the Kobuk River region, particularly those that are adjacent to the Ambler mining district.

Another concern is that the southern boundary often does not follow natural features. This poses identification problems for visitors and local residents and causes resource management difficulties. Also, visitors enjoying the John, Alatna, and North Fork of the Koyukuk wild rivers begin their trips in the park but float significant distances outside the boundary to reach practical pull-out points. Assuring continuity of their wilderness experience along these rivers is an objective.

Recommendation. Minor adjustments of the southern boundary are appropriate. Land exchanges will be pursued to place the boundary on

hydrographic divides in order to protect entire park watersheds, assist in boundary location in the field, and to achieve other benefits for both parties.

For lands in the vicinity of the Kobuk, Alatna, John, and North Fork of the Koyukuk rivers, the Park Service is willing to participate in any cooperative planning. State classification of adjoining lands to protect fish and wildlife and recreational values will be encouraged. The Park Service will work with the state to resolve practical pull-outs for floaters. One option would be for the state to designate and manage state-owned portions of the Kobuk, Alatna, John, and Middle Fork of the Koyukuk as part of the national wild and scenic rivers system.

The Park Service is interested in participating in the interagency task force planning for the Ambler mining district proposed in the Draft NANA Region Coastal Management Plan. If mining is not significantly developed, the National Park Service will encourage the state to classify the Schwatka Mountains in the upper Ambler River area for public recreation, wildlife, and subsistence use.

Lands East

Existing and Potential Uses. The trans-Alaska utility corridor just east of the park is currently managed by the Bureau of Land Management. Along with the oil pipeline, the corridor contains the Dalton Highway, which is managed and maintained by the state of Alaska. State maintenance camps at Prospect, Coldfoot, Chandalar, and Atigun, BLM concession operations at Coldfoot, and Yukon River, and a growing number of permanent residents in Coldfoot and Wiseman along the road all affect park use and access. A gas pipeline is proposed within this corridor. The state legislature has closed the corridor to hunting, with firearms and to ORV use. However, current enforcement is not effective.

The Dalton Highway is open to the public to Dietrich, providing an opportunity for visitor access that did not exist at the time the park was established. The unpaved road is well maintained and provides a spectacular recreational experience. It is a unique opportunity to be able to drive through the outstanding scenery of the Brooks Range. The corridor is adjacent to several other conservation system units: Kanuti, Yukon Flats, and Arctic national wildlife refuges. Adjacent state and native lands possess scenery and lakes with additional recreational potential.

While recreational use of the road provides access for visitors to Gates of the Arctic, there are some concerns. Concentrated visitor use in the eastern portion of the park could potentially damage park resources. Another concern is that not all visitors who reach the park by way of the highway are prepared for wilderness opportunities and dangers. There is concern that access to the park from the highway not be impeded by development or private lands.

Corridor management planning by the Bureau of Land Management anticipates that development will occur in nodes, around government facilities, and concessions. A possible future gas pipeline has the highest priority over other potential uses. The Alaska Department of Natural Resources has recently made a formal request to the Bureau of Land Management to allow state land selection within the corridor north of the Yukon. Future changes in land use within the corridor will fundamentally affect park lands, access, and use. Mining along streams that are used for access, increased local population and related pressures on subsistence and recreation resources, and strip development not unlike gateways to national parks in the lower 48 states are all possible scenarios, which can lead to adverse impacts.

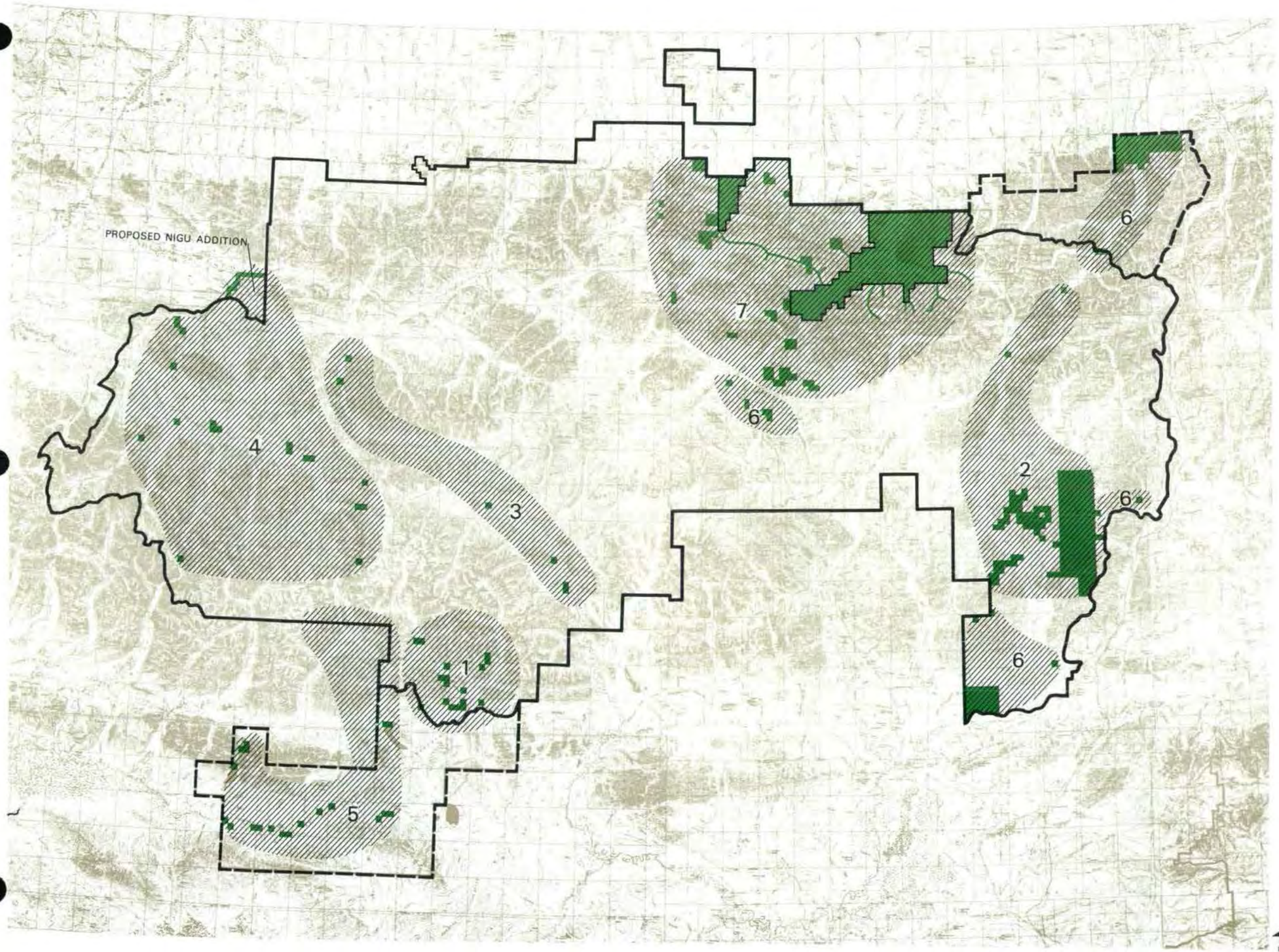
Recommendation. The Park Service recommends comprehensive planning of the utility corridor as national interest land reserved for oil and gas transmission and as a link to several national conservation system units. This planning should involve all state, local, federal, and private organizations with adjacent lands or public responsibilities in the corridor. The corridor possesses outstanding opportunities for scenic and recreational use in a manner compatible with the utility purposes and purposes of the conservation system units. The National Park Service will encourage orderly, planned development that recognizes the recreational opportunities of the corridor and surrounding lands and is willing to participate in any planning or task force and provide technical assistance.

Lands North

Existing and Potential Uses. The northern boundary of the park is bordered by the Arctic Slope Regional Corporation and state land selections. Oil and gas exploration and development is the primary reason for these selections, although future prospects are not completely known. The state of Alaska proposes oil and gas leasing of land just north of the park and preserve in 1989. If reserves are found and developed, an east-west pipeline corridor connecting to the trans-Alaska pipeline is probable. Migrating wildlife, particularly caribou, could be affected by increased human activity in an east-west corridor, which would cut directly across drainages and migration routes.

Recommendation. The Park Service will support the North Slope Borough to continue the land use zone districts that place lands adjacent to the unit in a conservation district. The Park Service will also encourage the state and the Arctic Slope Regional Corporation to manage these lands to protect wildlife.

Further land exchanges with the Arctic Slope Regional Corporation pursuant to ANILCA section 1431 will be sought in the Cascade Lake and Shainin Lake areas. The Park Service is interested in future legislation and exchanges to make the Castle Mountain "island" contiguous with the rest of the park.



GATES OF THE ARCTIC NATIONAL PRESERVE BOUNDARY

GATES OF THE ARCTIC NATIONAL PARK BOUNDARY

NONFEDERAL LANDS AND INTERESTS WITHIN THE BOUNDARY

LAND PROTECTION PRIORITIES
These priorities indicate the general interest and concern of the National Park Service for the foreseeable future.

LAND PROTECTION PLAN

GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE

UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

NORTH

0 5 10 15 20 MILES

0 5 10 15 20 25 30 KILOMETERS

185	20047A
DSC	FEB 86

ON MICROFILM

Lands West

Much of the western boundary borders Noatak National Preserve, which together with Gates of the Arctic protects one of the largest undeveloped watersheds in the world. To the northwest is the Alaska National Petroleum Reserve. A 9-mile-wide band of land originally thought to be part of the reserve may actually be unappropriated public land. This is currently being adjudicated. If a change is adopted, the National Park Service proposes to add approximately 23,000 acres of this land along the upper Nigu River to each of the Gates of the Arctic and Noatak units, under the authority of section 103 of ANILCA. Archeological surveys on nearby lands have revealed numerous sites of five different types representing most cultural traditions in northwest Alaska (Irving 1964; NPS, USDI 1981). Acquisition would significantly improve the protection of cultural and ecological values in this area. Any lands added to Gates of the Arctic in this area would be designated as park, while any lands added to Noatak National Preserve would be designated as preserve.

Minor Boundary Adjustments

As authorized by sections 103 and 1302 of ANILCA, the National Park Service will pursue minor boundary adjustments with the state of Alaska to place the boundaries along hydrographic divides or other recognizable natural features for mutual benefits.

Administrative Sites

For administrative facilities identified in the general management plan, land will be needed outside the unit as authorized by section 1306 of ANILCA. To the extent practicable, native lands will be used for this purpose. The National Park Service will seek to acquire 6 acres at Bettles and 2 acres at Anaktuvuk Pass for facilities. In Bettles, the Park Service will seek joint construction of facilities on land shared with the U.S. Fish and Wildlife Service and the Alaska Fire Service (BLM). About 3 acres of the needed land could be located on Evansville Native Corporation lands for NPS residential use. The other 3 acres for administrative and visitor facilities need to be near the airstrip on state land. Fee interest or a long-term lease is needed. The 2 acres at Anaktuvuk Pass would be on private lands.

At Coldfoot the Park Service has an administrative right-of-way on two tracts of land. This will be sufficient for housing and offices, but an additional tract of approximately ¼ to ½ acre on the airport apron will be needed (in fee or leased) from the state for a hangar.

COMPLIANCE CONSIDERATIONS

Actions of this land protection plan that propose no significant change to existing land or public use are categorically excluded from NEPA

considerations, in accordance with Department of the Interior implementing procedures (516 DM 6, appendix 7.4(11) and 516 DM, appendix 2). The proposed actions for small tracts, native allotments, mining claims, administrative sites, and agreements and cooperative planning for submerged or adjacent lands are included in this category. The proposed Nigu addition is also in this category, as this action would not significantly change existing land or visitor use nor exceed the 23,000-acre limitation (ANILCA section 103(b)) for minor boundary adjustments.

NEPA requirements for proposals in this plan related to native corporation lands and state lands will be fulfilled at a later date when, and if, conceptual agreements are reached with these landowners. The effects of land exchanges can be evaluated only when both the lands to be acquired and the lands to be removed from federal ownership are identified; this land protection plan currently identifies only the lands (or interests in lands) to be acquired. Environmental assessments and/or environmental impact statements will be prepared prior to the implementation of any land exchange, with the exception of land exchanges involving the conveyance of lands to native corporations that fulfill entitlements under the terms of ANCSA, as provided by ANILCA section 910.

Consistent with current policies on implementation of section 810 of ANILCA, evaluations will be prepared on any proposals in this land protection plan that require the preparation of environmental assessments and/or environmental impact statements, or any proposals that would result in the removal of lands (or interests in lands) from federal ownership.

Section 103(b) of ANILCA requires that Congress be notified of the intent to make boundary adjustments. The public will also receive reasonable notice of the intent to implement boundary adjustments and will be provided the opportunity to review and comment on such adjustments. The compliance requirements of NEPA and ANILCA will be fulfilled in the case of administrative boundary adjustments.

The remaining land protection proposal that required an environmental assessment to determine impacts was the proposed acquisition of the Reed River watershed, approximately 80,000 acres. These impacts were discussed in the "Impacts of the Proposal" section of the Draft General Management Plan (March 1985). Acquisition is not proposed in the final plan; however, the issue may be addressed in the future if opportunities change.

LAND PROTECTION PRIORITIES

The recommended means of land protection for nonfederal land in Gates of the Arctic are given in order of priority. Ownership, location, acreages involved, minimum interest needed for protection, and justification are also given. Priorities may be readjusted if incompatible uses develop, as

additional information is obtained, or to address emergencies or hardships. The land protection plan will be reviewed every two years and revised as necessary to reflect new information and changing uses and priorities. Review and revision procedures, including public involvement, are discussed in the introduction to this plan.

"Owner" as it pertains to privately owned real property inside the park and preserve is defined as follows: The person(s), corporation, or other entity who first received patent or other conveyance from the United States of America or the State of Alaska. When the title to real property is conveyed by the United States of America or the State of Alaska (in the case of state land disposals), no records are required to be maintained by the government covering future transfers of ownership. Those records are maintained in each recording district. Abstracts of such records are available from various title insurance companies throughout the state.

This plan identifies a minimum interest needed for protection but recognizes that the actual means of protection may change as a result of negotiation. In carrying out the purposes of ANILCA, section 1302 authorizes the secretary of the interior to acquire by purchase, donation, exchange, or otherwise any lands within the boundaries of conservation system units. Where acquisition is proposed, exchange is the preferred method whenever possible. Donations, or relinquishments where applicable, are encouraged. Purchase with appropriated or donated funds is another possible method. It should be noted that the appropriation of funds for land acquisition is expected to be very limited for the next few years. Therefore, the purchase of nonfederal interests in the park and preserve is expected to be minimal.

No estimates of the cost of implementing the recommendations of this plan have been prepared at this time. A useful estimate requires appraisals that are costly and have a short shelf life because of variable and changing market conditions. Appraisals for individual tracts will be prepared following agreement in concept with the landowner to acquire a specific interest in real property.

The plan establishes priority groups to identify the relative importance of tracts and to provide a general explanation of what lands are considered most important for park purposes. However, because ANILCA and its legislative history strongly supports acquisition of lands from voluntary sellers and by exchange, the land protection program will proceed primarily on an opportunity basis as owners offer to sell or exchange their lands. Therefore, tracts may not be acquired in exact priority order. Priorities will be most important if several different offers are submitted at the same time. Limited funds and lands suitable for exchange will generally mean that only high priority lands among those offered can be acquired. Emergency and hardship cases also may be addressed as they arise, regardless of priority.

Priority 1

The Walker Lake area has high scenic, natural, and recreational values. This area is within designated wilderness and is a national natural landmark. Its landmark status is merited by being an outstanding example of glacial activity and resulting wide range of ecological associations and by its impressive scenery. Commercial development and use has already occurred, and because of accessibility and attractiveness increased commercial development and use is likely. Increased commercial use would result in further impacts on fish, scenery, the wild and undeveloped character, and water quality of the lake and surrounding park lands.

Another aspect of priority 1 is to secure administrative sites in Bettles, Anaktuvuk Pass, and Coldfoot.

Table 21: Land Protection Priority 1 - Walker Lake and Administrative Sites

Tract	Type	Acres	Tracts or Claims	General Location	Improvements or Disturbance	Serial No. or Claim Group	Applicant or Owner	Status	Minimum Interest
25	NA	50	-	Walker Lake	-	FF016597	Earnest Chase	PE	easement
101	T	3	-	Walker Lake	house	F030911	Martha Helmricks	PA	easement
102	T	16	-	Walker Lake	-	F011622	Harmon Helmricks	PA	easement
104	T	5	-	Walker Lake	cabin	FF033312	Harmon Helmricks	PA	easement
107	T	5	-	Walker Lake	-	FF005370	Thomas Classen	PE	easement
110	T	5	-	Walker Lake	commercial/ lodge	FF009823	Martha Helmricks	PA	easement
-	C	3,880	6	Walker Lake	-	-	NANA Corp.	PE	agreement
-	AJ	3	-	Bettles	-	-	State DOTPF	-	fee
-	AJ	3	-	Bettles	-	-	State DOTPF or Evansville, Inc.	-	fee
-	AJ	2	-	Anaktuvuk Pass	-	-	City of Anaktuvuk or private	-	fee
-	AJ	1	-	Coldfoot	-	-	State DOTPF	-	fee

Type:

NA	Native allotment
T	Other small tract
M	Mining claim
C	Cemetery and historical site
NC	Native corporation
AJ	Adjacent lands

Status:

PA	Patented
U	Unpatented
A	Approved
PE	Pending

Priority 2

The North Fork of the Koyukuk is a designated wild river that possesses outstanding natural, cultural, scenic, and recreational values. Approximately 15 to 20 percent of wilderness recreational activities take place in this portion of the park. Boreal Mountain and Frigid Crags flank the North Fork forming the "Gates of the Arctic"--namesake of the park. Private lands are located along the river and have access and potential for commercial development, which would be incompatible with the wild and undeveloped character of the area. Development of mining claims would threaten vegetation, wildlife, water quality, cultural resources, scenery, and wilderness character.

Table 22: Land Protection Priority 2 - North Fork of the Koyukuk River

Tract	Type	Acres	Tracts or Claims	General Location	Improvements or Disturbance	Serial No. or Claim Group	Applicant or Owner	Status	Minimum Interest
5A	NA	40	-	North Fork	cabin	FF014284A	Renee Merry	A	easement
5B	NA	40	-	North Fork	cabin	FF014284C	Renee Merry	A	easement
33	NA	160	-	North Fork	-	FF017881	Elizabeth Ahgook	A	easement
201	M	1,240	31	North Fork	-	Bonanza Cr.	Maple Leaf Gold, Inc.	U	mineral*
202	M	3,400	99	North Fork	lower 5 miles disturbed	Conglomerate	Maple Leaf Gold, Inc.	U	mineral*
205	M	1,680	42	North Fork	-	Ipnek Cr.	Maple Leaf Gold, Inc.	U	mineral*
207	M	60	3	La Salle Cr.	-	Hansen Cr.	Thorwald Hansen	U	mineral
208	M	560	28	North Fork	cabin, disturbed	Mascot Cr.	Maple Leaf Gold, Inc.	U	regulations
305A	NC	10,428	-	Glacier River	historic cabin	-	Doyon, Ltd.	PE	fee
305B	NC	62,504	-	Glacier River	-	-	Doyon, Ltd.	PA	fee
-	AJ	-	-	Trans-Alaska pipeline corridor	pipeline, Dalton Highway	-	BLM	-	cooperative planning
-	AJ	-	-	Alatna, John, Middle Fork, Koyukuk	-	-	State of Alaska	-	classification
401	S	430	-	North Fork	-	-	State of Alaska	-	classification

*Validity of mining claims will be examined.

Type:

NA	Native allotment
T	Other small tract
M	Mining claim
C	Cemetery and historical site
NC	Native corporation
AJ	Adjacent lands
S	Submerged land

Status:

PA	Patented
U	Unpatented
A	Approved
PE	Pending

Priority 3

The Alatna River is a designated wild river in wilderness, adjacent to Arrigetch Peaks, a national natural landmark and popular visitor destination. Its remarkable natural, scenic, and recreational values are virtually untouched by man. Private lands are at prime locations for commercial development along the river and Takahula Lake, and there is already one commercially operated lodge at the headwaters. Further development and commercial use would concentrate impacts on wilderness character, fish, and wildlife on adjacent park lands.

Table 23: Land Protection Priority 3 - Alatna River

Tract	Type	Acres	Tracts or Claims	General Location	Improvements or Disturbance	Serial No. or Claim Group	Applicant or Owner	Status	Minimum Interest
28	NA	40	-	Alatna River	cabin	FF017762D	Stella Hamilton	PE	easement
32	NA	40	-	Takahula Lake	-	FF017773D	Cora Maguire	PE	easement
103	T	40	-	Alatna River	-	FF010383	Bernd Gaedeke	PA	easement
108	T	5	-	Alatna River, upper	commercial cabin	FF008750	Bernd Gaedeke	PA	easement
111	T	10	-	Takahula Lake	cabin	FF007675	Harmon Helmricks	PA	easement

Type:

NA	Native allotment
T	Other small tract
M	Mining claim
C	Cemetery and historical site
NC	Native corporation
AJ	Adjacent lands

Status:

PA	Patented
U	Unpatented
A	Approved
PE	Pending

Priority 4

The Noatak River drainage is the largest undeveloped river valley in America, containing every arctic habitat and one of the finest arrays of flora and fauna anywhere in the Arctic. The headwaters lie within Gates of the Arctic National Park and Preserve, and the rest of the watershed is protected by the Noatak National Preserve. It is a designated wild river, designated wilderness, part of the United Nations' "Man in the Biosphere" program, and popular for wilderness recreational activities. Private lands are located along the river and have potential for commercial development. Development of mining claims would adversely affect the wild and undeveloped character and water quality.

Table 24: Land Protection Priority 4 - Noatak River

Tract	Type	Acres	Tracts or Claims	General Location	Improvements or Disturbance	Serial No. or Claim Group	Applicant or Owner	Status	Minimum Interest
1B	NA	40	-	Noatak River	-	FF035179D	Anthony Bernhardt	PE	easement
49	NA	160	-	Noatak River	cabin	FF019203	Myra Walker	A	easement
50	NA	40	-	Noatak River	-	FF021749B	Virginia Christiansen	PE	easement
105	T	5	-	Noatak River	cabin	FF000019	Nelson Walker	PA	easement
219A	M	150	8	Nigikpalugurvak	-	Joiners Cr.	E.B. Joiner, D & L MacPhee	U	mineral*
219B	M	10	1	Nigikpalugurvak	-	Joiners Cr.	Bill Boucher	U	mineral*
-	C	1,892	9	Noatak River	-	-	NANA Corp.	PE	agreement
-	AJ	23,000	-	Upper Nigu River	-	-	BLM, may be unappropriated	-	fee

* Validity of mining claims will be examined.

Type:

NA	Native allotment
T	Other small tract
M	Mining claim
C	Cemetery and historical site
NC	Native corporation
AJ	Adjacent lands

Status:

PA	Patented
U	Unpatented
A	Approved
PE	Pending

Priority 5

The Kobuk River and Narvak, Selby, and Nutuvukti lakes are important for subsistence fishing and hunting, sport hunting, and recreational floating. The Kobuk River is a designated wild river, and the area contains numerous archeological sites. Private lands along the river or lakes could be sold or developed for commercial use, which would be disruptive to these activities and to the wild and undeveloped character of the area. Adjacent land includes state lands that contain subsistence resources, important watersheds, and recreational opportunities.

Table 25: Land Protection Priority 5 - Kobuk River

Tract	Type	Acres	Tracts or Claims	General Location	Improvements or Disturbance	Serial No. or Claim Group	Applicant or Owner	Status	Minimum Interest
1A	NA	40	-	Narvak Lake	cabin	FF035179C	Anthony Bernhardt	PE	easement
3A	NA	20	-	Narvak Lake	cabin	FF013268B	Charlie Sheldon	PE	easement
3B	NA	20	-	Nutuvukti Lake	-	FF013268C	Charlie Sheldon	PE	easement
3C	NA	20	-	Kobuk River	-	FF013268G	Charlie Sheldon	PE	easement
4A	NA	40	-	Kobuk River	-	FF014224B	Charlie Horner	PE	easement
4B	NA	80	-	Kobuk River	-	FF014224C&D	Charlie Horner	PE	easement
27	NA	80	-	Kobuk River	-	FF017614B	Ida Ross	A	easement
48	NA	40	-	Selby Lake	cabin	FF018992A	May Bernhardt	PE	easement
-	C	4,922	8	Kobuk River	-	-	NANA Corp.	PE	agreement
-	AJ	-	-	Schwatka Mtns.	-	-	State of Alaska	-	classification
-	AJ	-	-	Ambler Mining	some mining	-	State of Alaska, numerous claimants	-	cooperative planning

Type:

NA	Native allotment
T	Other small tract
M	Mining claim
C	Cemetery and historical site
NC	Native corporation
AJ	Adjacent lands

Status:

PA	Patented
U	Unpatented
A	Approved
PE	Pending

Priority 6

Lands along the lower John River and the Hunt Fork, lands along the Itkillik River and Itkillik Lake, and the Middle Fork of the Koyukuk drainage contain varied resources. John River is a designated wild river, a major caribou migration route, and from the Hunt Fork down is moderately popular for recreational floating. Itkillik River and Itkillik Lake are along a common caribou migration route and are moderately popular for backpacking trips which are accessible from the Dalton Highway. Private lands are located along the rivers and lake and could be developed for commercial activities, which would not be compatible with wildlife protection or the wild and undeveloped character of the area. Development of subsurface rights for minerals or oil and gas near Itkillik Lake could be disruptive to wildlife and would not maintain the wild and undeveloped character. Mining claims along the Middle Fork could affect the wild and undeveloped character, water quality, and fish.

Table 26: Land Protection Priority 6 - John River, Itkillik Lake, and Middle Fork

Tract	Type	Acres	Tracts or Claims	General Location	Improvments or Disturbance	Serial No. or Claim Group	Applicant or Owner	Status	Minimum Interest
5C	NA	40	-	Itkillik River	cabin	FF014284B	Renee Merry	A	easement
5D	NA	40	-	Itkillik Lake	cabin	FF014284D	Renee Merry	A	easement
8	NA	160	-	Hunt Fork	cabin	FF014512	Ruth Rulland	A	easememt
11	NA	80	-	Itkillik River	-	FF016292	Mary Darling	PE	easement
42	NA	160	-	John-Hunt Fork	cabin	FF018132	Mollie Ahgook	A	easement
44	NA	160	-	Hunt Fork	-	FF018271	Joseph Mekiana	PE	easement
106	T	5	-	Itkillik River	-	FF000030	Peter Merry	PA	easement
210	M	20	1	Hammond/Jenny	-	Hammond #1	Robert Emerson	U	mineral*
211A	M	100	5	Lower Hammond	disturbed	Snowshoe Cr.	L&N Cobb	U	regulations
211B	M	30	2	Michigan Creek	-	East Creek	L&N Cobb	U	regulations
212	M	300	15	Lower Hammond	-	Washington Cr.	Maple Leaf Gold, Inc.	U	mineral*
213A	M	40	2	Middle Fork	-	Alder Creek	Glen Bouton	U	mineral*
213B	M	20	1	Middle Fork	-	Down River	Glen Bouton	U	mineral*
215	M	160	8	Fall Creek	-	Otto Creek	Maple Leaf Gold, Inc.	U	mineral*
216	M	80	6	Fall Creek	-	Fall Creek	Maple Leaf Gold, Inc.	U	mineral*
304	NC	18,962	-	North/Middle Fork	cabin	-	Doyon, Ltd.	PA	fee
307	NC	30,003	-	Itkillik Lake	subsurface rights	-	Arctic Slope Regional Corp.	PA	fee
310	NC	1,319	-	Kurupa Lake	subsurface rights	-	Arctic Slope Regional Corp.	PA	fee

* Validity of mining claims will be examined

Type:

NA	Native allotment
T	Other small tract
M	Mining claim
C	Cemetery and historical site
NC	Native corporation
AJ	Adjacent lands

Status:

PA	Patented
U	Unpatented
A	Approved
PE	Pending

Priority 7

Lands in the vicinity of Anaktuvuk Pass and Chandler Lake are of great importance for subsistence resources and activities for the people of Anaktuvuk Pass. The John River, a designated wild river, is a major caribou migration route. The Anaktuvuk Pass area is also one of the two highest recreational use areas of the park, with a growing number of visitors per year expected to begin backpacking trips there..

The future development of corporation lands in a manner consistent with the purposes of the national park is a goal. Particularly in this area of the park, existing uses of native allotments are compatible with park purposes. Tracts are generally undeveloped, used for subsistence activities, and are reached by snowmachine or on foot. Commercial use or development of ATV roads to small tracts would be incompatible.

For native allotments within or immediately adjacent to corporation lands, cooperative agreements similar to those proposed for native corporation lands are the minimum interest necessary to protect park values. For outlying tracts, less-than-fee is the minimum interest.

Successful implementation and enforcement of zoning by the North Slope Borough, which would assure compatible use of tracts within the park and borough boundary, would eliminate the need for the Park Service to acquire any interests in these tracts.

Table 27: Land Protection Priority 7 - Anaktuvuk Pass and Chandler Lake

Tract	Type	Acres	Tracts or Claims	General Location	Improvements or Disturbance	Serial No. or Claim Group	Applicant or Owner	Status	Minimum Interest
2A	NA	80	-	Okokmilaga River	-	FF000038B	Zaccharius Hugo	PE	easement
2B	NA	80	-	Anaktuvuk Pass	(within corp.)	FF000038A	Zaccharius Hugo	PE	agreement
6	NA	160	-	John River, upper	-	FF014505	Lela Ahgook	A	easement
7	NA	160	-	John River, upper	-	FF014506	Noah Ahgook	A	easement
9	NA	80	-	John River, upper	-	FF015025	Ben Ahgook	A	easement
10	NA	80	-	John River, upper	-	FF015575B	Elizabeth Paneak	A	easement
12	NA	150	-	Chandler Lake	(adj. corp.)	FF016309	Clyde Hugo	PE	agreement
13	NA	160	-	Anaktuvuk Pass	(within corp.)	FF016415	Jack Ahgook	A	agreement
14	NA	160	-	Anaktuvuk Pass	(within corp.)	FF016416	Rhoda Ahgook	A	agreement
15A	NA	80	-	Arctic Slope	(adj. corp.)	FF016424B	Danny Hugo	A	agreement
15B	NA	80	-	Chandler Lake	(within corp.)	FF016424A	Danny Hugo	A	agreement
16	NA	160	-	Chandler Lake	(within corp.)	FF016425	John Hugo	PE	agreement
17	NA	160	-	Chandler Lake	(adj. corp.)	FF016429	David Mekiana	A	agreement
18	NA	80	-	Anaktuvuk Pass	(adj. ATV easement)	FF016430A	Amos Morry	A	agreement
19	NA	160	-	Anaktuvuk Pass	(adj. ATV easement)	FF016431	John Morry	A	agreement
20A	NA	80	-	Anaktuvuk Pass	(within corp.)	FF016434A	Anna Nageak	A	agreement
20B	NA	80	-	Chandler Lake	(adj. corp.)	FF016434B	Anna Nageak	A	agreement
21	NA	160	-	Chandler Lake	(within corp.)	FF016436	Roosevelt Paneak	A	agreement
22	NA	160	-	Anaktuvuk Pass	-	FF016443	Lazarus Rulland	A	easement
23	NA	160	-	Anaktuvuk Pass	(within corp.)	FF016445	Rachel Riley	PE	agreement
24	NA	160	-	John River, upper	-	FF016447	Sarah Tobuk	PE	easement
26A	NA	80	-	John River, upper	-	FF016647B	Raymond Paneak	PE	easement
26B	NA	80	-	Arctic Slope	-	FF016647A	Raymond Paneak	PE	easement
29	NA	160	-	John River, upper	-	FF017763	Anna Hugo	A	easement
30	NA	160	-	John River, upper	-	FF017764	Ellen Hugo	A	easement
31	NA	160	-	John River,	-	FF017765	Harry Hugo	A	easement

Tract	Type	Acres	Tracts or Claims	General Location	Improvements or Disturbance	Serial No. or Claim Group	Applicant or Owner	Status	Minimum Interest
34	NA	160	-	Agiak Lake	-	FF017884	Doris Hugo	A	easement
35A	NA	80	-	John River, upper	-	FF017885A	Ethel Mekiana	A	easement
35B	NA	80	-	Chandler Lake	(adj. ATV easement)	FF017885B	Ethel Mekiana	A	agreement
36A	NA	60	-	Arctic Slope	(adj. corp.)	FF017886B	Billy Morry	PE	agreement
36B	NA	80	-	Anaktuvuk Pass	(adj. ATV easement)	FF017886A	Billy Morry	PE	agreement
37	NA	160	-	Anaktuvuk Pass	(within corp.)	FF017887	Rebecca Mekiana	A	agreement
38	NA	80	-	Anaktuvuk Pass	(within corp.)	FF017888B	Maggie Morry	PE	agreement
39	NA	160	-	Anaktuvuk Pass	(adj. ATV easement)	FF017889	Riley Morry	PE	agreement
40	NA	160	-	Chandler Lake	(within corp.)	FF017892	Robert Paneak	PE	agreement
41	NA	120	-	Anaktuvuk Pass	(within corp.)	FF017893B	Jane Young	PE	agreement
45	NA	80	-	Ekopuk Creek	-	FF018272B	Mark Morry	PE	easement
46	NA	160	-	Arctic Slope	-	FF018274	Johnny Rulland	A	easement
47	NA	160	-	Okokmilaga River	-	FF018815	Joshua Rulland	A	easement
301-302	NC	90,391	-	Chandler Lake, Anaktuvuk Pass	-	-	Arctic Slope Regional Corp.	PA	agreement
303	NC	66,275	-	Anaktuvuk Pass	village AKP	-	Anaktuvuk Pass Village Corp.	PA	agreement
308	NC	365	-	Anaktuvuk Pass, Chandler Lake	ATV easements	-	Arctic Slope Regional Corp.	PA	agreement
309	NC	3,791	-	Arctic Slope	-	FF19148-35	Arctic Slope Regional Corp.	PE	agreement
-	AJ	-	-	Killik-Itkillik River	-	-	Arctic Slope Regional Corp., State	-	zoning

Type:

NA Native allotment
T Other small tract
M Mining claim
C Cemetery and historical site
NC Native corporation
AJ Adjacent lands

Status:

PA Patented
U Unpatented
A Approved
PE Pending

Moose

Game Trails

Bear Tracks

Nest

Caribou

Young Raptor

Grayling

WILDERNESS SUITABILITY REVIEW

WILDLIFE

INTRODUCTION

Approximately 7,263,215 acres of wilderness were designated by ANILCA in the park. Approximately 1,209,302 acres in the park and preserve are examined here for suitability.

Section 1317(a) of ANILCA directed that a review be made of the suitability or nonsuitability for preservation as wilderness of all lands not so designated by the act. Section 1317(b) specifies that "the Secretary shall conduct his review, and the President shall advise the United States Senate and House of Representatives of his recommendations, in accordance with the provisions of sections 3(c) and (d) of the Wilderness Act."

Recommendations on whether to designate suitable areas as wilderness will be made following completion of the general management plan. An EIS will be prepared as part of the wilderness recommendation process. The public will have the opportunity to review and comment on these recommendations, and public hearings will be held. Upon completion of the EIS and secretarial review, the president will make his recommendations to the Congress.

The Wilderness Act of 1964 defines wilderness as follows:

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

Wilderness areas in Alaska have certain exceptions to the Wilderness Act specified in ANILCA. The legal guidelines for wilderness management in appendix E provide more information.

WILDERNESS SUITABILITY CRITERIA

Wilderness review criteria specific to Gates of the Arctic were developed that reflect the act's definition of wilderness. For a particular tract of land to be determined suitable for designation, it must meet the wilderness suitability criteria found on table 28.

Table 28: Wilderness Suitability Criteria

Description of Land or Activity		Suitable for Wilderness	Not Suitable for Wilderness	Suitability Pending
Land status	Federal	X		
	Federal: under application or selection			X
	State and private land, patented or tentatively approved		X	
	Private ownership of subsurface estate		X	
Mining	Areas with minor ground disturbances from past mining activities	X		
	Areas with major past ground disturbances from mining activities		X	
	Current mining activities and ground disturbances		X	
Roads and ORV trails	Unimproved roads or ORV trails that are unused or little used by motor vehicles	X		
	Improved roads and ORV trails regularly used by motor vehicles		X	
Landing strips	Unimproved or minimally improved and maintained	X		
	Improved and maintained		X	
Cabins	Uninhabited structures; hunter, hiker, and patrol cabins	X		
	Inhabited as a primary place of residence		X	
Size of unit	Greater than 5,000 acres adjacent to existing wilderness, or of a manageable size	X		
	Less than 5,000 acres or of unmanageable size		X	

These suitability criteria are based on the existing character of the land. Future development or use will be considered when making formal recommendations for designation of wilderness, but it is not an appropriate criteria for determining suitability.

SUITABILITY DETERMINATION

Approximately 1,009,638 acres of nonwilderness lands within the park and preserve meet the criteria as established by the Wilderness Act (see Wilderness Suitability map). Prior to a formal presidential recommendation, a wilderness report and environmental analysis will be prepared.

Approximately 190,023 acres of nonwilderness lands do not meet the criteria: (1) land containing subsurface mineral rights in the northeast preserve (31,322 acres); (2) ATV use easements in the Anaktuvuk Pass/Chandler Lake area (about 56 miles of 200-foot-wide nonwilderness corridors equals about 1,360 acres); and (3) native village and regional corporation lands in the Anaktuvuk Pass/Chandler Lake area, approved small tracts, and approved native allotments (157,341 acres). All of these lands, except for the village of Anaktuvuk Pass, would be suitable for wilderness designation if nonconforming uses (ATVs), outstanding rights, or nonfederal ownership were eliminated.

Approximately 9,641 acres of nonwilderness lands cannot have their suitability determined until pending applications are resolved. These lands include pending native allotments, native regional corporation lands under application, and cemetery and historical sites (14(h)(1) sites). Each of the eight cemetery and historical site applications in nonwilderness land included an entire section (640 acres). Resolution of these applications could result in all 640 acres, a few acres, or no acres being transferred to the nonfederal applicant depending on facts and findings surrounding the specific cemetery or historical site.

Based on its existing character, the entire southwest preserve is suitable for wilderness except for lands conveyed or under application. ANILCA section 201(4)(b, c, d, and e) permits surface access across the southwest preserve. The wilderness recommendation will have to consider the existing authority for that right-of-way. All future wilderness recommendations will recognize valid existing rights including rights-of-way under RS 2477.

All lands determined suitable for wilderness designation will be managed under the terms of ANILCA to maintain the wilderness character and values of the lands until designation recommendations have been proposed and Congress has acted on these proposals.

Bettles Airfield

Coldfoot Truck Stop

Anaktuvuk Pass

Many varied activities have taken place throughout the planning process to consult and coordinate with the general public, agencies, and organizations. As a result, issues have been clarified, information has been identified, and alternatives have emerged and been refined. Through consultation and coordination the draft general management plan, land protection plan, and wilderness suitability review have evolved.

SCOPING

The first event was a general scoping meeting held March 12, 1984, in Anchorage for five NPS areas in northern and northwest Alaska. The purpose of the meeting was to notify agencies and organizations of the start of five general management plans, briefly identify the purpose and major issues of each area, outline the planning process and schedule, and identify where and how agencies would like to further be involved. Representatives of the following agencies and organizations were invited, those attending indicated by an asterisk (*).

U.S. Department of Agriculture
- Soil Conservation Service
- Forest Service

U.S. Department of Commerce
- National Oceanic and Atmospheric Administration

U.S. Army Corps of Engineers

U.S. Department of Energy

U.S. Environmental Protection Agency

U.S. Department of the Interior
- *Special Assistant to the Secretary
- Bureau of Land Management
- Bureau of Indian Affairs
- *Bureau of Mines
- *Fish and Wildlife Service
- Geological Survey

U.S. Department of Transportation
- Federal Aviation Administration
- Federal Highway Administration

*Alaska Land Use Council, State Coordinator

Alaska Land Use Council, Federal Coordinator

*Alaska Department of Fish and Game (Note: State CSU Coordinator was responsible for identifying and notifying all other related state agencies)

*Citizens Advisory Commission on Federal Areas

*Alaska Federation of Natives

*NANA Development Corporation, Inc.

Arctic Slope Regional Corporation

Doyon, Ltd.

Bering Straits Native Corporation

*Alaska Visitors Association

Alaska Center for the Environment

*Sierra Club

Cominco Alaska, Inc.
Arctic Environmental Information and Data Center
Alaska Geographic Society
*Alaska Miners Association
*Alaska Oil and Gas Association
Alaska Professional Hunters Association
Alaska Wilderness Guides Association
Friends of the Earth
*National Audubon Society
*North Slope Borough
*Alaska Department of Transportation
*Alaska Department of Natural Resources
*Alaska Department of Environmental Conservation

PUBLICATIONS DISTRIBUTED TO THE PUBLIC

The primary forum for identifying issues was the "Statement for Management," and over 600 were distributed in draft form in 1982. This document set forth the purposes of the area, analyzed resources and uses, identified issues, and proposed management objectives. Public comments were incorporated, and the final Statement for Management was publicly distributed in April 1984. Issues and management objectives were the starting point of this plan.

A newsletter was developed and distributed to more than 600 people on the mailing list, and another 100 were distributed at field stations and headquarters in July 1984. Its purpose was to keep the public informed of the progress of the general management plan for Gates of the Arctic following the first round of public meetings. It stated the purpose of the park, the planning process, summarized public participation, and presented four conceptual alternatives being developed and considered.

A second general newsletter was also distributed in July to discuss the progress of planning for all NPS areas in Alaska, particularly the five new plans underway for northern and northwest units.

In late March 1985 a single document was distributed to the public which contained a draft general management plan/environmental assessment, a draft land protection plan, and a draft wilderness suitability review. Over 1,400 copies of this document were sent to people on the mailing list, or were distributed at public meetings or from NPS offices. A summary was distributed to an additional 700 people. The draft general management plan/environmental assessment portion contained four alternative management strategies for the park and preserve, including the alternative preferred by the National Park Service. The environmental consequences of the four alternatives were analyzed. The land protection plan portion presented recommended approaches to the treatment of nonfederal lands within the park and preserve and to various lands outside the park and preserve. The wilderness suitability review portion assessed the technical suitability of lands within

the unit for designation as wilderness. No wilderness recommendations were presented, as any wilderness recommendations will be made in an environmental impact statement prior to 1987. The public comment period for the document was initially 90 days, but was extended for an additional 60 days because of public requests for such an extension.

Because of the extensive public interest, a revised Draft General Management Plan was released in December 1985, an extra step prior to releasing a final plan. This document was made publicly available at libraries and communities around the state and outside Alaska, as well as available upon request. Letters announcing its availability were sent to the entire mailing list. Some 400 copies of the revised draft were distributed, and over 150 letters were received.

OPEN MEETINGS

Open meetings were held in May and June 1984 in Bettles/Evansville, Coldfoot, Allakaket/Alatna, Anaktuvuk Pass, and Fairbanks. Attendance was 24, 28, 3, 37, and 13, respectively. At each meeting there was a presentation of the major purposes of the area, the planning process, and issues identified to date, followed by open discussion of issues, local concerns, and possible alternatives. The local meetings revealed many concerns about subsistence, access, and interest in more NPS involvement and communication in communities.

A second set of open meetings was held in the local communities of Ambler, Kobuk, Shungnak, and Allakaket (rescheduled because of low attendance) in October 1984. Attendance was 28, 6, 24, and 12, respectively. In addition to presenting the park purposes, issues, and planning problems, alternatives were presented for discussion. Concerns were expressed about recreational visitors, particularly sporthunters and rafters, interfering with subsistence use. People were also concerned about Anaktuvuk Pass, the only community within the boundaries of the park and preserve.

Open meetings were held during May 1985 on the draft general management plan/environmental assessment, land protection plan, and wilderness suitability review. Meetings were held in Ambler, Kobuk, Shungnak, Bettles/Evansville, Allakaket, Coldfoot, Anaktuvuk Pass, Anchorage, and Fairbanks. Attendance at these meetings was 58, 18, 20, 55, 24, 15, 55, 24, and 55, respectively. At each of the meetings there was a presentation of a summary of the contents of the preferred alternative in the general management plan and of the land protection plan. Questions about the draft plans were answered by park personnel and public comments were recorded. Written summaries of the public questions and comments were prepared and distributed to the attendees of the meetings. At the request of the North Slope Borough an additional public meeting was held in Barrow on June 28.

CONSULTATION COMMITTEE

To develop and further consult on the details of the general management plan, a consultation committee comprised of representatives of federal, state, and local agencies and native and private organizations was established. The initial list of 50 has grown to 65 consultants. The first meeting was held in Fairbanks on May 15, 1984, attended by a cross section of 22 representatives. Members of the planning team presented topics of the plan, followed by a general discussion and initial ideas on alternatives. Among other topics, participants brought up the importance of Gates of the Arctic as a wilderness.

Following the initial meeting, participants were provided with an outline of alternatives developed to address the issues which went into more detail than the general newsletter. Responses were incorporated into the alternatives.

The second meeting was held in Fairbanks on August 15, 1984. Alternatives had been more fully developed and were written out on large worksheets and organized by topic. Participants were asked to work through as many of the alternatives as they could, particularly those of greatest interest, and provide comments on the worksheets or discuss them with available team members. Although only 15 attended, the worksheets were made available at the Fairbanks NPS office until the end of September for those who could not attend or did not have enough time at the August meeting. About 12 additional participants added comments.

Consultation committee meetings were held in late April 1985 in Anchorage and Fairbanks to review the contents of the Draft General Management Plan/Environmental Assessment, Land Protection Plan, and Wilderness Suitability Review. Only two committee members attended the meeting in Anchorage, while 15 attended the meeting in Fairbanks. At each of the meetings questions about the plans were answered, followed by discussions of the alternatives and their consequences.

Another round of consultation committee meetings was held in Anchorage and Fairbanks in mid-June 1985. The purpose of these meetings was to discuss the draft plans after the committee had sufficient time to thoroughly review the plans. Only two members attended in Anchorage and 12 attended in Fairbanks. At each of the meetings committee members expressed concerns about the content of the draft plans, and for some topics recommended other management strategies. Comments and questions from both consultation committee meetings were recorded and written summaries were prepared and distributed.

Mailing List of Consultation Committee

*Denotes those who have participated in one or more sessions

Honorable Albert P. Adams, Alaska State Legislature
Jacob Adams, Arctic Slope Regional Corporation
*Susan Alexander, Wilderness Society

*Wesley Aikiz, Arctic Slope Regional Corporation
Perry Baker, Bureau of Indian Affairs
*Leslie Barber, Citizens Advisory Commission
*Joyce Beelman, Alaska Department of Environmental Conservation
Earl H. Beistline, Alaska Miners Association
*Richard Bishop, Alaska Department of Fish and Game
Judy Bittnor, State Historic Preservation Officer
Jerry L. Brossia, Alaska Department of Natural Resources, Division of Forest, Land, and Water
*Billy E. Butts, Bureau of Land Management
Gwen Canham, North Slope Borough
*John Carnihan, North Slope Borough
Richard Caulfield, Subsistence Resource Commission
Ken Charlie, Interior Regional Fish and Game Advisory Council
John Coady, Alaska Department of Fish and Game, Game Division
*Naomi Costello, Evansville, Inc.
James Drew, UAF School of Agriculture and Land Resources Management
Phillip Driver, Alaska Guide Board
*Linda Dunton
Larry Edwards, K'oyitlots'ina, Ltd.
Glen Ellison, Arctic National Wildlife Refuge
*Jean Ernst, Alaska Department of Fish and Game, Game Division
Honorable Bettye Fahrenkamp, Alaska State Legislature
Honorable Frank Ferguson, Alaska State Legislature
Bill Fickus, Subsistence Resource Commission
Dale Fox, Alaska Visitors Association
*Bernd Gaedeke, Guide
Paul Gallagher, Federal Aviation Administration
*Sally Gibert, Alaska OMB, CSU Coordinator
Easy O. Gilbreth, Alaska Oil and Gas Association
H. Glenzer, Jr., Alaska Department of Transportation
*Don Greybeck, U.S. Geological Survey, Branch of Alaska Geology
*Steve Grubis
Frank Harris, Gulf Oil
*Terry Haynes, Alaska Department of Fish and Game, Subsistence Division
*Bud and Martha Helmricks, Landowners
*Harry Hugo, Anaktuvuk Pass
Honorable Vern Hurlburt, Alaska State Legislature
Carl Johnson, Bureau of Land Management
*Lt. Terry Jordan, Alaska Department of Fish and Game
*Carol Kasza, Alaska Association of Wilderness Guides
Roger Kaye, Northern Alaska Environmental Center
Captain Lawrence, Alaska State Troopers
*Gary Lee
Shirly Lee, Evansville, Inc.
*Stan Lephart, Citizens Advisory Committee
Douglas L. Lowery, Alaska Department of Fish and Game
Ray Marley, FAA
*Michael Matz, Northern Alaska Environmental Center
*Ervin W. McIntosh, Kanuti National Wildlife Refuge

Thomas P. Miller, U.S. Geological Survey, Branch of Alaska Geology
Calvin Motto, Fish and Game Advisory Council
Honorable Frank Murkowski, U.S. Senate
*Claudene Nordeen, Koyukuk Mining District
Al Ott, Alaska Department of Fish and Game
*Roosevelt Paneak, Anaktuvuk Pass
*Sverre Pedersen, Alaska Department of Fish and Game, Subsistence Division
President, Doyon Ltd.
President, Nunimiut Corporation
Honorable John Ringsted, Alaska State Legislature
*Matt Robus, Alaska Department of Fish and Game, Habitat Division
*Randy Rogers, Northern Alaska Environmental Center
*Dave Rupert, Bureau of Land Management
Honorable John C. Sackett, Alaska State Legislature
*Helvi Sandvik, Alaska Department of Transportation
Honorable Richard Schultz, Alaska State Legislature
*James Schwarber, Subsistence Resource Commission
John Shaeffer, NANA Regional Corporation, Inc.
*Craig Shirley, Alaska Department of Natural Resources
*Ron Silas, Tanana Chiefs Conference
Pollock Simon
*Richard Stern, Alaska Department of Fish and Game, Subsistence Division
George Stevens, North Slope Borough
Honorable Ted Stevens, U.S. Senate
*Dick Stolzberg, Northern Alaska Environmental Center
Lou Swanson, Yukon Flats National Wildlife Refuge
*William Thomas, Arctic Slope Regional Corporation
Homer Tobuk, Subsistence Resource Commission
George Van Whe, Alaska Department of Fish and Game
*Bob Waldrop, Citizens Advisory Commission
Honorable Kay Wallis, Alaska State Legislature
George Walters, Bureau of Indian Affairs
*Dan Wetzel, Subsistence Resource Commission, Commercial Operator
William Willams, Tanana Chiefs Conference
Honorable Dan Young, U.S. House of Representatives

QUESTIONNAIRES

Over 40 questionnaires were sent to the commercial operators offering visitor services in Gates of the Arctic. Over 30 percent of the major operators responded, offering observations on commercial operations, visitor expectations, conflicts with other users, and human impacts on the park and preserve. The majority indicated that the total number of commercial operators should be held at current levels. Their observations on human use impacts coincided with the field observations of NPS staff.

Along with this questionnaire, each commercial operator was given 20 visitor questionnaires to send to their clients, with more available upon request. This voluntary questionnaire inquired about activities, group

size, observations of use and impacts, and management preferences. Over 60 responses were received. Results are summarized in the "Affected Environment" section of the general management plan, and the questionnaire is in appendix C.

OTHER CONSULTATIONS

In addition to those involved in the general scoping meeting and consultation committee, the following people have also provided information and assistance:

Tina Cunning, Alaska Department of Fish and Game
Dave Hansen, Alaska Federation of Natives
Mike Green, Bureau of Land Management, Yukon Resource Area
Jack Ledgerwood, Alaska Fire Service
Dave Weingartner, Mahillag Associates, Coastal Zone Management
Tom Hamilton, U.S. Geological Survey, Branch of Alaska Geology
John Kelley, U.S. Geological Survey, Branch of Alaska Geology
Tom Dutro, U.S. Geological Survey, National Museum

Knorr Cabin

Yale Cabin

Cabin Ruins

APPENDIX A: MANAGEMENT OBJECTIVES

NATURAL RESOURCES

Maintain the wild and undeveloped character of the park and preserve.

Maintain natural features, environmental integrity, and the dynamics of natural processes operating within the park.

Allow wildfire as a natural process while protecting private property, significant historic resources, water quality, and air quality.

Determine and only allow levels of human use that park resources can withstand without impairing their integrity or condition.

Maintain clean air and unimpaired viewsheds.

Maintain free-flowing rivers and water quality.

Establish clear standards and maintain natural and healthy populations of fish and wildlife and their associated habitats within the park.

Identify and protect threatened or endangered species.

Identify interrelated portions of natural watersheds, wildlife populations, habitat, and systems that are outside the park boundary and actively strive for compatible protection.

Promote human understanding and behavior which minimizes hazardous or destructive encounters with wildlife.

Manage sport hunting and trapping in the preserve and permit sportfishing in such manner as to maintain healthy populations and natural habitat and to avoid competing with subsistence needs.

CULTURAL RESOURCES

Identify, evaluate, and provide appropriate treatment for known historic and prehistoric sites and structures in the park and preserve.

Protect significant cultural resources on park land with methods that are compatible with the wilderness purposes of the area.

Offer technical assistance and cooperative protection for significant related cultural resources on private inholdings and adjacent lands.

Coordinate cultural resource research monitoring and protection with all land managers and owners throughout the central Brooks Range area.

SUBSISTENCE USES

In cooperation with the state of Alaska, provide continued opportunity for customary subsistence activities by local residents in traditional areas in accordance with title VIII and title II, 201(4) of the Alaska Lands Act.

Permit the subsistence taking of wildlife, fish, and plants without impairing natural and healthy populations of fish and wildlife.

Permit access to customary and traditional areas of subsistence activities without seriously impairing vegetation, waters, and other natural resources and systems.

Fully document customary and traditional subsistence activities, including patterns, intensity, and cycles, as they interrelate with natural and healthy flora and fauna populations.

Allow preference for customary subsistence uses over other consumptive uses of park resources when necessary.

Minimize conflicts between subsistence activities and recreational uses.

Fully support the operation and informational needs of the park's subsistence resource commission, consulting with it on all major subsistence management decisions.

VISITOR USES

Provide for park purposes and wilderness recreational activities by maximizing a visitor's opportunity to experience solitude, self-reliance, challenge, wilderness discovery, and freedom of movement through the use of the park, without intrusive regulation or unreasonable jeopardy.

Monitor aircraft operations (including access planes, commercial, military, and private overflights) and mitigate visual and audible intrusion on visitors' wilderness experiences.

Allow aircraft landings, river use, foot, ski, and dogsled use, which facilitates visitor access without adversely affecting resource conditions or the wild and undeveloped character of the area.

Continually assess the appropriateness of new nontraditional forms of mechanized access as they are developed and appear in the central Brooks Range.

Authorize necessary commercial services, such as air-taxis, outfitters, and guides, at levels which meet visitors' wilderness recreation needs and are compatible with park resources.

Identify park experiences for handicapped visitors.

At appropriate locations, provide visitor information and interpretation necessary to ensure basic orientation to the area, promote safe enjoyment of the area, minimize adverse impacts on park resources, and avoid conflicts with private property owners and subsistence users.

Promulgate the importance of this area to the public through the availability of research material that examines and develops an appreciation for the area's national significance.

Prepare well-developed guidelines and methods for the consideration, analysis, and establishment of park use carrying capacities.

Respond to all known requests for emergency assistance within the limits of available manpower and equipment.

Promote visitor awareness of known life-threatening hazards in the park.

Ensure that each visitor accepts responsibility for their own safety and behavior while in the park and preserve.

Aggressively pursue elimination of emergency search or rescue caused by careless or negligent actions.

LAND PROTECTION

Ensure through cooperative agreement, easement, or exchange protection of watersheds that are not entirely in NPS ownership.

Recognize fully the rights of private inholders and promote understanding among inholders and neighbors of compatible use, development, and access.

Recognize the rights of valid mining claims; work closely with all operators to ensure that valid mining activities have the least possible adverse impact on park resources.

Extinguish invalid mining claims.

Ensure that present access routes and future requests for access corridors are consistent with law, visitor needs, park purposes, and resource conditions.

Identify future incompatible uses of adjacent lands and be an active participant in working with adjacent landowners to ensure compatibility.

ADMINISTRATION

Provide optimal staff necessary to accomplish purposes, objectives, and management plans of the park.

Provide all park employees detailed orientation to the Alaska national parks, the central Brooks Range, and park management issues and objectives.

Keep park management activities, requirements, and regulations from unnecessarily interfering with valid recreation, subsistence, and private property uses.

Solicit and utilize citizen volunteers, cooperative education students, public and private organizations, and other donations for planning, research, and operation of the park.

Employ staffing plans that recognize Alaskan conditions, particularly the knowledge and skills of local persons and the effects of severe environmental conditions on personnel productivity.

Closely coordinate management activities along the Kobuk and Noatak rivers with the superintendent, northwest areas.

Work with the state of Alaska regarding numerous areas of common interest: sport hunting and fishing, subsistence use, wildlife protection, and enforcement; disposal of adjacent state lands; state rights-of-way and navigable river claims; and future transportation corridors.

Work with individuals, villages, and regional corporations regarding access, subsistence, adjacent land use, transportation, and other areas of common interest.

Work with the Bureau of Land Management regarding development of the utility corridor.

Quickly inform the public, through notices and other direct means, of all significant management decisions, projects, and programs.

DEVELOPMENT

Determine facilities necessary for visitor use and resource protection.

Locate necessary visitor and administrative facilities in local communities whenever practicable.

Allow no developed facilities in wilderness for visitor use or management, including trails, signs, campsites, or communications equipment unless after thorough examination no feasible, prudent, and effective alternative is available to accomplish park purposes.

Routinely evaluate any such facility and remove it if a more effective alternative becomes available, or if such management intervention is no longer essential.

APPENDIX B: SUMMARY OF ANILCA PROVISIONS

The Alaska National Interest Lands Conservation Act (ANILCA, Public Law 96-487, December 2, 1980) provides for "the designation and conservation of certain public lands in the State of Alaska, including the designation of units of the national park, national wildlife refuge, national forest, national wild and scenic rivers, and national wilderness preservation systems, and for other purposes." The following provisions of this act are especially pertinent to Gates of the Arctic National Park and Preserve.

Section 101 - (a) establishment of all units, (b) identification of values to be protected, and (c) provision of opportunity for subsistence.

Section 102 - definitions.

Section 103 - (a) availability of boundary maps, (b) minor boundary adjustments.

Section 201(4) - (a) establishment of Gates of the Arctic National Park and Preserve, purposes, (b) provision for access for surface transportation from the Ambler mining district to the pipeline haul road, (c) notice for application for right-of-way, and (d) environmental and economic analysis process for right-of-way.

Section 203 - administration of new National Park Service areas pursuant to cited laws; national preserves permit hunting; no entrance fees.

Section 206 - withdrawal from future disposition for mining or state and native selections.

Section 601 - designation of the (26) Alatna, (30) John, (31) Kobuk, (33) Noatak, (34) North Fork of the Koyukuk, and (36) Tinayguk rivers as part of the national wild and scenic rivers system.

Section 605 - (a) above rivers designated as wild, (d) coordination of plan for rivers with conservation system unit management plan, and (e) cooperative agreements for rivers.

Section 606 - other amendments to the Wild and Scenic Rivers Act.

Section 701(2) - designation of Gates of the Arctic wilderness.

Section 707 - administration of wilderness pursuant to Wilderness Act.

Section 801 - findings and declaration of opportunity for subsistence.

Section 802 - subsistence policy.

Section 803 - subsistence definitions.

Section 804 - preference for subsistence uses.

Section 805 - establishment of regional advisory councils.

Section 806 - federal monitoring.

Section 807 - judicial enforcement.

Section 808 - establishment of park and monument subsistence resource commissions.

Section 809 - cooperative agreements for subsistence.

Section 810 - procedural requirements to assess impacts of land use decisions on subsistence.

Section 811 - ensures reasonable access for subsistence.

Section 812 - provision for research on subsistence.

Section 813 - monitoring and periodic reports on subsistence.

Section 814 - authority to prescribe appropriate regulations.

Section 815(a) - subsistence level consistent with natural and healthy populations of fish and wildlife in the park unit, healthy populations in the preserve.

Section 816 - authority to close subsistence uses for specified conditions.

Section 905 - Alaska native allotments.

Section 907 - Alaska land bank.

Section 1010 - Alaska mineral resource assessment program.

Section 1101 - authority for the approval or disapproval of applications for transportation and utility systems through public lands in Alaska.

Section 1107(b) - transportation or utility system pursuant to title XI may not interfere with or impede a national wild and scenic river.

Section 1109 - protection of valid existing rights of access.

Section 1110 - (a) specifies methods of access for traditional activities, (b) assurance of access to private property rights.

Section 1111 - temporary access.

Section 1112 - North Slope haul road.

Section 1301 - (a) transmittal of conservation management plan for each unit of the national park system to Congress by December 2, 1985, and (b) requirements for a National Park Service plan, (c) consideration factors, (d) hearing and participation.

Section 1302 - land acquisition authority, (a) general authority, (b) restrictions, (c) exchanges, (d) improved property, (e) retained rights, (f) definitions, (g) consideration of hardship, (h) exchange authority, (i) authority to acquire contiguous state lands by donation or exchange.

Section 1303 - use of cabins, improved property on national park lands.

Section 1306 - administrative sites and visitor facilities.

Section 1307 - revenue-producing visitor services.

Section 1308 - local hire.

Section 1313 - administration of national preserves.

Section 1314 - taking of fish and wildlife.

Section 1315 - (a) wilderness management in Alaska, (c) existing cabins, and (d) new cabins.

Section 1316 - allowed uses of compatible temporary facilities to manage fish and wildlife.

Section 1317 - general wilderness review provision.

Section 1319 - effect on existing rights.

Section 1431 - (a) provisions for Arctic Slope Regional Corporation lands, (c) land exchange terms and conditions for Kurupa Lake, and (e) acquisition and exchange authority, boundary adjustments, exchange with National Petroleum Reserve-Alaska.

Gates of the Arctic

NATIONAL PARK AND PRESERVE

VOLUNTARY VISITOR REPORT

Gates of the Arctic is a new part of the National Park System. The National Park Service is in the initial stages of planning the future management of the area, and would like to draw upon your experiences as a visitor. This voluntary visitor report reflects several management concerns. Feel free to add others on additional sheets. Thank you for your time and assistance.

- Number in your party: _____
- Dates in the park/preserve: from __/__/__ to __/__/__
- Trip was:
  - ___ Led by guide/outfitter
  - ___ Independently led and organized
  - ___ Independently led and organized, but outfitted by professional guide or outfitter
- Method of access to the area:
  - ___ Dalton Highway (oil pipeline haul road)
  - ___ Small aircraft
  - ___ Anaktuvuk Pass
  - ___ Other (_____)
- Primary method(s) of travel while in the park/preserve:
  - ___ Boat/raft/kayak/canoe
  - ___ Backpacking/niking
  - ___ Horse
  - ___ Dog sled
  - ___ Snowmobile
  - ___ X-country skis/snowshoes
  - ___ Other (_____)
- Activities participated in:
  - ___ Fishing
  - ___ Photography
  - ___ Hunting
  - ___ Wildlife observation
  - ___ Mountaineering
  - ___ Other (_____)
- Description and locations of any trash, cabins, or camps in the backcountry:

  _____

  _____

  _____

  _____
- Route of travel: _____

  _____

  _____
- Number of other groups encountered while in the park/preserve backcountry: _____
- Reaction to that number of encounters:

Too Many		Just Right		Too Few

- What would threaten the wilderness character of the park?

	No Threat	Minor Threat	Major Threat
Other people seen			
Fire rings			
Barespots on tundra			
Trails			
Aircraft			
Cabins, perm. camps			
Other (specify):			

- If use levels ever increased enough to threaten the wilderness character of Gates of the Arctic, which management strategy would you prefer for controlling use?
  - ___ Regulations (like requiring a permit or limiting the number of people into a zone.)
  - ___ Minor Facilities (like establishing and maintaining selected trails or campsites.)
- If minor facilities had to be used to control impacts from increasing visitor use, check which box best represents your feelings about the use of the following:

	Approve	Neutral	Disapprove
Trails			
Campsites			
Cabins			
Other (specify):			

- If regulations had to be used to control impacts from increasing visitor use, check which box best represents your feelings about the use of the following:

	Approve	Neutral	Disapprove
Inform and educate users by requiring free permit			
Limit number of people or groups that can start from a given access point			
Use temporary zone closures			
Limit number of poeple or groups by zone			
Limit commercial guide operations			
Eliminate selected public cabins where use problems have accumulated			
Limit group size			
Limit types of uses			
Other (specify):			

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
GATES OF ARCTIC NATIONAL PARK AND PRESERVE
P. O. BOX 74680
FAIRBANKS, ALASKA 99707

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

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Visitor Address:

● General Comments:

Thanks for your help! If you have additional general comments, please feel free to add them on additional sheets. You may return these comments to us by refolding to the pre-addressed side. Postage is pre-paid.

● Do you wish to be on a mailing list for future planning documents?

☐ Yes ☐ No

If so, please give name and address:

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
GATES OF ARCTIC NATIONAL PARK AND PRESERVE
P. O. BOX 74680
FAIRBANKS, ALASKA 99707

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INT-417

Superintendent
Gates of the Arctic
National Park and Preserve
P.O. Box 74680
Fairbanks, AK 99707

APPENDIX D

(copy)

MASTER MEMORANDUM OF UNDERSTANDING
BETWEEN
THE ALASKA DEPARTMENT OF FISH AND GAME
JUNEAU, ALASKA
AND
THE U.S. NATIONAL PARK SERVICE
DEPARTMENT OF THE INTERIOR
ANCHORAGE, ALASKA

This Master Memorandum of Understanding between the State of Alaska, Department of Fish and Game, hereinafter referred to as the Department, and the U.S. Department of the Interior, National Park Service, hereinafter referred to as the Service, reflects the general policy guidelines within which the two agencies agree to operate.

WHEREAS, the Department, under the Constitution, laws, and regulations of the State of Alaska, is responsible for the management, protection, maintenance, enhancement, rehabilitation, and extension of the fish and wildlife resources of the State on the sustained yield principle, subject to preferences among beneficial uses; and

WHEREAS, the Service, by authority of the Constitution, laws of Congress, executive orders, and regulations of the U.S. Department of the Interior is responsible for the management of Service lands in Alaska and the conservation of resources on these lands, including conservation of healthy populations of fish and wildlife within National Preserves and natural and healthy populations within National Parks and Monuments; and

WHEREAS, the Department and the Service share a mutual concern for fish and wildlife resources and their habitats and desire to develop and maintain a cooperative relationship which will be in the best interests of both parties, the fish and wildlife resources and their habitats, and produce the greatest public benefit; and

WHEREAS, the Alaska National Interest Lands Conservation Act (ANILCA) and subsequent implementing Federal regulations recognize that the resources and uses of Service lands in Alaska are substantially different than those of similar lands in other states and mandate continued subsistence uses in designated National Parks plus sport hunting and fishing, subsistence, and trapping uses in National Preserves under applicable State and Federal laws and regulations; and

WHEREAS, the Department and the Service recognize the increasing need to coordinate resource planning and policy development;

NOW, THEREFORE, the parties hereto do hereby agree as follows:

(copy)

THE DEPARTMENT OF FISH AND GAME AGREES:

1. To recognize the Service's responsibility to conserve fish and wildlife and their habitat and regulate human use on Service lands in Alaska, in accordance with the National Park Service Organic Act, ANILCA, and other applicable laws.

2. To manage fish and resident wildlife populations in their natural species diversity on Service lands, recognizing that nonconsumptive use and appreciation by the visiting public is a primary consideration.

3. To consult with the Regional Director or his representative in a timely manner and comply with applicable Federal laws and regulations before embarking on management activities on Service lands.

4. To act as the primary agency responsible for management of subsistence uses of fish and wildlife on State and Service lands, pursuant to applicable State and Federal laws.

5. To recognize that National Park areas were established, in part, to "assure continuation of the natural process of biological succession" and "to maintain the environmental integrity of the natural features found in them."

THE NATIONAL PARK SERVICE AGREES:

1. To recognize the Department as the agency with the primary responsibility to manage fish and resident wildlife within the State of Alaska.

2. To recognize the right of the Department to enter onto Service lands after timely notification to conduct routine management activities which do not involve construction, disturbance to the land, or alterations of ecosystems.

3. To manage the fish and wildlife habitat on Service lands so as to ensure conservation of fish and wildlife populations and their habitats in their natural diversity.

4. To cooperate with the Department in planning for management activities on Service lands which require permits, environmental assessments, compatibility assessments, or similar regulatory documents by responding to the Department in a timely manner.

5. To consider carefully the impact on the State of Alaska of proposed treaties or international agreements relating to fish and wildlife resources which could diminish the jurisdictional authority of the State, and to consult freely with the State when such treaties or agreements have a significant impact on the State.

(copy)

6. To review Service policies in consultation with the Department to determine if modified or special policies are needed for Alaska.

7. To adopt Park and Preserve management plans whose provisions are in substantial agreement with the Department's fish and wildlife management plans, unless such plans are determined formally to be incompatible with the purposes for which the respective Parks and Preserves were established.

8. To utilize the State's regulatory process to the maximum extent allowed by Federal law in developing new or modifying existing Federal regulations or proposing changes in existing State regulations governing or affecting the taking of fish and wildlife on Service lands in Alaska.

9. To recognize the Department as the primary agency responsible for policy development and management direction relating to subsistence uses of fish and wildlife resources on State and Service lands, pursuant to applicable State and Federal laws.

10. To consult and cooperate with the Department in the design and conduct of Service research or management studies pertaining to fish and wildlife.

11. To consult with the Department prior to entering into any cooperative land management agreements.

12. To allow under special use permit the erection and maintenance of facilities or structures needed to further fish and wildlife management activities of the Department on Service lands, provided their intended use is not in conflict with the purposes for which affected Parks or Preserves were established.

THE DEPARTMENT OF FISH AND GAME AND THE NATIONAL PARK SERVICE MUTUALLY AGREE:

1. To coordinate planning for management of fish and wildlife resources on Service lands so that conflicts arising from differing legal mandates, objectives, and policies either do not arise or are minimized.

2. To consult with each other when developing policy, legislation, and regulations which affect the attainment of wildlife resource management goals and objectives of the other agency.

3. To provide to each other upon request fish and wildlife data, information, and recommendations for consideration in the formulation of policies, plans, and management programs regarding fish and wildlife resources on Service lands.

(copy)

4. To recognize that the taking of fish and wildlife by hunting, trapping, or fishing on certain Service lands in Alaska is authorized in accordance with applicable State and Federal law unless State regulations are found to be incompatible with documented Park or Preserve goals, objectives or management plans.

5. To recognize for maintenance, rehabilitation, and enhancement purposes, that under extraordinary circumstances the manipulation of habitat or animal populations may be an important tool of fish and wildlife management to be used cooperatively on Service lands and waters in Alaska by the Service or the Department when judged by the Service, on a case by case basis, to be consistent with applicable law and Park Service policy.

6. That implementation by the Secretary of the Interior of subsistence program recommendations developed by Park and Park Monument Subsistence Resource Commissions pursuant to ANILCA Section 808(b) will take into account existing State regulations and will use the State's regulatory process as the primary means of developing Park subsistence use regulations.

7. To neither make nor sanction any introduction or transplant of any fish or wildlife species on Service lands without first consulting with the other party and complying with applicable Federal and State laws and regulations.

8. To cooperate in the development of fire management plans which may include establishment of priorities for the control of wildfires and use of prescribed fires.

9. To consult on studies for additional wilderness designations and in development of regulations for management of wilderness areas on Service lands.

10. To resolve, at field office levels, all disagreements pertaining to the cooperative work of the two agencies which arise in the field and to refer all matters of disagreement that cannot be resolved at equivalent field levels to the Regional Director and to the Commissioner for resolution before either agency expresses its position in public.

11. To meet annually to discuss matters relating to the management of fish and wildlife resources on, or affected by, Service lands.

12. To develop such supplemental memoranda of understanding between the Commissioner and the Regional Director as may be required to implement the policies contained herein.

13. That the Master Memorandum of Understanding is subject to the availability of appropriated State and Federal funds.

(copy)

14. That this Master Memorandum of Understanding establishes procedural guidelines by which the parties shall cooperate, but does not create legally enforceable obligations or rights.

15. That this Master Memorandum of Understanding shall become effective when signed by the Commissioner of the Alaska Department of Fish and Game and the Alaska Regional Director of the National Park Service and shall continue in force until terminated by either party by providing notice in writing 120 days in advance of the intended date of termination.

16. That amendments to this Master Memorandum of Understanding may be proposed by either party and shall become effective upon approval by both parties.

STATE OF ALASKA	U.S. DEPARTMENT OF THE INTERIOR
Department of Fish and Game	National Park Service
By /s/ Ronald O. Skoog	By /s/ John E. Cook
Ronald O. Skoog	John E. Cook
Commissioner	Regional Director, Alaska
Date 14 October 1982	Date October 5, 1982

APPENDIX E: LEGAL GUIDELINES FOR WILDERNESS MANAGEMENT

Section 701 of ANILCA designated approximately 7,262,800 acres of Gates of the Arctic National Park as wilderness and directed that this wilderness be managed in accordance with the Wilderness Act of 1964 except as otherwise expressly provided for in ANILCA. The Wilderness Act states that wilderness areas "shall be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness."

Wilderness is then defined (in part) as "an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitations, which is protected and managed so as to preserve its natural conditions"

ANILCA made certain exceptions to the Wilderness Act that apply only to management of wilderness areas in Alaska. These are summarized below.

Section 1110(a) provides that the secretary will permit, in conservation system units, which by definition in section 102(4) includes units of the national wilderness preservation system,

> the use of snowmachines . . ., motorboats, airplanes, and nonmotorized surface transportation methods for traditional activities (where such activities are permitted by this Act or other law) and for travel to and from villages and homesites. Such use shall be subject to reasonable regulations by the Secretary to protect the natural and other values of the (wilderness) . . . areas, and shall not be prohibited unless, after notice and hearing in the vicinity of the affected unit or area, the Secretary finds that such use would be detrimental to the resource values of the unit or area.

The National Park Service has incorporated this provision into 36 CFR 13, which covers the administration of national park system units in Alaska.

Airplanes are used to gain access to the designated wilderness, and are allowed under the above-cited sections of ANILCA and the Code of Federal Regulations. Helicopter landings are prohibited on park lands except in compliance with a permit issued by the superintendent. Snowmachines and motorboats are used primarily by local residents for subsistence and other traditional activities, for access to private property, and for travel to and from local villages and homesites, and such use will continue to be guaranteed in designated wilderness under the above-cited sections of ANILCA and the Code of Federal Regulations. The general management plan states that the National Park Service will go through the process in ANILCA and 36 CFR 13.30 to prohibit general public recreational use of snowmachines and motorboats because proliferation of these uses where they have not been widely established will be detrimental to the resource values of the unit (see discussion under "Recreational Visitor Use Management"). No other forms of

motorized access are permitted except as provided by ANILCA sections 1110 and 1111.

The Wilderness Act, section 4(c), states that, subject to existing private rights, there will be

> no commercial enterprise and no permanent road within any wilderness area . . . and except as necessary to meet minimum requirements for the administration of the area for purposes of this Act (including measures required in emergencies involving health and safety of persons within the area), there shall be no temporary road . . . and no structure or installation within the area.

NPS "Management Policies" further state that:

> Guide services for horseback trips, hiking, mountain climbing, boat trips, and similar services designed to provide opportunities for the enjoyment of primitive and unconfined types of recreation or other wilderness purposes of the area are permissible under careful control by each park as to their nature, number, and extent. Structures or facilities in support of such commercial services are not permitted within wilderness.

Management of commercial operations is discussed under "Recreational Visitor Use Management" in the general management plan.

Section 1303(a)(3) of ANILCA, however, authorizes the use and occupancy of existing cabins or other structures in national park system units under a permit system. Cabins and other structures not under a permit system may be used for official government business, for emergencies involving health and safety, and for general public use. Also under section 1303, the secretary may permit the construction and maintenance of cabins or other structures if it is determined that the use is necessary for reasonable subsistence use. Section 1315 of ANILCA contains more specific language about existing cabins: "Previously existing public use cabins within wilderness . . . may be permitted to continue and may be maintained or replaced subject to such restrictions as the Secretary deems necessary to preserve the wilderness character of the area." The general management plan elaborates on the use and maintenance of cabins in the "General Development" section of the proposal.

Section 1315 also allows the construction of new cabins and shelters if necessary for the protection of public health and safety. Appropriate congressional committees must be notified of the intention to remove existing public use cabins or shelters or to construct new ones in wilderness. No cabins are proposed for construction or removal in the general management plan.

Section 1310 provides, subject to reasonable regulation, for access to and the operation, maintenance, and establishment of air and water navigation

aids, communications sites and related facilities, and facilities for weather, climate, and fisheries research and monitoring in wilderness areas.

The decision-making process established in title XI of ANILCA for the siting of transportation and utility systems applies to designated wilderness in Alaska.

Wilderness management under the above-cited mandates has been integrated with other aspects of recreational visitor use and resource management for the park, which are discussed elsewhere in this document.

APPENDIX F: ANILCA SECTION 810 SUBSISTENCE EVALUATION

I. Introduction

Section 810(a) of ANILCA states the following:

> In determining whether to withdraw, reserve, lease, or otherwise permit the use, occupancy, or disposition of public lands under any provision of law authorizing such actions, the head of the Federal agency having primary jurisdiction over such lands or his designee 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, occupany or disposition of such lands which would significantly restrict subsistence uses shall be effected until the head of such Federal agency
>
> > (a) 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 will involve the minimal amount of public lands necessary to accomplish the purposes of such use, occupancy, or other disposition, and (C) reasonable steps will be taken to minimize adverse impacts upon subsistence uses and resources resulting from such actions.

The purposes for which the park and preserve were established and will be managed are presented in title II of ANILCA.

In addition, components of the national wild and scenic rivers system and the national wilderness preservation system are to be administered pursuant to the Wild and Scenic Rivers Act and the Wilderness Act, respectively, as amended by ANILCA (see "Wild River Management" and "Wilderness Management" sections in the general management plan for specific management provisions).

Subsistence uses are to be permitted in conservation system units in accordance with title VIII of ANILCA. Section 102 defines the term "conservation system unit" to include any unit in Alaska of the national park system, national wild and scenic rivers system, and national wilderness preservation system.

II. Evaluation Factors

As directed by section 810(a) of ANILCA, the following three factors have been evaluated:

1. The effect on subsistence use or needs would be significant if:

   (a) there is likely to be a reduction in subsistence uses due to factors such as direct impacts on the resource, adverse impacts on habitat, or increased competition from nonrural harvesters.

   (b) there is likely to be a reduction in subsistence uses due to changes in availability of resources caused by an alteration in their distribution, migration, or location.

   (c) there is likely to be a reduction in subsistence uses due to limitations on the access to harvestable resources, such as by physical or legal barriers.

2. The availability of other lands that could be used for the proposed action, including an analysis of existing subsistence uses of those lands.

3. Alternatives that would reduce or eliminate the proposed action from lands needed for subsistence purposes.

III. Proposed Action on Federal Lands

The National Park Service is implementing a general management plan for Gates of the Arctic National Park and Preserve that would guide management of the area for the next 5-10 years. The plan presents approaches to management of natural resources, cultural resources, visitor use and development, land management, and administration. It is the result of a Draft General Management Plan / Environmental Assessment" printed in March 1985, which presented four alternatives and their impacts to the public.

IV. Alternatives Considered

The draft plan/assessment presented the following alternatives:

1. The proposal (preferred alternative C)
2. Minimum action (alternative A)
3. Management emphasis on known areas of high and concentrated use (alternative B)
4. Management emphasis on anticipation and prevention of problems through comprehensive research and intensive management of all park uses (alternative D)

V. Affected Environment

As described in the subsistence section of the "Affected Environment," Gates of the Arctic National Park and Preserve is part of a broader area used by local residents for subsistence. The total area of the park and preserve that may be effectively and efficiently used for subsistence purposes is relatively small. Much of the park is made up of rugged mountains. While limited amounts of sheep harvest are possible on the rocky slopes, the great mass of mountainous terrain is marginally productive and inaccessible. The resource base, particularly in the northern half of the park, is thin and tends to be concentrated within narrow margins along valley floors. The following river corridors are important for subsistence purposes: the Kobuk up to the lower canyon for hunting, fishing, and gathering; the Alatna to the vicinity of the Unakseruk River for hunting moose and bear; and the John to the vicinity of Wolverine Creek for hunting moose, sheep, and bear. Winter is the time of greatest travel and resource use within the park area with the greatest amount of travel taking place from late February through early April. Snowmachines are commonly used during periods of snow cover. The residents of Anaktuvuk Pass travel by ATVs along designated easements to Chandler Lake for the purposes of netting fish, gathering edible vegetation, and hunting sheep, caribou, bear and marmot, and out toward Ernie Pass to hunt sheep and caribou. Light subsistence use currently occurs in other areas of the park and preserve.

VI. Evaluation

In the determination of potential restrictions to existing subsistence activities, the evaluation criteria were analyzed relative to existing subsistence resources that could be affected. The draft general management plan and environmental assessment described the total range of potential impacts that may occur. This section discusses any possible restrictions to subsistence activities.

1. (a) The potential to reduce populations, adversely impact habitat, or increase competition from nonrural harvesters

No significant declines in populations would result from implementation of any of the alternatives. Natural cycles in populations would be allowed to continue. The National Park Service would not attempt to artificially manipulate wildlife populations or habitat within the park and preserve.

Under alternative A, the possibility for adverse impacts on habitat is greater than under the other alternatives because there would not be a systematic approach to researching and monitoring the park's resources, including those habitats important to subsistence uses. Adverse impacts on habitat could go undetected until they reached a more serious or obvious stage. The likelihood of this happening is not considered significant in view of the minimal changes in resource conditions expected over the next 10 years. All of the other alternatives would provide varying degrees of research and monitoring programs that would enable

the National Park Service to detect adverse impacts on habitats at early stages.

Increased competition from nonrural harvesters is possible in the preserve portions of Gates of the Arctic where sport hunting is allowed. Competition may occur from a growth of the number of eligible subsistence users.

Increased recreational use of the entire area including the preserve portions would occur under any of the alternatives. However, the primary subsistence use periods occur in the winter, while the primary recreational use periods are in the summer and during hunting season in the fall. Therefore, the overlap between the two user groups is not great. In addition, in all of the alternatives except A, the National Park Service would manage recreational uses by placing limitations on group sizes and on length of stay and number of groups at high use areas. Visitors and commercial guides would be provided information on subsistence activities including locations and seasons, and NPS personnel would monitor sensitive subsistence use areas. All of these actions would be designed to minimize interaction and thus conflict between subsistence users and recreational users.

The subsistence resource commission will be examining the potential for declines in populations, adverse habitat impacts, and increased competition from nonrural harvesters as part of their subsistence hunting recommendations.

Conclusion: None of the alternatives including the plan would result in a reduction in population of any harvestable resource, adversely impact habitat, or significantly increase competition from nonrural harvesters.

(b) Availability of subsistence resources

The distribution, migration patterns, and location of subsistence resources are expected to remain essentially the same under any of the alternatives. In all of the alternatives except A, the National Park Service would manage recreational uses (as described under (a) above) to minimize disturbance to wildlife including their distribution, migration routes, or location.

Conclusion: None of the alternatives including the plan would result in changes in the availability of resources caused by an alteration in their distribution, migration, or location.

(c) Restriction of access

Under all alternatives, access to the preserve for subsistence purposes is guaranteed by section 811 of ANILCA. Regulations implementing section 811 are already in place, and none of the alternatives propose changes in those regulations.

Conclusion: None of the alternatives including the plan would result in limitations on the access to harvestable resources.

2. Availability of other lands for the proposed action

There are no other lands available for this action because the park and preserve boundaries were established by Congress to achieve specific purposes. Local residents can and do use other lands outside the park and preserve for subsistence purposes. The proposed plan is consistent with the mandates of ANILCA, including title VIII, and the National Park Service organic act.

3. Alternatives

No alternatives that would reduce or eliminate the proposed actions from lands needed for subsistence purposes were identified because preparation of a general management plan is required by ANILCA and the proposed plan is consistent with provisions of ANILCA related to subsistence.

VII. Consultation and Coordination

The Alaska Department of Fish and Game, Arctic Slope Regional Corporation, North Slope Borough, residents of Anaktuvuk Pass, and the subsistence resource commission for the park were consulted specifically on subsistence throughout preparation of this plan. Further information on meetings and other contacts is contained in the "Consultation and Coordination" section.

VIII. Findings

Based on the above process and considering all the available information, this evaluation concludes that the action would not result in a significant restriction of subsistence uses within Gates of the Arctic National Park and Preserve.

APPENDIX G: DETERMINATION OF CONSISTENCY WITH ALASKA COASTAL MANAGEMENT PROGRAM

Section 307(c) of the Coastal Zone Management Act of 1972, as amended (PL 92-583), states that "each federal agency conducting or supporting activities directly affecting the coastal zone shall conduct or support those activities in a manner which is, to the maximum extent practicable, consistent with approved state coastal management programs." Approximately 668,160 acres or 7.8 percent of Gates of the Arctic National Park and Preserve are within the NANA Coastal Resource Service Area. These lands are located in the southwestern "boot," along the upper Kobuk River and include Walker Lake.

The Alaska Coastal Management Act of 1977, as amended, and the subsequent Alaska Coastal Management Program (ACMP) and Final Environmental Impact Statement of 1979 set forth policy guidelines and standards to be used for review of projects. The NANA Coastal Resource Service Area is preparing a district program, but the program has not been approved by the state or the U.S. Department of Commerce. Therefore, the standards established by the state of Alaska are applicable to Gates of the Arctic National Park and Preserve.

The ACMP identifies 12 primary categories that are to be used in consistency evaluations. The basis of the following consistency determination is the environmental assessment that accompanied the Draft General Management Plan for Gates of the Arctic (March 1985). The highlights of the assessment are organized in the format of the ACMP standards in the following consistency determination. This determination considers not only the elements of the plan, but also the elements of alternative proposals in the draft plan that relate to coastal land and water uses.

The categories in the ACMP that are applicable to this plan are as follows:

Coastal development	*
Geophysical hazard areas	*
Recreation	*
Energy facilities	
Transportation and utilities	*
Fish and seafood processing	
Timber harvest and processing	
Mining and mineral processing	
Subsistence	*
Habitats	*
Air, land, and water quality	*
Historic, prehistoric, and archeological resources	*

* Applicable

The accompanying matrix evaluates the consistency of the plan alternatives with the requirements of each of the applicable categories identified.

DETERMINATION OF CONSISTENCY WITH ALASKA COASTAL MANAGEMENT PROGRAM

Preferred ACMP Section	Policy	Other Alternatives	Evaluation of Consistency
6 AAC 80.040 Coastal Development	(a) In planning for and approving development in coastal areas, districts and state agencies will give, in the following order, priority to 1) water-dependent uses and activities, 2) water-related uses and activities, and 3) uses and activities that are neither water-dependent nor water-related for which there is no feasible and prudent inland alternative to meet the public need for the use or activity.	(a) All of the alternatives emphasize nondevelopment uses of the preserve (e.g., subsistence, dispersed recreation, research). Many of these activities are water-related and take place within a 2-mile corridor along the Kobuk River and at Walker Lake. Two small-scale administrative facilities (e.g., seasonal camps consisting of tents and caches) would be developed along the Kobuk River and at Walker Lake.	Consistent
	(b) The placement of structures and the discharge of dredged or fill material into coastal water must, at a minimum, comply with 33 CFR 320-323, July 19, 1977.	(b) None of the alternatives propose discharging any dredged or fill material into coastal waters.	Consistent
6 AAC 80.050 Geophysical Hazard Areas	(a) Districts and state agencies will identify known geophysical hazard areas and areas of high development potential in which there is a substantial possibility that geophysical hazards may occur. (b) Development in areas identified under (a) of this section may not be approved by the appropriate state or local authority until siting, design, and construction measures for minimizing property damage and protecting against loss of life have been provided.	None of the alternatives propose developments in any known geophysical hazard area.	Consistent
6 AAC 80.060 Recreation	(a) Districts will designate areas for recreational use. Criteria for designation of areas of recreational use are (1) the area receives significant use by persons engaging in recreational pursuits or is a major tourist destination, or (2) the area has potential for high quality recreational use because of physical, biological, or cultural features.	(a) Present recreational use of the area is small, but expected to grow at a rate of 7.3%/year. The park is recognized as one of the country's premier wilderness areas, and the national park designation was designed primarily to protect the wilderness opportunities. All of the alternatives recognize and would protect the preserve's potential for high quality, wilderness-type recreational opportunities related to its physical, biological, and cultural features.	Consistent
	(b) District and state agencies will give high priority to maintaining and, where appropriate, increasing public access to coastal water.	(b) The park preserve is not adjacent to any coastal waters, but does guarantee access to the upper Kobuk River and Walker Lake	Consistent

Preferred ACMP Section	Policy	Other Alternatives	Evaluation of Consistency
6 AAC 80.080 Transportation and Utilities	(a) Transportation and utility routes and facilities in the coastal area must be sited, designed, and constructed so as to be compatible with district programs. (b) Transportation and utility routes and facilities must be sited inland from beaches and shorelines unless the route or facility is water-dependent or no feasible and prudent inland alternative exists to meet the public need for the route or facility.	When the park/preserve was established, a provision was made for a right-of-way to link the Alaska pipeline haul road to the Ambler mining district across the western Kobuk River preserve unit. Upon receipt of any application for development of the right-of-way, environmental and economic analysis for the purposes of determining the the most desirable route in the right-of-way and other terms and conditions will be prepared.	Consistent
6 AAC 80.120 Subsistence	(a) Districts and state agencies will recognize and ensure opportunities for subsistence usage of coastal areas and resources. (b) Districts will identify areas in which subsistence is the dominant use of coastal resources. (c) Districts may, after consultation with appropriate state agencies, native corporations, and any other persons or groups, designate areas identified under (b) of this section as subsistence zones in which subsistence uses and activities have priority over all nonsubsistence uses and activities. (d) Before a potentially conflicting use of activities may be authorized within areas designated under (c) of this section, a study of the possible adverse impacts of the proposed potentially conflicting use or activity upon subsistence usage must be conducted, and appropriate safeguards to ensure subsistence usage must be provided. (e) Districts sharing migratory fish and game resources must submit compatible plans for habitat management.	The ANILCA section 810 subsistence evaluation (see appendix F) finds that none of the alternatives would result in a significant restriction of subsistence uses within the park/preserve.	Consistent
60 AAC 80.130 Habitats	(a) Habitats in the coastal area which are subject to the ACMP include (1) offshore areas, (2) estuaries, (3) wetlands and tidelands, (4) rocky islands and seacliffs, (5) barrier islands and lagoons, (6) exposed high energy coasts, (7) rivers, streams, and lakes, (8) important upland habitat. (b) The habitats contained in (a) of this section must be managed so as to maintain or enhance the biological, physical, and chemical characteristics of the habitat which contribute to its capacity to support living resources.	All of the alternatives would serve to maintain the integrity and biological health of habitats within the Coastal Resource Service Area by promoting research and monitoring programs, except alternative A. Under alternative A, the possibility for adverse impacts on habitat would be much greater than with the other alternatives because there would not be systematic research and monitoring. Adverse impacts on habitat could go undetected until they reached a more serious stage. The likelihood of this happening is not considered to be significant in view of minimal changes in resource conditions expected in the next 10 years.	Consistent

Preferred ACMP Section	Policy	Other Alternatives	Evaluation of Consistency
6 AAC 80.140 Air, Land, and Water Quality	The statutes pertaining to and the regulations and procedures of the Alaska Department of Environmental Conservation with respect to the protection of air, land, and water quality are incorporated into the ACMP.	All requirements would be met under all of the alternatives. Development of any facilities would require compliance with applicable federal and state laws and regulations regarding air, land, and water quality.	Consistent
6 AC 80.150 Historic, Prehistoric, and Archeological Resources	Districts and appropriate state agencies will identify areas of the coast that are important to the study, understanding, or illustration of national, state, or local history or prehistory.	In all alternatives, the National Park Service would survey, evaluate, and protect historical and archeological sites within the preserve as mandated by laws and regulations.	Consistent

DETERMINATION

The draft general management plan for Gates of the Arctic National Park and Preserve has been evaluated for consistency with the standards of the ACMP. The National Park Service has determined that the plan conforms with all the ACMP requirements.

APPENDIX H: COMPLIANCE WITH OTHER LAWS, POLICIES, AND EXECUTIVE ORDERS

This section provides a reference to the applicable laws, executive orders, and policies that this planning project is required to address or comply with. In many cases compliance has been discussed in the Draft General Management Plan / Environmental Assessment of March 1985, and the information is repeated here to provide a comprehensive compliance discussion. Detailed discussions of the requirements of ANILCA and the federal regulations for national park system units in Alaska are included in appendixes B and J.

Natural Environment

Clean Air Act, Clean Water Act: None of the proposed actions would appreciably affect air or water quality within the park/preserve. All NPS facilities would meet or exceed state Department of Environmental Quality and EPA standards and regulations for proper waste disposal.

Rivers and Harbors Act: Permits from the U.S. Army Corps of Engineers for work in navigable waters of the United States would be obtained. However, no construction is planned in these waters.

Executive Orders 11988 (Floodplain Management) and 11990 (Protection of Wetlands): Since no floodplain mapping exists for the park/preserve, development of new facilities would be preceded by site-specific analyses unless the area has been examined by an NPS qualified hydrologist or hydraulic engineer and excluded. No proposal would affect wetlands within the area.

Since there is little or no human habitation along the rivers in the park/preserve, the Corps of Engineers does not consider floodplain mapping within the area a high priority in Alaska.

Safe Drinking Water Act: The plan does not propose to provide any public drinking water within the park/preserve. However, at visitor contact areas established in Bettles, Anaktuvuk Pass, and Coldfoot, all drinking water will be treated to meet state and federal standards.

Endangered Species Act: Pursuant to section 7 of the Endangered Species Act, the U.S. Fish and Wildlife Service was contacted in March 1984 for a list of threatened and endangered plant and animal species that might occur within the park/preserve. In their response of March 28, 1984, the Fish and Wildlife Service stated that records indicate that arctic peregrine falcons as possibly passing through the area during migration. The candidate plant species *Erigeron muirii* and *Oxytropis glaberrima* have been reported from Anaktuvuk Pass and the Kurupa Lake area, respectively. Either or both may be present within the park/preserve.

Since no threatened or endangered species were identified as occurring within the area, no further consultation with the U.S. Fish and Wildlife Service is required under section 7.

Protection of Fish and Game and Waters Important to Anadromous Fish (Alaska State Statutes): Before undertaking any development or action that could have an effect on spawning and rearing habitat for anadromous fish in designated streams, the National Park Service would request a title 16 permit from the Alaska Department of Fish and Game.

Alaska Hunting, Trapping, and Fishing Regulations: All of these uses within either the park or preserve, whether for sport, subsistence, or commercial purposes, are subject to established laws. The Park Service will seek concurrent jurisdiction from the state to assist in enforcing game and fish laws within the park/preserve.

Alaska Coastal Management Program: A consistency determination has been prepared pursuant to the federal Coastal Zone Management Act of 1972, as amended, and the plan is consistent with the standards of the Alaska ACMP of May 1979 (see appendix G). The consistency determination was reviewed by the state of Alaska during the summer of 1985, and notification that the plan is consistent with the program's standards was received from the Office of the Governor in a letter dated August 30, 1985. Compliance with the ACMP pursuant to section 307 of the federal Coastal Zone Management Act of 1972, as amended, is thus assumed.

Cultural Resources

Antiquities Act, Historic Sites Act, National Historic Preservation Act, and Archeological Resources Protection Act: All actions will be in full compliance with appropriate cultural resource laws. All proposals and activities affecting or relating to cultural resources will be developed and executed with the active participation of professional historians, archeologists, anthropologists, and historical architects, in accordance with NPS "Management Policies" and "Cultural Resource Management Guidelines" (NPS-28). No undertaking that would result in the destruction or loss of known significant cultural resources is proposed in this plan.

In accordance with the September 1981 amendment to the 1979 programmatic memorandum of agreement between the National Park Service, the Advisory Council on Historic Preservation, and the National Council of State Historic Preservation Officers, the Park Service has requested the advice and consultation of the Advisory Council and the Alaska historic preservation officer during the preparation of this plan. A meeting was held in Anchorage in April 1984 with the Alaska historic preservation office to discuss coordination and consultation procedures for this plan. The Advisory Council was provided a copy of the task directive for this plan. Another briefing was held with the Alaska historic preservation office in November 1984.

On April 2, 1985, the National Park Service provided copies of the draft GMP/Environmental Assessment to the Advisory Council on Historic Preservation for their review and comment. On September 19, 1985, the regional director was notified that the document did not qualify for inclusion under the programmatic memorandum of agreement between the Advisory Council, the National Park Service, and the National Conference of State Historic Preservation Officers. The general management plan did not present cultural resource information in sufficient scope and detail to allow for substantive Advisory Council review and section 106 compliance under the programmatic memorandum of agreement. Therefore, pursuant to section 106 of the National Historic Preservation Act, as amended in 1980, and until more specific planning documents are developed, the National Park Service will continue to consult with the Alaska State Historic Preservation Officer and the Advisory Council on a case-by-case basis prior to implementing any action under the general management plan that may affect cultural resources.

1982 National Park Service Native American Relationships Policy (derived from American Indian Religious Freedom Act of 1978): A thorough effort has been made to identify all native corporations and local native American groups and individuals who would be interested in participating in this planning effort and who have traditional ties with the park/preserve. The planning team has met with representatives of these groups at various stages of the plan's development. These individuals and groups have been placed on the mailing list and will continue to be consulted, invited to all public meetings, and sent copies of all public information documents for review and comment.

Museum Act of 1955 (69 Stat. 242; 16 USC 18[f]): All collected artifacts and specimens will be treated, cataloged, and protected in accordance with this act.

Socioeconomic Environment

Concessions Policy Act: Concession permits will be issued in accordance with this act.

Architectural Barriers Act: All public facilities both inside and outside the park/preserve will be accessible by the handicapped to the extent possible.

APPENDIX I: SUMMARY OF ACCESS PROVISIONS

SUBSISTENCE AND RECREATIONAL USE

Means of Access	Subsistence	Reference[1]	Recreation	Reference[1]	Changes Proposed in Plan
Snowmachines	Yes Except: A	ANILCA 811 36 CFR 13.46 43 CFR 36.11(b)	Yes Except: B	ANILCA 1110 43 CFR 36.11(c) 36 CFR 13.30 43 CFR 36.11(h)	Guaranteed for subsistence purposes, access to private property within the unit, and travel to and from villages and homesites; pursue legislation that would discontinue the recreational use of snowmachines in certain areas of the unit
ORVs	No	ANILCA 811 36 CFR 13.46	No	ANILCA 101 43 CFR 36.11(g) EO 11644 and EO 11989[2]	None
Motorboats	Yes Except: A	ANILCA 811 36 CFR 13.46 43 CFR 36.11(b)	Yes Except: B	ANILCA 1110 43 CFR 36.11(d) 36 CRF 13.30 43 CFR 36.11(h)	Guaranteed for subsistence purposes, access to private property within the unit, and travel to and from villages and homesites; pursue legislation that would discontinue the recreational use of motorboats in certain areas of the unit
Fixed-wing aircraft	No Except: C	ANILCA 811 36 CFR 13.45 43 CFR 36.11(f) 36 CFR 13.64	Yes Except: B	ANILCA 1110 43 CFR 36.11(f) 36 CFR 13.30	None
Helicopters	No	ANILCA 811 43 CFR 36.11(f) 36 CFR 13.45	No Except: D	ANILCA 1110 43 CFR 36.11(f)	None
Ultralights	No	ANILCA 811 36 CFR 2.17 36 CFR 13.45	No	ANILCA 1110 36 CFR 2.17 43 CFR 36.11(f)	None
Pack and saddle animals[3]	Yes Except: A	ANILCA 811 36 CFR 13.46	Yes Except: B	ANILCA 1110 43 CFR 36.11(e) 36 CFR 13.30	Limit recreational use of hoofed pack and saddle animals to three per party and require permit to monitor closely; allow pack dogs under restraint; no change to subsistence or access to private land

The terms "Yes" and "No" in subsistence and recreation columns reflect a general rule as to whether a specific type of access is allowed. Where exceptions to the general rule exist, they are noted and explained in the appropriate footnote.

Exceptions:

A. The superintendent may restrict or close a route or area to use of snowmachines, motorboats, dog teams, or other means of surface transportation traditionally employed by local rural residents engaged in subsistence uses under specified conditions (36 CFR 13.46(b)(c)).
B. The superintendent may close an area or restrict an activity on an emergency, temporary, or permanent basis (36 CFR 1.5 and 13.30 and 43 CFR 36.11(h)).
C. The use of fixed-wing aircraft for access to and from park lands (not preserve units) for the purposes of taking fish and wildlife for subsistence is prohibited (36 CFR 13.45 and 43 CFR 36.11(f)). In extraordinary cases local rural residents, particularly residents of Anaktuvuk Pass, may use aircraft on park lands for taking fish and wildlife in accordance with a permit issued by the superintendent (36 CFR 13.45 and 13.64). The use of aircraft is allowed for subsistence activities other than the taking of fish and wildlife.
D. The use of a helicopter in any park area, other than at designated landing areas and pursuant to the terms and conditions of a permit issued by the superintendent, is prohibited (43 CFR 36.11(f)(4)).

Footnotes:

1. ANILCA refers to sections of the Alaska National Interest Lands Conservation Act of 1980; Part 13 of title 36 of the Code of Federal Regulations (36 CFR 13), "National Park System Units in Alaska," and relevant sections of part 36 of title 43 of the Code of Federal Regulations, "Transportation and Utility Systems in and across, and Access into, Conservation System Units in Alaska," are contained in appendix J.
2. EO 11644 prohibits the designation of ORV areas and trails in officially designated wilderness. In areas of the national park system, the executive order also requires a determination that the location of ORV areas and trails in nonwilderness will not adversely affect the natural, aesthetic, or scenic values.
3. Pack animal means horses, burros, mules, llamas, or other hoofed mammals when designated as pack animals by the superintendent.

OTHER ACCESS PROVISIONS

Provision	Reference	Changes Proposed in Plan
1. Access to Inholdings (Applies to holders of valid property or occupancy interest including mining claims) Ensures adequate and feasible access, subject to reasonable regulations to protect the natural and other values.	ANILCA 1110 36 CFR 13.31 43 CFR 36.10 43 CFR 36.11	None
2. Temporary Access (Applies to state and private landowners not covered in 43 CFR 36.10 and 36.11) Superintendent will permit temporary access across a park area for survey, geophysical, exploratory, or similar temporary activities on nonfederal lands when determined that such access will not result in permanent harm to park area resources.	ANILCA 1111 43 CFR 36.12	None
3. Transportation and Utility Systems in and across, and Access into, Conservation System Units Sets procedures for application and approval process; proposal must be compatible with purposes for which the unit was established and no economically feasible and prudent alternate route exists; establishes terms and conditions of rights-of-way.	ANILCA Title XI 43 CFR 36	None
4. RS 2477 Revised Statute 2477 (repealed in 1976) provides that "the right-of-way for the construction of highways over public lands, not reserved for public uses, is hereby granted." Gates of the Arctic was established subject to valid existing rights, including rights-of-way established under RS 2477. The validity of these rights-of-way will be determined on a case-by-case basis. These rights-of-way are discussed further in the "Access and Circulation" section. A list and map of the potential rights-of-way that the state contends may be valid under RS 2477 are located in appendix M.	43 USC	None
5. ANCSA 17(b) Easements Campsite and linear access easements may be reserved on native corporation lands that are within or adjoin the park/preserve, as authorized by section 17(b) of ANCSA. The routes and locations of these easements are identified on maps contained in the conveyance documents. The conveyance documents also specify the terms and conditions of use including periods and methods of public access. It is anticipated that the National Park Service will be responsible for the management of approximately 30 public access easements within and adjoining the park/preserve.	ANCSA 17(b)	None

Provision	Reference	Changes Proposed in Plan
6. Navigation Aids and Other Facilities Access is provided to existing air and water navigation aids, communication sites, and facilities for weather, climate, and fisheries research and monitoring, subject to reasonable regulation. Access is also provided to facilities for national defense purposes.	ANILCA 1310	None
7. Alaska Department of Fish and Game The National Park Service recognizes the right of the department to enter onto park lands after timely notification to conduct routine management activities that do not involve construction, disturbance to the land, or alterations of ecosystems.	NPS/ADF&G Memorandum of Understanding	None
8. Alaska Mineral Resource Assessment Program Allows for access for assessment activities for USGS and their designated agents permitted by ANILCA section 1010, subject to regulations ensuring that such activities are carried out in an environmentally sound manner.	ANILCA 1010	None
9. General Research The superintendent may permit the use of helicopters for research activities subject to terms and conditions prescribed by the superintendent.	ANICLA 1110 36 CFR 13.31 43 CFR 36.11(f)	Research activities must meet stipulations and helicopter may be used if essential to research and will not disrupt wildlife or uses.
10. Surface Transportation Route across Western (Kobuk River) Unit of Preserve Access for a surface transportation route is to be permitted in accordance with the provision of section 201(4) of ANILCA.	ANILCA 201(4)	None

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PART 13—NATIONAL PARK SYSTEM UNITS IN ALASKA

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13.73 Wrangell-St. Elias National Park and Preserve.
13.74 Yukon-Charley Rivers National Preserve.

Authority: Sec. 3 of the Act of August 15, 1916 (39 Stat. 535, as amended (16 U.S.C. 3); 16 U.S.C. 1, 1a-1, 1c, 462); Alaska National Interest Lands Conservation Act (ANILCA), 94 Stat. 2371 and 1281; Pub. L. No. 96-487 (December 2, 1980); and the Paperwork Reduction Act of 1980, 94 Stat. 2812, Pub. L. No. 96-511.

Subpart A—Public Use and Recreation

§ 13.1 Definitions.

The following definitions shall apply to all regulations contained in this part:

* ~~(a) The term "adequate and feasible access" means a reasonable method and route of pedestrian or vehicular transportation which is economically practicable for achieving the use or development desired by the applicant on his/her non-federal land or occupancy interest, but does not necessarily mean the least costly alternative.~~

(b) The term "aircraft" means a machine or device that is used or intended to be used to carry persons or objects in flight through the air, including, but not limited to airplanes, helicopters and gliders.

(c) The term "ANILCA" means the Alaska National Interest Lands Conservation Act (94 Stat. 2371; Pub. L. 96-487 (December 2, 1980)).

(d) The term "carry" means to wear, bear or carry on or about the person and additionally, in the case of firearms, within or upon a device or animal used for transportation.

(e) The term "downed aircraft" means an aircraft that as a result of mechanical failure or accident cannot take off.

(f) The term "firearm" means any loaded or unloaded pistol, revolver, rifle, shotgun or other weapon which will or is designated to or may readily be converted to expel a projectile by the action of expanded gases, except that it does not include a pistol or rifle powered by compressed gas. The term "firearm" also includes irritant gas devices.

(g) The term "fish and wildlife" means any member of the animal kingdom,

*Regulations that were revised as of Sept. 4, 1986

including without limitation any mammal, fish, bird (including any migratory, nonmigratory or endangered bird for which protection is also afforded by treaty or other international agreement), amphibian, reptile, mollusk, crustacean, arthropod, or other invertebrate, and includes any part, produce, egg, or offspring thereof, or the dead body or part thereof.

(h) The term "fossil" means any remains, impression, or trace of any animal or plant of past geological ages that has been preserved, by natural processes, in the earth's crust.

(i) The term "gemstone" means a silica or igneous mineral including, but not limited to (1) geodes, (2) petrified wood, and (3) jade, agate, opal, garnet, or other mineral that when cut and polished is customarily used as jewelry or other ornament.

(j) The term "National Preserve" shall include the following areas of the National Park System:

Alagnak National Wild and Scenic River, Aniakchak National Preserve, Bering Land Bridge National Preserve, Denali National Preserve, Gates of the Arctic National Preserve, Glacier Bay National Preserve, Katmai National Preserve, Lake Clark National Preserve, Noatak National Preserve, Wrangell-St. Elias National Preserve, and Yukon-Charley National Preserve.

(k) The term "net" means a seine, weir, net wire, fish trap, or other implement designed to entrap fish, except a landing net.

(l) The term "off-road vehicle" means any motor vehicle designed for or capable of crosscountry travel on or immediately over land, water, sand, snow, ice, marsh, wetland or other natural terrain, except snowmachines or snowmobiles as defined in this chapter.

(m) The term "park areas" means lands and waters administered by the National Park Service within the State of Alaska.

(n) The term "person" means any individual, firm, corporation, society, association, partnership, or any private or public body.

(o) The term "possession" means exercising dominion or control, with or without ownership, over weapons, traps, nets or other property.

(p) The term "public lands" means lands situated in Alaska which are federally owned lands, except—

(1) land selections of the State of Alaska which have been tentatively approved or validly selected under the Alaska Statehood Act (72 Stat. 339) and lands which have been confirmed to, validly selected by, or granted to the Territory of Alaska or the State under any other provision of Federal law;

(2) land selections of a Native Corporation made under the Alaska Native Claims Settlement Act (85 Stat. 688) which have not been conveyed to a Native Corporation, unless any such selection is determined to be invalid or is relinquished; and

(3) lands referred to in section 19(b) of the Alaska Native Claims Settlement Act.

(q) The term "snowmachine" or "snowmobile" means a self-propelled vehicle intended for off-road travel primarily on snow having a curb weight of not more than 1,000 pounds (450 kg), driven by a track or tracks in contact with the snow and steered by a ski or skis on contact with the snow.

(r) The term "Superintendent" means any National Park Service official in charge of a park area, the Alaska Regional Director of the National Park Service, or an authorized representative of either.

(s) The term "take" or "taking" as used with respect to fish and wildlife, means to pursue, hunt, shoot, trap, net, capture, collect, kill, harm, or attempt to engage in any such conduct.

(t) The term "temporary" means a continuous period of time not to exceed 12 months, except as specifically provided otherwise.

(u) The term "trap" means a snare, trap, mesh, or other implement designed to entrap animals other than fish.

(v) The term "unload" means there is no unexpended shell or cartridge in the chamber or magazine of a firearm; bows, crossbows and spearguns are stored in such a manner as to prevent their ready use; muzzle-loading weapons do not contain a powder charge; and any other implement capable of discharging a missile into the air or under the water does not contain a missile or similar device within the loading or discharging mechanism.

(w) The term "weapon" means a firearm, compressed gas or spring powered pistol or rifle, bow and arrow, crossbow, blow gun, speargun, hand thrown spear, slingshot, explosive device, or any other implement designed to discharge missiles into the air or under the water.

§ 13.2 Applicability and scope.

(a) The regulations contained in this Part 13 are prescribed for the proper use and management of park areas in Alaska and supplement the general regulations of this chapter. The general regulations contained in this chapter are applicable except as modified by this Part 13.

(b) Subpart A of this Part 13 contains regulations applicable to park areas. Such regulations amend in part the general regulations contained in this chapter. The regulations in Subpart A govern use and management, including subsistence activities, within the park areas, except as modified by Subparts B or C.

(c) Subpart B of this Part 13 contains regulations applicable to subsistence activities. Such regulations apply to park areas except Kenai Fjords National Park, Katmai National Park, Glacier Bay National Park, Klondike Gold Rush National Historical Park, Sitka National Historical Park, and parts of Denali National Park. The regulations in Subpart B amend in part the general regulations contained in this chapter and the regulations contained in Subpart A of this Part 13.

(d) Subpart C of this Part 13 contains special regulations for specific park areas. Such regulations amend in part the general regulations contained in this chapter and the regulations contained in Subparts A and B of this Part 13.

(e) The regulations contained in this Part 13 are applicable only on federally owned lands within the boundaries of any park area. For purposes of this part, "federally owned lands" means land interests held or retained by the United States, but does not include those land interests: (1) Tentatively approved, legislatively conveyed, or patented to the State of Alaska; or (2) interim conveyed or patented to a Native Corporation or person.

§ 13.3 Penalties.

Any person convicted of violating any provision of the regulations contained in this Part 13, or as the same may be amended or supplemented, may be punished by a fine not exceeding $500 or by imprisonment not exceeding 6 months, or both, and may be adjudged to pay all costs of the proceedings (16 U.S.C. 3).

§ 13.4 Information collection.

The information collection requirements contained in §§ 13.13, 13.14, 13.15, 13.16, 13.17, 13.31, 13.44, 13.45, 13.49, and 13.51 have been approved by the Office of Management and Budget under 44 U.S.C. 3507 and assigned clearance number 1024–0015. The information is being collected to solicit information necessary for the Superintendent to issue permits and other benefits. This information will be used to grant statutory or administrative benefits. In all sections except 13.13, the obligation to respond is required to obtain a benefit. In § 13.13, the obligation to respond is mandatory.

**§ 36.10 Access to inholdings.

(a) This section sets forth the procedures to provide adequate and feasible access to inholdings within areas in accordance with section 1110(b) of ANILCA. As used in this section, the term:

(1) "Adequate and feasible access" means a route and method of access that is shown to be reasonably necessary and economically practicable but not necessarily the least costly alternative for achieving the use and development by the applicant on the applicant's nonfederal land or occupancy interest.

(2) "Area" also includes public lands administered by the BLM designated as wilderness study areas.

(3) "Effectively surrounded by" means that physical barriers prevent adequate and feasible access to State or private lands or valid interests in lands except across an area(s). Physical barriers include but are not limited to rugged mountain terrain, extensive marsh areas, shallow water depths and the presence of ice for large periods of the year.

(4) "Inholding" means State-owned or privately owned land, including subsurface rights of such owners underlying public lands or a valid mining claim or other valid occupancy that is within or is effectively surrounded by one or more areas.

(b) It is the purpose of this section to ensure adequate and feasible access across areas for any person who has a valid inholding. A right-of-way permit for access to an inholding pursuant to this section is required only when this part does not provide for adequate and feasible access without a right-of-way permit.

(c) Applications for a right-of-way permit for access to an inholding shall be filed with the appropriate Federal agency on a SF 299. Mining claimants who have acquired their rights under the General Mining Law of 1872 may file their request for access as a part of their plan of operations. The appropriate Federal agency may require the mining claimant applicant to file a SF 299, if in its discretion, it determines that more complete information is needed. Applicants should ensure that the following information is provided:

(1) Documentation of the property interest held by the applicant including, for claimants under the General Mining Law of 1872, as amended (30 U.S.C. 21–54), a copy of the location notice and recordations required by 43 U.S.C. 1744;

(2) A detailed description of the use of the inholding for which the applied for right-of-way permit is to serve; and

(3) If applicable, rationale demonstrating that the inholding is effectively surrounded by an area(s).

(d) The application shall be filed in the same manner as under § 36.4 and shall be reviewed and processed in accordance with §§ 36.5 and 36.6.

(e)(1) For any applicant who meets the criteria of paragraph (b) of this section, the appropriate Federal agency shall specify in a right-of-way permit the route(s) and method(s) of access across the area(s) desired by the applicant, unless it is determined that:

(i) The route or method of access would cause significant adverse impacts on natural or other values of the area and adequate and feasible access otherwise exists; or

(ii) The route or method of access would jeopardize public health and safety and adequate and feasible access otherwise exists; or

(iii) The route or method is inconsistent with the management plan(s) for the area or purposes for which the area was established and adequate and feasible access otherwise exists; or

(iv) The method is unnecessary to accomplish the applicant's land use objective.

(2) If the appropriate Federal agency makes one of the findings described in paragraph (e)(1) of this Section, another alternate route(s) and/or method(s) of access that will provide the applicant adequate and feasible access shall be specified by that Federal agency in the right-of-way permit after consultation with the applicant.

(f) All right-of-way permits issued pursuant to this section shall be subject to terms and conditions in the same manner as right-of-way permits issued pursuant to § 36.9.

(g) The decision by the appropriate Federal agency under this section is the final administrative decision.

**§ 36.11 Special access.

(a) This section implements the provisions of section 1110(a) of ANILCA regarding use of snowmachines, motorboats, nonmotorized surface transportation, aircraft, as well as off-road vehicle use.

As used in this section, the term:

(1) "Area" also includes public lands administered by the BLM and designated as wilderness study areas.

(2) "Adequate snow cover" shall mean snow of sufficient depth, generally 6–12 inches or more, or a combination of snow and frost depth sufficient to protect the underlying vegetation and soil.

(b) Nothing in this section affects the use of snowmobiles, motorboats and nonmotorized means of surface transportation traditionally used by rural residents engaged in subsistence activities, as defined in Tile VIII of ANILCA.

(c) The use of snowmachines (during periods of adquate snow cover and frozen river conditions) for traditional activities (where such activities are permitted by ANILCA or other law) and for travel to and from villages and homesites and other valid occupancies is permitted within the areas, except where such use is prohibited or otherwise restricted by the appropriate Federal agency in accordance with the procedures of paragraph (h) of this section.

(d) Motorboats may be operated on all area waters, except where such use is prohibited or otherwise restricted by the appropriate Federal agency in accordance with the procedures of paragraph (h) of this section.

(e) The use of nonmotorized surface transportation such as domestic dogs, horses and other pack or saddle animals is permitted in areas except where such use is prohibited or otherwise restricted by the appropriate Federal agency in accordance with the procedures of paragraph (h) of this section.

(f) Aircraft.

(1) Fixed-wing aircraft may be landed and operated on lands and waters within areas, except where such use is prohibited or otherwise restricted by the appropriate Federal agency, including closures or restrictions pursuant to the closures of paragraph (h) of this section. The use of aircraft for access to or from lands and waters within a national park or monument for purposes of taking fish and wildlife for subsistence uses therein is prohibited, except as provided in 36 CFR 13.45. The operation of aircraft resulting in the harassment of wildlife is prohibited.

**Sept. 4, 1986, revisions--43 CFR 36.10, 36.11, and 36.12.

(2) In imposing any prohibitions or restrictions on fixed-wing aircraft use the appropriate Federal agency shall:

(i) Publish notice of prohibition or restrictions in "Notices to Airmen" issued by the Department of Transportation; and

(ii) Publish permanent prohibitions or restrictions as a regulatory notice in the United States Flight Information Service "Supplement Alaska."

(3) Except as provided in paragraph (f)(3)(i) of this section, the owners of any aircraft downed after December 2, 1980, shall remove the aircraft and all component parts thereof in accordance with procedures established by the appropriate Federal agency. In establishing a removal procedure, the appropriate Federal agency is authorized to establish a reasonable date by which aircraft removal operations must be complete and determine times and means of access to and from the downed aircraft.

(i) The appropriate Federal agency may waive the requirements of this paragraph upon a determination that the removal of downed aircraft would constitute an unacceptable risk to human life, or the removal of a downed aircraft would result in extensive resource damage, or the removal of a downed aircraft is otherwise impracticable or impossible.

(ii) Salvaging, removing, possessing or attempting to salvage, remove or possess any downed aircraft or component parts thereof is prohibited, except in accordance with a removal procedure established under this paragraph and as may be controlled by the other laws and regulations.

(4) The use of a helicopter in any area other than at designated landing areas pursuant to the terms and conditions of a permit issued by the appropriate Federal agency, or pursuant to a memorandum of understanding between the appropriate Federal agency and another party, or involved in emergency or search and rescue operations is prohibited.

(9) Off-road vehicles.

(1) The use of off-road vehicles (ORV) in locations other than established roads and parking areas is prohibited, except on routes or in areas designated by the appropriate Federal agency in accordance with Executive Order 11644, as amended or pursuant to a valid permit as prescribed in paragraph (g)(2) of this section or in §§ 36.10 or 36.12.

(2) The appropriate Federal agency is authorized to issue permits for the use of ORVs on existing ORV trails located in areas (other than in areas designated as part of the National Wilderness Preservation System) upon a finding that such ORV use would be compatible with the purposes and values for which the area was established. The appropriate Federal agency shall include in any permit such stipulations and conditions as are necessary for the protection of those purposes and values.

(h) Closure procedures.

(1) The appropriate Federal agency may close an area on a temporary or permanent basis to use of aircraft, snowmachines, motorboats or nonmotorized surface transportation only upon a finding by the agency that such use would be detrimental to the resource values of the area.

(2) Temporary closures.

(i) Temporary closures shall not be effective prior to notice and hearing in the vicinity of the area(s) directly affected by such closures and other locations as appropriate.

(ii) A temporary closure shall not exceed 12 months.

(3) Permanent closures shall be published by rulemaking in the **Federal Register** with a minimum public comment period of 60 days and shall not be effective until after a public hearing(s) is held in the affected vicinity and other locations as deemed appropriate by the appropriate Federal agency.

(4) Temporary and permanent closures shall be (i) publishing at least once in a newspaper of general circulation in Alaska and in a local newspaper, if available; posted at community post offices within the vicinity affected; made available for broadcast on local radio stations in a manner reasonably calculated to inform residents in the affected vicinity; and designated or a map which shall be available for public inspection at the office of the appropriate Federal agency and other places convenient to the public; or (ii) designated by posting the area with appropriate signs; or (iii) both.

(5) In determining whether to open an area that has previously been closed pursuant to the provisions of this section, the appropriate Federal agency shall provide notice in the **Federal Register** and shall, upon request, hold a hearing in the affected vicinity and other locations as appropriate prior to making a final determination.

(6) Nothing in this section shall limit the authority of the appropriate Federal agency to restrict or limit uses of an area under other statutory authority.

(i) Except as otherwise specifically permitted under the provisions of this section, entry into closed areas or failure to abide by restrictions established under this section is prohibited.

(j) Any person convicted of violating any provision of the regulations contained in this section, or as the same may be amended or supplemented, may be punished by a fine or by imprisonment in accordance with the penalty provisions applicable to the area.

✡ ✡ § 36.12 Temporary access.

(a) For the purposes of this section, the term:

(1) "Area" also includes public lands administered by the BLM designated as wilderness study areas or managed to maintain the wilderness character or potential thereof, and the National Petroleum Reserve—Alaska.

(2) "Temporary access" means limited, short-term (i.e., up to one year from issuance of the permit) access which does not require permanent facilities for access to State or private lands.

(b) This section is applicable to State and private landowners who desire temporary access across an area for the purposes of survey, geophysical, exploratory and other temporary uses of such non-federal lands, and where such temporary access is not affirmatively provided for in §§ 36.10 and 36.11. State and private landowners meeting the criteria of §36.10(b) are directed to use the procedures of § 36.10 to obtain temporary access.

(c) A landowner requiring temporary access across an area for survey, geophysical, exploratory or similar temporary activities shall apply to the appropriate Federal agency for an access permit by providing the relevant information requested in the SF 299.

(d) The appropriate Federal agency shall grant the desired temporary access whenever it is determined, after compliance with the requirements of NEPA, that such access will not result in permanent harm to the area's resources. The area manager shall include in any permit granted such stipulations and conditions on temporary access as are necessary to ensure that the access granted would not be inconsistent with the purposes for which the area was established and to ensure that no permanent harm will result to the area's resources and section 810 of ANILCA is complied with.

§ 13.17 Cabins and other structures.

(a) *Purpose.* It is the purpose of this section to provide procedures and guidance for those occupying and using existing cabins and those wishing to construct new cabins within park areas.

(b) *Existing cabins or other structures.* (1) This subsection applies to all park areas in Alaska except Klondike Gold Rush National Historical Park, Sitka National Historical Park and the former Mt. McKinley National Park, Glacier Bay National Monument and Katmai National Monument.

(2) Cabins or other structures existing prior to December 18, 1973, may be occupied and used by the claimants to these structures pursuant to a nontransferable, renewable permit. This use and occupancy shall be for terms of five years. *Provided, however,* That the claimant to the structure, by application:

(i) Reasonably demonstrates by affidavit, bill of sale or other documentation proof of possessory interest or right of occupancy in the cabin or structure;

(ii) Submits an acceptable photograph or sketch which accurately depicts the cabin or structure and a map showing its geographic location;

(iii) Agrees to vacate and remove all personal property from the cabin or structure upon expiration of the permit;

(iv) Acknowledges in the permit that he/she has no interest in the real property on which the cabin or structure is located; and

(v) Submits a listing of the names of all immediate family members residing in the cabin or structure.

Permits issued under the provisions of this paragraph shall be renewed every five years until the death of the last immediate family member of the claimant residing in the cabin or structure under permit. Renewal will occur unless the Superintendent determines after notice and hearing, and on the basis of substantial evidence in the administrative record as a whole, that the use under the permit is causing or may cause significant detriment to the principal purposes for which the park area was established. The Superintendent's decision may be appealed pursuant to the provisions of 43 CFR 4.700.

(3) Cabins or other structures, the occupancy or use of which began between December 18, 1973, and December 1, 1978, may be used and occupied by the claimant to these structures pursuant to a nontransferable, nonrenewable permit. This use and occupancy shall be for a maximum term of 1 year: *Provided, however,* That the claimant, by application, complies with § 13.17(c)(1) (i) through (iv) above. Permits issued under the provisions of this paragraph may be extended by the Superintendent, subject to reasonable regulations, for a period not to exceed one year for such reasons as the Superintendent deems equitable and just.

(4) Cabins or other structures, construction of which began after December 1, 1978, shall not be available for use and occupancy, unless authorized under the provisions of paragraph (d) of this section.

(5) Cabins or other structures, not under permit, shall be used only for official government business: *Provided, however,* That during emergencies involving the safety of human life, or where designated for public use by the Superintendent through the posting of signs, these cabins may be used by the general public.

(c) *New Cabins or Other Structures Necessary for Subsistence Uses or Otherwise Authorized by Law.* The Superintendent may issue a permit under such conditions as he/she may prescribe for the construction, reconstruction, temporary use, occupancy, and maintenance of new cabins or other structures when he/she determines that the use is necessary to accommodate reasonably subsistence uses or is otherwise authorized by law. In determining whether to permit the use, occupancy, construction, reconstruction or maintenance of cabins or other structures, the Superintendent shall be guided by factors such as other public uses, public health and safety, environmental and resource protection, research activities, protection of cultural or scientific values, subsistence uses, endangered or threatened species conservation and other management considerations necessary to ensure that the activities authorized pursuant to this section are compatible with the purposes for which the park area was established.

(d) *Existing Cabin Leases or Permits.* Nothing in this section shall preclude the renewal or continuation of valid leases or permits in effect as of December 2, 1980, for cabins, homesites, or similar structures on federally owned lands. Unless the Superintendent issues specific findings, following notice and an opportunity for the leaseholder or permittee to respond, that renewal or continuation of such valid permit or lease constitutes a direct threat or a significant impairment to the purposes for which the park area was established, he/she shall renew such valid leases or permits upon their expiration in accordance with the provisions of the original lease or permit subject to such reasonable regulations as he/she prescribe in keeping with the management objectives of the park area. Subject to the provisions of the original lease or permit, nothing in this paragraph shall necessarily preclude the Superintendent from transferring such a lease or permit to another person at the election or death of the original permittee or leasee.

§ 13.18 Camping and picnicking.

(a) *Camping.* Camping is permitted in park areas except where such use is prohibited or otherwise restricted by the Superintendent in accordance with the provisions of § 13.30, or as set forth for specific park areas in Subpart C of this part.

(b) *Picnicking.* Picnicking is permitted in park areas except where such activity is prohibited by the posting of appropriate signs.

§ 13.19 Weapons, traps and nets.

(a) This section applies to all park areas in Alaska except Klondike Gold Rush National Historical Park, Sitka National Historical Park and the former Mt. McKinley National Park, Glacier Bay National Monument and Katmai National Monument.

(b) Firearms may be carried within park areas in accordance with applicable Federal and State laws, except where such carrying is prohibited or otherwise restricted pursuant to § 13.30.

(c) Traps, bows and other implements authorized by State and Federal law for the taking of fish and wildlife may be carried within National Preserves only during those times when the taking of fish and wildlife is authorized by applicable law or regulation.

(d) In addition to the authorities provided in paragraphs (b) and (c) of this section, weapons (other than firearms) traps and nets may be possessed within park areas provided such weapons, traps or nets are within or upon a device or animal used for transportation and are unloaded and cased or otherwise packed in such a manner as to prevent their ready use while in a park area.

(e) Notwithstanding the provisions of this section, local rural residents who are authorized to engage in subsistence uses, including the taking of wildlife pursuant to § 13.48, may use, possess, or carry traps, nets and other weapons in accordance with applicable State and Federal laws.

§ 13.20 Preservation of natural features.

(a) This section applies to all park areas in Alaska except Klondike Gold Rush National Historical Park, Sitka National Historical Park, the former Mt. McKinley National Park, Glacier Bay National Monument, and Katmai National Monument.

(b) *Renewable Resources.* The gathering or collecting, by hand and for personal use only, of the following renewable resources is permitted:

(1) Natural plant food items, including fruits, berries and mushrooms, but not including threatened or endangered species;

(2) Driftwood and uninhabited seashells;

(3) Such plant materials and minerals as are essential to the conduct of traditional ceremonies by Native Americans; and

(4) Dead or downed wood for use in fires within park areas.

(c) *Rocks and Minerals.* Surface collection, by hand (including hand-held gold pans) and for personal recreational use only, of rocks and minerals is permitted: *Provided, however,* That (1) collection of silver, platinum, gemstones and fossils is prohibited, and (2) collection methods which may result in disturbance of the ground surface, such as the use of shovels, pickaxes, sluice boxes, and dredges, are prohibited.

(d) *Closure and Notice.* Under conditions where it is found that significant adverse impact on park resources, wildlife populations, subsistence uses, or visitor enjoyment of resources will result, the Superintendent shall prohibit the gathering or otherwise restrict the collecting of these items. Portions of a park area in which closures or restrictions apply shall be (1) published in at least one newspaper of general circulation in the State and designated on a map which shall be available for public inspection in the office of the Superintendent, or (2) designated by the posting of appropriate signs, or (3) both.

(e) *Subsistence.* Nothing in this section shall apply to local rural residents authorized to take renewable resources.

§ 13.21 Taking of fish and wildlife.

(a) *Subsistence.* Nothing in this section shall apply to the taking of fish and wildlife for subsistence uses.

(b) *Fishing.* Fishing is permitted in all park areas in accordance with applicable State and Federal law, and such laws are hereby adopted and made a part of these regulations to the extent they are not inconsistent with § 2.13 of this chapter. With respect to the Cape Krusenstern National Monument, the Malaspina Glacier Forelands area of the Wrangell-St. Elias National Preserve, and the Dry Bay area of Glacier Bay National Preserve, the exercise of valid commercial fishing rights or privileges obtained pursuant to existing law—including any use of park area lands for campsites, cabins, motorized vehicles, and aircraft landings on existing airstrips which is directly incident to the exercise of such rights or privileges—may continue: *Provided, however,* That the Superintendent may restrict the use of park area lands directly incident to the exercise of these rights or privileges if he/she determines, after conducting a public hearing in the affected locality, that such use of park area lands constitutes a significant expansion of the use of park area lands beyond the level of such use during 1979.

(c) *Hunting and Trapping.* Hunting and trapping are permitted in all National Preserves in accordance with applicable State and Federal law, and such laws are hereby adopted and made a part of these regulations: *Provided, however,* That engaging in trapping activities, as the employee of another person is prohibited.

(d) *Closures and Restrictions.* The Superintendent may prohibit or restrict the taking of fish or wildlife in accordance with the provisions of § 13.30. Except in emergency conditions, such restrictions shall take effect only after consultation with the appropriate State agency having responsibility over fishing, hunting, or trapping and representatives of affected users.

§ 13.22 Unattended or abandoned property.

(a) This section applies to all park areas in Alaska except Klondike Gold Rush National Historical Park and Sitka National Historical Park, or as further restricted for specific park areas in Subpart C of this part.

(b) Leaving any snowmachine, vessel, off-road vehicle or other personal property unattended for longer than 12 months without prior permission of the Superintendent is prohibited, and any property so left may be impounded by the Superintendent.

(c) The Superintendent may (1) designate areas where personal property may not be left unattended for any time period, (2) establish limits on the amount, and type of personal property that may be left unattended, (3) prescribe the manner in which personal property may be left unattended, or (4) establish limits on the length of time personal property may be left unattended. Such designations and restrictions shall be (i) published in at least one newspaper of general circulation within the State, posted at community post offices within the vicinity affected, made available for broadcast on local radio stations in a manner reasonably calculated to inform residents in the affected community, and designated on a map which shall be available for public inspection at the office of the Superintendent, or (ii) designated by the posting of appropriate signs or (iii) both.

(d) In the event unattended property interferes with the safe and orderly management of a park area or is causing damage to the resources of the area, it may be impounded by the Superintendent at any time.

§ 13.30 Closure procedures.

(a) *Authority.* The Superintendent may close an area or restrict an activity on an emergency, temporary, or permanent basis.

(b) *Criteria.* In determining whether to close an area or restrict an activity on an emergency basis, the Superintendent shall be guided by factors such as public health and safety, resource protection, protection of cultural or scientific values, subsistence uses, endangered or threatened species conservation, and other management considerations necessary to ensure that the activity or area is being managed in a manner compatible with the purposes for which the park area was established.

(c) *Emergency Closures.* (1) Emergency closures or restrictions relating to the use of aircraft, snowmachines, motorboats, or nonmotorized surface transportation shall be made after notice and hearing; (2) emergency closures or restrictions relating to the taking of fish and wildlife shall be accompanied by notice and hearing; (3) other emergency closures shall become effective upon notice as prescribed in § 13.30(f); and (4) no emergency closure or restriction shall extend for a period exceeding 30 days, nor may it be extended.

(d) *Temporary closures or restrictions.* (1) Temporary closures or restrictions relating to the use of aircraft, snowmachines, motorboats, or nonmotorized surface transportation or to the taking of fish and wildlife, shall not be effective prior to notice and hearing in the vicinity of the area(s) directly affected by such closures or restrictions, and other locations as appropriate; (2) other temporary closures shall be effective upon notice as prescribed in § 13.30(f); (3) temporary closures or restrictions shall not extend for a period exceeding 12 months and may not be extended.

(e) *Permanent closures or restrictions.* Permanent closures or restrictions shall be published as rulemaking in the **Federal Register** with a minimum public comment period of 60 days and shall be accompanied by public hearings in the area affected and other locations as appropriate.

(f) *Notice.* Emergency, temporary and permanent closures or restrictions shall be (1) published in at least one newspaper of general circulation in the State and in at least one local newspaper if available, posted at community post offices within the vicinity affected, made available for broadcast on local radio stations in a manner reasonably calculated to inform residents in the affected vicinity, and designated on a map which shall be available for public inspection at the office of the Superintendent and other places convenient to the public; or (2) designated by the posting of appropriate signs; or (3) both.

(g) *Openings.* In determining whether to open an area to public use or activity otherwise prohibited, the Superintendent shall provide notice in the **Federal Register** and shall, upon request, hold a hearing in the affected vicinity and other locations as appropriate prior to making a final determination.

(h) Except as otherwise specifically permitted under the provisions of this part, entry into closed areas or failure to abide by restrictions established under this section is prohibited.

§ 13.31 Permits.

(a) *Application.* (1) Application for a permit required by any section of this part shall be submitted to the Superintendent having jurisdiction over the affected park area, or in the absence of the Superintendent, the Regional Director. If the applicant is unable or does not wish to submit the application in written form, the Superintendent shall provide the applicant an opportunity to present the application orally and shall keep a record of such oral application.

(2) The Superintendent shall grant or deny the application in writing within 45 days. If this deadline cannot be met for good cause, the Superintendent shall so notify the applicant in writing. If the permit application is denied, the Superintendent shall specify in writing the reasons for the denial.

(b) *Denial and appeal procedures.* (1) An applicant whose application for a permit, required pursuant to this part, has been denied by the Superintendent has the right to have the application reconsidered by the Regional Director by contacting him/her within 180 days of the issuance of the denial. For purposes of reconsideration, the permit applicant shall present the following information:

(i) Any statement or documentation, in addition to that included in the initial application, which demonstrates that the applicant satisfies the criteria set forth in the section under which the permit application is made.

(ii) The basis for the permit applicant's disagreement with the Superintendent's findings and conclusions; and

(iii) Whether or not the permit applicant requests an informal hearing before the Regional Director.

(2) The Regional Director shall provide a hearing if requested by the applicant. After consideration of the written materials and oral hearing, if any, and within a reasonable period of time, the Regional Director shall affirm, reverse, or modify the denial of the Superintendent and shall set forth in writing the basis for the decision. A copy of the decision shall be forwarded promptly to the applicant and shall constitute final agency action.

Subpart B—Subsistence

§ 13.40 Purpose and policy.

(a) Consistent with the management of fish and wildlife in accordance with recognized scientific principles and the purposes for which each park area was established, designated, or expanded by ANILCA, the purpose of this subpart is to provide the opportunity for local rural residents engaged in a subsistence way of life to do so pursuant to applicable State and Federal law.

(b) Consistent with sound management principles, and the conservation of healthy populations of fish and wildlife, the utilization of park areas is to cause the least adverse impact possible on local rural residents who depend upon subsistence uses of the resources of the public lands in Alaska.

(c) Nonwasteful subsistence uses of fish, wildlife and other renewable resources by local rural residents shall be the priority consumptive uses of such resources over any other consumptive uses permitted within park areas pursuant to applicable State and Federal law.

(d) Whenever it is necessary to restrict the taking of a fish or wildlife population within a park area for subsistence uses in order to assure the continued viability of such population or to continue subsistence uses of such population, the population shall be allocated among local rural residents engaged in subsistence uses in accordance with a subsistence priority system based on the following criteria:

(1) Customary and direct dependence upon the resource as the mainstay of one's livelihood;

(2) Local residency; and

(3) Availability of alternative resources.

(e) The State of Alaska is authorized to regulate the taking of fish and wildlife for subsistence uses within park areas to the extent such regulation is consistent with applicable Federal law, including but not limited to ANILCA.

(f) Nothing in this subpart shall be construed as permitting a level of subsistence use of fish and wildlife within park areas to be inconsistent with the conservation of healthy populations, and within a national park or monument to be inconsistent with the conservation of natural and healthy populations, of fish and wildlife.

§ 13.41 Applicability.

Subsistence uses by local rural residents are allowed pursuant to the regulations of this Subpart in the following park areas:

(a) In national preserves;

(b) In Cape Krusenstern National Monument and Kobuk Valley National Park;

(c) Where such uses are traditional (as may be further designated for each park or monument in Subpart C of this part) in Aniakchak National Monument, Gates of the Arctic National Park, Lake Clark National Park, Wrangell-St. Elias National Park, and the Denali National Park addition.

§ 13.42 Definitions.

(a) *Local rural resident.* (1) As used in this part with respect to national parks and monuments, the term "local rural resident" shall mean either of the following:

(i) Any person who has his/her primary, permanent home within the resident zone as defined by this section, and whenever absent from this primary, permanent home, has the intention of returning to it. Factors demonstrating the location of a person's primary, permanent home may include, but are not limited to, the permanent address indicated on licenses issued by the State of Alaska Department of Fish and Game, driver's license, and tax returns, and the location of registration to vote.

(ii) Any person authorized to engage in subsistence uses in a national park or monument by a subsistence permit issued pursuant to § 13.44.

(b) *Resident zone.* As used in this part, the term "resident zone" shall mean the area within, and the communities and areas near, a national park or monument in which persons who have customarily and traditionally engaged in subsistence uses within the national park or monument permanently reside. The communities and areas near a national park or monument included as a part of its resident zone shall be determined pursuant to § 13.43 and listed for each national park or monument in Subpart C of this part.

(c) *Subsistence uses.* As used in this part, the term "subsistence uses" shall mean the customary and traditional uses by rural Alaska residents of wild, renewable resources for direct personal or family consumption as food, shelter, fuel, clothing, tools or transportation; for the making and selling of handicraft articles out of nonedible byproducts of fish and wildlife resources taken for personal or family consumption; for barter or sharing for personal or family consumption; and for customary trade. For the purposes of this paragraph, the term—

(1) "Family" shall mean all persons related by blood, marriage, or adoption, or any person living within the household on a permanent basis; and

(2) "Barter" shall mean the exchange of fish or wildlife or their parts taken for subsistence uses—

(i) For other fish or game or their parts; or

(ii) For other food or for nonedible items other than money if the exchange is of a limited and noncommercial nature; and

(3) "Customary trade" shall be limited to the exchange of furs for cash (and such other activities as may be designated for a specific park area in Subpart C of this part).

§ 13.43 Determination of resident zones.

(a) A resident zone shall include—

(1) the area within a national park or monument, and

(2) the communities and areas near a national park or monument which contain significant concentrations of rural residents who, without using aircraft as a means of access for purposes of taking fish or wildlife for subsistence uses (except in extraordinary cases where no reasonable alternative existed), have customarily and traditionally engaged in subsistence uses within a national park or monument. For purposes of

determining "significant" concentrations, family members shall also be included.

(b) After notice and comment, including public hearing in the affected local vicinity, a community or area near a national park or monument may be—

(1) Added to a resident zone, or

(2) Deleted from a resident zone, when such community or area does or does not meet the criteria set forth in paragraph (a) of this section, as appropriate.

(c) For purposes of this section, the term "family" shall mean all persons living within a rural resident's household on a permanent basis.

§ 13.44 Subsistence permits for persons whose primary, permanent home is outside a resident zone.

(a) Any rural resident whose primary, permanent home is outside the boundaries of a resident zone of a national park or monument may apply to the appropriate Superintendent pursuant to the procedures set forth in § 13.51 for a subsistence permit authorizing the permit applicant to engage in subsistence uses within the national park or monument. The Superintendent shall grant the permit if the permit applicant demonstrates that,

(1) Without using aircraft as a means of access for purposes of taking fish and wildlife for subsistence uses, the applicant has (or is a member of a family which has) customarily and traditionally engaged in subsistence uses within a national park or monument; or

(2) The applicant is a local rural resident within a resident zone for another national park or monument, or meets the requirements of paragraph (1) of this section for another national park or monument, and there exists a pattern of subsistence uses (without use of an aircraft as a means of access for purposes of taking fish and wildlife for subsistence uses) between the national park or monument previously utilized by the permit applicant and the national park or monument for which the permit applicant seeks a subsistence permit.

(b) In order to provide for subsistence uses pending application for and receipt of a subsistence permit, until August 1, 1981, any rural resident whose primary permanent home is outside the boundaries of a resident zone of a national park or monument and who meets the criteria for a subsistence permit set forth in paragraph (a) of this section may engage in subsistence uses in the national park or monument without a permit in accordance with applicable State and Federal law. Effective August 1, 1981, however, such rural resident must have a subsistence permit as required by paragraph (a) of this section in order to engage in subsistence uses in the national park or monument.

(c) For purposes of this section, the term "family" shall mean all persons living within a rural resident's household on a permanent basis.

§ 13.45 Prohibition of aircraft use.

(a) Notwithstanding the provisions of § 13.12 the use of aircraft for access to or from lands and waters within a national park or monument for purposes of taking fish or wildlife for subsistence uses within the national park or monument is prohibited except as provided in this section.

(b) *Exceptions.* (1) In extraordinary cases where no reasonable alternative exists, the Superintendent shall permit, pursuant to specified terms and conditions, a local rural resident of an "exempted community" to use aircraft for access to or from lands and water within a national park or monument for purposes of taking fish or wildlife for subsistence uses.

(i) A community shall quality as an "exempted community" if, because of the location of the subsistence resources upon which it depends and the extraordinary difficulty of surface access to these subsistence resources, the local rural residents who permanently reside in the community have no reasonable alternative to aircraft use for access to these subsistence resources.

(ii) A community which is determined, after notice and comment (including public hearing in the affected local vicinity), to meet the description of an "exempted community" set forth in paragraph (b)(1) of this section shall be included in the appropriate special regulations for each park and monument set forth in Subpart C of this part.

(iii) A community included as an "exempted community" in Subpart C of this part may be deleted therefrom upon a determination, after notice and comment (including public hearing in the affected local vicinity), that it does not meet the description of an "exempted community" set forth in paragraph (b)(1) of this section.

(2) Any local rural resident aggrieved by the prohibition on aircraft use set forth in this section may apply for an exception to the prohibition pursuant to the procedures set forth in § 13.51. In extraordinary cases where no reasonable alternative exists, the Superintendent may grant the exception upon a determination that the location of the subsistence resources depended upon and the difficulty of surface access to these resources, or other emergency situation, requires such relief.

(c) Nothing in this section shall prohibit the use of aircraft for access to lands and waters within a national park or monument for purposes of engaging in any activity allowed by law other than the taking of fish and wildlife. Such activities include, but are not limited to, transportating supplies.

§ 13.46 Use of snowmobiles, motorboats, dog teams, and other means of surface transportation traditionally employed by local rural residents engaged in subsistence uses.

(a) Notwithstanding any other provision of this chapter, the use of snowmobiles, motorboats, dog teams, and other means of surface transportation traditionally employed by local rural residents engaged in subsistence uses is permitted within park areas except at those times and in those areas restricted or closed by the Superintendent.

(b) The Superintendent may restrict or close a route or area to use of snowmobiles, motorboats, dog teams, or other means of surface transportation traditionally employed by local rural residents engaged in subsistence uses if the Superintendent determines that such use is causing or is likely to cause an adverse impact on public health and safety, resource protection, protection of historic or scientific values, subsistence uses, conservation of endangered or threatened species, or the purposes for which the park area was established.

(c) No restrictions or closures shall be imposed without notice and a public hearing in the affected vicinity and other locations as appropriate. In the case of emergency situations, restrictions or closures shall not exceed sixty (60) days and shall not be extended unless the Superintendent establishes, after notice and public hearing in the affected vicinity and other locations as appropriate, that such extension is justified according to the factors set forth in paragraph (b) of this section. Notice of the proposed or emergency restrictions or closures and the reasons therefor shall be published in at least one newspaper of general circulation within the State and in at least one local newspaper if appropriate, and information about such proposed or emergency actions shall also be made available for broadcast on local radio stations in a manner reasonably calculated to inform local rural residents in the affected vicinity. All restrictions and closures shall be designated on a map which shall be available for public inspection at the office of the

Superintendent of the affected park area and the post office or postal authority of every affected community within or near the park area, or by the posting of signs in the vicinity of the restrictions or closures, or both.

(d) Motorboats, snowmobiles, dog teams, and other means of surface transportation traditionally employed by local rural residents engaged in subsistence uses shall be operated (1) in compliance with applicable State and Federal law, (2) in such a manner as to prevent waste or damage to the park areas, and (3) in such a manner as to prevent the herding, harassment, hazing or driving of wildlife for hunting or other purposes.

(e) At all times when not engaged in subsistence uses, local rural residents may use snowmobiles, motorboats, dog teams, and other means of surface transportation in accordance with §§ 13.10, 13.11, 13.12, and 13.14, respectively.

§ 13.47 Subsistence fishing.

Fish may be taken by local rural residents for subsistence uses in park areas where subsistence uses are allowed in compliance with applicable State and Federal law, including the provisions of §§ 2.13 and 13.21 of this chapter: *Provided, however,* That local rural residents in park areas where subsistence uses are allowed may fish with a net, seine, trap, or spear where permitted by State law. To the extent consistent with the provisions of this chapter, applicable State laws and regulations governing the taking of fish which are now or will hereafter be in effect are hereby incorporated by reference as a part of these regulations.

§ 13.48 Subsistence hunting and trapping.

Local rural residents may hunt and trap wildlife for subsistence uses in park areas where subsistence uses are allowed in compliance with applicable State and Federal law. To the extent consistent with the provisions of this chapter, applicable State laws and regulations governing the taking of wildlife which are now or will hereafter be in effect are hereby incorporated by reference as a part of these regulations.

§ 13.49 Subsistence use of timber and plant materials.

(a) Notwithstanding any other provision of this part, the non-commercial cutting of live standing timber by local rural residents for appropriate subsistence uses, such as firewood or house logs, may be permitted in park areas where subsistence uses are allowed as follows:

(1) For live standing timber of diameter greater than three inches at ground height, the Superintendent may permit cutting in accordance with the specifications of a permit if such cutting is determined to be compatible with the purposes for which the park area was established;

(2) For live standing timber of diameter less than three inches at ground height, cutting is permitted unless restricted by the Superintendent.

(b) The noncommerical gathering by local rural residents of fruits, berries, mushrooms, and other plant materials for subsistence uses, and the noncommerical gathering of dead or downed timber for firewood, shall be allowed without a permit in park areas where subsistence uses are allowed.

(c)(1) Nothwithstanding any other provision of this part, the Superintendent, after notice and public hearing in the affected vicinity and other locations as appropriate, may temporarily close all or any portion of a park area to subsistence uses of a particular plant population only if necessary for reasons of public safety, administration, or to assure the continued viability of such population. For the purposes of this section, the term "temporarily" shall mean only so long as reasonably necessary to achieve the purposes of the closure.

(2) If the Superintendent determines that an emergency situation exists and that extraordinary measures must be taken for public safety or to assure the continued viability of a particular plant population, the Superintendent may immediately close all or any portion of a park area to the subsistence uses of such population. Such emergency closure shall be effective when made, shall be for a period not to exceed sixty (60) days, and may not subsequently be extended unless the Superintendent establishes, after notice and public hearing in the affected vicinity and other locations as appropriate, that such closure should be extended.

(3) Notice of administrative actions taken pursuant to this section, and the reasons justifying such actions, shall be published in at least one newspaper of general circulation within the State and at least one local newspaper if available, and information about such actions and reasons also shall be made available for broadcast on local radio stations in a manner reasonably calculated to inform local rural residents in the affected vicinity. All closures shall be designated on a map which shall be available for public inspection at the office of the Superintendent of the affected park area and the post office or postal authority of every affected community within or near the park area, or by the posting of signs in the vicinity of the restrictions, or both.

§ 13.50 Closure to subsistence uses of fish and wildlife.

(a) Notwithstanding any other provision of this part, the Superintendent, after consultation with the State and adequate notice and public hearing in the affected vicinity and other locations as appropriate, may temporarily close all or any portion of a park area to subsistence uses of a particular fish or wildlife population only if necessary for reasons of public safety, administration, or to assure the continued viability of such population. For purposes of this section, the term "temporarily" shall mean only so long as reasonably necessary to achieve the purposes of the closure.

(b) If the Superintendent determines that an emergency situation exists and that extraordinary measures must be taken for public safety or to assure the continued viability of a particular fish or wildlife population, the Superintendent may immediately close all or any portion of a park area to the subsistence uses of such population. Such emergency closure shall be effective when made, shall be for a period not to exceed sixty (60) days, and may not subsequently be extended unless the Superintendent establishes, after notice and public hearing in the affected vicinity and other locations as appropriate, that such closure should be extended.

(c) Notice of administrative actions taken pursuant to this section, and the reasons justifying such actions, shall be published in at least one newspaper of general circulation within the State and in at least one local newspaper if available, and information about such actions and reasons also shall be made available for broadcast on local radio stations in a manner reasonably calculated to inform local rural residents in the affected vicinity. All closures shall be designated on a map which shall be available for public inspection at the office of the Superintendent of the affected park area and the post office or postal authority of every affected community within or near the park area, or by the posting of signs in the vicinity of the restrictions, or both.

§ 13.51 Application procedures for subsistence permits and aircraft exceptions.

(a) Any person applying for the subsistence permit required by § 13.44(a), or the exception to the prohibition on aircraft use provided by

§ 13.45(b)(2), shall submit his/her application to the Superintendent of the appropriate national park or monument. If the applicant is unable or does not wish to submit the application in written form, the Superintendent shall provide the applicant an opportunity to present the application orally and shall keep a record of such oral application. Each application must include (1) a statement which acknowledges that providing false information in support of the application is a violation of Section 1001 of Title 18 of the United States Code, and (2) additional statements or documentation which demonstrates that the applicant satisfies the criteria set forth in § 13.44(a) for a subsistence permit or § 13.45(b)(2) for the aircraft exception, as appropriate. Except in extraordinary cases for good cause shown, the Superintendent shall decide whether to grant or deny the application in a timely manner not to exceed forty-five (45) days following the receipt of the completed application. Should the Superintendent deny the application, he/she shall include in the decision a statement of the reasons for the denial and shall promptly forward a copy to the applicant.

(b) An applicant whose application has been denied by the Superintendent has the right to have his/her application reconsidered by the Alaska Regional Director by contacting the Regional Director within 180 days of the issuance of the denial. The Regional Director may extend the 180-day time limit to initiate a reconsideration for good cause shown by the applicant. For purposes of reconsideration, the applicant shall present the following information:

(1) Any statement or documentation, in addition to that included in the initial application, which demonstrates that the applicant satisfies the criteria set forth in paragraph (a) of this section;

(2) The basis for the applicant's disagreement with the Superintendent's findings and conclusions; and

(3) Whether or not the applicant requests an informal hearing before the Regional Director.

(c) The Regional Director shall provide a hearing if requested by the applicant. After consideration of the written materials and oral hearing, if any, and within a reasonable period of time, the Regional Director shall affirm, reverse, or modify the denial of the Superintendent and shall set forth in writing the basis for the decision. A copy of the decision shall be forwarded promptly to the applicant and shall constitute final agency action.

Subpart C—Special Regulations—Specific Park Areas in Alaska

§ 13.64 Gates of the Arctic National Park and Preserve.

(a) *Subsistence.*—(1) *Resident Zone.* The following communities and areas are included within the resident zone for Gates of the Arctic National Park:

Alatna
Allakaket
Ambler
Anaktuvuk Pass
Bettles/Evansville
Hughes
Kobuk
Nuiqsut
Shungnak
Wiseman

(2) *Aircraft Use.* In extraordinary cases where no reasonable alternative exists, local rural residents who permanently reside in the following exempted community(ies) may use aircraft for access to lands and waters within the park for subsistence purposes in accordance with a permit issued by the Superintendent:

Anaktuvuk Pass

(2) *Customary Trade.* In The Gates of the Arctic National Preserve unit which contains the Kobuk River and its tributaries, "customary trade" shall include—in addition to the exchange of furs for cash—the selling of handicraft articles made from plant material taken by local rural residents of the park area.

§ 1.5 Closures and public use limits.

(a) Consistent with applicable legislation and Federal administrative policies, and based upon a determination that such action is necessary for the maintenance of public health and safety, protection of environmental or scenic values, protection of natural or cultural resources, aid to scientific research, implementation of management responsibilities, equitable allocation and use of facilities, or the avoidance of conflict among visitor use activities, the superintendent may:

(1) Establish, for all or a portion of a park area, a reasonable schedule of visiting hours, impose public use limits, or close all or a portion of a park area to all public use or to a specific use or activity.

(2) Designate areas for a specific use or activity, or impose conditions or restrictions on a use or activity.

(3) Terminate a restriction, limit, closure, designation, condition, or visiting hour restriction imposed under paragraph (a)(1) or (2) of this section.

(b) Except in emergency situations, a closure, designation, use or activity restriction or condition, or the termination or relaxation of such, which is of a nature, magnitude and duration that will result in a significant alteration in the public use pattern of the park area, adversely affect the park's natural, aesthetic, scenic or cultural values, require a long-term or significant modification in the resource management objectives of the unit, or is of a highly controversial nature, shall be published as rulemaking in the FEDERAL REGISTER.

(c) Except in emergency situations, prior to implementing or terminating a restriction, condition, public use limit or closure, the superintendent shall prepare a written determination justifying the action. That determination shall set forth the reason(s) the restriction, condition, public use limit or closure authorized by paragraph (a) has been established, and an explanation of why less restrictive measures will not suffice, or in the case of a termination of a restriction, condition, public use limit or closure previously established under paragraph (a), a determination as to why the restriction is no longer necessary and a finding that the termination will not adversely impact park resources. This determination shall be available to the public upon request.

(d) To implement a public use limit, the superintendent may establish a permit, registration, or reservation system. Permits shall be issued in accordance with the criteria and procedures of § 1.6 of this chapter.

(e) Except in emergency situations, the public will be informed of closures, designations, and use or activity restrictions or conditions, visiting hours, public use limits, public use limit procedures, and the termination or relaxation of such, in accordance with § 1.7 of this chapter.

(f) Violating a closure, designation, use or activity restriction or condition, schedule of visiting hours, or public use limit is prohibited. When a permit is used to implement a public use limit, violation of the terms and conditions of a permit is prohibited and may result in the suspension or revocation of the permit.

PROPOSED CHANGES TO REGULATIONS
(36 CFR PART 13)

Subpart A - Public Use and Recreation

13.1 Definitions. No change.

13.2 Applicability and scope. No change.

13.4 Information collection. No change.

13.17 Cabins and other structures. No change.

13.18 Camping and picnicking. Prohibit single campsite use by more than 6 people per backcountry group or 10 people per river running group between June 1 and September 30. Prohibit single campsite use by more than 10 people between October 1 and May 31. For slightly larger groups, two or three extra people, advance written permission from the superintendent may be obtained under certain conditions. Prohibit camping at a single site for longer than three nights without prior written permission from the superintendent. No campsite in use may be located within ½ mile of another campsite in use. Prohibit campfires on tundra or anywhere beyond tree line. Establish zone around Arrigetch Peaks and Circle Lake requiring permit, limit use to 3 groups at any one time, maximum length of stay 10 days. This closure does not apply to subsistence users.

13.19 Weapons, traps, and nets. Require all bear and other wildlife incidents involving human injury or death, damage to property, harm to wildlife, or discharge of firearms in adverse wildlife encounters to be promptly reported to National Park Service personnel. Closure does not apply to subsistence users or preserve.

13.20 Preservation of natural features. No change.

13.21 Taking of fish and wildlife. No change.

13.22 Unattended or abandoned property. Prohibit food and stove fuel caches unless stored in approved containers for no longer than one month. Require permit for unattended property at Walker Lake and Arrigetch Peaks zone. Prohibit aviation, motorboat, or other vehicle fuel caches in park and preserve. Closures do not apply to subsistence users.

13.30 Closure procedures. No change.

13.31 Permits. Applications for the following activities between June 1 and September 30 must be submitted and completed 45 days prior to the start of each season (April 15); applications for the following activities that occur between October 1 and May 31 must be submitted and completed 45 days prior to the start of the proposed activity: research activities involving specimen collection, helicopter landings, special events, and temporary access to private property.

Subpart B - Subsistence

13.40 - 13.51. No change.

Subpart C - Special Regulations-Specific Park Areas in Alaska

13.46 Gates of the Arctic National Park and Preserve. As necessary to implement the foregoing changes.

43 CFR 36

36.10 Access to inholdings. No change.

36.11(c) Snowmachines. The National Park Service intends to pursue legislation that would discontinue the recreational use of snowmachines in certain areas of the unit.

36.11(d) Motorboats. The National Park Service intends to pursue legislation that would discontinue the recreational use of motorboats in certain areas of the unit.

36.11(e) Nonmotorized surface transportation. Limit use of hoofed pack animals to three per party; requires permit from superintendent.

36.11(f) Aircraft. No change.

36.11(g) Off-road vehicles. No change.

36.11(h) Closure procedures. No change.

36.12 Temporary access. No change.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
1011 E. TUDOR RD.
ANCHORAGE, ALASKA 99503
(907) 276-3800

IN REPLY REFER TO:

SE

2 8 MAR 1984

Mr. Roger J. Contor
Regional Director
National Park Service
2525 Gambell Street, Room 107
Anchorage, Alaska 99503-2892

Dear Mr. Contor:

This responds to your March 1, 1984, inquiry. The following summarizes the occurrence of marine mammals, migratory birds, and endangered species in the five park areas you identified and assesses the relative importance of the areas to those species present.

Bering Land Bridge National Preserve

Marine Mammals - Walruses are harvested offshore. Polar bears and ice associated seals are harvested in substantial numbers by residents of Shishmaref and probably other villages, but actual use of the land area is relatively infrequent. Bowheads and beluga whales are common migrants along the coast.

Migratory Birds - The northern side of the Seward Peninsula is extremely important to numerous species of migratory birds. During spring migration, a large variety of waterbirds follow the coast into Kotzebue Sound, resting at the numerous creek and river outlets. Important species include snow and Canada geese, black brant, sandhill cranes, pintails, American wigeons, lesser scaup and numerous species of gulls and shorebirds. During the summer this region is an important nesting and molting area for numerous waterbirds, including black brant, emperor geese, sandhill cranes, tundra swans, and various duck and shorebird species. Particularly important areas are Cape Espenberg, the Nugnugaluktuk and Goodhope River deltas, and the lagoon system south and west of Shishmaref. During fall migration the Nugnugaluktuk and Goodhope river deltas are used as staging areas for thousands of Canada Geese and various duck and shorebird species. The lagoon system west of Shishmaref is also important.

Endangered Species - An old record indicates that Arctic peregrine falcons may have nested near the Preserve in the Cape Deceit area. Peregrines are not known to nest on the Preserve. Migratory peregrines likely pass through this area.

Artemisia senjavinensis and Carex jacobi-peteri are two candidate plant species (considered for possible future listing as threatened or endangered) which may be present on the Preserve.

Cape Krusenstern National Monument

Marine Mammals - Polar bears and ice associated seals frequent the pack ice off-shore during the winter. Bowhead and beluga whales migrate along the shear zone offshore.

Migratory Birds - The importance of the Cape Krusenstern area to migrating birds in the spring probably varies with snow and ice conditions. The lagoons between Cape Krusenstern and Sheshalik are heavily used by a large variety of migrating waterbirds if snow and ice conditions permit, and the area is an important spring waterfowl hunting area for subsistence users. The lagoons north of Cape Krusenstern are often frozen during spring migration and only creek outlets are open. During summer a variety of geese, ducks, shorebirds, and gulls nest and molt in the Krusenstern Monument. The area between Cape Krusenstern and Sheshalik is particularly important as a fall staging area for thousands of geese, ducks, shorebirds, and gulls. Tundra swans number in the several hundreds.

Endangered Species - Nesting by Arctic peregrine falcons has been reported within the southern half of the Monument. Although the total extent of nesting is unclear, the area is not considered to be one of the more important peregrine nesting areas.

Gates of the Arctic National Park and Preserve

Marine Mammals - Not present.

Migratory Birds - This park encompasses primarily mountains with poor waterfowl habitat. Certain passes, such as Anaktuvuk, are used by waterbirds migrating to and from the north slope. Deeper lakes in the region are used by diving ducks for nesting, molting, and migrating.

Endangered Species - No threatened or endangered species are known to occur. Arctic peregrine falcons may pass through portions of the Preserve during migration.

The candidate plants Erigeron muirii and Oxytropis glaberrima have been reported from Anaktuvuk Pass and the Kurupa Lake area, respectively. Either or both may be present within the Preserve.

Kobuk Valley National Park

Marine Mammals - Not present.

Migratory Birds - The upriver Kobuk area is utilized by migrating ducks and geese as soon as it begins to open in late April and early May. However ponds and lakes remain frozen late into spring. These ponds and lakes are utilized for nesting and molting by diving ducks and some geese, but not in large numbers.

Endangered Species - No threatened or endangered species are known to occur. Arctic peregrine falcons may pass through portions of the Park during migration.

A 25-mile section of the middle Kobuk River is the only known habitat for the candidate plant Oxytropis kobukensis. This plant is the subject of a proposed conservation agreement between the National Park Service and the U.S. Fish and Wildlife Service.

Noatak National Preserve

Marine Mammals - Not present.

Migratory Birds - That part of the Preserve bordering the Noatak River and river delta may provide important habitat to migrating and nesting ducks, geese, and tundra swans in spring and fall. However, the majority of prime waterfowl habitat is just outside of Preserve borders. That part of the Preserve within the Brooks Range is poor waterfowl habitat. Deep lakes are used by small numbers of nesting and migrating diving ducks. Certain passes, such as Howard Pass, are utilized by birds migrating to and from the North Slope.

Endangered Species - Although records indicate that Arctic peregrine falcons nested within the Preserve at one time, no recent nesting has been documented. Migrants likely pass through the Preserve.

Orytropis kokrinensis, a candidate plant species, is probably present within the Preserve. For additional information on the occurrence of these rare plants, see Hulten's Flora of Alaska and Neighboring Territories, reprinted in 1974 and David F. Murray's 1980 guide to Threatened and Endangered Plants of Alaska, published cooperatively by the U.S. Forest Service and the Bureau of Land Management, Anchorage, Alaska.

If you need additional information or details, feel free to contact either me or my staff (migratory birds and marine mammals - Dr. Jim Baker, 786-3444; endangered species - Dennis Money, 786-3431).

Sincerely,

Acting Regional Director

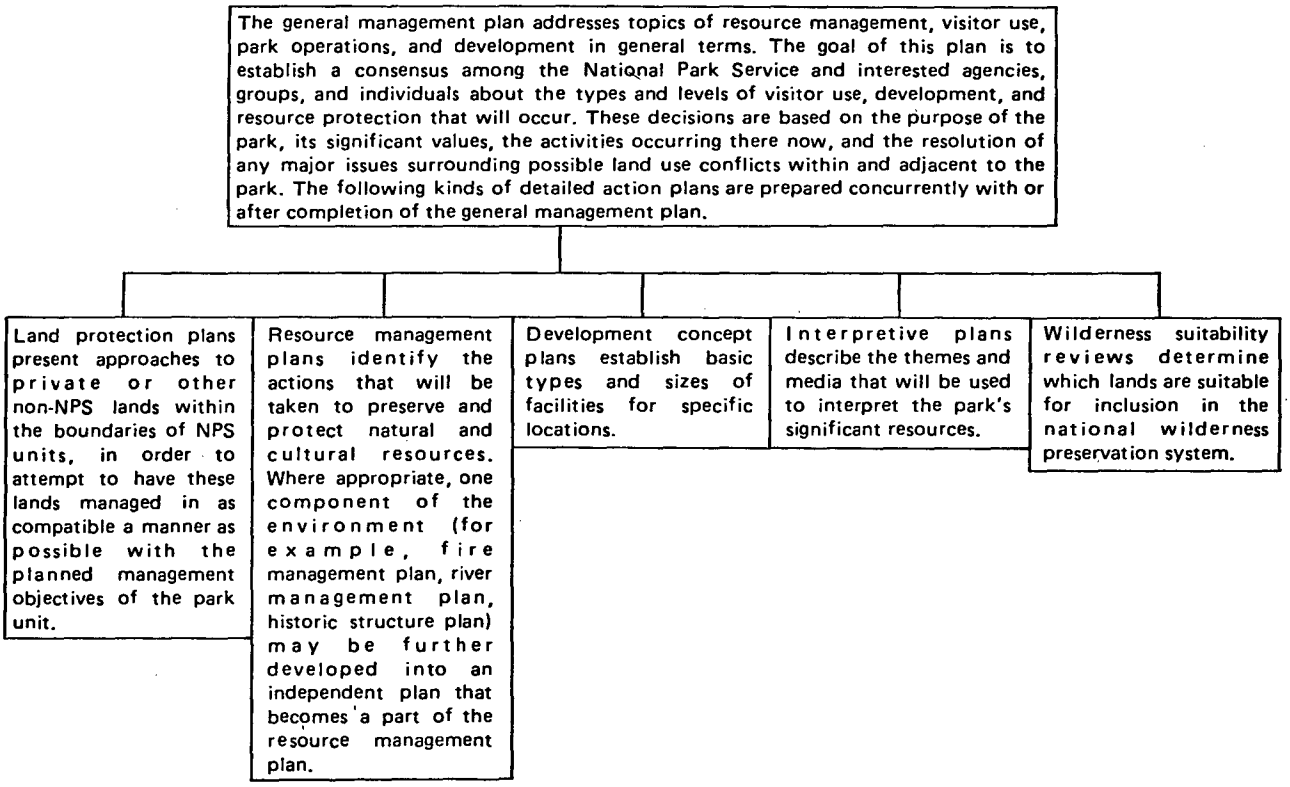
APPENDIX L: NPS PLANNING PROCESS

ANILCA REQUIREMENTS

Section 1301 of the Alaska National Interest Lands Conservation Act (ANILCA: PL 96-487) requires the preparation of conservation and management plans for each unit of the national park system established or enlarged by ANILCA. These plans are to describe programs and methods for managing resources, proposed development for visitor services and facilities, proposed access and circulation routes and transportation facilities, programs and methods for protecting the culture of local residents, plans for acquiring land or modifying boundaries, methods for ensuring that uses of private lands are compatible with the purposes of the unit, and opportunities for mutually beneficial cooperation with other regional landowners.

NPS PLANNING DOCUMENTS

The National Park Service planning process for each park (preserve, monument, or other unit of the system) involves a number of stages, progressing from the formulation of broad objectives, through decisions about what general management direction should be followed to achieve the objectives, to formulation of detailed actions for implementing specific components of the general management plan.



Depending largely on the complexity of individual planning efforts, action plans may or may not be prepared simultaneously with the general management plan. If they are prepared after the general plan, the NPS public involvement and cooperative planning efforts are continued until all of the implementation plans are completed.

APPENDIX M: POSSIBLE RS 2477 RIGHTS-OF-WAY IN GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE

THIS MAP OR LIST DOES NOT ESTABLISH THE VALIDITY OF THESE POTENTIAL RIGHTS-OF-WAY AND DOES NOT PROVIDE THE PUBLIC THE RIGHT TO TRAVEL OVER THEM. THIS MAP HAS BEEN PROVIDED BY THE STATE TO ILLUSTRATE RIGHTS-OF-WAY THAT THE STATE HAS IDENTIFIED AND CONTENDS MAY BE VALID UNDER RS 2477. THE USE OF OFF-ROAD VEHICLES IN LOCATIONS OTHER THAN ESTABLISHED ROADS OR DESIGNATED ROUTES IN UNITS OF THE NATIONAL PARK SYSTEM IS PROHIBITED (EO 11644 and EO 11989, AND 43 CFR 36.11(g)). IDENTIFICATION OF POSSIBLE RIGHTS-OF-WAY DOES NOT CONSTITUTE THE DESIGNATION OF ROUTES FOR OFF-ROAD VEHICLE USE.

Trail 51A (from jct. of Trail 51 Wiseman/Chandalar River Trail)

Identification - Quad 124, T30N, R5W,FM

Description: Trail 51A runs from Jct. with Trail 51 west of confluence of north fork of Koyukuk River and Hammond River northerly on west bank of Hammond River to Canyon Creek T31N, R12W.

Trail 56 Ned's Lake/Smith Creek Dome Trail

Identification - Quad 124, T20N, R23W, FM

Description: The trail begins at Ned's Lake and Jct. with 63 in T20N, R23,W FM, thence east and north along the Koyukuk River to Bettles, thence continuing along the Koyukuk and the middle fork of the Koyukuk on the south side through Tramway Bar and Coldfoot and onto Wiseman, thence up the Wiseman Creek to Noland Creek and Nolan, thence up Nolan Creek to Smith Creek Dome.

Trail 56A Nolan/Mascot Creek Trail

Identification - Quad 124, T13N, R13W, FM

Description: The trail runs from Noland westerly through Glacier Pass to Glacier River thence crossing Glacier River northwesterly to Mascot Creek, T31N, R13W.

Trail 60 Bettles/Quartz Creek

Identification - Quad 124, Bettles

Description: The trail begins at Bettles, then east to Bettles field, thence south of Birch Hill, crossing the Koyukuk River and traveling

north of the middle fork of the Koyukuk River; thence along the fork past 12 Mile Mountain to the fork of Porcupine and Quartz Creek.

Trail 60A Spur connecting Trails 60 and 56

Identification - Quad 124, Bettles

Description: The trail begins on Trail 60 at Mailbox Creek then south to Tramway Bar.

Trail 280 Hickel Highway

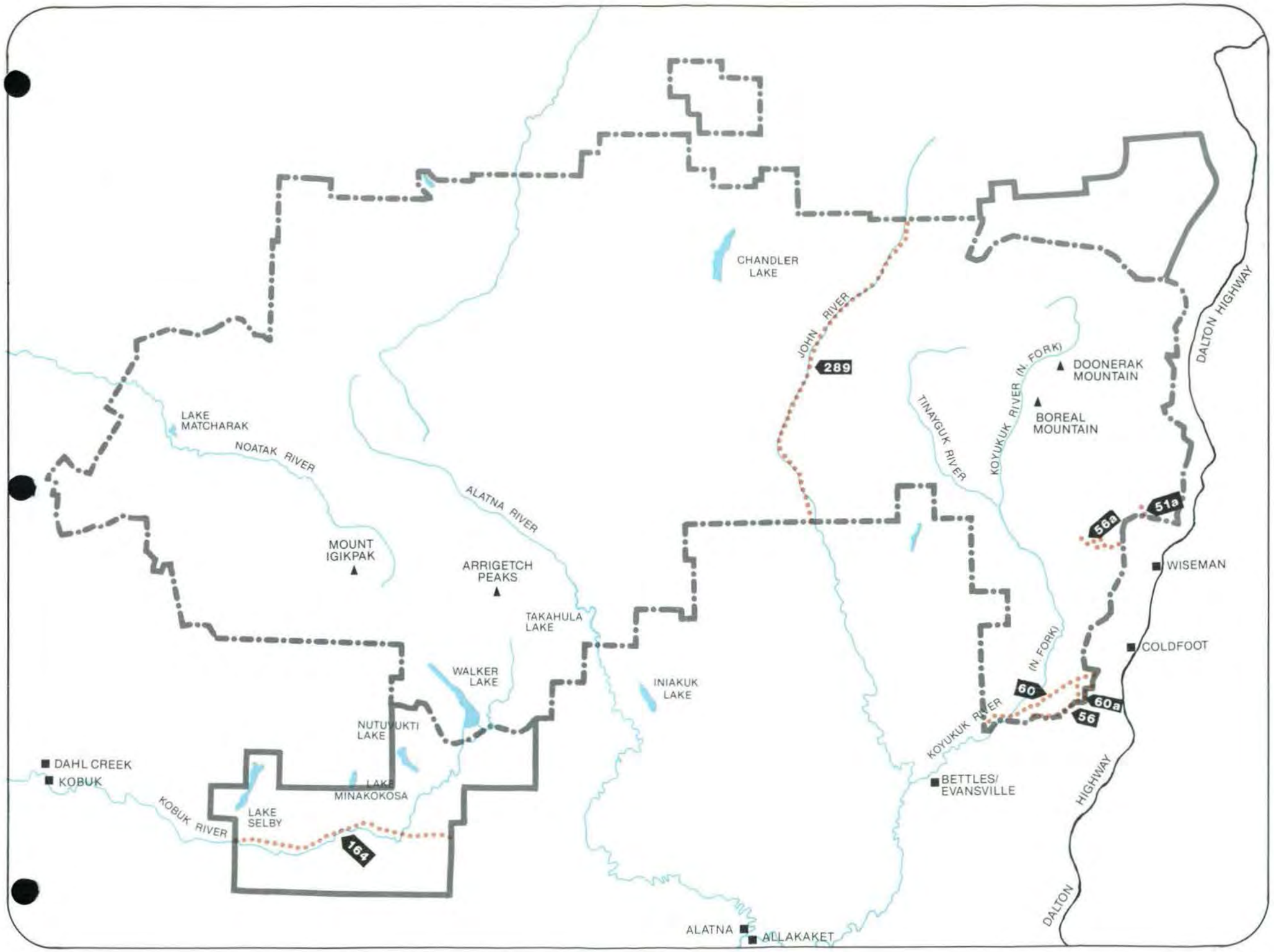
Identification - Quad 124, Livengood - Sagwon

Description: The trail runs from Livengood northerly via Trails 49 to Bettles Field, 59A north to Ninemile Cabin, thence easterly around Ninemile Hills to Death Valley, thence 59 to Crevice Creek, thence northerly along John River to Anaktuvuk Pass, thence northerly along Anaktuvuk River to Schrar Bluff, then northeasterly to the Itkillik River, thence easterly across the Kupuruk River to the Tookik River, thence northerly along Tookil for approximately 4 miles thence northeasterly and southeasterly around base of ridge, then southerly on Sagavanirktok River to Sagwon.

Trail 164 Alatna/Shungnak/Kotzebue

Identification - Quad 116, Hughes, Shungnak

Description: The trail extends up Alatna River to a point east of Norutak Lake, then across lake over to Kobuk River and up Kobuk River.



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POSSIBLE R.S. 2477 RIGHTS-OF-WAY

GATES OF THE ARCTIC

National Park and Preserve

- PARK BOUNDARY
- PRESERVE BOUNDARY
- POSSIBLE R.S. 2477 TRAIL
- 22 R.S. 2477 TRAIL NO.

(This number corresponds to the Alaska Existing Trails System. Source: State of Alaska Department of Transportation/Public Facilities. Submitted April 1974.)

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0 5 10 15 20 25 30 KILOMETERS

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APPENDIX N: DEFINITION OF TRADITIONAL

In applying the provisions of ANILCA as related to "means of surface transportation traditionally employed" (section 811) and "the use of snowmachines . . ., motorboats, airplanes, and nonmotorized surface transportation methods for traditional activities" (section 1110), the National Park Service has relied on the following definitions of "tradition(al)" from Webster's Third New International Dictionary of the English Language (unabridged), 1976:

> 2. The process of handing down information, opinions, beliefs, and customs by word of mouth or by example: transmission of knowledge and institution through successive generations without written instruction . . .
>
> 3. An inherited or established way of thinking, feeling or doing; a cultural feature (as an attitude, belief, custom, institution) preserved or evolved from the past; usage or custom rooted in the past (as of a family or nation); as a (1): a doctrine or practice or a body of doctrine and practice preserved by oral transmission (2): a belief or practice of the totality of beliefs and practices not derived directly from the Bible . . .
>
> 5.a. Cultural continuity embodied in a massive complex of evolving social attitudes, beliefs, conventions, and institutions rooted in the experience of the past and exerting an orienting and normative influence on the present b: the residual elements of past artistic styles or periods . . .

The National Park Service recognizes that it would be valuable to pursue, with those affected, the refinement of this definition in the context of the legislative history; in the interim, the Park Service will continue to use this definition in applying the above-referenced provisions of ANILCA. To qualify under ANILCA, a "traditional means" or "traditional activity" has to have been an established cultural pattern, per these definitions, prior to 1978 when the unit was established.

APPENDIX O: FINDING OF NO SIGNIFICANT IMPACT

The National Park Service is proposing to implement the final general management plan and land protection plan for Gates of the Arctic National Park and Preserve. The general management plan is intended to guide the management of the park/preserve for a period of 5 to 10 years and addresses all the major topics of management, including resources management, general public use, subsistence, access, and development. The land protection plan is reviewed, and revised as necessary, every two years, and presents proposals for the nonfederal land within and near the park/preserve.

A Draft General Management Plan/Environmental Assessment, Land Protection Plan, and Wilderness Suitability Review was distributed to the public in the spring of 1985, and comments were accepted until the end of August. A subsequent revised draft was distributed for a 60-day public comment period in December 1985.

The environmental assessment analyzed the impacts of four alternative management strategies for the park/preserve, including the impacts on wildlife, vegetation, cultural resources, park operations, and the local economy. It was determined that the proposal will cause no adverse impacts on the public health, public safety, or rare or endangered species. No highly uncertain or controversial impacts, or significant cumulative effects, were identified. Any negative environmental effects will be minor and/or temporary. The proposal will result in positive effects on natural and cultural resources within the park/preserve as a result of natural resource research and monitoring, and through cultural resource identification and protection. A complete evaluation of impacts resulting from the proposal and alternatives can be found in the draft plan and environmental assessment.

Based on the environmental analysis and public and agency comment on the proposed plans, I have determined that the proposed federal action will not significantly affect the quality of the human environment, and therefore an environmental impact statement will not be prepared.

Regional Director, Alaska Region

11/20/86
Date

BIBLIOGRAPHY

ALASKA DEPARTMENT OF COMMUNITY AND REGIONAL AFFAIRS

1972 Alaska Community Survey. Alaska Planning and Management.

1976a Ambler. University of Alaska, Arctic Environmental Information and Data Center.

1976b Kobuk. University of Alaska, Arctic Environmental Information and Data Center.

1976c Shungnak. University of Alaska, Arctic Environmental Information and Data Center.

ALASKA DEPARTMENT OF FISH AND GAME

1978a Alaska's Fisheries Atlas. Vols. 1 and 2, Tacoma, Washington: Print Northwest Company.

1978b Alaska's Wildlife and Habitat. Vols. 1 and 2, Tacoma, Washington: Print Northwest Company.

1984a Western Arctic Caribou Herd Strategic Management Plan. Nome, Alaska.

1984b "Resource Management Recommendations for Gates of the Arctic National Park and Preserve and Surrounding Area." Anchorage, Alaska.

1985a Personal communication with J. Davis (January), Game Biologist, Fairbanks, Alaska.

1985b State Comments on Draft Gates of the Arctic General Management Plan (August).

1985c Catalogue of Waters Important for Spawning, Rearing, or Migration of Anadromous Fishes, Interior and Arctic Regions, as revised March 29, 1985, effective May 29, 1985, Juneau, Alaska.

ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

1981a Preliminary State Transportation Policy Plan and Needs Assessment.

1981b Western and Arctic Alaska Transportation Study, by Louis Berger and Assoc., Inc., in association with Philleo Engineering and Architectural Services. Phases 1-3.

1984 Interior Alaska Transportation Study, by Louis Berger and Assoc., Inc., in association with Alaska Transportation Consultants, Inc. Vols. 1-3.

ALASKA INTERAGENCY FIRE PLANNING TEAM
1982 Tanana-Minchumina Area Alaska Interagency Fire Management Plan and Environmental Analysis.

ALASKA OFFICE OF THE GOVERNOR AND THE JOINT FEDERAL-STATE LAND USE PLANNING COMMISSION FOR ALASKA
1975 Alaska Regional Profiles, by Lidia L. Selkregg. University of Alaska, Arctic Environmental Information and Data Center.

ALEXANDER, H.L.
1967 "Alaskan Survey, Expedition." Bulletin of the University Museum, University of Pennsylvania. Spring. Vol. 9, no. 3.

1968 "Archeology in the Atigun Valley." Expedition, Bulletin of the University Museum, University of Pennsylvania. Fall. Vol. 11, no. 1.

1973 "The Association of Aurignacoid Elements with Fluted Point Complexes in North America." International Conference of the Prehistory and Paleoecology of Western North American Arctic and Subarctic. Edited by J. Raymond and P. Schledermann. University of Calgary Archeological Association, Alberta.

ALLEN, HENRY T.
1887 Report of an Expedition to the Copper, Tanana, and Kobuk Rivers in the Territory of Alaska. Washington, DC: Government Printing Office.

ANDERSON, DOUGLAS
1968 "A Stone Age Campsite at the Gateway to America." Scientific American, vol. 218, no. 6.

1970 "Amak: An Early Archeological Assemblage from Onion Portage, Northwest Alaska." Arta Arctica Fase. XVI.

1981 "Ancient Peoples of the Kotzebue Basin." Kotzebue Basin. Alaska Geographic Society, Anchorage, Alaska.

ARCTIC ENVIRONMENTAL INFORMATION AND DATA CENTER, UNIVERSITY OF ALASKA
1982 Mineral Terranes of Alaska, 1:1,000,000-scale map series.

BANDI, HANS-GEORG
1969 Eskimo Prehistory. University of Alaska Press, College, Alaska, and University of Washington Press, Seattle, Washington.

BUREAU OF LAND MANAGEMENT, U.S. DEPARTMENT OF THE INTERIOR
n.d. The Central Brooks Range, A Proposal.

1979 National Petroleum Reserve in Alaska, Native Livelihood and Dependence, A Study of Land Use Values Through Time. Prepared by North Slope Borough contract staff.

1980 The Utility Corridor Land Use Decisions, Washington Creek to Saganon Bluffs. In coordination with the state of Alaska, North Slope Borough, and Fairbanks North Star Borough.

1981 The Wiseman Historical District: A Report on Cultural Resources, by S.M. Will. Fairbanks, Alaska.

BUREAU OF MINES, U.S. DEPARTMENT OF THE INTERIOR

n.d. "A Mineral Appraisal of the Areas Traversed by the Kobuk, Killik, Alatna, and John rivers and the North Fork of the Koyukuk River, Brooks Range, Alaska: Summary Report." Open file report 36-799.

BUREAU OF OUTDOOR RECREATION, U.S. DEPARTMENT OF THE INTERIOR

1973a Wild and Scenic River Analysis: Alatna River. Alaska Task Force.

1973b Wild and Scenic River Analysis: Noatak River. Alaska Task Force.

1973c Wild and Scenic River Analysis: Tinayguk River and North Fork of the Koyukuk River. Alaska Task Force.

1974a Wild and Scenic River Analysis: John River. Alaska Field Office.

1974b Wild and Scenic River Analysis: Upper Kobuk River. Alaska Field Office.

1976 Wild and Scenic River Analysis: Middle Fork of the Koyukuk River. Alaska Field Office.

BUREAU OF THE CENSUS, U.S. DEPARTMENT OF COMMERCE

1980 Summary Characteristics for Alaska. Governmental Units and Standard Metropolitan Statistical Areas, Census of Population and Housing.

1981 Census of Population, Number of Inhabitants, Alaska. Vol. 1, pt. 3.

CAMPBELL, J.M., COMPILER

1962 "Cultural Succession at Anaktuvuk Pass, Arctic Alaska." Prehistoric Cultural Relations between the Arctic and Temperate Zones of North America. Technical paper no. 11. Arctic Institute of North America, Montreal, Canada.

1964 "Arctic, Current Research." American Antiquity. Vol. 29, no. 4.

CLARK, D.W.
1974 Archeological Collections from Norutak Lake on the Kobuk-Alatna River Portage, Northwestern Alaska. Paper no. 18. Mercury Service Archeological Survey of Canada. Ottawa, Canada.

COOK, J.P., EDITOR
1970 Report of Archeological Survey and Excavations Along the Alyeska Pipeline Service Company Haulroad and Pipeline Alignments. Department of Anthropology, University of Alaska. College, Alaska.

1971 Final Report of the Archeological Survey and Excavations along the Alyeska Pipeline Service Company Route. Department of Anthropology, University of Alaska. College, Alaska.

1977 Pipeline Archeology. Institute of Arctic Biology. Fairbanks, Alaska.

DARBYSHIRE and ASSOCIATES
1982 NANA Coastal Resource Service Area, Coastal Management Program. Anchorage, Alaska.

DETTERMAN, ROBERT L.
1974 The Arctic Lowland Region Potential Landform and Lifeform Natural Landmarks.

DIXON, E.J. JR.
1971 "The Gallagher Flint Station and Other Sites Along the Sagavanirktok River." Final Report of the Archeological Survey and Excavations Along the Alyeska Pipeline Service Company Pipeline Route. Edited by J.P. Cook. Department of Anthropology, University of Alaska. College, Alaska.

FEDERAL AVIATION ADMINISTRATION, U.S. DEPARTMENT OF TRANSPORTATION
1981 Ten Year Plan. Alaska Region

FISH AND WILDLIFE SERVICE, U.S. DEPARTMENT OF THE INTERIOR
1984 Letter of March 28, responding to inquiry for the occurrence of marine mammals, migratory birds, and endangered species in five northern NPS units.

FOREST SERVICE, U.S. DEPARTMENT OF AGRICULTURE
1978 Wilderness Management, by John C. Hendee, George H. Stankey, and Robert C. Lucas.

GEOLOGICAL SURVEY, U.S. DEPARTMENT OF THE INTERIOR
1973 Bedrock Geologic Map of Bettles and Southern Part of Wiseman Quads, Alaska, by W.W. Patton, Jr. and T.P. Miller. MF-492.

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As the nation's principal conservation agency, the Department of the Interior has basic responsibilities to protect and conserve our land and water, energy and minerals, fish and wildlife, parks and recreation areas, and to ensure the wise use of all these resources. The department also has major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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1979a "Reconnaissance of Surface Water Resources in the Kobuk River Basin, Alaska." Water Resources Investigation Report 83-4027. Anchorage, Alaska.

GEOLOGICAL SURVEY, U.S. DEPARTMENT OF THE INTERIOR

1979b Surficial Geologic Map of the Wiseman Quadrangle, Alaska. Miscellaneous field studies, MF-1122.

1980a Geologic Map of Alaska, by Helen M. Beikman.

1980b Geologic Map of the Survey Pass Quadrangle, Brooks Range, Alaska, by S.W. Nelson and Donald Greybeck. MF 1176-A, sheet 2.

1981 "Hydrologic Reconnaissance of the Noatak River Basin, Alaska," by J.M. Childers and D.R. Kernodle. Open file report 81-1005. Anchorage, Alaska.

GIDDINGS, J.L.

1952 "The Arctic Woodland Culture of the Kobuk River." Museum Monographs: The University Museum. University of Pennsylvania.

HALL, E.S., JR.

1974 "Archeological Investigations in Northwest Alaska: Summer 1974." Department of Anthropology, State University of New York. Brockport, New York.

HERITAGE CONSERVATION AND RECREATION SERVICE, U.S. DEPARTMENT OF THE INTERIOR

1981 Proposed Ecological Natural Landmarks in the Brooks Range, Alaska, by Lawrence C. Bliss and Karen Gustafson. Department of Botany, University of Washington. Seattle, Washington.

HOPKINS, M.

1967 The Bering Land Bridge. Stanford University Press, California.

IRVING, W.

1964 Punyik Point and the Arctic Small tool Tradition. University Microfilms International, Ann Arbor, Michigan.

KUNZ, M.L.

1977 "Mosquito Lake Site (PSM-049)." Pipeline Archeology. Edited by J.P. Cook. Institute of Arctic Biology, University of Alaska. College, Alaska.

1978-1983 "Field Notes," North Fork of the Chandalar River.

MANILAQ ASSOCIATION
1982 NANA Regional Strategy. Kotzebue.

MARSHALL, R.
1933 Arctic Village. New York: Harrison Smith and Robert Hass.

1956 Alaska Wilderness: Exploring the Central Brooks Range. University of California Press.

NASH, R.
1982 Wilderness and the American Mind. Third edition. Yale University Press. New Haven, Connecticut.

NATIONAL PARK SERVICE, U.S. DEPARTMENT OF THE INTERIOR
1973 Gates of the Arctic National Wilderness Park and Nunamiut National Wildlands, Alaska - Master Plan.

1974a Final Environmental Statement, Proposed Gates of the Arctic National Park and Preserve. Alaska Planning Group.

1974b The Environment of the Noatak River Basin, Alaska, by Steven B. Young, editor, et al. Center for Northern Studies.

1977 Kuuvanmiit Subsistence: Traditional Eskimo Life in the Latter Twentieth Century, by Douglas D. Anderson, Ray Bane, Richard K. Nelson, Wanni W. Anderson, and Nita Sheldon. Washington, D.C.

1981 Slugging, Humping and Mucking Through NPR-A: An Archeological Interlude, by Craig W. Davis, Dana C. Liner, Kenneth M. Schoenberg, and Harvey M. Shields. Anthropology and Historic Preservation, Cooperative Park Studies Unit. Vol. 1, Occasional Paper 25. Fairbanks, Alaska.

1982 "Special Report on Reed River Hot Springs, Gates of the Arctic National Park and Preserve." Denver Service Center, Branch of Special Programs. Denver, Colorado.

1983 "Environmental Overview and Analysis of Mining Effects, Gates of the Arctic National Park and Preserve Alaska." Denver Service Center. Denver, Colorado.

1984a "Gates of the Arctic National Park and Preserve, Scope of Collection Statement and Collecting Guidelines," Alaska Regional Office, Anchorage.

1984b "Upper Kobuk River Drainage Archeology," by Michael L. Kunz. Gates of the Arctic National Park and Preserve, Alaska.

1985a "Gates of the Arctic National Park and Preserve, Draft General Management Plan/Environmental Assessment, Land Protection Plan, Wilderness Suitability Review," Alaska Regional Office, Anchorage.

1985b "Response of Tussock-Shrub Terrain to Experimental All-Terrain Vehicle Tests in Wrangell-St. Elias National Park and Preserve, Alaska, A Progress Report," by Charles H. Racine and Gary M. Ahlstrand. Alaska Regional Office, Anchorage.

NELSON, R., KATHLEEN MAUUTNER, and RAY BANE
1978 Tracks in the Wildland: A Portrayal of Koyukuk and Nunamiut Subsistence. Occasional paper no. 9. Cooperative Park Studies Unit, University of Alaska, Fairbanks.

NORTH SLOPE BOROUGH
1982 Comprehensive Plan, North Slope Borough. Wickersham and Flynn, Planning Consultants. Anchorage, Alaska.

1983a Background for Planning, City of Anaktuvuk Pass. Alaska Consultants, Inc.

1983b Background for Planning, City of Nuiqsut. Alaska Consultants, Inc.

1984 Coastal Management Program, Resource Atlas.

RANKIN, JANNA S.
1978 "The Legal System as a Proponent of Adventure Programming." Leisure Today. April.

1980 "Agency Liability." Western Wildlands, by Jack Utter, Bill Gleason, and Donald Baty.

SAX, J.L.
1980 Mountains Without Handrails: Reflections on the National Parks. University of Michigan Press. Ann Arbor, Michigan.

SOIL CONSERVATION SERVICE, U.S. DEPARTMENT OF AGRICULTURE
1979 Exploratory Soil Survey of Alaska, by Samuel Rieger, D.C. Schoephorster, and C.E. Furbush.

SOLECKI, R.S.
1950 "New Data on the Inland Eskimo of Northern Alaska." Journal of the Washington Academy of Sciences. Vol. 40, no. 5.

SPEARMAN, GRANT
1980 Land Use Values Through Time in the Anaktuvuk Pass Area. Occasional paper no. 22. Anthropology and Historic Preservation Unit, Cooperative Park Studies Unit. University of Alaska. Fairbanks, Alaska.

STONEY, GEORGE M.
1899 Explorations in Alaska. U.S. Naval Institute Proceedings, Annapolis, Maryland.

U.S. DEPARTMENT OF ENERGY
1980 Geothermal Resources of Alaska, by David L. Turner, Robert B. Forbes, Mary Albanese, Joyce MacBeth, Andrew B. Lockhart, and Stanley M. Seed. Geophysical Institute, University of Alaska. Fairbanks, Alaska.

WILEY, GORDON R.
1966 An Introduction to American Archeology, Vol. I: North and Middle America: Englewood Cliffs, NJ: Prentice-Hall.

WILSON, I.R.
1978 Archeological Investigations at the Atigun Site, Central Brooks Range, Alaska. Mercury Series, no. 78. National Museum of Canada.

WOODWARD-CLYDE CONSULTANTS
1984 Draft NANA Region Coastal Management Plan. Vols. 1 and 2.