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general management plan
land protection plan
wilderness suitability review

ANIACHAK



NATIONAL MONUMENT AND PRESERVE / ALASKA

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General Management Plan
Land Protection Plan
Wilderness Suitability Review

Aniakchak National Monument and Preserve Alaska



SUMMARY

The following document provides a description and a plan for use and management of Aniakchak National Monument and Preserve, a 600,000-acre federal park area on the Alaska Peninsula.

The plan presented by the National Park Service will continue existing types and levels of public use at Aniakchak, monitor these uses, and increase resource management and protection. Because good management requires resource knowledge, identifying research priorities and initiating surveys are important elements of the proposal.

The plan also calls for several National Park Service staff positions to provide permanent and seasonal resource protection, assistance to visitors, and liaison with local communities. No permanent trails or campgrounds within the monument or preserve are proposed. The only permanent facility considered to be appropriate for visitor use to the public is the cabin at the mouth of the Aniakchak River and privately owned cabins associated with two hunting camps that are operated by guides with exclusive hunting guide areas in the preserve.

Results of a wilderness suitability review conclude that all federal lands within the monument and preserve on which there are no pending selections (64 percent of the total) are suitable. The lands on which there are pending selections either for surface or subsurface oil and gas rights total 34 percent, and are placed in a category of suitability pending. The remaining 2 percent of lands are not federally owned and are considered not suitable.

On the primary land protection issue--oil and gas rights that may eventually be conveyed to the Koniag Regional Native Corporation--the National Park Service proposes to acquire these rights, giving priority to areas of high resource value and visitor use.

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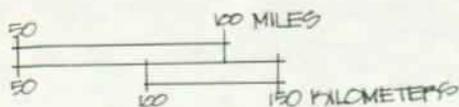
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ABBREVIATIONS

- ACMP - Alaska Coastal Management Program
- 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
- BBNC - Bristol Bay Native Corporation
- 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
- 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



REGION and VICINITY

ANIAKCHAK

NATIONAL MONUMENT AND PRESERVE
UNITED STATES DEPARTMENT OF THE INTERIOR
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INTRODUCTION

ANIAKCHAK NATIONAL MONUMENT AND PRESERVE

Midway down the wild and roadless Alaska Peninsula lies one of the nation's most fascinating recent volcanic features, Aniakchak--a 6-mile-wide, 2,000-foot-deep caldera formed by the collapse of a once lofty 7,000-foot mountain. This great caldera's location inland in a region of frequent clouds and stormy weather meant Aniakchak remained unknown to all but native inhabitants until the 1920s. Then, geographers remotely plotting the location of mountains along the caldera's rim noticed their strange circular configuration, and eventually in 1922, a field party gazed down into the caldera and brought back news of its immense proportions.

Although there are a dozen calderas on the Alaska Peninsula, Aniakchak is one of the largest. Its volcanic history is a fascinating story readable from its exposed "internal plumbing." About 3,500 years ago, there was a dramatic explosion and subsequent loss of 3,000 feet or so of the upper mountain, followed by collapse of the remainder to form a relatively flat-floored, ash-filled bowl. On a number of occasions after the original formation, lesser eruptions have created the small internal cones, lava or fresh pumice flows, and collapsed explosion pits that now dot the caldera floor. Since some explosion features seem to have been created underwater, it appears the caldera may once have contained a deep snow-fed lake. Eventually at a low place along the rim, lake waters began to spill out and, over time, the fast-flowing stream has created a great breach in the rim--the Gates--which now allows the Aniakchak River to begin its tumultuous 32-mile course southeastward to the Pacific Ocean.

Aniakchak's most recent volcanic activity was in 1931 when a small but impressive explosion pit was added to the pockmarked caldera floor, and many thousands of tons of ash were scattered within the caldera and as much as 40 miles away in the small villages. This event, fortunately documented "before and after" by an indomitable geologist and Jesuit priest named Father Hubbard, provides an important benchmark by which to judge the rate vegetation and wildlife will return to the devastated caldera. Mosses, grasses, and more complex flowering plants have invaded in sheltered spots; brown bear and caribou once again are beginning to enter, along with an occasional wolf; and runs of sockeye salmon now return up the Aniakchak River all the way to Surprise Lake, the river's small shallow headwater lake remaining in the caldera.

In creating Aniakchak National Monument and Preserve, Congress not only recognized the unique geological significance of the caldera, but also acknowledged the outstanding wildlife and recreational values of the Aniakchak River by designating it a wild river within the national wild and scenic rivers system. Boundaries of the area also include a vast sweep of treeless tundra and lowland ecosystem characterizing the lower Alaska Peninsula.

Evidence of ancient human history at Aniakchak is minimal, but perhaps eventually more will be known of this important transition zone between ancestral Aleuts and Eskimos. Local village residents can provide a fascinating and valuable perspective on how native lifestyles have evolved.

LEGISLATIVE AND PLANNING HISTORY

Aniakchak National Monument was initially created as a unit of the national park system by presidential proclamation in December 1978. It was subsequently designated a monument and preserve by section 201(1) of the Alaska National Interest Lands Conservation Act (ANILCA) on December 2, 1980. Section 1301 of that act requires the development of a "conservation and management plan" for Aniakchak by December 2, 1985, generally specifies the procedures for developing the plan, and outlines its minimum content. Section 601 designates the Aniakchak as a wild river, and section 1317 requires a review of suitability for wilderness designation.

The National Park Service has an established procedure and sequence by which it is meeting Aniakchak's planning and management goals as mandated not only by ANILCA but also by the 1916 act establishing the National Park Service, the 1964 Wilderness Act, the 1966 National Historic Preservation Act, the 1968 Wild and Scenic Rivers Act, and various other federal acts and regulations.

Basically, this procedure requires definition of the major issues and clarification of objectives for which Aniakchak was originally set aside, followed by public discussion of issues and various feasible management alternatives. A single alternative, or a combination thereof, was chosen for presentation as the general management plan. This plan specifies the basic strategies to reach resource management and visitor use objectives; it also contains sections specifically guiding implementation of the more complex strategies, such as those for natural and cultural resource protection, research, land protection or acquisition, and facilities development.

For Aniakchak, issues and objectives were first outlined in 1983 in a publicly reviewed document, the Statement for Management, which served as an interim guide to management during preparation of the general management plan. Fieldwork and data collection took place in the summer and fall of 1983, and in February 1984, a workbook on issues and alternatives was presented for informal public review. A Draft General Management Plan/Environmental Assessment was released in April 1985. It presented a number of alternatives for management of Aniakchak and an analysis of the environmental consequences of implementing each alternative. The document was available for public review and comment for more than six months. Public meetings were held in King Salmon and Anchorage. This final plan benefited from the ideas, concerns, and preferences expressed in the meetings and in letters received on the draft plan. The general management plan represents the National Park

Service's proposed plan for conservation and management of Aniakchak for the next 5 to 10 years.

It was determined that the actions proposed in this plan will not result in major environmental effects, and the preparation of an environmental impact statement is not required. A finding of no significant impact (FONSI) is included in appendix O.

PLANNING ISSUES AND MANAGEMENT CONCERNS

The major issues to be addressed in this general management plan and associated plans, as presented in previous public review documents, are identified below. Detailed management objectives from the Statement for Management are given in appendix A.

Resource Conservation, Management, and Research

ANILCA established Aniakchak to preserve and protect its natural and cultural resources. Provision was also made for continued opportunity for subsistence uses, where traditional, and sportfishing in the monument. The preserve provides opportunities for subsistence uses, where traditional, sport hunting and fishing, as well as trapping.

The issue is the means to ensure that the opportunity for traditional uses can be maintained while preserving the natural and cultural resources of the area. This will require knowledge of these resources through research and an ability to recognize and analyze impacts of use.

Public Use Activities

Subsistence uses, where traditional, and sportfishing in the monument and preserve, and trapping and sport hunting in the preserve are traditional consumptive uses in Aniakchak. Nonconsumptive recreational uses such as hiking, rafting, photography, and wilderness exploration have not been common in Aniakchak. Whereas increases in subsistence use are not anticipated, increases in recreational use (which includes sport hunting and fishing, as well as nonconsumptive uses) are likely. They are expected to focus on the caldera, the Aniakchak River and its mouth, the Meshik River, and Meshik Lake, where there is some potential for competition with subsistence users and for impacts on the resources.

The major issue is whether to manage the expected increased recreational use or to simply accept it.

Visitor Services and Development

Closely tied to decisions on management of recreational use are decisions on what degree of interpretation, physical assistance, or protection from potential danger to provide recreational visitors.

Administrative Staff and Development

Aniakchak is a remote area. Currently it is managed from King Salmon, 140 miles to the north, by the superintendent of Katmai National Park and Preserve. No permanent full-time staff is assigned nor are there any administrative facilities within the area or in nearby villages.

The issue to be addressed in this plan is a determination of the level of administrative support needed to effectively manage Aniakchak.

Private Interests within Aniakchak

As various provisions of ANILCA and the Alaska Native Claims Settlement Act (ANCSA) are implemented, the pattern of private landownership in Aniakchak is becoming clearer. Currently 152,780 acres of mineral in-lieu selections (oil and gas only) made by the Kodiak Regional Native Corporation (Koniag, Inc.); two native allotments; and a parcel of state land are the only unresolved or clearly nonfederal properties within the monument and preserve.

The issue is what private use and development might occur on such lands and whether it would be detrimental to the purposes of the area. If detrimental development is likely, measures must be considered to protect the values of adjacent federal lands within the monument and preserve.

Response to External Influences

Various potential changes in land use, transportation, and community character in the Aniakchak region are being discussed. Of most serious concern to monument/preserve management would be discovery and development of oil, gas, or hard-rock minerals. This discovery might bring new or enlarged neighboring communities, a pipeline or transport corridor across the peninsula, and easier access to the area.

The issue is the level of NPS participation in regional planning and how the monument/preserve would respond to external development from the perspective of its mandate of resource conservation and protection.

SUMMARY OF PUBLIC COMMENTS AND CHANGES

COMMENTS ON THE MARCH 1985 DRAFT GENERAL MANAGEMENT PLAN

The public review period for the draft plan should be extended.

The plans should be made easier to read.

It should be stated how the plans can be changed.

It should be stated how local people can get NPS jobs.

Group sizes should be limited.

Surficial geological studies should be allowed.

Subsistence has priority over other uses.

Public meetings should be held in the lower 48 states.

There was objection to fee acquisition of the native allotments in the land protection plan.

Specific wilderness recommendations should be made in the general management plan.

Aniakchak should be closed to the recreational use of snowmachines.

Inholdings should be acquired through exchange or purchase.

The National Park Service should work closely with the Bureau of Land Management to identify land for exchanges.

Environmental impact statements should be done for all exchanges and Congress should review all such exchanges.

Subsistence map is not accurate.

Clarification is needed of NPS management intent for access and circulation, natural resources, water rights, navigability, and public use.

Scientific study program should be developed.

CHANGES MADE IN RESPONSE TO MARCH 1985 DRAFT PLAN COMMENTS

The "Legislative and Planning History" section was expanded to include a summary of the "Consultation and Coordination" section (which was deleted).

Clarification was added concerning fish and game as well as subsistence management.

Additional sections entitled "Navigability, Shorelands, Submerged Lands, and Tidelands" and "Water Rights" were added to clarify the National Park Service's intent in these areas.

The river management plan was incorporated into the general management plan since the overall proposed management of Aniakchak more than adequately meets and is compatible with management standards for wild and scenic rivers.

Clarification that aircraft for subsistence use is permitted in the preserve was added.

A description of existing cooperative agreements was added to the general management plan.

Land status was updated--no change in the recommended minimum interest needed.

The "Alternatives" section was deleted since the recommended plan was completed after public and management review.

Appendix A (Summary of ANILCA Provisions) was deleted.

A change was made in resource management plan research/study priorities for basic resource inventory from fourth to second priority.

The general management plan was determined consistent with Alaska Coastal Zone Management Policies.

The remaining changes were editorial in nature.

COMMENTS ON THE DECEMBER 1985 REVISED DRAFT (COMMON TO ALL PLANS)

General

The National Park Service should continue to protect and maintain the undeveloped character of the national park system units in Alaska.

The National Park Service is using policies that are too restrictive. The National Park Service is anti-people.

The public is not capable of developing data to respond to the plans.

Radio repeaters do not belong in parks.

Private land, subsistence, and mining are cultural resources and should be recognized as such.

Plans provide little improvement of recreational opportunities.

Employment opportunities for local residents were not discussed.

There should be subsistence management plans for each national park system unit.

Definitions of traditional, temporary use, and public safety should be included.

Implementation of the plans will be too expensive.

Requests for temporary facilities should be addressed on a case-by-case basis, not by a blanket prohibition (preserve only).

What would constitute a "significant expansion" of temporary facilities needs to be determined (preserve only).

Natural Resources

The management intent for fish and wildlife with respect to the National Park Service and the Alaska Department of Fish and Game should be clarified.

All national park system units should have class I air quality.

Dogs should be the only pack animals allowed.

The National Park Service should made a greater effort to identify all resources, including minerals.

The difference between "natural and healthy" and "healthy" wildlife populations should be discussed, and management implications should be identified.

The National Park Service should consider following the U.S. Fish and Wildlife Service policy on the regulation of navigable rivers.

The plans need to state that the Park Service has ultimate authority for managing fish and wildlife.

The process for involving fish and game advisory councils and committees needs to be described.

Land Protection Plan

The plan needs to state that complete federal ownership of land is needed for proper management.

All private lands need to be acquired.

Boundary adjustments could be used to eliminate private lands within national park system units.

Inholders say they are threatened by unnecessary regulations.

The high priority for the acquisition of nonfederal lands is opposed.

The Park Service should consider land exchanges within national park system units to minimize effects on native allottees.

Native allotments should not be acquired.

Inholders would like to provide commercial services for other park users.

NEPA and 810 documents need to be prepared for land protection plans.

Private lands should be used as developed areas.

Additions to national park system units should not simply be the same designation as adjacent units.

The land protection plans violate ANILCA provisions for access to inholdings.

Access

The National Park Service should limit the number of off-road vehicles.

RS 2477 maps should be deleted from the plans.

The use of helicopters should be restricted to administrative use only.

The National Park Service does not have adjudicative or management authority for RS 2477 rights-of-way.

Snowmachines and motorboats should be further restricted.

ORV determinations relating to subsistence use lack substantiation.

RS 2477 rights-of-way should be resolved before wilderness recommendations are made.

If permits are required for ORVs, they should be easy to obtain.

The Wrangell's ORV study results should not be applied to other national park system units.

Public Involvement

Methods for involving local residents in planning and management should be identified.

The system for getting rural input in preparing the plans was inadequate.

Mechanisms for public review of resource management plans need to be provided.

Wilderness

Potential transportation corridors should not be recommended for wilderness designation.

Congress should review all changes in wilderness boundaries.

Wilderness areas need to be managed more liberally to be consistent with ANILCA.

COMMENTS ON THE DECEMBER 1985 REVISED DRAFT SPECIFIC TO ANIAKCHAK

General

The NPS staff should be reduced.

There should be facilities for public use.

The entire park unit should be turned over to the Bureau of Land Management for management.

Aircraft should not be used for subsistence hunting.

Full-time staff should be put in King Salmon and in Aniakchak.

The staff level is too high for such little public use.

Natural Resources

Mineralized zones should be excluded from the preserve.

Land Protection

Only federal land should be included in the park unit.

Access

The National Park Service should allow traditional access.

MAJOR CHANGES MADE TO PLAN BASED ON DECEMBER 1985
REVISED DRAFT COMMENTS

Natural Resources

Clarification was provided on management of fish and wildlife.

Clarification was provided on management of navigable waters and the watercolumn.

Public Involvement

A new section on "Public Involvement in Plan Implementation" was prepared and included.

A commitment was made to continue communication with local residents on a regular basis.

Access

The process to determine whether ORVs are traditional for subsistence was revised allowing for opportunities to review additional data.

A statement was added that there are no designated landing strips in the monument or preserve.

Clarification was provided that maintenance is not allowed on landing strips.

A commitment was made to inventory access routes and uses and to involve the public in future actions regarding access.

General

The "Guide Areas and Guide Services" section was deleted as a planning issue and management concern.

A definition of "traditional" was added.

Clarification was provided on temporary facilities in preserves, and additional justification for determination was added.

Clarification was provided on the management of unclaimed cabins on federal land.

A commitment was made to prepare a subsistence management plan.

Wilderness

Clarification was provided on the suitability of potential RS 2477 rights-of-way for wilderness designation.

An appendix was added explaining how wilderness would be managed should Congress designate any land as wilderness.

Land Protection Plan

Clarification was provided on the designation (park, preserve, monument, wilderness) of potential additions to national park system units.

Clarification was provided on NEPA and ANILCA section 810 compliance requirements.

Clarification was provided on land protection recommendations and why cost estimates are not included.

DOCUMENT ORGANIZATION

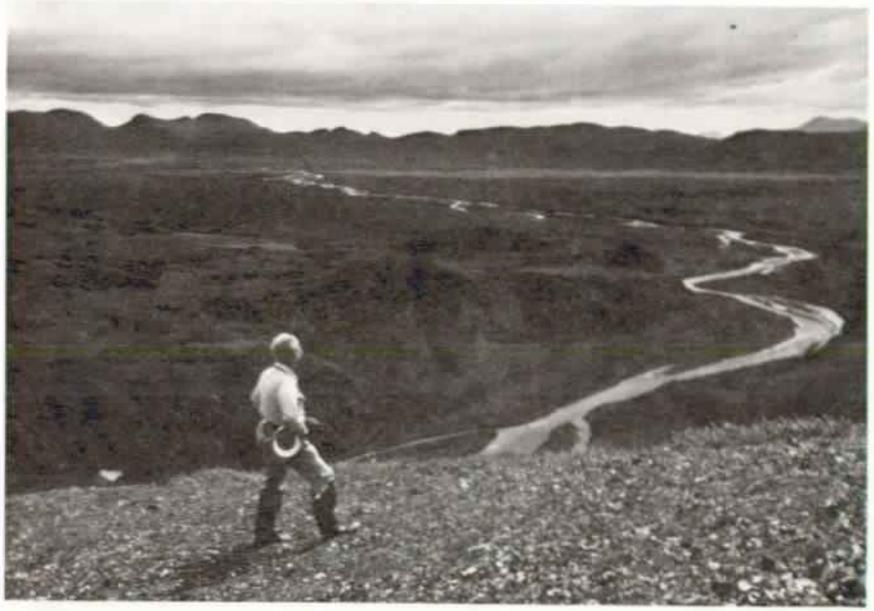
The following document is divided into four major elements as follows:

A General Management Plan setting forth basic strategies for resource conservation and management, public use and development, and administration in compliance with section 1301 of ANILCA and specific national park system legislation.

A Land Protection Plan specifically stating a plan for protecting Aniakchak from development activities that would adversely affect the resources by acquiring the minimum estate necessary and addressing other requirements of section 1301(b)(6) and (7) of ANILCA.

A Wilderness Suitability Review analyzing suitability of federal lands within Aniakchak for potential inclusion within the National Wilderness Preservation System, in compliance with section 1317(a) of ANILCA and sections 3(c) and (d) of the Wilderness Act, as amended.

The Aniakchak Environment containing a description of the natural, cultural, and socioeconomic environments of Aniakchak and the region.



GENERAL MANAGEMENT PLAN

GUIDING PRINCIPLES

The underlying management emphasis for Aniakchak National Monument and Preserve is to better understand its natural and cultural resources and to ensure that natural ecological processes and cultural resources are preserved through monitoring and protection activities that consider current as well as anticipated patterns and amounts of public use.

Aniakchak is now and for the life of this plan will remain a wild area where the user will meet the area's challenges on nature's terms. Recognizing that public use, particularly recreational, is now at very low levels, management of public use will initially be minimal. Improvements in access to or through the area, or in facilities whose principal purpose is to encourage increased recreational use, will not be proposed.

External events, particularly discovery and development of oil and gas, could significantly affect the National Park Service's ability to maintain the principal resource values of Aniakchak. Accordingly, close cooperation will be necessary with regional development planners to ensure the maximum protection of the unit's integrity over the long term.

MANAGEMENT ZONING

The National Park Service will not designate management zones until further baseline studies produce more definitive knowledge about the resources of Aniakchak. Such zoning to manage specific activities in designated areas is believed to be premature for the new park units in Alaska.

RESOURCE CONSERVATION, MANAGEMENT, AND RESEARCH

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 monument/preserve (ANILCA section 201(1) 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. 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 Aniakchak, 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 monument/preserve.

The National Park Service and the state of Alaska will cooperatively manage the fish and wildlife resources of the unit. A memorandum of understanding between the National Park Service and the Alaska Department of Fish and Game (see appendix C) 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 monument; and hunting, fishing, and trapping are allowable uses in the preserve (ANILCA section 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 monument where such uses are traditional (ANILCA section 201(1)). 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 monument (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 monument/preserve, consistent with the provisions of ANILCA. The Park Service will cooperate with the state wherever possible to establish regulations that are compatible with monument/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 specific criteria in sections 803, 804, and 805 of ANILCA are enacted and implemented.

A subsistence resource commission has been established for the monument/preserve in accordance with section 808 of ANILCA. The commission is charged with devising and recommending a subsistence

hunting program for the monument/preserve. 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).

Within the preserve units, the National Park Service ". . . may designate zones where and periods when no hunting, fishing, trapping, or entry may be permitted for reasons of public safety, administration, flora or faunal protection, or public use or enjoyment" (ANILCA section 1313). Additionally, the National 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 monument or 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 monument/preserve. The state has also developed fish and wildlife management plans. The master memorandum of understanding indicates that the National 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 was established (see appendix C).

Habitat and animal population manipulation will not be permitted within the park 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).

Aquatic habitat of the monument/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 Aniakchak's waters will be considered only if necessary to reestablish species extirpated by man's activities.

In recognition of mutual concerns relating to the 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 National 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 monument and preserve.

The monument's informational programs will inform visitors about the allowable uses of the monument/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.

It is premature to propose specific wildlife or habitat management plans or to suggest that existing state fish and game regulations should or should not be changed. The National Park Service will cooperate with the Alaska Department of Fish and Game and the U.S. Fish and Wildlife Service in conducting general and site-specific natural resource research and advise the state of any NPS concerns regarding local regulations. NPS staff will assist in enforcement of state regulations. Unless or until such time as these cooperative efforts lead to the conclusion that current regulations are failing to achieve conservation of healthy populations of fish and wildlife within the preserve and natural and healthy populations within the monument, the Park Service will continue to adopt all nonconflicting state hunting, trapping, and fishing regulations pursuant to 36 CFR 2.2 and 2.3. This adoption of state regulations does not diminish the right and obligation of the secretary of the interior, upon consultation with the state, to designate areas where or establish periods when no taking of fish and wildlife will be permitted in Aniakchak for reasons of public safety and administration, or to ensure the continued viability of particular wildlife populations (ANILCA sections 816(b) and 1313).

See also "Subsistence Use Management" section in this plan.

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. Some 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, submerged lands, or tidelands 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 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 National Park Service. The National Park Service will manage the preserve uplands adjacent to shorelands, submerged lands, and tidelands to protect their natural character.

Additionally, the National Park Service recommends that the state close such areas to new mineral entry, as was recommended in the Bristol Bay Area Plan (1984), as well as to the extraction of oil, gas, sand, and gravel resources, and the National Park Service will apply to the state for these closures. The National Park Service will also pursue cooperative agreements with the state for the management of lands under navigable water bodies (shorelands) and tidelands.

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 Aniakchak National Monument and Preserve. 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 National Park Service will work cooperatively with the state of Alaska.

Air and Water Quality

Aniakchak National Monument and Preserve is currently classified as a class II airshed under the provisions of the Clean Air Act amendments (42 USC 7401 et seq.). Aniakchak will be managed so as to achieve the highest attainable air quality levels and visibility standards consistent with the Clean Air Act designation and mandates specified by enabling legislation, e.g., ANILCA and the NPS organic act. An air quality monitoring program will be established for Aniakchak to provide base line data on air quality against which future air quality samples can be compared. This program may be established cooperatively with the Alaska Department of Environmental Conservation and the U.S. Environmental Protection Agency.

Maintaining the quality of water within Aniakchak will be carried out under the regulatory authorities of the National Park Service, the Alaska Department of Environmental Conservation, and the Environmental Protection Agency. The Alaska Department of Environmental Conservation will be consulted prior to initiation of any NPS developments that may have adverse effects on water quality in the monument or preserve. The Alaska Department of Environmental Conservation and the Environmental Protection Agency enforce both air and water quality regulations on NPS lands. Water quality sampling will be conducted in Aniakchak by the National Park Service, in coordination with the Alaska Department of Environmental Conservation and the Environmental Protection Agency.

Pollution Control and Abatement

The National Park Service recognizes the potential for fuel and oil spills along the coastline of the preserve. The sensitive nature of the resources and the difficulty of containing spills in shallow, wind-whipped waters and in ice make these spills of special concern. To minimize the danger to resources within and adjacent to the preserve, the National Park Service will work with other federal and state agencies in preparing for and responding to spills that may occur.

Waste Disposal

The policy for trash removal in Aniakchak will continue to be "pack in, pack out." Visitors will be informed of the policy and asked to adhere to it.

The disposal of human waste from administrative sites and visitor use sites within Aniakchak will be accomplished in compliance with applicable regulations of the Alaska Department of Environmental Conservation and the Environmental Protection Agency.

Cultural Resources

Cultural resource surveys and identification of any sites eligible for the National Register of Historic Places will be accomplished in cooperation with the state historic preservation officer and appropriate federal regulations. Sites thus identified will be classified according to significance and scheduled for appropriate treatment. This might involve no special protection, simple archeological evaluation of a site, or reconstruction or adaptive restoration of a structure for use by visitors or management staff.

Research

A comprehensive program of natural and cultural resource research is necessary in order to manage the permitted consumptive uses as well as to recognize and analyze impacts associated with nonconsumptive uses and regional influences. Detailed research planning is beyond the scope of this general management plan and will be presented in a separate document called the resource management plan.

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 Aniakchak. 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.

For a summary of projects contained in the (1984) draft resource management plan, see appendix D. The listing of research projects is current at the time of printing of this document; however, proposals and priorities for research projects are reviewed annually and are updated as necessary.

Some research projects will be undertaken in the field by Aniakchak's resource management specialist, assisted by seasonal rangers (technicians) and NPS regional scientific staff. Others will be done under contract with academic institutions such as the University of Alaska, where a number of individual investigators are already covered under cooperative work agreements. With research funding anticipated to be limited, there will also be emphasis on cost-effective cooperative programs of monitoring and research with the state, the U.S. Fish and Wildlife Service, and other federal agencies under terms of existing memoranda of agreement.

An integral part of the research, monitoring, and interpretive programs at Aniakchak will be the systematic collection and professional maintenance of museum specimens. These will include historic photographs, documents, and objects as well as natural history specimens. Provisions will be made either in King Salmon or a central repository for proper care and use of this collection. Guidelines concerning appropriate materials for collection are contained in a separate "Scope of Collections Statement and Collecting Guidelines" prepared by NPS staff.

PUBLIC USE ACTIVITIES

Subsistence uses (hunting, fishing, trapping, and gathering), where traditional, and sportfishing in the monument and preserve, and sport hunting in the preserve will continue to be permitted, subject to applicable state and federal regulations. Other forms of recreational use--nonconsumptive activities such as rafting, hiking, exploration, photography, and nature study--will also be permitted, subject to such regulations as may be needed to avoid conflict with subsistence use and other recreational activities, and to avoid damage to natural or cultural resources.

Subsistence use and other forms of public use are currently occurring only at very low levels. Hunting guide activity occurs annually, particularly during bear seasons; only a few fishing parties are known to have visited the area recently; and fewer than 10 hiking or rafting visitors per year have been reported for the past five years. However, as the scenic and geologic resources of Aniakchak become better known, increases in public use can be expected. Predicting the amount of increased use is difficult. Since Aniakchak is remote, difficult to reach, and subject to notoriously bad weather, it is not anticipated that visitor use will rise quickly to the point of psychological crowding. The potential for unacceptable resource impacts also seems remote. Similarly, very few conflicts involving nonconsumptive recreational visitors and consumptive users are anticipated because hunting and trapping seasons are generally not open at times (late summer, fall, winter) when hiking, rafting, and exploring (early and mid summer) are most attractive.

PUBLIC ACCESS

Planning for the various topics described in this section will be an ongoing process. The National Park Service will continue to document past and current uses of Aniakchak. 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.

Current access to and within Aniakchak is by aircraft, snowmachine, watercraft, tracked vehicle, and foot. Public access will continue to depend on these traditional modes. Some of these access methods have the potential for causing resource damage. Because of this, the National Park Service will take various steps to manage access in a manner consistent with the purposes of the unit and other laws and regulations (see table 1; appendix F; and "External Conditions Affecting Land Protection" in the land protection plan.)

The various types of access routes discussed in this section may overlap. For example, a valid RS 2477 right-of-way may overlap an easement conveyed under section 17(b) of ANCSA. Management strategies, where this occurs, will reflect valid existing rights and other considerations unique to the situation. The National Park Service will work cooperatively with interested parties to ensure that management is compatible with the purposes of Aniakchak. Overlap situations will be dealt with on a case-by-case basis in conformance with general management policies.

Table 1: Summary of General Access Provisions for Subsistence and Recreational Use

NOTE: This table summarizes current access provisions and proposed changes, if any. For a complete discussion of access, including where the various provisions may overlap, please refer to the "Public Access" section.

<u>Means of Access</u> ¹	<u>Subsistence</u> ²	<u>Reference*</u>	<u>Recreation</u>	<u>Reference*</u>	<u>Changes Proposed in Plan</u>
Snowmachines	Yes	ANILCA 811 36 CFR 13.46 43 CFR 36.11(b)	Yes	ANILCA 1110 43 CFR 36.11(c)	None
ORVs	No	ANILCA 811 36 CFR 13.46	No	ANILCA 101 43 CFR 36.11(g) EO 11644 and 11989 ⁵	None
Motorboats	Yes	ANILCA 811 36 CFR 13.46 43 CFR 36.11(b)	Yes	ANILCA 1110 43 CFR 36.11(d)	None
Fixed-wing aircraft	No-Monument Except:3 Yes-Preserve	ANILCA 811 36 CFR 13.45	Yes	ANILCA 1110 43 CFR 36.11(f)	None
Helicopters	No	ANILCA 811 36 CFR 13.45 43 CFR 36.11(f)	No Except:4	ANILCA 1110 43 CFR 36.11(f)	None
Dogs, horses, and other pack animals	Yes	ANILCA 811 36 CFR 13.46 36 CFR 2.16 36 CFR 1.4	Yes	ANILCA 1110 43 CFR 36.11(e) 36 CFR 2.16 36 CFR 1.4	None
Ultralights, hovercraft, and airboats	No	ANILCA 811 36 CFR 2.17 36 CFR 13.46	No	ANILCA 1110 36 CFR 2.17 43 CFR 36.11(f)	None

The terms "Yes" and "No" in the 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.

1. 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)).
2. Villages within the resident zone for Aniakchak (CFR 13.60 (a)) are Chignik, Chignik Lake, Chignik Lagoon, Meshik, and Port Heiden. The superintendent may restrict or close a route or area to use of snowmobiles, motorboats, or dog teams, or other means of surface transportation (13.46(b) and (c)).
3. The use of fixed-wing aircraft for access to and from monument lands (not preserve units) for the purposes of taking fish and wildlife for subsistence is prohibited (36 CFR 13.45). In extraordinary cases, local rural residents may use aircraft on monument lands for taking fish and wildlife in accordance with a permit issued by the superintendent (36 CFR 13.45 and 13.60). The use of aircraft is allowed for subsistence activities other than the taking of fish and wildlife.
4. 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)).
5. In areas of the national park system, Executive Order 11644 requires a determination that the location of ORV trails and areas in nonwilderness will not adversely affect the natural, aesthetic, or scenic values.

*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 B.

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.

Aircraft

Consistent with the principles and proposals described for public use, no improvement in access by air is proposed by the National Park Service. The current access by private amphibious or floatplane air charter is anticipated to continue as the most flexible method of visiting the monument or the preserve.

Fixed-wing aircraft may be landed and operated on lands and waters within the monument/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 monument for purposes of taking fish or wildlife for subsistence uses therein is generally prohibited as set forth in 36 CFR 13.45.

Currently, all federal lands within the monument/preserve are open to authorized aircraft uses, and no changes are proposed at this time. In the future, if the need for closures or restrictions is identified, the National Park Service will propose them through the procedures outlined in 36 CFR 1.5 and 13.30 and 43 CFR 36.11(f) and (h).

Fixed-wing aircraft land on gravel bars, tundra ridges, ash fields, and lakes. A sufficient number of these natural landing sites do not require forms of maintenance or improvement.

There are currently no designated landing strips within Aniakchak. These designations are for maintenance purposes only and will be made pursuant to 36 CFR 1.7(b). Designated landing strips may be maintained as needed with nonmotorized hand tools by people using the areas. Maintenance or improvements to designated landing strips involving equipment other than nonmotorized hand tools must be accomplished under a permit from the superintendent. Outside designated areas, no alteration of vegetation or terrain is authorized for landings and takeoffs except in emergency situations.

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 use of a helicopter in Aniakchak, 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 the monument/preserve.

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. These flight advisories will become a stipulation in all special use permits and commercial use licenses subject to the requested use. It is recognized that these minimum altitude suggestions are advisory only (except for permits and licenses mentioned above) since the Federal Aviation Administration regulates air space, and lower altitudes may be required due to weather conditions and emergencies.

Although the Congressional Record for the U.S. House of Representatives (November 12, 1980, p. 10541) indicates the congressional intent that "only rarely should aircraft use for subsistence hunting purposes be permitted within National Parks, National Monuments, and National Preserves," current federal regulations allow aircraft use for subsistence hunting in preserves.

Watercraft

Access by powered and nonpowered watercraft will continue without regulation except for currently applicable state and federal laws. The only areas where conflict might be anticipated are on the Meshik River or the lower Aniakchak River. There rafters could encounter powerboaters engaged in subsistence or sport fishing and hunting in the short, late summer period when favorable rafting conditions may overlap with hunting for moose or caribou. Such conflicts can be minimized through public information programs to inform each user group of appropriate behavior. No docks or stream or shoreside construction to assist boat operation is considered necessary.

Foot

No hiking trails will be constructed or improved. A corridor from the monument's western boundary nearest Port Heiden to the rim of the

caldera will be identified on small-scale maps and possibly with a few cairns on the ground to assist cross-country hikers in locating a route generally free from willow and alder.

Off-Road Vehicles

The recreational use of ORVs off established roads, parking areas, 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 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 natural, 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.

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 units, subject to reasonable regulations to protect natural and other values of park lands. The use of ORVs for access to inholdings may be allowed under existing regulations (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 preserve resources and values.

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 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.

Easements

Campsite and linear access easements may be reserved on native corporation lands that are within or adjoin Aniakchak, 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 Park Service outside the unit. Pursuant to part 601, chapter 4.2 of the Department of the Interior "Department 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 the 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. The conditions governing allowable uses of each easement may vary.

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 preserve 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 King Salmon.

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 land 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 if 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.

At the present time, no section 17(b) easements have been identified within or adjoining Aniakchak.

RS 2477 Rights-of-Way

RS 2477 (formerly codified at 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 rights.

Aniakchak National Monument 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. One right-of-way that the state contends may be valid under RS 2477 is as follows:

Chignik Lagoon Trail NE, runs northeast along the coast of Chignik Bay, crosses land to Kujulik Bay, runs along the coast northeast to the North Fork (Aniakchak River) and runs north via Lava Creek.

A map illustrating the above route is found in appendix M. This above-named right-of-way 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 Aniakchak. 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 RS 2477 rights-of-way does not establish their validity 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 designated routes for ORV use.

SUBSISTENCE USE MANAGEMENT

One of the purposes of ANILCA is to provide the opportunity for rural residents engaged in a subsistence way of life to continue to do so, consistent with management of fish and wildlife in accordance with recognized scientific principles and the purposes for which each conservation system unit is established (section 101(c)). ANILCA section 201(1) states that subsistence uses by local residents will be permitted in the monument where such uses are traditional in accordance with the provisions of title VIII. All areas of Aniakchak National Monument and Preserve are open for subsistence use.

Title VIII of ANILCA addresses subsistence management and uses. Section 802 presents the subsistence policy of ANILCA. This section states that consistent with sound management principles, and the conservation of healthy populations of fish and wildlife, the utilization of public lands in Alaska is to cause the least adverse impact possible on rural residents who depend on subsistence use of the resources of such lands; that nonwasteful subsistence uses of fish and wildlife and other renewable resources on the public lands of Alaska will be given preference over other consumptive uses when shortages occur; and that federal land managing agencies, in managing subsistence activities and in protecting the continued viability of all wild renewable resources in Alaska, will cooperate with adjacent landowners and land managers.

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 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.

Sections 13.47 and 13.48 of the Code of Federal Regulations specify that, "To the extent consistent with the provisions of this chapter, applicable state laws and regulations governing the taking of fish" and wildlife "which are now or will hereafter be in effect are hereby incorporated by reference as a part of these regulations." The National Park Service will work through the Alaska Boards of Fish and Game wherever possible to ensure that healthy populations of fish and wildlife are maintained in accordance with the requirements of ANILCA. The master memorandum of understanding between the National Park Service and the Alaska Department of Fish and Game gives further clarification of jurisdiction for regulation and management of fish and wildlife in the park units (see appendix C).

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 subsistence resource commission for Aniakchak 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.

Section 814 directed the secretary of the interior to prescribe regulations, as necessary and appropriate, to implement title VIII of ANILCA. Regulations that implemented or clarified the provisions of ANILCA, including title VIII, became effective on June 17, 1981. These regulations (36 CFR 13, see appendix B) address numerous aspects of subsistence management and uses within park units in Alaska. They are subject to

refinement and change as better understanding of the requirements and management of subsistence uses in the park units are attained.

The National Park Service will prepare a subsistence management plan for Aniakchak 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.

The following are some proposed elements of a subsistence management plan:

1. Resident Zones. The National Park Service will periodically carry out surveys of the resident zone communities for the park units where subsistence is authorized to determine if significant changes have occurred in the makeup and character of such communities in accordance with 36 CFR 13.43. The Park Service will consult with the subsistence advisory councils and subsistence resource commissions and other interested publics prior to and during such surveys. Resident zone communities that do not meet the criteria contained in ANILCA and the regulations will be deleted from resident zone status following completion of the proper regulatory procedures. Individuals within these communities who have customarily and traditionally (as defined in title 5, chapter 99 of the Alaska Administrative Code) engaged in subsistence uses within the park units would be issued subsistence permits allowing these individuals to continue to engage in these activities in the monument where subsistence is permitted.

2. 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 monument, subsistence uses by local residents are allowed, where such uses are traditional (see also appendix M for definition of traditional), in accordance with the provisions of title VIII of ANILCA. Authorized means of access for subsistence uses in Aniakchak are snowmachines, motorboats, foot, 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 shall 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.

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 Aniakchak, the use of ORVs for subsistence is not allowed because the use has not been shown to be a traditional means of access. Any new information related to the traditional use of ORVs for subsistence that is gathered by the National Park Service or provided by others will be reviewed for consistency with ANILCA.

The use of aircraft as a means of access to areas within the monument 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. 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 Park, National Monuments and National Preserves" (House, Nov. 12, 1980, Congressional Record, H 10541).

General provisions for subsistence access are summarized in table 1 and appendix F.

3. Shelters and Cabins. Section 1313(a)(4) of ANILCA authorizes the secretary of the interior to issue permits for the use, occupancy, construction, and maintenance of new cabins or other structures if it is determined that the use is necessary to reasonably accommodate subsistence uses. When reviewing an application for a subsistence cabin

or shelter permit, the National Park Service will consider the use for which the structure is desired; the subsistence use history of the applicant, including the applicant's use of such shelters; the local patterns of subsistence use as they relate to shelters; the potential impact on the subsistence users and on natural and cultural resources; and alternative means of reasonably accommodating the subsistence needs of the applicant. Other considerations will include the purposes for which the park unit was established.

4. Trapping. In order to gather necessary data and to measure impacts on the resources of the park unit where trapping is permitted, a trapping monitoring program will be instituted. This program will build upon past efforts to identify trapping areas and persons engaged in this activity. The program will address trapping methods, harvest levels, the role of trapping in the local economy, the cultural implications of trapping, and other pertinent topics. The information acquired will be used as necessary, to develop guidelines for the management of trapping within the park unit. Congress intends that "trapping or any other customary trade practice within parks and monuments" are not intended "to be or become a solely or predominantly commercial enterprise beyond its traditional role as part of the subsistence regimen." (Federal Register, vol. 46, no. 116, June 17, 1981, "Rules and Regulations"). The National Park Service will work with the state of Alaska in monitoring the "customary trade" aspect of subsistence (including trapping) and will promulgate regulations consistent with the intent of title VIII of ANILCA (Senate Report 96-413, p. 234).

5. Use Conflicts. The taking of fish and wildlife for nonwasteful subsistence uses in Aniakchak 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 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.

6. Subsistence Resource Commissions. The National Park Service will offer all possible assistance to the subsistence resource commission for Aniakchak. When a subsistence hunting program is recommended by the commission, and accepted by the secretary of the interior, it will be incorporated in the subsistence management plan. The subsistence management plan will be modified as necessary to be in agreement with the commission's accepted program.

Although the subsistence resource commission's primary responsibility is to formulate a subsistence hunting program, the National Park Service will consult with this body, whenever possible, on all substantive matters relating to subsistence uses.

7. Section 810 of ANILCA. The National Park Service will evaluate all management actions in terms of their potential impacts on subsistence activities as required (see appendix H).

PUBLIC SERVICES

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.

Services made available to the different users will be only the minimum required to protect natural and cultural resources, inform each group of the interests and rights of others, provide information on trip planning and safety, and provide an opportunity to learn more about the character and significance of Aniakchak's resources. These services will generally be provided outside the area through staff contacts in the villages and at contact points such as the administrative headquarters in King Salmon. No visitor assistance or interpretive programs involving NPS staff inside Aniakchak will be provided, although such service will be available for incidental contacts during resource management and patrol duties.

The principal interpretive service will be written materials available at contact points outside Aniakchak, such as at Port Heiden, one of the Chignik villages, or King Salmon. Visual materials--a slide program or film--will be available outside Aniakchak for orientation of visitors and for integration into interpretive programs in Katmai National Park and Preserve and other NPS areas. Maps and other materials sponsored or produced by the National Park Service will concentrate on explaining the geological structure and history of Aniakchak, its relative significance among Alaskan, other U.S., and worldwide examples of volcanism, and discussions of wildlife and other natural history values.

Visitor safety is of concern, but as a practical matter, little assistance can be provided to visitors once they have entered the area. The best method for avoiding safety problems is adequate preparation in terms of group leadership, personal skills, equipment, and knowledge of potential weather, wildlife, or backcountry hazards. Recommendations on preparing for a visit will be available and efforts made to get this advice to visitors in advance of their arrival. Cooperative planning involving visitor groups, air-taxi companies, and park staff will be essential in minimizing risks. In the event of serious mishap, the National Park Service will render assistance in search and rescue efforts in cooperation with other public and private agencies under a plan to be developed for that purpose.

Services are summarized on the General Development map.

FACILITIES

Physical facilities provided specifically for recreational visitors will consist of the following: At King Salmon visitor information, trip planning advice, and interpretation will be provided in a structure shared with Katmai National Park and Preserve. Subject to further approval and design, a joint visitor facility used by Aniakchak, Katmai, and the

KING SALMON

PERMANENT AREA MANAGER AND RESOURCE
MANAGEMENT SPECIALIST
INFORMATION / INTERPRETATION
IN JOINT FACILITY
AIR CHARTERS TO
MONUMENT/PRESERVE

ANIAKCHAK CALDERA AND RIVER

LIMITED RECREATIONAL USE
NO FACILITIES
MONITORING IMPACTS

MONUMENT IN GENERAL

SUBSISTENCE USE
CONTINUES WHERE
TRADITIONAL
NO FACILITIES
RESEARCH AND
MONITORING

PRESERVE IN GENERAL

SUBSISTENCE USE AND SPORT
HUNTING, FISHING, AND
TRAPPING CONTINUE
NO FACILITIES
RESEARCH AND MONITORING

ALASKA
PENINSULA NWP

PORT HEIDEN

PART-TIME COORDINATOR
NO FACILITIES
PERIODIC VISITS BY AREA STAFF

MESHIK LAKE AND RIVER

LIMITED RECREATIONAL USE
PERIODIC NPS MANAGEMENT ACTIVITIES

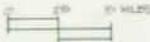
ANIAKCHAK RIVER MOUTH

PUBLIC USE CABIN RESTORED
PERIODIC NPS MANAGEMENT ACTIVITIES
SEASONAL RANGERS

CHIGNIK BAY VILLAGE

PART-TIME COORDINATOR
NO FACILITIES
PERIODIC VISITS BY AREA STAFF

- MONUMENT BOUNDARY
- PRESERVE BOUNDARY
- COMMERCIAL AIRSTRIP
- AMPHIBIOUS AIRCRAFT LANDING (UNIMPROVED)
- VILLAGE BUILDINGS
- CABINS
- IDENTIFIED HIKING CORRIDOR



GENERAL DEVELOPMENT

ANIAKCHAK
NATIONAL MONUMENT AND PRESERVE
UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

101 100 85A
EX-100P-80

ON MICROFILM

Becharof and Alaska Peninsula national wildlife refuges in King Salmon is necessary and desirable. This facility will be accessible to the handicapped.

No visitor facilities are considered necessary or appropriate in Port Heiden or in the Chignik villages. Informational programs and materials will be available for schools and special interest groups in all villages and towns involved with Aniakchak, including the Chigniks, Port Heiden, Pilot Point, King Salmon, Naknek, Kodiak, and others.

Cabins

At this time no NPS visitor facilities will be constructed or camping areas designated in the caldera or along the Aniakchak or Meshik rivers. The existing public use cabin (APA bunkhouse) at the mouth of the Aniakchak River will continue to be maintained consistent with its historical design, and will be available to both public users and park staff. Simple sanitary facilities and possibly an elevated food-storage cache will be provided there also. Since likelihood of interaction between humans and brown bears seems higher here at the beach than elsewhere along the river and parties may have to wait several days for an air pickup, it is considered prudent to maintain this minimum shelter. The two existing, privately owned cabins associated with hunting camps in the preserve will remain under a permit from the superintendent.

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 are in the process of finalizing the regulations at the time of publication of this plan.

The superintendent will maintain an ongoing inventory of the location and description of all cabins located in Aniakchak. As part of the inventory, the cabins will be evaluated for potential historical significance pursuant to the National Historic Preservation Act, as amended in 1980. The National Park Service will actively seek to determine any valid claims within applicable regulations for cabins on federal lands. Unclaimed cabins will be evaluated according to the pattern of public use associated with them since the unit was established. Those that support intermittent compatible activities or authorized local activities without any adverse effects on monument/preserve resources or other valid uses will be left standing. For example, a cabin used for occasional winter dog team trips or used as an occasional stop-over for local village-to-village snowmachine travel may be in this category. Such cabins will be available for nonexclusive public use, including use by commercial guides, on a first-come, first-served basis or for emergency use. Where determined to

be essential for public health and safety and where funding is available, the National Park Service may propose to maintain certain of these cabins. Maintenance by others may be permitted by the superintendent, but no possessory interest or exclusive use rights will be acquired.

Unclaimed cabins that do not support compatible activities or have adverse effects on monument/preserve resources or other valid uses may 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 may 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 proposed in this general management plan. The construction of public use cabins is an issue that is evaluated through the planning process. New public use cabins will only be constructed after being assessed through an amendment to this plan or the preparation of a new general management plan.

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 and other natural values. This determination maintains the number of these facilities at present levels (1978 or 1985, which 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).

Based on ranger patrols an ongoing inventory has currently identified six known temporary facilities in varying states of condition in the preserve. Should additional facilities be identified, the ceiling would be raised accordingly. There have not been any requests for new temporary facilities since Aniakchak was established.

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.

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(1) of ANILCA that the purposes of the unit, among others, are "to maintain the caldera and its associated volcanic features including the Aniakchak River and other lakes and streams in their natural state; to assure continuation of the natural process of biological succession; and to protect habitat for, and populations of, fish and wildlife." To further these purposes, the National Park Service has determined that additional temporary facilities above the current level would be detrimental for the following reasons: New, additional temporary facilities would alter the natural state and habitat of the preserve as well as concentrate public use (human waste, trash, trail formation, soil compaction, etc.); potential impacts on wildlife and other natural values by concentrating use year after year; access (such as landing strip or trail) would be needed to get to a new temporary facility, which would further alter the natural and scenic character of the preserve; and there has not been a demonstrated need for such new facilities and other more portable options are available.

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.)

If the existing facilities are removed, no longer used, or destroyed, 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. Likewise if the existing facilities are adversely affecting the purposes of the unit or subsistence uses, the superintendent may authorize the replacement of temporary facilities with structures of similar size and type in other suitable areas of the preserve.

In the future, if changing use patterns and further analyses 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.

Minimum-impact camping methods will be required for all commercially guided groups and encouraged for all private visitors. Monitoring of physical impacts and the frequency of interaction between groups will be undertaken through observation and informal discussions by park staff.

Developments (or lack thereof) are summarized on the General Development map.

RIVER MANAGEMENT

Section 601(27) of ANILCA designated the Aniakchak River, including its major tributaries, within Aniakchak National Monument and Preserve as a component of the Wild and Scenic Rivers Act (PL 90-542, October 2, 1968). The designation includes about 32 river miles of the main stem of the Aniakchak River from Surprise Lake to Aniakchak Bay, and about 31 river miles of designated tributaries.

Section 605 of ANILCA directed that the Aniakchak River be administered as a wild river pursuant to the Wild and Scenic Rivers Act. The act established a national wild and scenic rivers system and the following policy:

That certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geological, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that 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 the wild river and for the preparation of a river management plan in accordance with the provisions of the Wild and Scenic Rivers Act. However, because the proposed management of Aniakchak National

Monument and Preserve meets and is compatible with management standards established by the Wild and Scenic Rivers Act, there is no purpose in designating river corridor boundaries. Similarly, since river management proposals have been fully integrated with other aspects of this plan, there is no purpose in preparing a separate management plan at this time. Management of the river will also follow the "Guidelines for Eligibility, Classification, and Management of River Areas" (Federal Register, Vol. 47, No. 173, September 7, 1982--see appendix E) and the guidelines developed in "A 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. As conditions warrant (e.g., increases in visitor use, resource degradation), a river management plan might be developed to address specific problems occurring along the Aniakchak River.

ADMINISTRATIVE STAFF AND DEVELOPMENT

Administrative staffing, facilities, and locations will be consistent with the emphasis on resource management and research. The cost and implementation schedule for the plan is contained in appendix G. Aniakchak's administrative headquarters will remain in King Salmon where it can take advantage of existing administrative infrastructure supporting Katmai National Park and Preserve. King Salmon is the location through which most nonlocal visitors will continue to arrive and where air-taxis will continue to be arranged. This location is also appropriate for retaining contact with the Alaska Department of Fish and Game and the U.S. Fish and Wildlife Service (Becharof and Alaska Peninsula national wildlife refuges) with whom coordination on research and management is a primary objective. No other permanent administrative facilities are considered necessary for the life of this plan.

For the foreseeable future, a resource management specialist will be the principal NPS staff person for the monument/preserve, with the Katmai superintendent retaining overall responsibility for personnel, budget, and planning. From a duty station in King Salmon, the resource specialist will frequently travel to Aniakchak for research, resource protection, and monitoring activities. He will provide the principal contacts with local villages and with recreational visitors. The long-term staffing goal is to have a full-time area manager for Aniakchak, reporting directly to the superintendent of Katmai, assisted by the resource management specialist.

Two seasonal technician positions for Aniakchak will be established. These positions will emphasize observation, resource management and monitoring, information, and enforcement of regulations when necessary. Their tasks will include extended patrols in the monument and preserve for monitoring, collecting routine data, and assisting research and management efforts of the National Park Service and other agencies.

There is a continuing need for communication with local interests in the villages. To provide this and to establish a point of contact for assistance to NPS staff on their frequent visits to the villages, two part-time village coordinator positions will be established, one each in

Port Heiden and one of the Chignik villages. Their functions would include communicating local village concerns to NPS staff as well as providing specific knowledge and assistance in planning and implementing research and monitoring programs.

In addition, the National Park Service has and will continue to communicate with rural residents on a regular basis to ensure that management strategies do not unnecessarily infringe on their interests. Methods of communication could include holding open houses in local communities where NPS staff would be available to discuss current issues and concerns, publishing a newsletter or an annual report, and making more frequent contact with local residents as NPS staff carry out their regular duties in the field.

The National Park Service will continue to carry out ANILCA section 1308 and chapter 320 in the Department of the Interior "Departmental Manual" (local hire). Furthermore, the National 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. The village coordinator positions are especially suited for the local hire provisions of section 1308(a) of ANILCA.

The management and operation of Aniakchak will depend on cooperation with other agencies. Cooperative agreements have been developed and implemented to facilitate various aspects of Aniakchak management. Some examples include the following:

There is a statewide master memorandum of understanding between the National Park Service and Alaska Department of Fish and Game which spells out each agency's cooperative role in fish and wildlife management (see appendix C).

An interagency agreement (Alaska Interagency Fire Management Plan: Kodiak-Alaska Peninsula) exists between the Alaska Departments of Fish and Game and Natural Resources, Bureau of Indian Affairs, Bureau of Land Management, U.S. Fish and Wildlife Service, U.S. Forest Service, Koniag, Inc. and several village corporations for fire management and/or fire suppression on the Alaska Peninsula and in Kodiak Island Borough.

A cooperative agreement also exists with the Alaska Department of Fish and Game for conducting moose surveys on the Alaska Peninsula.

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.

Other cooperative agreements may be developed as the need arises. This might include agreements as necessary for cooperative management with the state of Alaska regarding submerged lands, shorelands, tidelands, water rights, and public uses on waterways within Aniakchak.

Physical facilities required for administration are minimal. Office space for the resource management specialist and eventually the area manager will be provided in King Salmon. No permanent facilities are envisioned in local villages at this time. If needed by the resident coordinator and/or for temporary accommodation of seasonal rangers or the resource management specialist, a small office may be seasonally rented in a village. In the monument/preserve, no permanent new cabins for administrative purposes are proposed, but adaptive restoration of the APA bunkhouse and an elevated food-storage cache for joint staff/public use is required. Since the bunkhouse is historically significant, any stabilization or improvements will be consistent with preserving its historical values. Where resource management and research efforts require extended on-site staffing, portable shelters and tent platforms may be temporarily constructed for the use of NPS and other agency or institution staff. Wherever practicable and desirable, the Park Service will locate NPS facilities on native-owned lands in conformance with section 1306 of ANILCA.

PRIVATE INTERESTS WITHIN ANIAKCHAK

Proposals dealing with state and private landownership and subsurface oil and gas interests (i.e., ownership, not just development) are dealt with in the land protection plan.

If recreational use of Aniakchak originating outside the Alaska Peninsula increases, there may be modest increases in demand for food service and accommodation in the principal staging area, King Salmon, and to a lesser degree in Port Heiden. If additional capacity is required, the private sector is expected to meet that need. Similarly, if and when demand exceeds air-taxi capacity, the deficiency should be made up by private operators without concession status or subsidy.

Since recreational activities are expected to increase, an increase in demand for guide services in these uses is expected. These services should be met by guides in the private sector who make appropriate application for a commercial use license and report activities annually as requested.

Section 1307 of ANILCA provides 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 such services. Section 1307 also specifies that, in

selecting persons to provide any type of visitor service (except sport fishing and hunting guided 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 provisions of ANILCA. Any interpretation of this section will be implemented through rule making and published in the Federal Register.

RESPONSE TO EXTERNAL INFLUENCES

A variety of activities are now or may later be taking place on lands immediately surrounding Aniakchak or elsewhere in the Bristol Bay region. The responses proposed for such influences, as called for in ANILCA section 1301(b)(8), are covered in detail in the land protection plan. The National Park Service will cooperate with adjacent land managers to the fullest extent allowed by the legislatively determined purposes of Aniakchak, and will play the most positive, responsive role in regional planning consistent with protection of Aniakchak's resources.

PUBLIC INVOLVEMENT IN PLAN IMPLEMENTATION

Introduction

The planning for and management of national park system units in Alaska is an evolving and dynamic process. The general management plan provides overall guidance and direction for the management of the monument/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, major developments, and new or revised regulations do not become effective upon approval of the general management plan. Further information collection and analysis and appropriate public involvement are needed before these actions become final.

It is recognized that involving the public in the development of significant policies and management practices and in further planning for Aniakchak 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 Aniakchak. 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.

All public review documents will be submitted to the state of Alaska for coordinated state review. The National Park Service will also maintain an active mailing list of other groups, agencies, and individuals who have expressed interest in reviewing documents. As requested, these parties will be notified of the availability of public review documents, and upon request copies of such documents will be made available to those parties.

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 transportation and access planning. These plans and the required public involvement are described in the appropriate management sections of this plan, and the major ones are summarized in appendix L. 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 may include an interpretive

plan (prospectus), a scope of collections statement, and possibly others. 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 B.

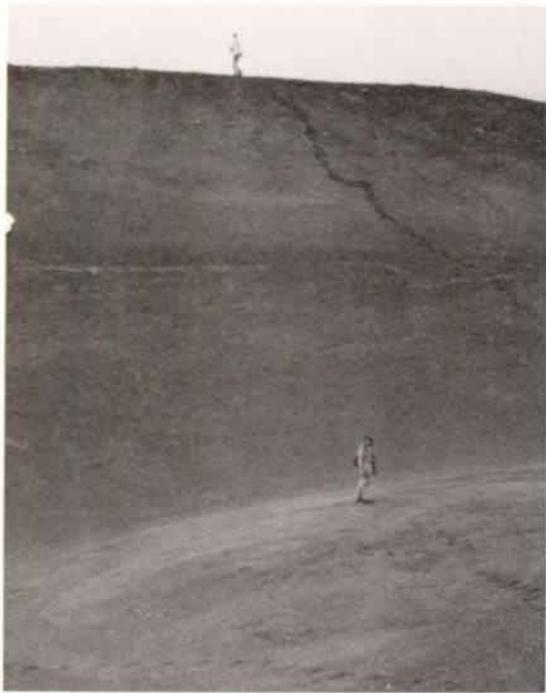
Regulations

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.



LAND PROTECTION PLAN

INTRODUCTION

In May 1982, the Department of the Interior issued a policy statement for use of the federal portion of the Land and Water Conservation Fund which requires that, in carrying out its responsibility for land protection in federally administered areas, each agency using the fund will

identify what lands or interests in land need to be in federal ownership to achieve management purposes consistent with public objectives in the unit

use, to the maximum extent practicable, cost-effective alternatives to direct federal purchase of private lands and, when acquisition is necessary, acquire or retain only the minimum interests necessary to meet management objectives

cooperate with landowners, other federal agencies, state and local governments, and the private sector to protect land for resource conservation or manage it for public use

formulate, or revise as necessary, plans for land acquisition and resource use or protection to ensure that sociocultural impacts are considered and that the most outstanding areas are adequately managed

In response to this policy, the National Park Service requires that a land protection plan be prepared for each unit of the national park system that contains private or other nonfederal land or interest in land within its authorized boundary.

The guiding principle of each land protection plan is to ensure the protection of that unit of the national park system consistent with the stated purposes for which it was created and administered. Land protection plans are prepared to

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 the unit purpose as established by Congress

inform landowners about NPS intentions for buying or protecting land within the unit through acquisition or other means

assist managers in identifying priorities for requesting and allocating funds to protect land and unit resources

find opportunities to help protect the unit by cooperating with state and local governments, landowners, and the private sector

The major elements to be addressed by this plan include (1) the identification of nonfederal lands within the boundaries of Aniakchak that need to be protected, (2) the minimum interest in those lands that the National Park Service must acquire, (3) the recommended means of

acquiring the land or interest in land, (4) priorities for protection to ensure that available funds are used to protect the most important resources, (5) impacts of the land protection plan on local residents, (6) the amount, type, and density of private use or development that can take place without harming unit resources, and (7) external activities that have or may have effects on unit resources and land protection requirements.

The major issues for this plan include retention of the natural character of Aniakchak, protection of the watersheds for anadromous and other fish species, and protection of the wildlife resources for subsistence and recreational uses.

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.

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.

Other actions proposed in this plan would cause no significant change in existing land or public use, and are therefore categorically excluded from NEPA considerations, in accordance with the Department of the Interior implementing procedures (516 DM 6, appendix 7.4, and 516 DM 2, appendix 2). Proposed actions for small tracts and submerged state lands are included in this category.

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.

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 public comment period.

Table 2 summarizes landownership in Aniakchak and the methods proposed to acquire or otherwise protect remaining nonfederal lands.

Table 2: Landownership and Protection Summary*

	<u>Acres</u>	<u>Percent of Monument and Preserve</u>
Current Ownership		
Federal land (includes 185,310 acres of selections by native corporations and individuals)	590,272	98
Nonfederal (native corporations and state of Alaska)	12,507	2
Total	602,779	100
Acreege to be Protected (includes selections by native corporations,** individuals, and state of Alaska)	197,817**	
Proposed Methods of Protection		
Fee simple acquisition	190,080**	
Easements	160	
Agreement	7,577	

Statutory Acreage Ceiling: None

Funding Status: No funds have been authorized, appropriated, or obligated.

Top Priorities: Fee simple acquisition (through exchange) of native allotment applications near Surprise and Meshik lakes totaling 140 acres if the applications are approved; fee simple acquisition of subsurface selections of oil and gas rights for 189,940 acres from Koniag Inc., when or if the selections are conveyed.

* 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.

**Acreage totals include both surface and subsurface estates.

PURPOSE OF THE UNIT AND RESOURCES TO BE PROTECTED

Significance and Purpose

As a unit of the national park system, Aniakchak is to be managed "to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations" (NPS organic act of 1916). Aniakchak National Monument was established by presidential proclamation in 1978. ANILCA designated the area as Aniakchak National Monument and Preserve to

maintain the [Aniakchak] caldera and its associated features and landscape, including the Aniakchak River and other lakes and streams, in their natural state; to study, interpret, and assure continuation of the natural process of biological succession; to protect habitat for, and populations of, fish and wildlife, including, but not limited to, brown/grizzly bears, moose, caribou, sea lions, seals, and other marine mammals, geese, swans, and other waterfowl and in a manner consistent with the foregoing, to interpret geological and biological processes for visitors. Subsistence uses by local residents shall be permitted in the monument where such uses are traditional.

The Aniakchak National Wild River was also established by ANILCA in 1980. For additional information, refer to the "River Management" section in the general management plan.

Resource Description

The Pacific coastline of Aniakchak is rugged, with cliffs and rocky islands. Peaks of the Aleutian Range rise above it to elevations of 2,000 to 4,000 feet. The primary feature of the unit, Aniakchak caldera, reflects the tremendous forces of volcanism that are operating in the region. Within the caldera are numerous features that typify volcanic activity, including the spring-fed Surprise Lake. Plant communities include wet tundra on the broad lowlands of the Meshik and Cinder River drainages; moist tundra on terraces, coastal lowlands, and subalpine slopes; shrublands lining streams and blanketing gentle lowland slopes; alpine tundra at elevations above 1,000 feet; and coastal dunes and beaches. These habitats support a variety of wildlife species, including caribou, moose, brown bears, wolves, river otters, wolverines, sea otters, harbor seals, sea lions, bald eagles, peregrine falcons, tundra swans and other waterfowl, and shorebirds. Although not documented, the endangered Aleutian Canada goose may migrate through Aniakchak. Streams in the unit provide spawning habitat for sockeye, chum, king, and pink salmon, as well as habitat for arctic char, Dolly Varden, and rainbow trout.

Cabins and other historic structures and ruins give evidence of changing lifestyles after Russian contact with native people. Archeological resources, though present, have not been systematically surveyed.

Natural and cultural resources of the monument and preserve are described more fully in "The Aniakchak Environment" section of this document.

Legislative Authorities

Passage of ANILCA provided a general framework for land protection for the newly established conservation units in Alaska. Section 1302 provides the general authorities for land acquisition. The secretary of the interior is authorized to acquire, by purchase, donation, exchange, or other means, any lands or interests in lands within the monument and preserve. However, any lands or interests in lands owned by the state and local governments or by native village and regional corporations may be acquired only with the consent of the owners. In addition, lands owned by natives, allotted under ANCSA, who received title to the surface estate of lands from a village corporation as a primary place of residence, business, or subsistence campsite (section 14(c)(1)) or from the secretary of the interior as a primary place of residence (section 14(b)(5)), may be acquired only with the consent of the owner unless the secretary determines that the land is no longer being used for the purpose for which it was conveyed and that the use is or will be detrimental to the purposes of the monument and preserve.

Native allotments or other private small tracts may be acquired without consent only after offering an exchange of other lands of similar characteristics and like value, if available outside the unit, and the owner chooses not to accept the exchange. Exchanges will be complicated by present selections and past conveyances of lands within the state and by the lack of suitable substitute lands.

No improved property will be acquired without the consent of the owner unless such acquisition is necessary for the protection of resources or for protection of those values listed in ANILCA. When an owner of improved property consents to exchange lands or to sell to the United States, the owner may retain a right of use and occupancy for noncommercial residential and recreational use by agreement with the National Park Service.

Sections 1302(i)(1) and (2) of ANILCA authorize the secretary of the interior to acquire, by donation or exchange, state-owned or validly selected lands that are contiguous to the monument or preserve. Any lands so acquired will become part of the unit without reference to the 23,000-acre restriction on minor boundary adjustments as defined in section 103(b).

Section 103(c) states that only the public land within the boundaries of a conservation system unit will be deemed to be included as a portion of the unit. The state, native, and other private lands within the boundaries are not subject to regulations that apply solely to federal lands. If conveyed to the federal government under the provisions cited above, such lands will become part of the unit and be subject to those federal regulations.

In addition to complying with the above legislative and administrative requirements, the National Park Service is required to administer the area as a unit of the national park system pursuant to the provisions of the Act of August 25, 1916 (39 Stat. 535), as amended and supplemented, and in accordance with the provisions of 16 USC, 36 CFR, and other applicable laws and regulations. The National Park Service has proprietary jurisdiction over the federally owned lands in the monument and preserve.

Resource Management and Visitor Use Objectives

Objectives of resource management, visitor use management, and administration of the monument and preserve are given in appendix A. Major objectives include preservation of natural ecosystems that include fish and wildlife populations in their natural diversity, preservation of the natural character of the monument and preserve, identification and protection of archeological and historical resources, and provision for visitor enjoyment and appreciation of the area consistent with the foregoing values.

LANDOWNERSHIP AND USES

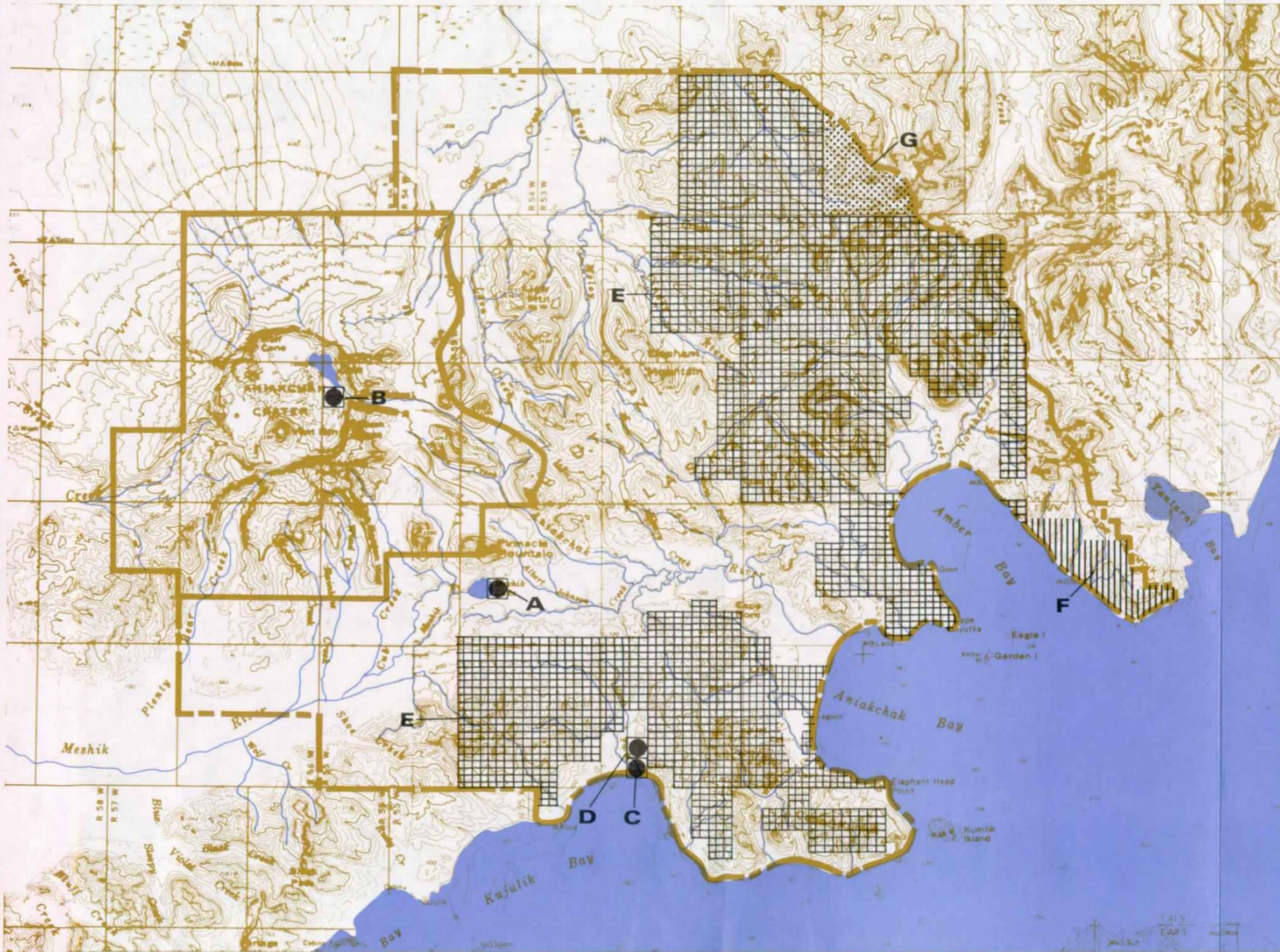
Ownership and Use of Nonfederal Lands

The current uses of nonfederal or selected lands within the monument and preserve are as follows (also see Landownership map and table 3):

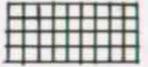
Native allotment applications for a 60-acre parcel in Aniakchak caldera, an 80-acre parcel on the shore of Meshik Lake, a 10-acre parcel on the North Fork River near Kujulik Bay, and a 150-acre parcel about 1/2 mile upstream on a tributary of the North Fork. Cabin ruins and a cabin are located on the 10-acre parcel. No structures are known to exist on the other parcels.

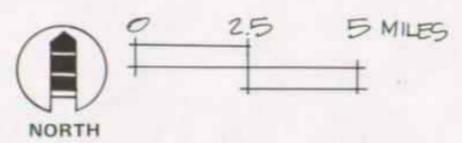
A 5,147-acre area of patented state land located in the northwest corner of the preserve. No development exists on this tract.

An area of approximately 185,010 acres on which the subsurface (mineral in-lieu) oil and gas rights have been selected by the Koniag Regional Corporation. (Note: Since insufficient lands were available on Kodiak and Afognak islands due to the limitations for national forest, national wildlife refuge, and state selected lands, additional lands were withdrawn on the Alaska Peninsula to fulfill village and regional entitlements within the Koniag region. Some of those lands were also withdrawn by section 17(d)(2) of ANCSA. Generally, conveyance of regional native selections was prohibited on lands that were withdrawn by section 17(d)(2). However, section 15 of PL 94-204 amended ANCSA and identified certain lands within the 17(d)(2)(e) Aniakchak withdrawal for selection by Koniag, Inc., as "in lieu" subsurface estate with certain limitations. That land



NOTE: LAND STATUS IS SUBJECT TO CHANGE AS VARIOUS CONDITIONS AFFECTING LAND STATUS ARE RESOLVED (FOR EXAMPLE, NAVIGABILITY DETERMINATIONS; STATE AND NATIVE LAND CONVEYANCES, REJECTIONS OR RELINQUISHMENTS; RIGHT-OF-WAY, EASEMENT, AND SMALL TRACT ADJUDICATION. BEDS OF INLAND NAVIGABLE RIVERS AND LAKES, TIDELANDS, AND SUBMERGED LANDS BENEATH MARINE WATERS ARE STATE OWNED.

- A-G** TRACT LETTERS (SEE TEXT)
-  STATE LANDS-PATENTED
-  SUBSURFACE OIL AND GAS IN-LIEU - SELECTIONS
-  SUBSURFACE OIL AND GAS - INTERIMLY CONVEYED
-  ALLOTMENT - APPLICATION
-  MONUMENT BOUNDARY
-  PRESERVE BOUNDARY



LANDOWNERSHIP
ANIAKCHAK
 NATIONAL MONUMENT AND PRESERVE
 UNITED STATES DEPARTMENT OF THE INTERIOR
 NATIONAL PARK SERVICE

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description was amended by section 911 of ANILCA, and section 1427(i) further limited the subsurface rights to be conveyed on those lands to oil and gas and sand and gravel used in connection with prospecting for, extracting, storing, or removing oil and gas (see table 3).

A 4,930-acre tract of land on Cape Kumlik, on the east shore of Amber Bay, was interimly conveyed to the Port Lions Village Corporation, but will be reconveyed back to the federal government after their Afognak Island selections are conveyed. The subsurface oil and gas rights on this tract are still retained by Koniag, Inc. (Note: Section 1427 of ANILCA directs the conveyance of all public lands (with specified exceptions) on Afognak, Bear, Teck, Hogg, and Murphy islands to a joint venture consisting of Koniag, Inc. (a regional native corporation) and the Koniag village corporations. This conveyance is in exchange for the relinquishment of the village corporations' section 12(a) and 12(b) selections and Koniag, Inc.'s, section 14(h)(8) selections on the peninsula. Relinquishments for those previous selections are on file at the Alaska State Office of the Bureau of Land Management. Additionally, the surface estate of lands conveyed to Afognak Native Corporation (for the village of Port Lions) in IC No. 340 will be reconveyed to the United States after their Afognak Island selections are conveyed. The subsurface estate of those lands conveyed to Koniag, Inc., in IC No. 341 will also be reconveyed with the exception of those rights related to oil and gas in section 1427(i) which will be retained by Koniag, Inc.)

There are no ANCSA section 17(b) (campsite and linear access) easements identified within Aniakchak.

The state of Alaska contends that certain rights-of-way may be valid under RS 2477. The validity of these rights-of-way has not been determined. Any valid right-of-way will be included in future land protection plans as nonfederal interests and appropriate protection strategies will be identified.

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 within Aniakchak.

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 full title to lands, or leasing the property for administrative purposes.

Table 3: Tract Summary of Nonfederal Lands or Interests in Aniakchak

<u>Tract</u>	<u>Owner/Applicant</u>	<u>Size (acres)</u>	<u>Location</u>	<u>Status</u> ¹
A	Graham (Christensen)	80	Meshik Lake	NA-P
B	Graham (Christensen)	60	Aniakchak caldera	NA-P
C	Brandal	10	North Fork/Kujulik Bay	NA-P
D	Brandal	150	North Fork/Kujulik Bay	NA-P
E	Koniag Regional Corp.	185,010	Various	IL-S
F	Koniag Regional Corp.	4,930	Cape Kunmik	IL-IC'd
G	State of Alaska	5,147	Northeast Preserve	S-P
H	State of Alaska	1,375	Aniakchak Lagoon	S-B
I	State of Alaska	1,055	Aniakchak River	S-B

¹Abbreviations:

- NA-P Native allotment application--pending
- IL-S Regional corporation in-lieu oil and gas--selection
- IL-IC'd Regional corporation in-lieu oil and gas--interimly conveyed
- S-P State--patented
- S-B State submerged lands under navigable waters

Potential Uses and Compatibility of Land Uses

Only one small parcel (tract C--the 10-acre parcel on the North Fork River) appears to have been used in recent years, probably as a base for subsistence activities. There are no year-round residences or commercial facilities in Aniakchak.

Owners of small parcels or native corporation lands may seek to develop sporthunting camps, primarily emphasizing brown bear and moose hunting.

Oil and gas exploration on regional corporation selections is likely. A discovery would probably lead to development of drill sites, access routes, and transportation facilities.

In determining uses that are compatible within a particular national park system unit, the following legislation and policies provide guidance: the organic act establishing the National Park Service, legislation establishing the unit, and NPS policies. Certain uses may be considered compatible in one park or in one part of a park and incompatible in another.

The National Park Service is required to examine existing and potential uses of nonfederal lands within the monument and preserve in order to determine if these uses are compatible with the purposes for which Aniakchak was established (ANILCA section 1301). For example, two of

the purposes Congress assigned for Aniakchak are the protection of the fish and wildlife habitat and the maintenance of the landscape in a natural state. The National Park Service must attempt to ensure that uses on federal and nonfederal lands within Aniakchak do not cause harm to that habitat or to the natural environment. If a private landowner were to subdivide his property and sell parcels for recreational development so that extensive habitat were destroyed or that caused an alteration of the natural environment on adjoining federal lands, this would be contrary to the purpose of protecting that habitat and environment and would be an incompatible use of private land in the monument and preserve.

The following lists of compatible and incompatible uses of nonfederal lands in Aniakchak are presented to publicly inform landowners about what uses of nonfederal lands are generally compatible with the purposes of Aniakchak, and what uses will cause the National Park Service to initiate actions to protect monument and preserve resources and values. These lists are intended to serve as general guidelines for both NPS managers and nonfederal landowners. Because all possible uses of nonfederal land cannot be anticipated and other compatible and incompatible uses may exist, the following lists of uses cannot be all-inclusive.

Many current or potential uses of nonfederal land are compatible with the purposes and values of the unit. Compatible uses include the following:

- private use of nonfederal lands for residential, commercial, recreational, or subsistence activities that do not impact wildlife or other values on adjacent federal lands, as discussed above

- construction, repair, replacement, or minor modification of new and/or existing structures, so long as the structures reasonably conform with the natural character of adjacent federal lands

- sale or transfer of property

Any activities that result in impairment of the values identified previously are considered incompatible uses of the land. In addition, any increase in the establishment of a permanent human population within the boundaries of the monument or preserve is incompatible with preservation of the unit's natural character.

Potential uses of nonfederal lands that would be incompatible with the ecological, cultural, and recreational values of the unit include the following:

- activities that result in water pollution, sedimentation, or other impairment of anadromous fish-spawning habitat

- contamination of other surface waters or groundwater

- construction of access roads, airstrips, and other surface disturbances that disrupt drainage patterns, accelerate erosion, and increase runoff and sediment loads on adjoining federal land

activities that impair wildlife use of habitat on adjacent federal lands

trapping or hunting that impairs the natural condition of wildlife populations in the monument or that impairs the healthy condition of wildlife populations in the preserve

disposal of refuse in a manner that attracts bears

activities that damage or contribute to damage of archeological or historical resources

intrusion on the natural character of scenic vistas

blocking public access for recreational use

development of major commercial facilities

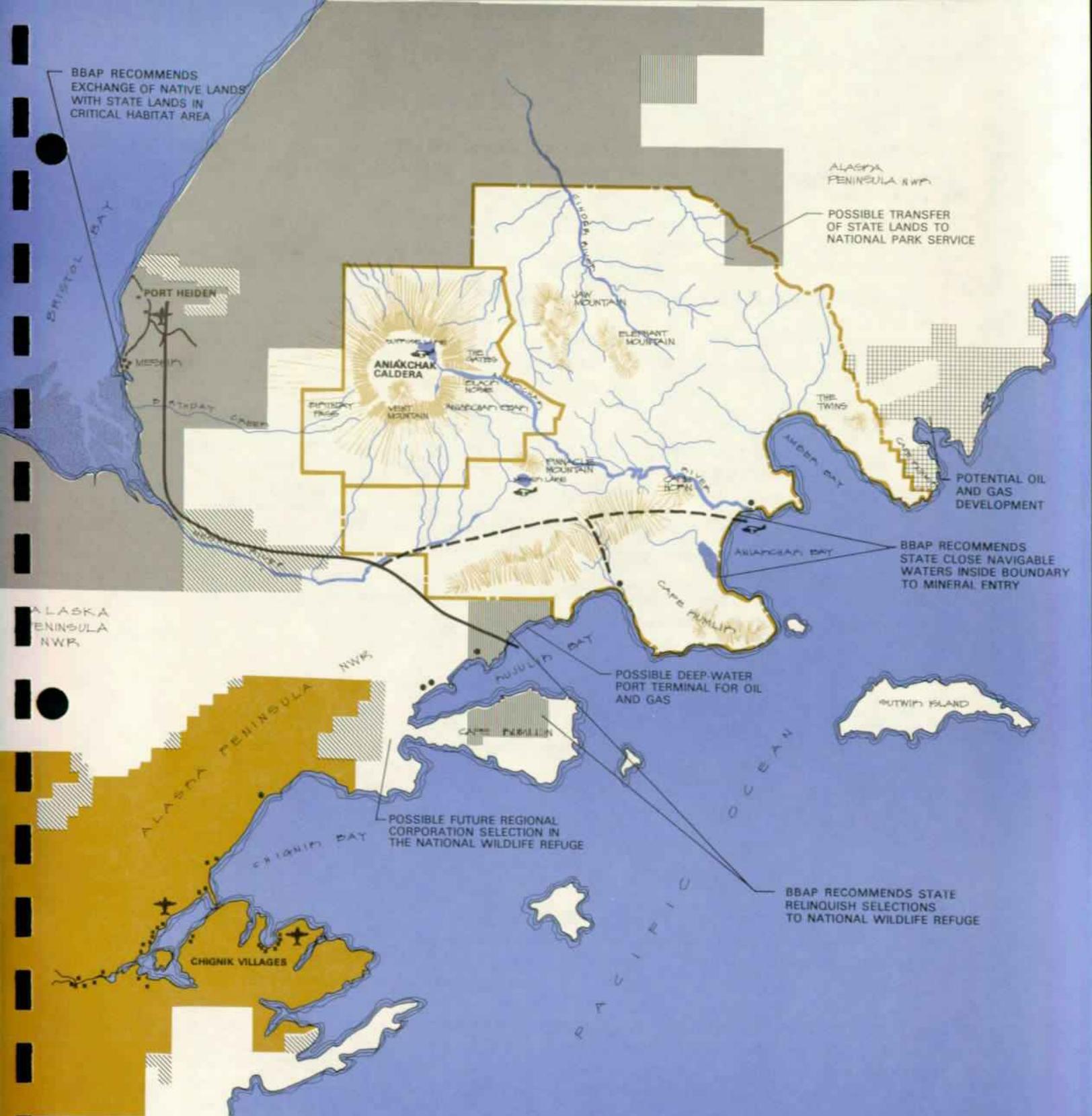
External Conditions Affecting Land Protection

ANILCA section 103(b) provides for minor boundary adjustments up to 23,000 acres. Section 1302(i) authorizes acquisition by donation or exchange of state-owned or state-selected lands that are contiguous to a conservation unit (the state has indicated it will not donate any land to the federal government). Except for these provisions, the National Park Service cannot acquire interests in lands outside the unit. Nevertheless, the use of lands outside the unit can affect the integrity of resources as well as the quality of visitors' experiences within the unit--in a positive way if the uses are harmonious with the unit's mission, or in a negative way if they conflict with or detract from it.

Lands adjacent to Aniakchak consist primarily of state patented and federally owned (Alaska Peninsula National Wildlife Refuge) lands. Several tracts within the refuge and abutting the preserve are native-selected or conveyed lands (see Adjacent Land Status and External Influences map).

The recently released Bristol Bay Area Plan for State Lands (State of Alaska 1984) documents a variety of activities that could potentially occur on lands in the Aniakchak area. Primary uses of state lands adjacent to Aniakchak are to be fish and wildlife habitat and harvest, recreation, and oil and gas development. Mineral exploration and community expansion are encouraged on lands south of Aniakchak.

Ongoing and proposed activities on adjacent lands that could affect Aniakchak include onshore and offshore oil and gas exploration and development, active mineral exploration and development, a north-south transportation corridor and other road development, land disposal and subdivision, sport hunting, commercial fishing, recreational development, and subsistence activities. A potential trans-peninsula transportation and pipeline corridor from Port Heiden to Kujulik Bay, immediately south of Aniakchak, has been identified. An alternate route might travel through the preserve to Kujulik Bay or Aniakchak Bay.



- MONUMENT BOUNDARY
- - - PRESERVE BOUNDARY
- ✈ COMMERCIAL AIRSTRIP
- ⚓ AMPHIBIOUS AIRCRAFT LANDING (UNIMPROVED)
- VILLAGE BUILDINGS
- CABINS
- NATIVE LAND
- ▨ NATIVE APPLICATION
- STATE LAND
- ▨ STATE APPLICATION
- ▨ OIL AND GAS RIGHTS (KONIAKI)
- POSSIBLE FUTURE OIL AND GAS PIPELINE
 - PREFERRED
 - - - ALTERNATIVES

ADJACENT LAND STATUS AND EXTERNAL INFLUENCES ANIAKCHAK

NATIONAL MONUMENT AND PRESERVE
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The National Park Service intends to work closely with all surrounding land managers to preclude or mitigate any potential adverse effects on Aniakchak.

Past Acquisition Activities and Current Protection Program

Aniakchak National Monument and Preserve was only recently established (1980) and has not acquired any land or interests in land subsequent to establishment. There have been no funds authorized, appropriated, or spent for acquisition in Aniakchak, nor is there any statutory acreage ceiling. This plan is the first to develop and prioritize a land protection program for Aniakchak.

Landowners who no longer wish to retain their land for the purposes for which it was acquired and wish to sell property within the monument and preserve are encouraged to contact the superintendent. The Park Service is interested in reviewing 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 ANILCA 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.

Sociocultural Characteristics

There are two very general patterns in the relationship between the private lands in the monument and preserve and their local sociocultural context. The two small tracts were claimed by local people who, now or in the past, may have used these sites as a part of their subsistence lifestyle. While commercial fishing in Bristol Bay dominates activities in the summer months and is the mainstay of the regional economy, activities during much of the remainder of the year focus on trapping, hunting, or subsistence fishing. Lands selected by Koniag village corporations are likely to be used to generate economic returns through resource development or sale of the land.

LAND PROTECTION ALTERNATIVES

Land Protection Laws and Authorities

Federal. Mining activity in areas of the national park system is governed by PL 94-429 as implemented through regulations in 36 CFR 9A.

Affirmative responsibilities for preservation of cultural resources by federal agencies is established by EO 11593 (Protection and Enhancement of the Cultural Environment; May 13, 1941) and PL 96-515, section 110 (National Historic Preservation Act as amended in 1980). Agencies are directed to identify, consider, preserve, and positively use cultural resources to achieve the following objectives:

Foster conditions, through measures including financial and technical assistance, under which our modern society and our prehistoric and historic resources can exist in productive harmony and fulfill the social, economic, and other requirements of present and future generations.

Provide leadership in the preservation of the prehistoric and historic resources of the United States and of the international community of nations.

Administer federally owned or controlled prehistoric and historic resources in a spirit of stewardship for the inspiration and benefit of present and future generations.

Contribute to the preservation of nonfederally owned prehistoric and historic resources and provide encouragement to organizations and individuals undertaking preservation by private means.

Encourage the public and private preservation and compatible use of historic structures.

Assist state and local governments and the National Trust for Historic Preservation to expand and accelerate their historic preservation programs and activities.

Section 106 of the National Historic Preservation Act, as amended in 1980, requires federal agencies to take into account the effects of federally assisted undertakings on properties listed or eligible for listing on the National Register of Historic Places, and to give the Advisory Council on Historic Preservation an opportunity to comment on such undertakings.

The Archeological and Historic Preservation Act of 1974 (PL 93-291; 16 USC 460) calls for the preservation of historic and archeological materials and data that would otherwise be lost as a result of federal construction or federally licensed or aided activities. Data recovery or in situ preservation is available to the secretary of the interior.

The Archeological Resources Protection Act of 1979 (PL 96-95; 16 USC 470aa) further protects historic, prehistoric, and archeological properties on federal and Indian lands by providing criminal and civil penalties against unauthorized use and destruction of those properties.

The Coastal Zone Management Act (PL 92-583, as amended in 1976 and 1980) 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. After a state program has been approved by the Office of Coastal Zone Management, federal activities affecting the state's coastal zone are to be consistent with the state program. The provision applies not only to federal construction, but also to permits, licenses, and grants. Most activities on federal lands are exempt from these consistency requirements.

Title XI of ANILCA provides rules and guidelines concerning access to private lands as well as transportation and utility systems within conservation units. Specifically, sections 1101-1109 concern transportation and utility rights-of-way, and section 1110 concerns access to homesites and access for traditional activities.

State. The Anadromous Fish Act (AS 16.05.870) provides protection to specific rivers, lakes, and streams or sections of them that are important for the spawning, rearing, or migration of anadromous fish. A number of water bodies in the unit, including the Aniakchak, Meshik, and Cinder rivers, are designated anadromous fish streams specifically protected by this act. The act requires any person, organization or government agency that is proposing construction that involves or uses one of the above water bodies must notify the commissioner of the 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.

The Bristol Bay Coastal Resource Service Area, which encompasses Aniakchak, has an approved coastal management program. Its goal is to achieve wise use of the land and water resources of the coastal area, balancing ecological, cultural, and economic values so as to maintain and protect coastal resources for the beneficial use and enjoyment of this and future generations. For activities occurring on federal lands that directly affect state coastal resources, the National Park Service will comply to the maximum extent practicable with the Alaska Coastal Management Program. The program's objectives most related to the mission of Aniakchak and the protection of its resources are as follows:

Ensure that development activity occurs in a manner that has no, or minimal, impact on important fish and wildlife populations.

Encourage the development of community land use planning efforts so that they may expand in a careful manner; avoid the creation of new communities.

Ensure that state, federal, and native lands made available for private development are thoroughly evaluated and shown to be physically capable of supporting the intended use.

Identify areas of high recreational value and use, and ensure that these areas retain the unique qualities that resulted in their identification.

Ensure that public access to recreational areas is maintained.

Alternative Means of Land Protection

Potential methods of land protection include cooperative agreements; Alaska Land Bank; coordination with other agencies; regulations; less-than-fee acquisition or easement; fee simple acquisition; and a combination of methods. Each alternative would provide some degree of protection to the ecological, cultural, wilderness, and recreational values of Aniakchak's federal and nonfederal lands. The application, sociocultural effects, and potential effectiveness of each alternative are considered below.

Agreements. An agreement is a legal instrument defining arrangements between two or more parties. Advantages of agreements include their flexibility, relative low cost, and ability to establish cooperative arrangements for management.

Application: An agreement can provide for the exchange or transfer of services, funds, or benefits. Some of the elements that could be addressed in an agreement for land protection include

- access for resource management activities
- routine maintenance or restoration
- enforcement of resource protection laws
- other law enforcement
- joint review of permit applications
- interpretive services

Sociocultural effects: Specific effects depend on the terms of the agreement. Since, by definition, most of the interested parties would agree with its terms, it is unlikely that an agreement would have negative or adverse effects.

Effectiveness: Agreements are likely to be most effective for lands owned by entities other than individuals. These include corporations, state or local governments, federal agencies, and nonprofit organizations. Agreements are more likely to be workable with these groups than with individuals because organizations often have the necessary staff, equipment, and financial resources to develop a worthwhile agreement in the first place and then to carry out the terms of the agreement over a long period of time.

Agreements are appropriate when both parties have similar or compatible management objectives. They can be used as interim protective measures when long-term goals cannot be immediately achieved. The expenditure of federal funds to provide permanent facilities under potentially short-term agreements is generally prohibited. Disadvantages include procedural requirements, the ability of one party to terminate the agreement on short notice, and the lack of permanent protection.

Alaska Land Bank. Section 907 of ANILCA established the Alaska Land Bank program to provide legal and economic benefits to native landowners and to provide for the protective maintenance of nonfederal lands, particularly where the lands relate to conservation system units.

Application: Land Bank agreements may contain provisions such as the landowner's responsibility to manage land in a manner compatible with the planned management of the unit. The superintendent's responsibility is also defined. It may include technical and other assistance such as fire management, trespass control, resource and land use planning, and other services, with or without reimbursement as agreed upon by the parties involved. Native corporation lands (but not native allotments or small patented tracts) would have immunity from adverse possession, real property taxes, and assessments when included in the Land Bank. They would also be immune to judgment in any action of law or equity to recover sums owed or penalties incurred by any native corporation or group or any officer, director, or stockholder of the corporation or group. Land Bank agreements may be particularly important in cooperating with native corporations that own large tracts of land in and adjacent to conservation system units.

Sociocultural impacts and effectiveness are essentially the same as for cooperative agreements (see above).

Coordination with Other Agencies. Actions by federal and local agencies to permit, license, or provide financial assistance may have significant effects on resources of the monument or preserve. Under provisions of NEPA, major federal actions are subject to public review processes to ensure adequate consideration of possible effects on the environment. The Coastal Zone Management Program also provides opportunities for review of permitting and funding activities that may have a significant effect on resources of the monument or preserve. Actions of special concern include federal grants, loans and loan guarantees for new development, road improvements, pipeline and utility corridors, sewage treatment facilities, and solid waste disposal.

As a concerned neighbor and land manager, the National Park Service can help ensure that other agencies are fully aware of any effects that proposed actions may have on resources of the monument or preserve. Since it is NPS policy to coordinate and cooperate with other agencies, organizations, and individuals to minimize conflicts, participation in public hearings and review processes is one means of expressing NPS concerns. Coordination may also be aided by memoranda of understanding or by requesting in advance that the National Park Service be notified when

certain actions are being considered. Participation by the Park Service in project or permit review processes will help encourage the most compatible design, location, and operation of new developments.

Regulations. As discussed below, regulatory controls stemming from authority vested in federal, state, and local governments may be available to help protect unit resources.

Application: Regulations are most useful for modifying the nature, level, and duration of activities. For example, federal, state, and local regulations often impose strict limits on dredging or filling of wetlands that would destroy wildlife habitat or degrade water quality. Local subdivision and environmental regulations may restrict residential development that is not adequately served by water and sewage-treatment facilities.

Sociocultural effects: Although with the adoption of regulations, developed with public involvement, individual landowners may be prevented from using their land in some ways, but this restriction on individual freedom results in benefit to the community as a whole.

Effectiveness: Where the impact of development is already evident, regulations are more likely to be effective in reducing the adverse effects of major projects. In relatively pristine areas, regulations may be of little use in preserving natural systems from any intrusion or development. Regulations are also more likely to be effective where there is a good base of information about the impacts that certain activities will have on unit resources.

Guidance and controls for public use and recreational activities in national park system units is provided in 36 CFR. While some of the regulations apply to nonfederal lands and waters, they are applicable only in units where the National Park Service has exclusive or concurrent jurisdiction; i.e., where the state has ceded enforcement authority to the federal government. Thus, the CFR regulations do not provide land protection to nonfederal lands in Aniakchak National Monument and Preserve.

Easements. Landownership may be envisioned as a package of rights. An easement conveys some of the rights from one owner to another, while the rest of the rights of ownership remain unchanged.

Application: Easements are most useful where

some, but not all, existing or potential private uses of the land are compatible with protection of unit resources

the owners desire to continue their occupancy and current uses of the land under conditions conveyed to the National Park Service

scenic values, resource protection, or access by the public or the Park Service is necessary only over a portion of the land

Easements may be used to convey a right of access, ensure the preservation of scenic values, maintain existing land uses, or limit existing or potential uses. Terms of an easement depend on the resource and concern, the topography, and the current or potential use and development of a specific tract. For example, the provisions of an easement to protect unit resources might address the following points: clearing of vegetation; density, height, and design of new structures; and NPS access for management of natural and cultural resources.

Sociocultural effects: Individual and cumulative effects will depend on the rights acquired. Overall, effects would likely be beneficial since the easements would contribute to the protection of ecological, cultural, wilderness, and recreational values of the monument and preserve.

On large tracts, the development of specific terms for easements would require detailed site planning to identify the most environmentally sensitive areas and the areas where development might be accommodated with minimal impacts. The development of specific terms can be a cooperative effort to ensure that development follows traditional patterns of land use and avoids any unnecessary disturbance of the natural system.

Effectiveness: Because easements are enforceable property rights, they are binding on future owners and thus provide greater assurance of permanent protection than do agreements or zoning ordinances. Advantages of easements include

- continuation of private ownership and use subject to the terms of the easement

- initial costs potentially lower than for fee acquisition, thus permitting the protection of more land

- less impact on local property taxes than fee acquisition

Disadvantages of easements rather than fee acquisition include

- potential difficulty in enforcement of easement terms

- frequent violations due to unfamiliarity of the landowners with less-than-fee ownership

- relatively high cost to acquire undeveloped properties where any development would be incompatible with unit values

- higher cost to monitor compliance with the terms and conditions of the easement

- higher cost of operation by the National Park Service than with fee acquisition

Fee Acquisition. When all of the interests in the land are acquired, it is owned in fee simple. Fee acquisition may be recommended when other methods are inefficient or inadequate to meet land protection needs.

Application: Fee acquisition is most often appropriate where

the land is owned by individuals who are not willing to sell a less-than-fee interest

the land must be maintained in a natural condition that precludes private use

resources of concern cannot be protected by alternative methods, or the alternatives would not be cost-effective

the land is needed for development of unit facilities or for intensive public use

Sociocultural effects: This method has the potential to significantly affect the individual or community involved. Residents would be dislocated unless their use and occupancy was reserved.

Effectiveness: Fee simple acquisition is the most effective and secure method of land protection although, in the short term, it is also generally the most expensive method. Advantages of fee acquisition include

provision for permanent NPS control over human activities and resource use on the tract

provision for full access and development where needed

continuation of private use and occupancy where reserved

landowners' familiarity with fee simple ownership

lower cost of operation than with easements

Disadvantages of fee acquisition include

initial cost of acquisition

dislocation of residents, unless use and occupancy are reserved, and reduction in local property tax base

requirements for management and maintenance, especially on developed land

Classification of State Lands. The Alaska Department of Natural Resources, Division of Land and Water Management, is responsible for managing state lands that are not specially 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: Future navigability determinations may affirm that portions of certain water bodies within the preserve are state owned. Additionally, state lands are within the northeastern portion of the preserve and also abut the northern and northwestern boundary of the monument and preserve. The National Park Service, or any individual or organization, can request that the Division of Land and Water Management classify or reclassify state lands. Classification of state lands may be useful in cases where the interests of the National Park Service and the state of Alaska are similar.

Sociocultural effects: Classification of state lands is established through a public process. Any impacts on the people of the region and state would likely be identified and eliminated or minimized during the process. The uses of the lands subject to classification and the type of classification determine what impacts will result.

Effectiveness: Classification can provide protection for state lands within and adjacent to a park unit. Advantages include no acquisition costs or need to exchange lands. Disadvantages include lack of permanent protection for preserve purposes.

Combination of Methods. Because of the diversity of lands and resources in the monument and preserve, no single method is adequate and cost-effective in every land protection situation. A combination of methods is likely to be more useful in ensuring that land uses within and adjacent to the monument and preserve are compatible with protection of unit values.

Application: The major consideration in selecting appropriate land protection methods is the need for compliance with the intent of the congressional legislation, executive orders, and proclamations that established the monument and preserve. These authorities emphasize the preservation and protection of Aniakchak's ecological, cultural, and recreational values, and the National Park Service will, in all cases, seek the land protection needed to fulfill this obligation. In some cases fee acquisition may be necessary and justified to protect key resources essential to the purpose of the unit or to provide for public use or improved resource management. Scenic easements may be effective in protecting the unit from incompatible development that would impair resources and detract from the visitor's experience.

Cooperative agreements with state agencies responsible for land management within the unit may ensure that the use of those lands will be consistent with unit purposes. Although regulations are not a substitute for the acquisition of land interests, the National Park Service will take advantage of opportunities to use regulations to maintain existing land uses and environmental quality within the monument and preserve.

Sociocultural effects: The objective of the land protection program of Aniakchak National Monument and Preserve is to ensure that the integrity of the unit is preserved. Implementation of the actions recommended in the following sections would have some impacts on nonfederal landowners in the monument and preserve.

Effectiveness: Implementation of the recommended plan will be effective in complying with congressional mandates for the unit and with the Department of the Interior policy to guide federal acquisition of nonfederal property rights.

Methods of Acquisition

There are four primary methods for acquisition of fee and less-than-fee interest in lands. These are described in the paragraphs that follow.

Donation. Landowners may be willing to donate their land or certain property rights in order to achieve conservation objectives. The tax benefits of donation may be an important consideration. Donations of fee are deductible from taxable income. Though subject to IRS requirements, easement donations may also be deductible.

Landowners are encouraged to consult qualified tax advisors to discuss in detail the advantages of donations. NPS representatives may be able to provide some general examples of tax advantages, but they cannot provide definitive tax advice.

Exchange. Land or land interests may be acquired by exchange. The land to be exchanged must be located within Alaska and must be of approximately equal value. Cash payments may be made for differences in value.

The National Park Service will also consider an exchange for other federal lands within the unit boundary in order to consolidate ownerships into more manageable units.

Other federal lands in Alaska that are 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 identify such federal lands that may be available for exchange purposes.

Purchase. Acquisition by purchase requires that funds be appropriated by Congress or donated from private sources. Donations of funds or purchases of land by individuals or organizations interested in holding land for conservation purposes will be encouraged.

Where it is determined that land or interests in land must be acquired, every effort will be made to reach a negotiated settlement with the owner. However, if an agreement cannot be reached, a complaint in condemnation

may be filed in the Federal Court for establishment of the fair market value of the property. Condemnation proceedings will not be initiated until negotiations to achieve satisfactory resolution of the problem through means other than condemnation have been exhausted. Exercise of the power of eminent domain, where allowed by law, may be used to prevent land use activities which, in the opinion of the secretary of the interior, produce an imminent threat or actual damage to the integrity of monument and preserve lands, resources, or values and no other action will prevent the damage. In addition, condemnation action may be used during the process of acquisition to overcome defects in title.

Relinquishment. State and native corporation lands that are under application may be relinquished, resulting in fee acquisition by the National Park Service. The relinquishing entity can use the allocation for acreage being relinquished to acquire other lands outside the unit.

RECOMMENDATIONS

General

The recommended means of land protection for nonfederal land in Aniakchak are in priority order below. Ownership, location, acreage 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.

"Owner" as it pertains to privately owned real property inside the monument/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 monument/preserve is expected to be minimal. Condemnation is usually avoided, although it may be used in emergencies to prevent imminent land use activities that would severely damage the integrity of unit values.

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 and/or priorities 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.

Land Protection Priorities

<u>Priority</u>	<u>Tract</u>	<u>Serial No.</u>	<u>Owner/Applicant</u>	<u>Acres</u>
1	A,B	AA007073	Graham (Christensen), Virginia	140

Analysis: Tract A (80 acres) is at the northeast corner of Meshik Lake. The parcel is generally flat, though it rises at the north end. Meshik Lake is one of two lakes in the monument and preserve on which floatplanes can land. This access point may be used as a staging area for rafters beginning a float trip on the Meshik River or for hikers bound for Aniakchak caldera. If this application is approved, any private development would disrupt the natural character of this lake as well as potentially disturb the large number of bears that use this area.

Tract B (60 acres) is along the Aniakchak National Wild River near its headwaters in Surprise Lake in the caldera. It is on a flat ash field vegetated with sparse grass and herbaceous plants, becoming very swampy near the river. Floatplanes can land on Surprise Lake, and wheeled aircraft may be able to land on the outwash plain $\frac{1}{2}$ mile northwest of the site; however, inclement weather commonly precludes aircraft from entering the caldera. Potential uses of the parcel include fishing for sockeye salmon in the Aniakchak River or using the site as a

base for subsistence activities in the caldera. Development of the site would conflict with the general management plan. Construction of any structures on the site, including seasonal residential structures, would significantly affect the unique scenic and natural character of the vast expanse within the caldera.

Minimum Interest Needed: If the application for either of these parcels is approved, the National Park Service will seek to acquire it in fee through exchange.

<u>Priority</u>	<u>Tract</u>	<u>Serial No.</u>	<u>Owner/Applicant</u>	<u>Acres</u>
2	E	Numerous	Koniag Inc.	185,010
	F	IC No. 341	Koniag Inc.	4,930

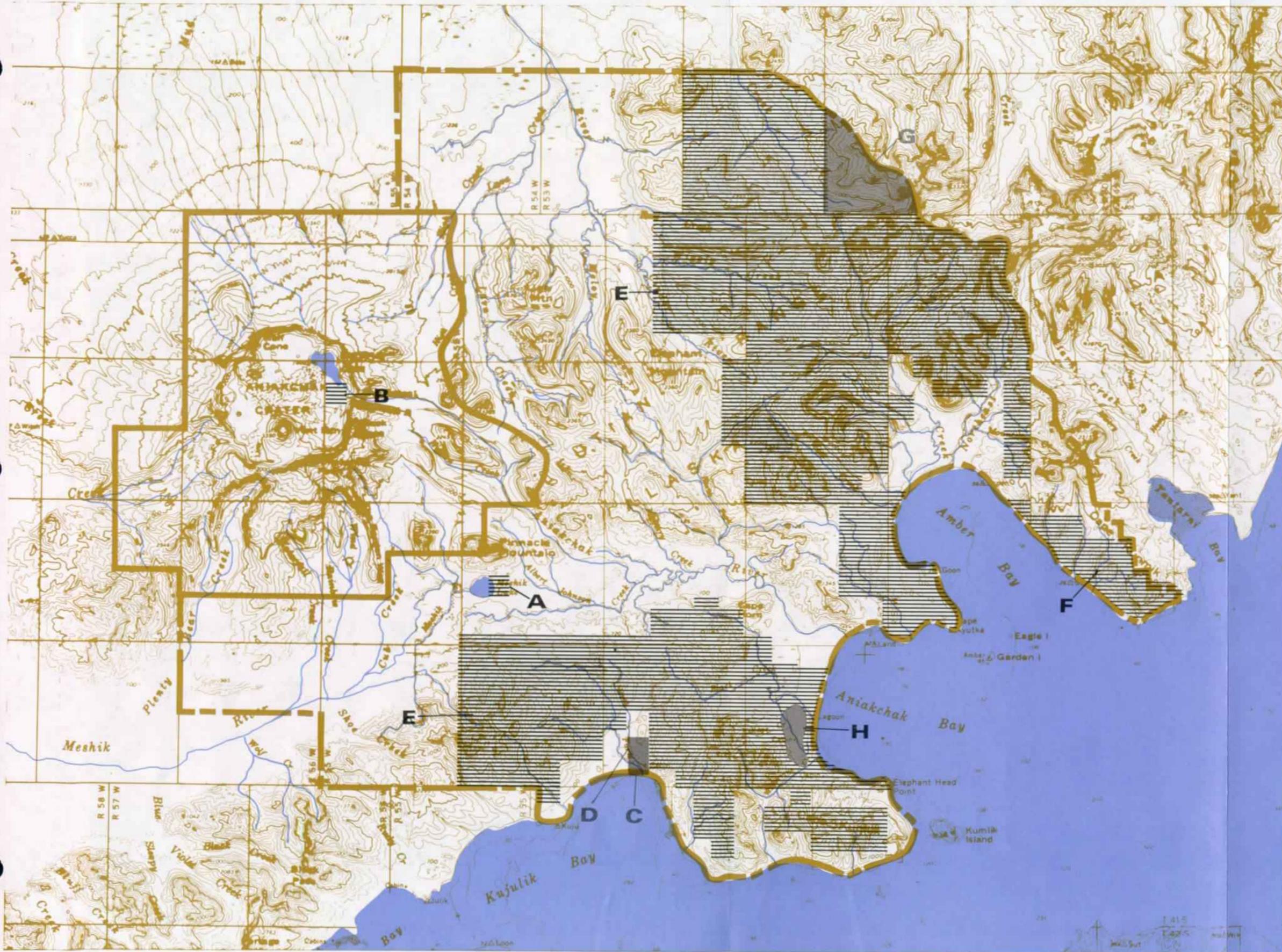
Analysis: Subsurface rights to approximately 185,010 acres (tract E) have been selected by the Koniag Regional Corporation in lieu of selections from lands contiguous to villages. In accordance with ANILCA, section 1427(I), these selections pertain only to oil and gas and the surface sand and gravel necessary to prospect for, extract, store, or remove oil and gas. The federal government would retain the other subsurface and surface rights.

This area has unknown to low potential for oil and gas. Several major river drainages lie in the area, including rivers that flow into Kujulik and Amber bays as well as the headwaters of the Cinder and King Salmon rivers. High concentrations of brown bears occur along salmon-spawning streams. The area is also used by caribou for calving and migration.

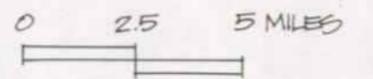
In addition to the in-lieu selections of tract E, Koniag, Inc. has received interim conveyance of subsurface oil and gas rights to 4,930 acres (tract F) in conjunction with previous village land surface conveyances. These subsurface rights were taken to facilitate oil exploration in adjacent Yantarni Bay. Surface rights on tract F are federally owned.

Where oil and gas rights are actually conveyed, any exploration or development operations must involve consultation with the surface owner and be in accordance with environmental protection guidelines outlined in 50 CFR 29.32, which provide that, "to the greatest extent possible," damage, erosion, pollution, and contamination of the land and water and their resources should be prevented, and that the character and condition of the land prior to such use would be restored.

Minimum Interest Needed: Because operations conducted even under strict controls may contaminate watersheds and impair fishery habitat and populations, the National Park Service will seek fee simple acquisition through exchange or purchase of these subsurface rights, where conveyed, to ensure protection of fish and wildlife, water quality, other resource values, and subsistence or recreational values of the area.



-  HIGH PRIORITY (1 or 2)
INCLUDES TRACTS A, B, E, F
-  LOWER PRIORITY (3, 4, or 5)
INCLUDES TRACTS C, D, G
-  MONUMENT BOUNDARY
-  PRESERVE BOUNDARY



LAND PROTECTION PRIORITIES ANIAKCHAK

NATIONAL MONUMENT AND PRESERVE
UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

ON MICROFILM

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Highest priority will be given to the most ecologically important resource values and to the most attractive visitor use areas. Protecting the upper watersheds of Aniakchak and Meshik rivers is essential to preserving the pristine water quality and undisturbed character of these rivers. It is equally important to protect broad corridors along the main river channels and all of Aniakchak Bay from the levels of human activity and scenic intrusion associated with oil and gas development and transportation facilities.

<u>Priority</u>	<u>Tract</u>	<u>Serial No.</u>	<u>Owner/Applicant</u>	<u>Acres</u>
3	G	AA005310	State of Alaska	5,147

Analysis: Tract G is part of a larger area owned or selected by the state and borders much of the northwest side of Aniakchak. Situated at the headwaters of Pumice Creek within the preserve boundary, this tract has now been patented to the state. The land is currently undeveloped, and potential development is speculative. The Bristol Bay Area Plan for State Lands (pp. 3-54) designates fish and wildlife habitat and harvest, recreation, and oil and gas as primary uses of state lands in this area. Remote settlement and cabins are prohibited. No major wildlife concentrations are known to exist on tract G, and the primary natural values are geological. No backpacking destinations have been identified, and this portion of Pumice Creek is not conducive to rafting. The tract has some potential for oil and gas discovery and considerable potential for copper and molybdenum. The state plan proposes that the tract be considered for possible exchange to the National Park Service, for unspecified lands in return, or that it be managed under a cooperative agreement with the National Park Service.

Minimum Interest Needed: Since the ultimate interest needed is fee title, the National Park Service will participate in discussions concerning a possible land exchange. Meanwhile, the Park Service will seek a cooperative agreement with the state to preclude mining and ensure protection of healthy wildlife populations, water quality of Pumice Creek, and other resource values.

<u>Priority</u>	<u>Tract</u>	<u>Serial No.</u>	<u>Owner/Applicant</u>	<u>Acres</u>
4	C,D	AA006023	Brandal, Alex, Jr.	160

Analysis: Tract C is a 10-acre parcel along the North Fork River near Kujulik Bay, and tract D is a 150-acre parcel ½ mile upstream straddling a tributary to the North Fork. One cabin and several cabin ruins are located on the smaller parcel. Access to the smaller parcel is primarily by boat. Access to the larger parcel is by foot up the river. Wheeled aircraft can land on an ash field 1½ miles north of the larger parcel.

Minimum Interest Needed: Acquisition of fee title is not required, and therefore, if the application was approved, the National Park Service will seek a conservation easement to protect the natural resource values.

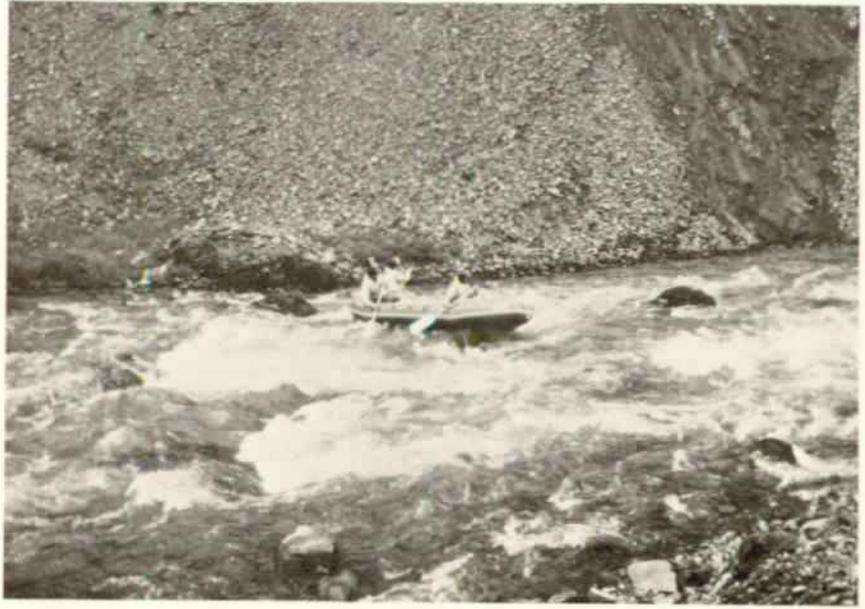
BOUNDARY CHANGES

At this time no boundary changes have been identified.

Potential additions to the monument/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 monument or preserve, whichever is adjacent to the addition. Potential acquisitions within the monument/preserve will similarly be designated the same category as surrounding lands. If such an addition or acquisition is adjacent to both monument and preserve lands, the tract will have a split designation following the extension of the monument/preserve boundary, adjusted wherever possible to follow hydrographic divides or embrace other topographic or natural features. For additions to the monument/preserve beyond the 23,000-acre limit of section 103(b), congressional action will be required and monument/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. The compliance requirements of NEPA and ANILCA will be fulfilled in the case of administrative boundary adjustments.

Additions to the monument/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.



WILDERNESS SUITABILITY REVIEW

INTRODUCTION

A review of all lands within the monument and preserve regarding their suitability or nonsuitability for preservation as wilderness has been accomplished in accordance with section 1317 of ANILCA and section 3 of the Wilderness Act.

The Wilderness Act created a national wilderness preservation system to be made up of federally owned lands designated by Congress. The intent was to "secure for the American people of present and future generations the benefits of an enduring resource of wilderness." The act defines wilderness as follows:

A wilderness, in contrast with those areas where man and his own works dominate the landscape, is . . . an area where the earth, and its community of life are untrammelled by man, where man himself is a visitor who does not remain. An area of wilderness is . . . 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.

Recommendations on whether to designate suitable areas as wilderness will be made following completion of the general management plan. An environmental impact statement 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.

Wilderness suitability is based generally on conditions as they currently exist. Because of the delay between the general management plan and the wilderness recommendation, there is a possibility that proposed use and development, if implemented, could adversely affect areas to be included later in a recommendation. 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.

WILDERNESS SUITABILITY CRITERIA

Wilderness suitability criteria have been developed that reflect the definition of wilderness contained in the Wilderness Act and the provisions

of ANILCA specific to wilderness areas in Alaska. These criteria were applied to all lands in the preserve and monument to determine their suitability for designation. These criteria relate to the physical character of the land and current land status. Other factors such as appropriateness for management as wilderness and state and local concerns with wilderness management will be considered during the formulation of the recommendation which follows completion of the general management plan. All future wilderness recommendations will recognize valid existing rights including rights-of-way under RS 2477.

In determining suitability, a particular tract of land is judged against the following criteria:

<u>Description of Land or Activity</u>		<u>Suitable for Wilderness</u>	<u>Not Suitable for Wilderness</u>	<u>Suitability Pending</u>
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

SUITABILITY DETERMINATION

Using the above criteria, all of the federal lands within Aniakchak have been determined suitable for wilderness designation based on their present undeveloped and unimpaired state. There are no past or current major mining developments, improved roads or ATV trails, improved or maintained airstrips, or inhabited cabins on the federal lands subject to this review. However, approximately 197,817 acres (including surface and subsurface) have been selected by and/or conveyed to regional native corporations, individuals, and the state of Alaska. Whether or not these selections will be transferred out of federal ownership is uncertain at this time. For purposes of this suitability review, three preliminary wilderness study areas have been identified and analyzed (see Wilderness Suitability map). These include federal lands under selection (suitability pending), those lands that will definitely remain in federal ownership (suitable), and those lands selected and already conveyed to private or state ownership (not suitable). A determination of suitability does not affect any pending selections or other prior existing land disposal actions.

Area 1 (about 185,310 acres - 31%) - These are lands selected by or interimly conveyed to Koniag, Inc., which include the subsurface oil and gas rights. They consist mainly of the coastal areas along portions of Amber, Aniakchak, and Kujulik bays. They are currently undeveloped and would, if ultimately retained in federal ownership, complement the adjoining preserve land to the west. Therefore, these lands or any portions thereof are suitable if retained in federal ownership and unsuitable if conveyed out of federal ownership. These lands are shown as "Suitability Pending" on the Wilderness Suitability map.

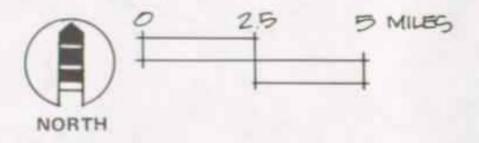
Area 2 (about 404,962 acres - 67%) - These lands encompass the remainder of the federal land within Aniakchak. They are undeveloped and therefore suitable for further consideration as wilderness. These lands are shown as "Suitable" on the Wilderness Suitability map.

Area 3 (about 12,507 acres - 2%) - These lands have been selected and conveyed to native corporations or to the state of Alaska. They are located in the extreme eastern and northeast portion of the preserve. Due to the nonfederal ownership, these areas are considered "Not Suitable" as indicated on the Wilderness Suitability map.

Changes in land status occurring or likely to occur between now and when future wilderness recommendations are made to the Congress will be reflected in those recommendations. All future wilderness recommendations would be made subject to valid existing rights.



-  SUITABILITY PENDING (AREA 1)
-  SUITABLE (AREA 2)
-  NOT SUITABLE (AREA 3)
-  AREA IN WILDLIFE REFUGE FOUND SUITABLE IN FWS DRAFT CONSERVATION PLAN
-  AREA IN WILDLIFE REFUGE FOUND UNSUITABLE (IF OIL AND GAS RIGHTS CONVEYED) IN FWS DRAFT CONSERVATION PLAN
-  AREA IN WILDLIFE REFUGE FOUND UNSUITABLE (IF PENDING STATE OR NATIVE SELECTIONS CONVEYED) IN FWS DRAFT CONSERVATION PLAN
-  MONUMENT BOUNDARY
-  PRESERVE BOUNDARY



WILDERNESS SUITABILITY

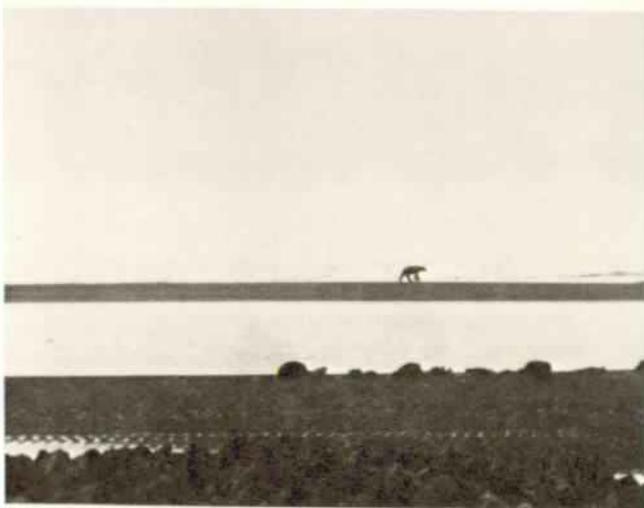
ANIAKCHAK

NATIONAL MONUMENT AND PRESERVE

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NATIONAL PARK SERVICE

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THE ANIAKCHAK ENVIRONMENT

NATURAL RESOURCES

Geology

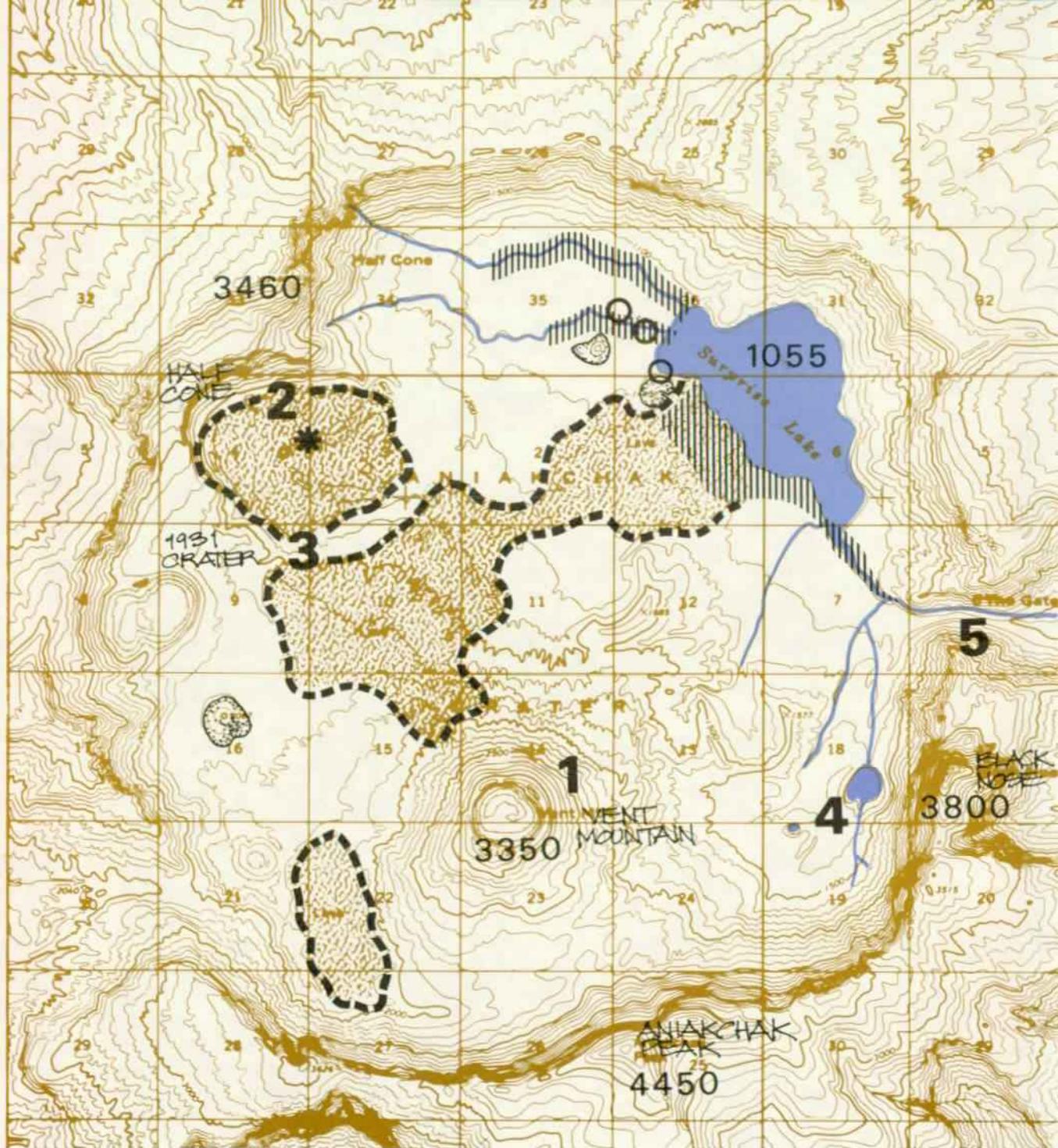
General. The rugged Alaska Peninsula is today and has been for thousands of years an area of considerable volcanic and tectonic activity. It is a part of the great "rim of fire" which surrounds the Pacific Basin and is caused by drifting of the giant Pacific crustal plate up against the surrounding continental plates. The deep Aleutian trench off the Pacific coast of the Alaska Peninsula represents a zone of great stresses and strains where the Pacific Ocean plate is being forced below the continental plate. Other regional structural features include a series of northeast-trending folds and faults.

The oldest exposed bedrock in the monument/preserve consists of a sequence of Jurassic and Cretaceous sedimentary formations of sandstone, shale, conglomerate, and limestone obviously deposited during a long period of tectonic stability. Tertiary time was marked by widespread uplift and volcanic activity throughout the region. The Aleutian Range was formed early in this period by a massive outpouring of volcanic material. Uplift, erosion, intrusion, and volcanism continued through the Tertiary, resulting in the deposition of thick sections of volcanic rock. Tertiary sedimentary and volcanic rock and much older sedimentary formations are evident throughout the Aleutian Mountains east of the Aniakchak caldera. A few scattered intrusives are exposed in the monument/preserve. Continued volcanic activity into recent times resulted in the volcanic rock, ash, and debris flows that form Aniakchak caldera, cover the caldera flanks, and are found in isolated outcrops. Surficial alluvial and glacial deposits mantle the Bristol Bay lowlands including the Meshik and Cinder River drainages.

Volcanic Features. Aniakchak caldera is a spectacular geologic feature and the most outstanding single resource in the monument/preserve (see Geologic Features - Aniakchak Caldera map). In 1967 the Aniakchak caldera was designated as a national natural landmark. The landmark program was established in 1962 by the secretary of the interior 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. Aniakchak is unique among volcanic areas in the national park system in that it is larger than most, it is the site of extensive recent activity, and it is essentially a dry-bottomed caldera.

The caldera is the result of the collapse of a large andesitic structure and has a total internal relief of approximately 3,000 feet and a diameter of about 6 miles. The precaldera cone from which it was formed was approximately 7,000 feet high.

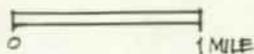
The basic caldera was probably formed more or less in a single massive eruption about 3,500 years ago. On a worldwide scale, the eruption ranks as one of the largest in such recent times, but there are nearly a dozen other calderas up and down the Alaska Peninsula that have a roughly similar geologic history. Since the initial formation of the



- 1 LARGEST, OLDEST VOLCANIC SPATTER CONE
- 2 YOUNGER, INCOMPLETE SPATTER CONE
- 3 MOST RECENT ERUPTION (1931)
-  MINOR SPATTER CONE
-  RECENT LAVA FLOW
- * WARM GROUND TEMPERATURE
- 4 WATER-FILLED EXPLOSION PITS
- 5 ERODED RIVER CANYON
-  PIONEER VEGETATION ON ASH
-  WARM MINERAL SPRINGS

GEOLOGIC FEATURES ANIAKCHAK CALDERA

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caldera, a number of less spectacular volcanic events have occurred that have resulted in the varied modern features of the caldera floor: a large spatter cone called Vent Mountain dominates the southeastern half of the area, several ash and lava flows of different ages cover the floor, collapsed small explosion pits pockmark its surface, and a substantial explosion appears to have blown out part of the northwest rim at Half Cone. The most recent explosion pit was apparently created in a 1931 ash eruption that blanketed not only the interior of the caldera with 1 to 2 feet of ash, but also deposited substantial ash layers as far as 40 miles away in the Chignik villages.

The caldera rim averages about 3,000 feet in elevation compared to its floor at 1,100 feet but rises in places to nearly 4,500 feet. It appears that initially the rim was complete and that probably the caldera filled to a substantial depth with water, creating a deep lake similar to Crater Lake in Oregon. Some of the postcaldera events appear to have taken place during that lake-filled period since some flows seem to have been erupted underwater. Eventually a lower, weaker portion of the rim was breached by rising lake waters, and in what appears to be very rapid erosion, the resulting outflow has cut through perhaps 1,500 feet of both fossil-bearing sedimentary and volcanic layers to create the modern-day "Gates" through which the Aniakchak River now exits the caldera.

Outside the caldera the Aniakchak area shows evidence of ash flowing over formidable topographic barriers (Miller and Smith 1977). Ash flow tuffs, probably emplaced during the period of caldera-forming eruptions, are found in thick continuous exposure near the caldera and in isolated outcrops at considerable distances from their source. Ash flows moved down the sides of the precaldera cone, filling glacial valleys next to the volcano to a thickness of 220 feet or more. To the north and west there were no obstructions, and the ash flows swept across the Bristol Bay lowlands to the sea. To the south of the caldera ash flows were channeled down glaciated valleys, crossed the Meshik River lowlands, and continued on through mountain passes of the Aleutian Range into the Pacific Ocean. Just west of the Aleutian Range flows passed and filled intervening valleys to probable depths of 300 feet. Ash flow tuff outcrops indicate that originally the flows covered an area of at least 900 square miles.

Mineral, Oil, and Gas Resources

The monument/preserve and immediately surrounding area have no recorded mineral production, and there are no recorded mineral claims within the monument or the preserve. The nearest valid and active mineral claims are approximately 15 to 18 miles southwest of the preserve. Five inactive claims are located east of these active claims in an area north of Chignik Bay about 12 miles south of the preserve.

The evaluation of metallic mineral resources in Aniakchak that follows is based on information provided by the U.S. Geological Survey (1981 and 1984). Rocks of Tertiary and Quaternary volcanic-intrusive environment

are widely distributed in the area and may contain porphyry copper and molybdenum deposits. No such deposits have been discovered in either the monument or the preserve, although there is the potential for their existence. Areas containing anomalous copper and molybdenum, which have been identified as having considerable mineral potential, occur within and near the boundaries of the preserve in three locations (see Mineral, Oil, and Gas Potential map). These areas also contain values of silver, lead, zinc, tungsten, bismuth, and arsenic. Another area with considerable mineral potential is the mountains between Pumice and Old creeks, where several small Tertiary intrusives are known to be mineralized. Streams that drain the mountainous areas between these creeks contain sites that show high values of lead, zinc, copper, and silver. As a general conclusion, however, there are no known major mineral resource areas within the monument or the preserve.

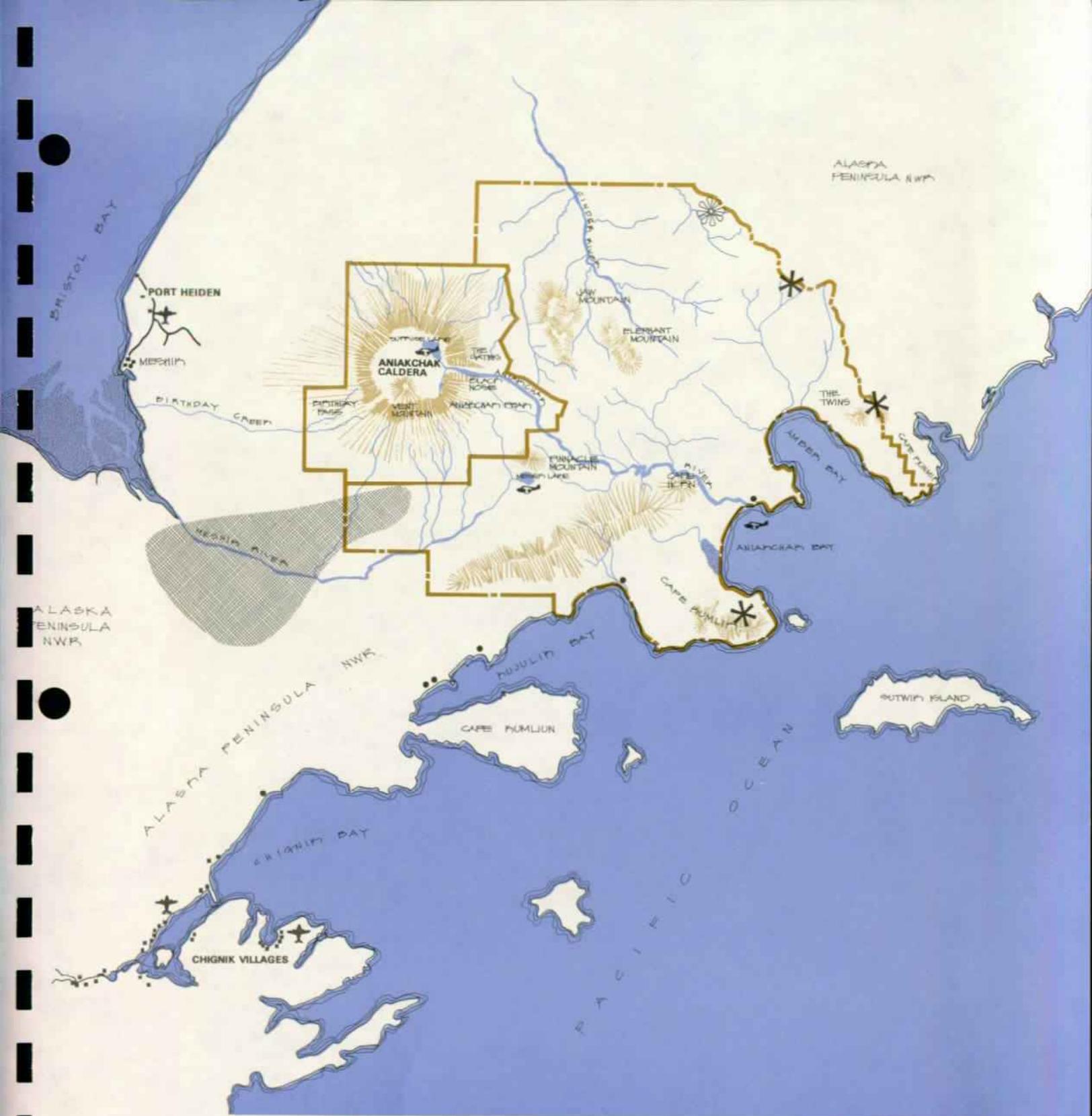
Thin seams of coal-bearing rocks are known within the preserve but are not believed to be of minable quality (Geological Survey 1984). Coal deposits have been identified south of the monument/preserve in a belt 3 miles wide and 25 miles long on the west shore of Chignik Bay, where coal was mined for local use from 1899 to 1915.

The Alaska Peninsula lies within two petroleum provinces (see Oil and Gas Potential - Bristol Bay Region map). The north side of the peninsula is in the Bristol Bay province and the south side is in the Alaska Peninsula province. Virtually all of the monument/preserve lies in the latter province. Because of insufficient data and an earlier conflicting analysis, it is difficult to evaluate the potential for finding oil and gas resources on the Alaska Peninsula. Based on information to date, the petroleum potential is considered low to moderate for onshore and out to the 3-mile limit offshore in the Bristol Bay province, and low or unknown for onshore and out to the 3-mile limit offshore in the Alaska Peninsula province (Alaska Department of Natural Resources 1983). This conclusion is in agreement with the original "Bristol Bay Cooperative Management Plan" (State of Alaska and USDI 1983) text description of oil and gas potential, but the BBCMP map of such potential is apparently derived from earlier studies that suggest a low to moderate potential on the Pacific side of the peninsula.

The U.S. Geological Survey has identified only one area within the boundaries of Aniakchak that they believe has some oil and gas potential. This area includes a portion of the Meshik River drainage and extends into the southwest section of the preserve, all of which is on federal land (see Mineral, Oil, and Gas Potential map). The extent of potential oil and gas resources offshore has not been determined, but most interest has been focused on the Bristol Bay province.

Topography and Soils

The Pacific coastline of the preserve is rugged, with numerous cliffs and offshore rocks and islands. Peninsulas jut into the ocean, creating large bays and protected coves. Rising abruptly from the Pacific shoreline and



- MONUMENT BOUNDARY
- PRESERVE BOUNDARY
- COMMERCIAL AIRSTRIP
- AMPHIBIOUS AIRCRAFT LANDING (UNIMPROVED)
- VILLAGE BUILDINGS
- CABINS

- COPPER, MOLYBDENUM
- LEAD, ZINC, COPPER, SILVER
- OIL AND GAS

SOURCE: GEOLOGICAL SURVEY 1981b AND 1984

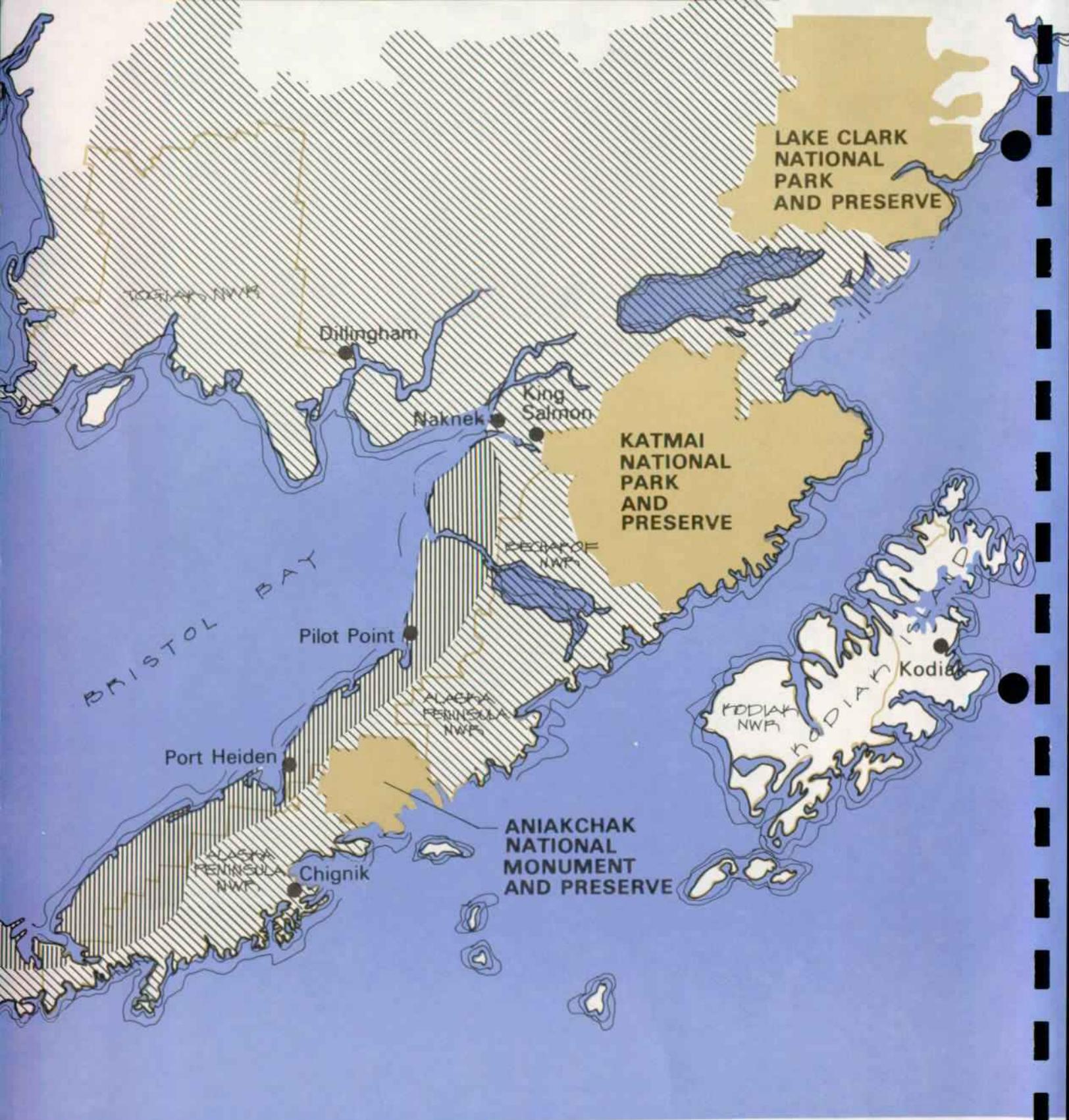


MINERAL, OIL AND GAS POTENTIAL

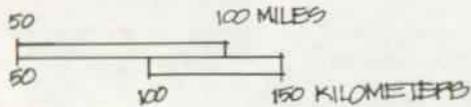
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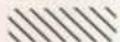
ON MICROFILM



NORTH



LOW TO MODERATE OIL AND GAS POTENTIAL



LOW OR UNKNOWN OIL AND GAS POTENTIAL

OIL AND GAS POTENTIAL BRISTOL BAY REGION

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SOURCE: ALASKA DEPARTMENT OF NATURAL RESOURCES 1983

more gradually from the Bristol Bay side, the Aleutian Range passes generally east of the centerline of the Alaska Peninsula. Peaks in this range seldom exceed 3,000 feet. To the northwest of these mountains and almost isolated from them lies Aniakchak caldera, the rim of which ranges from 2,000 to 4,000 feet in height. The northern and western flanks of the caldera grade gently down to the Bristol Bay lowlands. Several small streams wash and erode the far steeper southern flank of the caldera, creating extraordinarily rugged terrain characterized by deep ravines, steep escarpments, and waterfalls.

In contrast to the mountainous upland terrain are the Meshik and Aniakchak River valleys that interrupt the Aleutian Range. The Aniakchak drainage is a narrow, rocky corridor near its origin at the caldera, but gradually widens out and changes into a flat tundra/shrub-covered valley. The valley of the Meshik River, a more mature stream, is quite broad, flat, and marshy. The other major river drainage in the monument/preserve, the northward-draining Cinder River, originates on the caldera's northeastern flanks and in the mountains to the east and descends immediately into the Bristol Bay lowlands (see Topography and Soils map).

The majority of soils within the monument/preserve have been formed in well-drained, gravelly layered volcanic ash. The deepest, most developed soils occupy the footslopes of Aniakchak caldera, as well as below drainages in steep mountainous areas and in the nearby coastal plains. The shallowest soils occur on recently deposited volcanic ash and cinder flows primarily on the western and northern slopes of the caldera. This loose ash is easily disturbed by wind because there is little or no vegetative covering. Deep, very poorly drained organic soils occur along the wide, flat Meshik River valley. These soils consist of fibrous peat derived mostly from sedges and moss interspersed with several layers of volcanic ash. Little or no soil can be found on mountain peaks and ridges, rock escarpments, and talus slopes, which includes much of the higher elevation of the caldera and other mountainous terrain of the Aleutian Range. There are no prime or unique farmlands in the monument/preserve (Soil Conservation Service 1983).

Climate

The two sides of Aniakchak lie within two different climatic zones, a maritime one and a transitional one. The Aleutian Range has a major influence on local climate, acting as a barrier to the prevailing moist winds off the Pacific Ocean from the south. As a result, weather along the Pacific side of the Alaska Peninsula is maritime, i.e., characterized by heavy precipitation, moderate temperatures, and strong winds. Annual precipitation in the coastal community of Chignik averages 127 inches, including the moisture derived from 59 inches of snowfall. Annual snowfall at higher elevations averages more than 100 inches. Temperatures are relatively mild. The average summer temperatures in Chignik range from 39°F to 60°F, and the average winter temperatures range from 21°F to 36°F. High winds are common along the coast and in mountain passes and valleys.

The climate along the Bristol Bay side of the Alaska Peninsula is transitional between maritime and continental; the weather typically exhibits a wider temperature range, less precipitation, and clearer skies.

Annual precipitation at Port Heiden averages 13 inches, including moisture from 29 inches of snowfall. Average summer temperatures range from 40°F to 59°F, and average winter temperatures range from 13°F to 31°F.

Summers are characterized by fog, drizzle, and protracted cloud cover on both coasts. Weather records for Port Heiden show a 45 to 60 percent frequency of fog and a 70 to 80 percent frequency of rain or drizzle during the summer. Cloud ceilings obscure the caldera rim for most of the summer, and even on days when it is possible to see the caldera from the air, turbulence and strong downdrafts can occur. Because of its topography and location, the caldera creates its own microclimate. As strong downdrafts form over the caldera rim, a phenomenon known as "cloud niagaras" frequently occurs, with clouds rapidly flowing over the rim and down onto the caldera floor. The interior of the caldera is subject to violent windstorms, even when the weather is relatively calm outside. Particularly strong winds may channel through the narrow "Gates," making entry by aircraft extremely hazardous.

Hydrology

Surprise Lake is nestled in the Aniakchak caldera on the north side. It is fed by several iron-soda springs issuing from northwest of the lake and by snowmelt from surrounding highlands. The lake is the major identifiable source of the Aniakchak River.

The Aniakchak River is the only major watercourse within the monument/preserve that drains eastward into the Pacific Ocean. Originating in Surprise Lake, it flows through the 2,000-foot Gates and runs approximately 31 miles to its mouth on Aniakchak Bay. The river is shallow, rocky, and has low falls as it drops 70 feet per mile for the first 13 miles. The remaining 18 miles of the river meander slowly through flatlands to Aniakchak Bay. Surprise Lake and the Aniakchak River form the primary passageway through which animal life finds its way from outside into the caldera.

Originating on the south slopes of the caldera is the Meshik River, which turns westward to flow into Bristol Bay. The river is fed by a number of short tributaries that drain the southern flanks of the caldera and northwest slopes of the Aleutian Range as well as Meshik Lake, a shallow, circular lake approximately 1 mile in diameter. The other major watercourse in the monument/preserve is the Cinder River, which originates in the mountains northeast of the caldera. The river enters the Bristol Bay lowlands at the footslopes of Aniakchak caldera outside the monument/preserve boundaries. Numerous short, fast-running streams originate on the southeast slopes of the Aleutian Range and drop rapidly toward the Pacific Ocean.

The 100- and 500-year floodplains have never been mapped for any of these rivers. Until more hydrological data become available, suspected floodplains must be assumed, taking into consideration identifiable high water marks, areas of obvious erosion potential, and narrow river sections where ice jamming could occur.

Air and Water Quality

The air quality of the monument/preserve remains virtually unaffected by human activity. Aniakchak is currently a class II airshed under the Clean Air Act. This classification allows some degradation of air quality from its existing condition.

The water quality in streams and lakes of the monument/preserve is also essentially unaffected by human activities and is considered to be good. Springs feeding into Surprise Lake are known to have high iron-soda content. Comprehensive data on streamflow, chemical quality, or suspended sediment are not available for Aniakchak.

Vegetation

Over the past several years an extensive program to map the vegetation of the Bristol Bay region using satellite data was commissioned by the BBCMP (1983).

Information obtained from this land cover mapping project has provided assistance in evaluating the vegetative communities within Aniakchak, but the extremely broad range of the classifications adopted for the regional study makes it inappropriate to adopt either the classification or the map for the small specific area represented by Aniakchak. Continued field inventory efforts within the monument/preserve will eventually produce information to better interpret regionwide Landsat data.

Vegetation at Aniakchak can be divided into three major types--tundra, shrubland, and strand (beach). Tundra, which generally dominates over vast stretches of the monument/preserve, can in turn be subdivided into three separate plant communities--wet, moist, and alpine tundra. Shrublands and strand (beach) communities have a more limited distribution in Aniakchak.

Each of the five general plant communities encompasses a wide variety of individual plant species. Small differences in elevation, exposure, drainage, slope, or substrate may result in marked vegetational differences over small distances, commonly resulting in interspersed and overlapping of plant community types.

The wet tundra community occurs on poorly drained organic soils on level terrain or open depressions. Standing water is generally present. The dominant plants are typically water-tolerant wildflowers or sedges rooted in a mat of sphagnum moss. Slightly drier peat mounds support dwarf

birch and heath shrubs such as crowberry and Labrador tea. Wet tundra primarily covers the broad flat lowlands of the Meshik and Cinder River drainages, with limited occurrence on Pacific Coast lowlands.

The moist tundra community occurs in areas of greater relief and better drainage than does wet tundra. It is found on level terraces, subalpine slopes, and coastal lowlands and is dominated by a plant mat of heath shrubs or grass-forb species. A kind of hummocky heath, generally 1 to 4 inches in relief, and most extensive on well-drained rocky soils is also found covering poorly drained peat mounds within the wet tundra habitat.

Terraces bordering the Aniakchak River commonly support this vegetation. Also found in moist tundra are bluejoint grass with various forbs; these are most extensive on well-drained subalpine slopes where they are often intermixed with tall shrub stands. Bluejoint/forb mixes also occur along coastal lowlands where drainage is moderate to poor.

The sparse, low vegetation of the alpine tundra community is found on exposed slopes and the summits of ridges and knolls near sea level, as well as at elevations above 1,000 feet in the Aleutian Range. Despite heavy rainfall, arid conditions may locally prevail due to strong drying winds and rapidly draining, poorly developed soils. Typical vegetation includes various dwarf forbs and heath shrubs such as aster, cinquefoil, mountain avens, bearberry, dwarf blueberry, and crowberry. Steep mountainous terrain and areas of recently deposited volcanic ash and cinder flows support some pioneering vegetation in protected areas and drainages, but are primarily barren.

Apparently devoid of vegetation after Aniakchak's eruption in 1931, the caldera and its flanks now display primary succession steps of revegetation on a barren volcanic landscape. Although much of the caldera floor remains unvegetated, plants have gained tentative inroads in favorable microenvironments. Pioneer plants such as mosses and lichens continue to spread and create more hospitable conditions for successive invasion by other floral associations. Plant cover is concentrated near moist areas around Surprise Lake, along the Aniakchak River, and on nearby low hills. Vegetation includes such species as lyme grass, sedges, and horsetail near the lake. Adjacent terrain is covered by mosses, lichens, lupine, dwarf fireweed, Kamchatka rhododendron, aster, mountain bluebell, and some dwarf willow. In these extreme environmental conditions, areas undergoing only ecological succession are quite fragile and sensitive to disturbance. Soil recovery and vegetation regeneration of affected areas is marginal and extremely slow.

The shrublands community covers moderately well-drained lowlands, slopes, and hilltops up to about 1,000 feet in elevation. Open stands of low willow are usually found lining streambanks and covering lowlands and gentle lower slopes. On rounded summits and progressively higher slopes, tall alder-willow becomes common and typically appears in a belt around mountainous areas, just below the alpine tundra. This coverage is most commonly a mosaic of shrub and grass-forb types.

In the strand (beach) community, very well drained coastal sand dunes support a vegetative cover of beach rye grass and forbs. A broad strip of this vegetation type stretches along the beach west of Kujulik Bay lagoon and occurs along other bay coastal strips as well.

Wildlife

Wildlife is varied and abundant in the Aniakchak area (see Wildlife Distribution map). Most human use of the area both past and present involves either sport or subsistence harvest of the area's wildlife resources. The monument/preserve includes habitat essential to the maintenance of a number of wildlife populations. These essential wildlife habitats have been designated as "critical" by the Alaska Department of Fish and Game in recognition of their particular significance as wildlife areas. Use of the state's term "critical habitat" should not be confused with that same term used elsewhere in conjunction with the federal Endangered Species Act.

Terrestrial Mammals. Within this century, moose have extended their range onto the Alaska Peninsula. Populations apparently peaked during the mid-1960s and have declined by one-third to one-half since that time. Brown bear predation as well as habitat changes are thought to be the most important causes of moose population declines on the peninsula. Although during the period of peak abundance when overuse of the available browse contributed to the decline in moose numbers, recent observations indicate that range quality is not currently a limiting factor. Consistently poor calf recruitment, primarily due to brown bear predation, seems to be the major factor limiting population expansion. Moose primarily range over the lower willow- and alder-lined slopes and valleys, with concentrations along the upper Meshik and Cinder River valleys and at the head of Amber Bay.

The Alaska Peninsula supports one of Alaska's major caribou herds. The peninsula herd is composed of three subherds. The largest, the Northern Alaska Peninsula herd, located between Naknek River and Port Moller, uses the monument/preserve and numbers about 19,000 animals. This herd ranges widely across most of the lowlands and follows general migratory routes in spring and fall. Calving normally occurs on the Bristol Bay lowlands, but within Aniakchak, calving is known to also occur south of Meshik Lake to the Aniakchak River drainage.

Brown bear move seasonally through many habitat types in the region. Within Aniakchak, spring bear concentrations occur along coastal grass flats at the heads of Aniakchak and Amber bays where they feed on newly emerging sedges. In late summer and early fall, concentrations shift to salmon-spawning streams. In the comparatively mild climate of the peninsula, the long period of food availability, and the abundance and quality of food, particularly salmon, are responsible for the large size and abundance of brown bear in Aniakchak. Areas of denning are usually located in alder, willow, or grassy areas on hillsides and mountain slopes. Denning within Aniakchak is known to occur on the slopes of the caldera and areas on the east side of the Aleutian Range.

Small numbers of wolves range throughout the region. Wolverines and lynx are also widespread but scarce. More common furbearers in the region include beaver, river otter, mink, short-tailed and least weasel, and red fox.

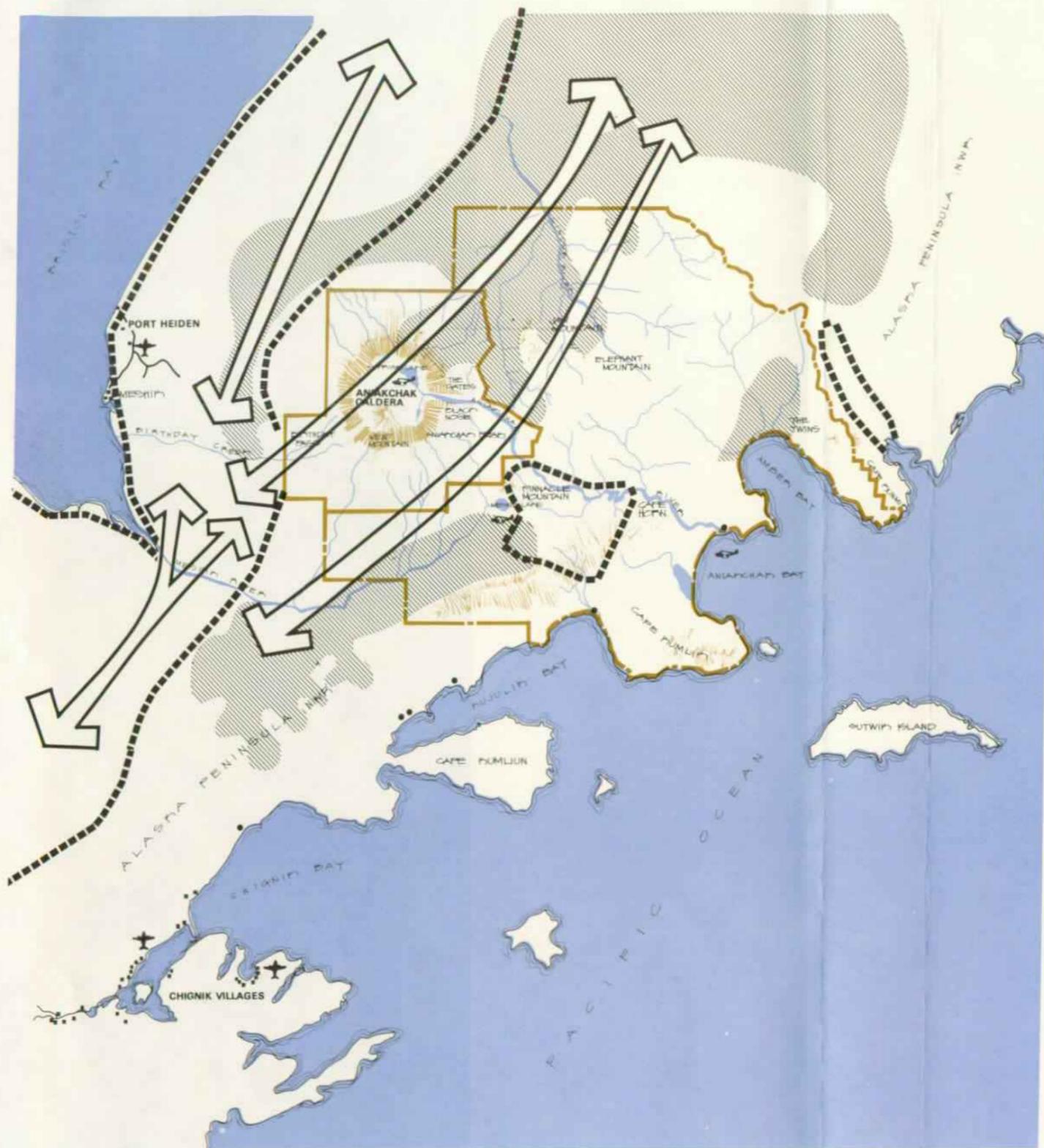
Marine Mammals. Sea otters, Dall porpoise, harbor porpoise, harbor seals, and northern sea lions inhabit coastal waters along the Pacific side of the Alaska Peninsula and probably occur along Aniakchak's coast throughout the year. A high/medium density sea otter area has been identified within the waters off the southern coast of Cape Kumlik. Harbor seals haul out in small groups along portions of Cape Kumlik, Cape Kunmik, and small islands off Aniakchak. Northern fur seals are probably near the coast in small numbers during most months of the year, with peaks in abundance when they are migrating southward in winter and northward in spring.

Generally speaking, eight species of whales occur in Alaska waters, some of which are endangered. Those species most frequently observed in coastal waters just outside the monument/preserve boundary are the humpback, gray, and fin whales. Sei, blue and Pacific right whales only occasionally occur near Aniakchak; sperm whales would be uncommon in these waters. The bowhead has not been reported in the Gulf of Alaska (National Marine Fisheries Service 1983).

Fish. The fresh and salt waters of the region support a number of valuable fish species that provide the basis for major commercial fisheries. Five species of salmon (sockeye, chum, pink, coho, and king) are harvested for commercial and subsistence use. The largest sockeye salmon run in the world occurs along the Bristol Bay coast of the Alaska Peninsula and into its lakes and rivers, primarily in June, July, and August.

On the Bristol Bay side on the peninsula, the Meshik and Cinder River systems support runs of sockeye, chum, coho, and king salmon. Other smaller streams support runs of sockeye and chum. On the Pacific side, sockeye salmon runs largely occur in the Chignik River system south of the preserve, although a small sockeye run exists in the Aniakchak River and its tributaries. In addition to sockeye salmon, the Aniakchak River system and other shorter Pacific side streams in the preserve provide spawning grounds for pink and chum salmon. Sockeye salmon are the only salmon species known to spawn in Surprise Lake. Streams on the Pacific side of the peninsula generally appear unsuitable for supporting king salmon, with the Chignik River system being a notable exception. The freshwater systems to which salmon return are obviously essential to the maintenance of salmon populations and the health of the fishery on which most area residents depend. The majority of the streams in the monument/preserve have been designated by the state as salmon critical habitat (see map).

Freshwater streams in the Aniakchak region also support Dolly Varden, arctic char, steelhead, and other freshwater species. Marine fish and shellfish that inhabit coastal waters off Aniakchak include halibut, cod,



- MONUMENT BOUNDARY
- - - PRESERVE BOUNDARY
- ✈ COMMERCIAL AIRSTRIP
- ⊕ AMPHIBIOUS AIRCRAFT LANDING (UNIMPROVED)
- ⊞ VILLAGE BUILDINGS
- CABINS

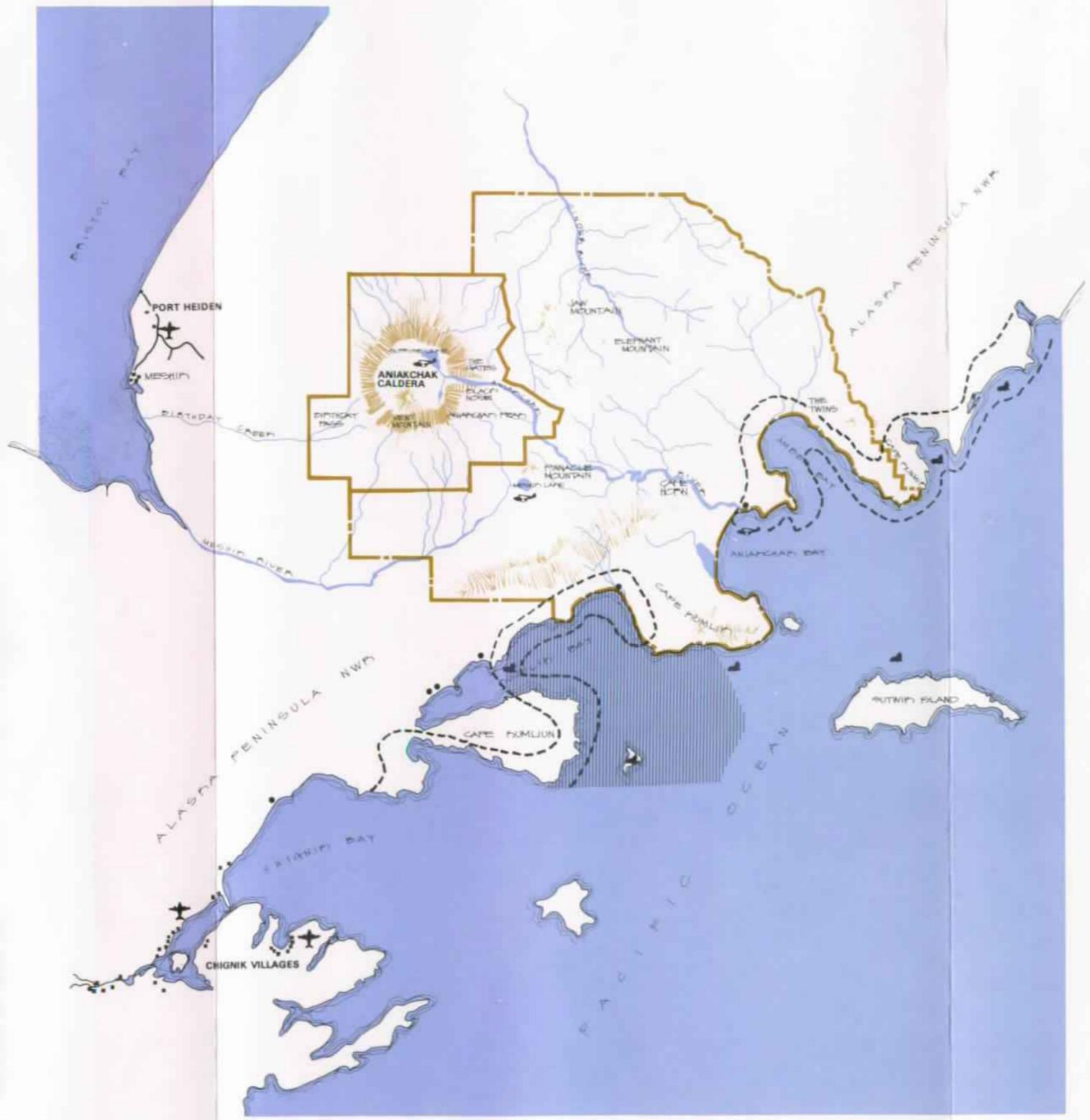
MOOSE AND CARIBOU

- ▨ MOOSE WINTER RANGE
- ⬄ CARIBOU CALVING AREA
- ↔ CARIBOU MIGRATION ROUTE

- MONUMENT BOUNDARY
- - - PRESERVE BOUNDARY
- ✈ COMMERCIAL AIRSTRIP
- ⊕ AMPHIBIOUS AIRCRAFT LANDING (UNIMPROVED)
- ⊞ VILLAGE BUILDINGS
- CABINS

BROWN BEAR

- ▨ SPRING USE AREAS
- - - SUMMER STREAM CONCENTRATIONS



- MONUMENT BOUNDARY
- - - PRESERVE BOUNDARY
- ✈ COMMERCIAL AIRSTRIP
- ↕ AMPHIBIOUS AIRCRAFT LANDING (UNIMPROVED)
- VILLAGE BUILDINGS
- CABINS

- RAPTORS AND MARINE MAMMALS**
- ▨ SEA OTTER HIGH / MEDIUM DENSITY AREA
 - ⬮ HARBOR SEAL HAULOUT AREA
 - RAPTOR NESTING / USE AREA

SOURCE: ALASKA DEPARTMENT OF FISH AND GAME 1983



WILDLIFE DISTRIBUTION
ANIAKCHAK
 NATIONAL MONUMENT AND PRESERVE
 UNITED STATES DEPARTMENT OF THE INTERIOR
 NATIONAL PARK SERVICE

ON MICROFILM

herring, flounder, crab (dungeness, tanner, king), shrimp, and clams. Most of these species are seasonally harvested and are very important elements in the area's commercial and/or subsistence economy.

Birds. The Bristol Bay side of the Alaska Peninsula provides habitat for some locally breeding bird populations but more significantly for the vast numbers of waterfowl (ducks, geese, and swans) and shorebirds that breed north of Bristol Bay. Millions of waterfowl and shorebirds migrate through the area, including large populations of emperor geese, cackling Canada geese, and black brant. Nesting and feeding and spring and fall staging areas are generally associated with productive estuaries, lagoons, river deltas, and tidal flats where extensive tidal flats provide plentiful food and protective vegetation types are present. Some of these areas have been designated by the state as critical to the maintenance of waterfowl populations, including the Cinder River delta and Port Heiden Bay north and west of Aniakchak. Many shorebirds use this same habitat, although principally during fall migration. The monument/preserve itself does not contain habitat designated critical to the maintenance of these populations.

The rugged terrain and relatively deep inshore waters of the south side of the Alaska Peninsula are not as attractive to waterfowl and shorebird nesting and staging as the Bristol Bay side. In the fall the Pacific bays' rocky shores are probably important for black oystercatchers, rock sandpipers, surfbirds, and black turnstones. Bays along this side of the peninsula are also used extensively by Steller's, king, and common eiders as wintering areas. In addition to waterfowl and shorebirds the region supports millions of seabirds, primarily on the Bristol Bay side of the peninsula. There are no major seabird colonies along Aniakchak's Pacific coastline. Species observed along the coastline and sometimes inland include black-legged kittiwakes, pelagic and red-faced cormorants, glaucous-winged gulls, murrelets, pigeon guillemots, and horned puffins. Nearby offshore islands also provide protected nesting habitat for a relatively small number of breeding pairs.

Bald eagles can be commonly found nesting and feeding along rivers and the coastline of Aniakchak. They have also been observed within Aniakchak caldera and on the cliffs north of Meshik Lake. Other raptors of the region include rough-legged hawks, gyrfalcons, ospreys, short-eared owls, and peregrine falcons. Peregrine falcons are probably present in the Aniakchak area but are likely to be of the nonendangered Falco peregrinus peali subspecies.

Endangered and Threatened Species

It is unlikely that any animals listed under the federal Endangered Species Act as a candidate, threatened, or endangered species occur in the Aniakchak area. There has been no positive identification of the endangered subspecies of peregrine falcon (Falco peregrinus anatum) or the threatened subspecies F. p. tundrius within the monument/preserve. The endangered Aleutian Canada goose (Branta canadensis leucopareia)



-  MONUMENT BOUNDARY
-  PRESERVE BOUNDARY
-  COMMERCIAL AIRSTRIP
-  AMPHIBIOUS AIRCRAFT LANDING (UNIMPROVED)
-  VILLAGE BUILDINGS
-  CABINS
-  FRESHWATER STREAMS AND LAKES

SALMON CRITICAL HABITAT

ANIAKCHAK
NATIONAL MONUMENT AND PRESERVE
UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE



SOURCE: ALASKA DEPARTMENT OF FISH AND GAME 1993

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nests on Aleutian islands far to the west and possibly migrates through Aniakchak, but no data exist to substantiate this. None of the 29 plant taxa being considered for possible future listing pursuant to the Endangered Species Act have been recorded from the area (Fish and Wildlife Service 1984).

Scenic and Wilderness Resources

Although great natural beauty can be found throughout the monument and preserve, the scenic focus is the caldera, the Aniakchak River, and the rugged Pacific shoreline (see the "Introduction"). Spectacular in dimension and awesome in its record of volcanic power, Aniakchak caldera is far beyond the ordinary scenic experience of visitors from elsewhere in Alaska or the Lower 48. The Aniakchak River's origin within the caldera and its tumultuous first miles are dramatic visual counterpoints to the river's gentle flatland nature as it approaches the Pacific.

Though a technical determination of wilderness is not being made here, wilderness-like character is a reality in Aniakchak. Access to the interior is only by aircraft or arduous overland backpacking, or to the Pacific Coast by boats that must travel 50 miles or more through often difficult waters. Weather is a frequent and even life-threatening challenge to the unwary or unprepared; the need for self-reliance and self-sufficiency in both normal and emergency situations is extremely high.

CULTURAL RESOURCES

Archeology and Prehistory

Today, as apparently in the past, the Alaska Peninsula is a sparsely settled region. Geographic isolation and a harsh climate have limited formal scientific study; the scattered nature of early human occupation has meant few archeological sites are known and even fewer have been well analyzed. This is particularly true in the central portion of the peninsula near Aniakchak; most survey work has been done farther north in the Katmai region, on Kodiak Island, or at the southern tip of the peninsula and southward in the Aleutians.

Although it is well accepted that the native peoples of the Aleutian Islands and Alaska Peninsula ultimately originate from forebearers in Siberian Asia, it is still uncertain as to the time and circumstances of arrival of the earliest groups.

Generally up until European contact the Aleutian Islands and the extreme western tip of the Alaska Peninsula were occupied by Aleut people; the central and eastern Peninsula contained Eskimo groups. The earliest physical evidence for occupation is about 8,000 years ago* for the Aleutian Islands and 9,000 years ago for the peninsula, but despite the similarity in dates it is probable that the Aleutian Islands and peninsula groups were not similar at that time.

More recent sites in the Aleutians are archeologically very distinct from the contemporary Eskimo sites on the northern peninsula. The modern Aleut language is also now very distinct from the southern Yupik spoken by peninsular Eskimo peoples. Although the two languages are related, it is estimated that divergence from a common ancestral language took place some 3,000 to 4,000 years ago.

The Eskimo component on the peninsula is derived from two major archeological traditions: a southern group of people who occupied the Pacific coast of the peninsula as well as Kodiak Island and eastward into the Kenai Peninsula area; and a northern-originating assemblage that occupied the Bering Sea Coast from the Bering Straits to the Alaska Peninsula. For several thousand years these two cultures coexisted on the peninsula yet remained distinct, with the boundary between them being the rugged Aleutian Range, mountainous backbone of the Alaska Peninsula. It was not until about A.D. 1000 that this boundary was fully breached and a convergence of the northern and southern cultural spheres took place. Although not obvious from archeological evidence, it is likely that the Eskimo language of the resultant convergent culture was derived from the northern component.

Though the Aleut and southern Yupik (Eskimo) languages are very distinct, and the geographic boundary between the two at the time of European contact can be drawn fairly clearly, there does not appear to have been such a clear line between the two based on their material cultures.** In fact, it is the Aniakchak area--although no evidence has been discovered in the monument/preserve itself--which appears to be a zone of gradual transition from Aleut to Eskimo culture. An important site at Port Moller (southwest of Aniakchak) is apparently transitional in

*This 8,000-year figure is far more recent than the 15,000 to 13,000 years commonly believed to be the most recent period when Alaska was connected to Siberia via the Bering Land Bridge. This suggests that the peninsula and the Aleutians were originally populated by proto-Eskimos (Eskaleutians) moving southward from their logical point of entry nearer the Yukon Delta or Seward Peninsula. However, some European and Russian archeologists maintain that the Aleut ancestors might have come by sea directly to the Aleutians even after the land bridge no longer existed.

**A confusion in terminology exists between native people who consider themselves Aleuts and Eskimos. The Russians, who occupied the Aleutians as well as the peninsula, failed to distinguish between Aleut speakers and southern Yupik (Eskimo) speakers and thus gave the generic (and foreign) name Aleut to both groups. Therefore, several generations of southern Yupik speaking people such as those in the Chigniks and Meshik have considered themselves Aleut even though their language and cultural heritage is quite distinct from the native peoples of the Aleutians.

terms of physical artifacts, suggesting that trade and contact between Aleut and Eskimo peoples along the juncture between the two groups resulted at least in a sharing of skills in tool-making and lifestyles, although not necessarily in language. Certainly both groups had a primary orientation toward coastal resource use and a secondary, but critical, dependence on terrestrial wildlife and berries. This tradition continues today.

Another indication of the transitional character of the Aniakchak region between Eskimo and Aleut is the archeological evidence that the Chignik area was peopled by Aleuts (i.e., people whose artifacts are clearly related to the Aleutian Island tradition) as late as A.D. 1000. Yet, by A.D. 1800 (European contact), the Chignik area was linguistically Eskimo, suggesting that up to the recent past the Eskimo culture was expanding southward down the peninsula.

Thus, the ancient history of the central Alaska Peninsula around Aniakchak involves the point of contact between at least two major groups. These groups, though archeologically quite distinct at the two ends of their territory (i.e., in the Aleutians for the Aleuts and the upper peninsula for the Eskimos) and linguistically distinct even into modern times, appear to have been transitional in material culture, reflecting similar lifestyles and relatively frequent contact. (Note: The principal references for this section were Dumond, n.d. and Dumond, Cotton, and Shields 1975.)

Eighteenth Century and Modern History

As elsewhere in Alaska, great changes began to occur on the peninsula soon after the Russians first began exploiting the Pacific Coast after Vitus Bering's initial voyage of discovery in 1741. The fur trade, focused at first on sea otter, was the driving force.

Until the 1780s, the Russian fur trade along the peninsula was based on independent traders and hunters sailing from Siberia's Kamchatka Peninsula. They roamed the Alaska Peninsula hunting, or forcing local natives to hunt. In 1783 the first permanent fur-trading company on the peninsula, a private operation called Shelikov-Golikov, was established on Kodiak Island. This corporation, later known as the Russian-American Company, exerted a tremendous influence over native life in villages throughout the Pacific coast of the peninsula far into the 19th century until Russia's sale of Alaska to the United States.

Despite movement of the colonial administrative center from Kodiak to Sitka in 1805, Kodiak's influence on the Pacific side of the mainland peninsula continued, both as the regional trading center and as the supporting center for the other major agent of change, the Russian Orthodox Church.

Specific details of Russian impact on Pacific coast villages in the Aniakchak area are not known for the early period. Permanent Russian

settlement on the mainland peninsula was apparently resisted with some hostility, at least until a strong presence was established on Kodiak. Undoubtedly both missionaries and fur traders traveled throughout Aniakchak's Pacific Coast, bringing Christianity as well as the gradual introduction of a commercial sector to the local economy, whereby locally harvested furs were exchanged for trade goods. Though probably not directly influenced in the earliest years of Russian trading, the Chignik-Aniakchak coast villages show some definite signs of Russian ancestral heritage, suggesting permanent residence and integration of Russian traders at some point.

In the latter half of the 19th century, Russia experienced difficulty in maintaining its position in the eastern Pacific and eventually sold its Alaskan interests outright to the United States in 1867. The strong government-monopolized trading firm approach of the Russians was replaced by independent competitive U.S. merchants. The result was not only an accelerated decline of the major furbearers,* but also a decline in social intermixing and integration between traders and natives. Competing economic attractions outside the peninsula (e.g., sealing in the Pribilof Islands, gold discovery in interior Alaska) began to provide stimulus for local residents to move away, or seasonally spend time away from their traditional villages; a cash economy began to replace what had become the traditional fur-based trading economy.

Following the decline of fur trading, the U.S. contribution to local socioeconomic change was in development of salmon and later crabbing fisheries and associated canneries. Though concentrated at first in southeastern Alaska (Sitka) or north in Bristol Bay, smaller operations began as early as 1890 in the Chigniks. Even though experiencing various up and down cycles, these cannery operations have persisted for the past 90 years, and are today the economic mainstay of Pacific coast villages. Because of a poor harbor situation, the Bristol Bay village of Meshik on Port Heiden has not become a cannery site, although many residents there have traditionally fished. Initially based on a fish-trapping technique involving nets on fixed poles at the mouths of spawning streams, the salmon fishery later shifted in Bristol Bay to the drift gill net (a floating net deployed from small boats). On the Pacific side in deeper waters the shift was to purse seines, which has led to present-day fleets of wide-ranging seining boats able to exploit fish populations far from shore.

*Although there is some evidence that the Russian American Company tried to maintain the fur trade by limiting hunting to sustained yields, the end result was severe scarcity even before 1867. The unorganized, competitive nature of the American independent traders left little opportunity for moderation in hunting. General conservation practices only came into effect after the U.S. Fish and Wildlife Service assumed control over sealing in 1910.

Though canneries dominated the Chigniks economically, native village people did not participate very actively. Instead, much of the cannery labor was imported, and the resulting seasonal influx of Chinese, Mongolians, Hawaiians, Filipinos, and others has brought considerable cultural diversity to Chignik villages. Some newcomers stayed, married local native women and, as a result, descendants of many nationalities are living in the Chignik villages today.

During the 1900-1930 period, while the canneries were expanding with imported labor, native lifestyles centered more on the limited fur trapping that was still available in the bays and lower drainages around Aniakchak. For a number of local families, fox farming supplemented a subsistence lifestyle, with small islands off the Chigniks and Aniakchak being used as unfenced farms where a few transplanted foxes were allowed to multiply and then trapped out. Trapping in winter and fishing in summer, either privately for subsistence or as a paid crew member, became and has continued to be a successful seasonal mix for many native Pacific Coast villagers.

By the 1940s, the small animal fur industry had essentially collapsed in this area, and many families that had previously led a very mobile lifestyle with only a few extended periods of residence in the villages began a more permanent residential pattern. Schools became common in the villages, and since the schools operated in the winter, this was a strong stimulus to establish permanent residence. Government assistance programs and seasonal employment with the fishing industry provided the necessary cash to exist within the cash economy, but subsistence activity to supplement cash purchases continued, as it does today.

The rugged Aleutian Range continued to exert a de facto separation between the events of the Pacific Coast and the Bering Sea side. On the Bristol Bay side, there was far less influence on the fur-trading industry simply because the marine furbearers did not occur there in large numbers. Historically, few villages existed on the Bristol Bay side of the lower and central peninsula at the time of first European exploration. In fact, Meshik village on Port Heiden appears to have been the westernmost Eskimo settlement on this side of the peninsula, with a large uninhabited gap extending farther west until the easternmost Aleut settlements are encountered.

The name Port Heiden was adopted when the village was incorporated, although there still remains a local distinction between the traditional Meshik village development and the newer developments associated with the Port Heiden airfield. Port Heiden evolved in several phases. By the late 19th century it was an active participant in the Bristol Bay cod fishery. This activity attracted a number of Scandinavian immigrants, whose surnames still appear in modern families. But much of the modern population is derived from persons relocated to Port Heiden from other settlements (like Unangashak) that had suffered great losses in the influenza epidemics of the early 1900s.

Social influences on Port Heiden in historic times have derived mostly from other communities of the Bristol Bay region such as Naknek and farther north to Dillingham.

Though lacking its own cannery, salmon fishing has been an important element in Meshik's economic history, with the catch going to Egegik for canning or, in recent times, fresh frozen locally and sent out by air. As in the Chigniks, a pattern of trapping in winter (for land animals rather than marine species) and fishing in the summer became common for native people.

In the 1940s, an important airfield was established on Port Heiden a few miles east of Meshik village. This provided a service and refueling stop for aircraft supporting various military bases farther out on the Aleutians. Though considerable temporary development accompanied the airfield, most was abandoned following World War II. The 6,200-foot gravel strip has been maintained and is the best such field in the lower third of the peninsula.

(Note: The major reference for this section was Tuten 1977.)

Archeological and Historic Sites and Structures

The National Register of Historic Places does not list any historic sites within Aniakchak National Monument and Preserve. However, a variety of sites have been identified for further study and evaluation for their national, regional, or local significance.

No prehistoric archeological sites are known within the monument/preserve, but such sites have been found in the Chignik drainage 40 to 60 miles to the southwest. The potential for future discoveries around Aniakchak at elevations below 1,000 feet is rated by the National Park Service as moderate to high. Obviously, many sites may have been buried by volcanic activity.

The 1976 Alaska Heritage Resource Survey did list three sites that are relatively recent--the Eskimo village of Kuiukuk (year 1880) and an old Russian fur-trading station (year 1790), both on Sutwik Island; and the Eskimo village of Aniakchak, somewhere on the Aniakchak coast.

Two additional reported historic sites of potential significance are the ruins of an unsuccessful razor clam cannery operated about 1932-35 on Aniakchak Lagoon, and the fish trap and Alaska Packers Association bunkhouse site at the mouth of the Aniakchak River. The latter operation began in 1917 and apparently was used seasonally until the 1940s. A native family living on Kumlik Island ran a tender between the traps and the cannery at Chignik, remaining in the Aniakchak area to trap small furbearers during the winter months.

These and other known historic cabin sites are shown on the Cultural Resources map.

SOCIOECONOMIC ENVIRONMENT

Regional Land Use, Economy, and Future Development

In a socioeconomic sense, the Alaska Peninsula is usually considered part of the Bristol Bay region. An extensive study of that region has resulted in two areawide plans: one dealing with state lands (Bristol Bay Area Plan, State of Alaska 1984), and the other concerning federal lands (Bristol Bay Regional Plan, Fish and Wildlife Service 1985).

These two recent Bristol Bay plans provide extensive regional data on land use, population, and future development and are excellent references to understanding the regional context for the monument/preserve. Since Kodiak Island (a separate borough) was excluded by the Bristol Bay Area Plan for State Lands, it does not treat economic and social ties between Kodiak and the Chignik villages. The region has also been arbitrarily defined to exclude both Aniakchak National Monument and Preserve and Katmai National Park and Preserve, but much of the data presented includes these two federally managed areas, which are important and integrated elements within the region.

Regional land status, use, and village location are shown on the Adjacent Land Status and External Influences map in the "Land Protection Plan."

Though widely distributed, the population of the Bristol Bay region is relatively small (in 1980, 38 communities totaling 7,815 persons); the population of Kodiak Island Borough was 9,939 in 1980. From 1970 to 1980 both areas have shown a tendency for population to shift from the smaller villages to the larger towns (Dillingham in Bristol Bay, Kodiak on Kodiak Island), which are becoming regional centers in the sense of transportation and economy. The dominant ethnic background is native (Aleut, Yupik Eskimo, and Indian), although there are many Caucasians in the regional centers and in certain smaller villages where they are involved in the commercial fishing industry.

The traditional economic base and subsistence lifestyle orientation of regional residents has been towards the resources of land and sea. Despite many changes and pressures in the historical past, this orientation persists, modified by external influences and channeled into sectors of the regional economy that seem suited to the tradition. The fishing industry is the region's largest employment source; it is highly seasonal and attracts many transient workers from elsewhere in Alaska and especially the Pacific Northwest states of Washington and Oregon. The permanent residents of the smaller villages have a very substantial reliance on subsistence activities to supplement their seasonal cash income, whereas in the regional centers a more diversified economy provides at least a part of the population with year-round cash employment.

In the Bristol Bay region, the commercial fishing industry (1979) provides about 47 percent of the employment base, government provides 33 percent, and support services provide 19 percent. More than one-third

of the world's entire annual sockeye salmon harvest comes from Bristol Bay and the south shore of the peninsula, with a value sold from the vessel (i.e., before processing) in excess of \$100 million.

For individuals actually owning and operating fishing vessels, a large capital investment is involved: several hundred thousand dollars may be invested in a seining vessel and nets for a Chignik family, but much less for a Port Heiden fisherman and his smaller drift gill net vessel. Such high investment in a seasonal industry leads to extremely intense activity for short periods (summer for salmon, fall and winter for crab) and long winter periods of quieter equipment maintenance or alternative economic activities. For individuals working as crew members or in processing plants, the intense summer activity is similar, and for many families the entire yearly cash income is earned in a short two-month period. Boat owners have the highest household income, which is needed to support the capital investment of their industry. Chignik Bay village, with its large proportion of boat owners, and an extended season that shifts from salmon to crab, has the highest household income (over \$45,000 in 1980). The lowest household income in the immediate area is in Port Heiden (about \$5,000). King Salmon, with its combination of boat owners and year-round employment in state and federal jobs has an average household income of over \$55,000.

Future development in the region, as foreseen by the Bristol Bay Area Plan, would concentrate on continued managed harvest of fish and wildlife resources both for commercial and subsistence purposes. Even if there should be major discovery and development of oil, gas, or hard-rock mineral resources, it is anticipated that the basic regional dependence on commercial fishing would continue. Whether village populations would continue to decline in favor of regional center growth is speculative.

The potential for finding commercially extractable quantities of oil and gas in some parts of the region (i.e., the Bristol Bay side) is rated low to moderate. Should discoveries be made, a considerable amount of associated development would likely occur, although this would take place gradually over a period of years. In addition to physical aspects of the drilling operations (which would differ significantly if the reserves were under tidal or submerged lands or on onshore lands), there would likely develop a support infrastructure for industry employees, including expanded housing and social services in some nearby villages. Transportation of the extracted product might well necessitate some sort of pipeline across the peninsula to a potential deep-water port on the Pacific side, the location of that pipeline and port being dependent on the actual location of the discovered reserves.

Discovery and extraction would undoubtedly bring economic change to some sectors of the regional population. Specific villages might see substantial change if development happened to occur in or near them. The Bristol Bay study addresses the long-term dependence of the region's residents on healthy renewable natural resources. The preferred oil and gas development alternative in the Bristol Bay Area Plan would encourage leasing and development to avoid environmentally sensitive lands in accordance with guidelines that would minimize impacts on wildlife.

Some future expansion of existing settlements on the peninsula is foreseen in response to local requirements, with land needs to be met from state, municipal, or native corporation holdings. Development of new settlements on remote lands is a possibility, with lands provided by the state (Department of Natural Resources) or federal government (Bureau of Land Management). However, no new remote area settlement near Aniakchak is imminent, nor is any proposed in the preferred alternative of the Bristol Bay Area Plan.

One potential land exchange involving state lands in the northeastern corner of Aniakchak is a part of the Bristol Bay Area Plan's preferred alternative (see the "Land Protection Plan").

Transportation and Access

There are no existing roads, railroads, or landing strips (other than unimproved ash field and gravel bar strips) within Aniakchak nor are there any known summer trails. Travel by foot is possible throughout Aniakchak except for areas of tussocky tundra and willow and the steeper snow-covered mountain peaks.

During the summer, access for recreation, subsistence, and research is generally by riverboat or aircraft (subsistence use of aircraft is limited to the preserve). Most use is believed to occur along the coast via riverboat and/or foot. Riverboats also provide access to some coastal rivers depending on water levels.

Aircraft can land on the ash fields near the river or on lakes for subsistence (in the preserve only), research, recreation, and access to private lands. Helicopters are generally not allowed except by permit from the superintendent.

During winter after freeze-up and sufficient snow cover, travel within Aniakchak is by snowmachine and aircraft.

A potential trans-peninsula transportation and pipeline corridor from Port Heiden to Kujulik Bay, immediately south of Aniakchak, has been identified in the Bristol Bay Area Plan. An alternate route might travel through the preserve to Kujulik Bay or Aniakchak Bay.

Similar to many remote Alaska areas that lack road connections, transportation and access among the villages around Aniakchak can be costly and difficult. Bulky supplies and fuel must arrive by barge, having been anticipated and ordered well in advance. The deep-water approaches to Chignik Bay and Lagoon allow fairly easy (monthly) barge service to these locations whereas lack of a port and shallow approaches limit larger boat access to Port Heiden. Travel by residents to outside the immediate area is by ferry, by boat incidental to fishing operations, or by aircraft. Reeve-Air Aleutian links Anchorage, King Salmon, and Port Heiden with large prop-jet aircraft, taking advantage of the 6,200-foot gravel runway. Small single-engine and twin-engine,

nonscheduled, wheeled aircraft offer daily charter or "seat-fare" service between King Salmon, Pilot Point, Port Heiden, and the Chigniks. Seat-fare service from Kodiak to the Chigniks operates seasonally. Charters on floats or with Goose and Widgeon amphibious aircraft are available from King Salmon. Charter costs (1985) are high (but similar to other Alaskan areas): \$200 to \$450 per hour for a 5-passenger floatplane or 10-passenger Goose, respectively. Aniakchak caldera is about 1½ hours' flying time from King Salmon, less than one-half hour from Port Heiden. King Salmon is served daily from Anchorage by jet.

Weather conditions frequently affect air transportation and access. At any time of the year, low clouds or fog can close these small runways, and adequate ground instrumentation is not available for low visibility landings.

See also table 1, appendix F, and "External Conditions Affecting Land Protection" section. The discussions under "Public Use Patterns," which follows, addresses areas used for subsistence and recreational activities.

Local Village Populations and Lifestyles

Six villages--Chignik Bay, Chignik Lake, Chignik Lagoon, Port Heiden (Meshik), Pilot Point, and Ugashik--lie within 15 to 40 miles of the monument/preserve. Residents of these villages have long used parts of Aniakchak for subsistence purposes. A summary of village population statistics is given in table 4.

The Chigniks. These three villages interact to form a distinct subgroup within the Bristol Bay region. The commercial focus among the Chigniks is on purse seining for salmon, and later crab fishing, and processing the product within the communities of Chignik Bay and Chignik Lagoon. Strong economic ties connect the Chigniks to Kodiak, despite the fact that all three villages are technically within the Bristol Bay Regional Corporation area.

Over 100 local boats participate in the salmon fishery in the Chigniks from May through September, with most of the catch being brought back either to the Sea Alaska (formerly Alaska Packers Association) cannery at Chignik Bay, or to floating processors. Some salmon for freezing is delivered to Kodiak. Some 30 local boats also participate in the fishery for herring and herring roe in June and July. Crabbing (king, tanner, and dungeness) is also important, with much of this activity taking place in fall and winter after the salmon runs. This provides boat owner/operators and crew a longer period of cash-based employment than if it were only a local salmon run being exploited. Summer, however, is the most intensely active time, with some 600 to 700 outside laborers moving into Chignik Bay and Lagoon for cannery work and hundreds more seasonally employed at Columbia Ward. In the summer much of the population of Chignik Lake leave their permanent homes to move into the fish camp at the Columbia Ward cannery opposite the village of Chignik

Table 4: Population Statistics of Villages Near Aniakchak

Village	Permanent Population				Avg. Annual Growth Rate (%)		Population vs. Households 1980	Ethnicity % Native		Avg. Household Income 1980	Limited Entry Fish Net Permit 1980
	1980	1970	1960	Earlier (year)	1970-80	1960-80		1980	1970		
Chignik Bay	178	83	99	253 (1950) 224 (1939) 193 (1890)	7.9	3.0	178/47	53.4	80.7	\$46,726	9+
Chignik Lake	138	117	107	Estab. 1950s	1.7	1.3	138/38	90.6	98.3	\$14,678	9+
Chignik Lagoon	48	NA	108	NA	NA	-4.1	48/14	85.4	NA	\$12,379	11+
Port Heiden	92	66	74	51 (1930) 30 (1920) 75 (1890) 40 (1880)	3.4	1.1	92/29	66.3	87.9	\$ 4,973	30*
Pilot Point	66	68	61		-0.3	0.4	66/16	86.4	85.3	\$11,283	34*
Ugashik	13	NA	36		NA	-5.2	13/8	NA	NA	NA	8*

*Drift or set gill net
+Purse seine

Lagoon. Recent closure (1983-84) of the formerly lucrative king crab fishery all along the Pacific and Bristol Bay coasts may have serious consequences on some fishing operations in the Chigniks.

Chignik Bay is in the process of being incorporated as a second-class city; the other two are currently unincorporated. Each is represented by traditional councils recognized by the Bureau of Indian Affairs. Unless or until the communities incorporate, title to townsite lands cannot be obtained. However, each respective native village corporation has already received interim conveyance (working title) to much of its share of selected lands near the village. Title to the subsurface estate on those lands, as provided by ANCSA, is held by the Bristol Bay Regional Corporation. None of these interimplly conveyed lands lie within the monument or preserve.

Many Chignik residents are still very involved in and dependent on hunting, fishing, trapping, and berry picking to supplement purchased foods. Marine and freshwater fish and invertebrates are taken throughout the year both locally and at some distance from the villages. Moose, caribou, ptarmigan, ducks, and geese are also taken in season. Berry picking (blueberry, cranberry, mossberry, and salmonberry) is important in the fall. A portion of this subsistence activity takes place along the coast and lower drainages of Aniakchak (described in more detail later in the section on public use patterns).

Bristol Bay Villages. These three bayside villages--Port Heiden, Pilot Point, and Ugashik (as well as a fourth, Egegik to the north)--form an interacting subdivision just as the Chigniks do on the Pacific side. The strongest economic ties between these villages and larger population centers are with Naknek and King Salmon. Social and family ties exist between Port Heiden and the Chigniks.

Commercial activity in these villages focuses on drift and set gill netting for salmon runs in the mouths of rivers near the villages (as contrasted with purse seining on the Pacific side). As elsewhere, entry into the fishery is limited to permit holders, and since only a fixed number of permits exist, there is a limit to expansion of the fishery. Permits may be bought and sold. Boat size (32 feet) is also limited. Most salmon caught in this fishery are delivered for canning principally to small-scale facilities in Ugashik and Egegik. Substantial amounts go out as fresh-frozen fish through operators in Pilot Point and Port Heiden.

These Bristol Bay communities have a greater seasonal dependence on short-lived salmon runs than the Pacific villages because there is less opportunity to progress to exploitable winter or fall fisheries. Recent years have been particularly productive, however, and the dollar value of the permits as well as profits have risen accordingly. Port Heiden has only a small natural harbor that is now silted in so as to be unusable except for shallow-draft vessels. No docks are publicly maintained at Pilot Point.

Port Heiden has been incorporated since 1972 and has an elected city council; the city provides utility services to residents. A major effort is underway to relocate many of the buildings and families from historic Meshik townsite to a less-confining site nearer the airport. The original site is crowded between a small lake and the eroding seacoast.

Both Pilot Point and Ugashik are unincorporated but have recognized traditional councils representing their inhabitants. Both have active native village corporations that have selected and received interim conveyance of title to nearly all lands to which they are entitled. None of these lands are within Aniakchak National Monument and Preserve. Ugashik is too small to qualify for state revenue sharing funds, although Pilot Point does. The 3,500-foot runway at Pilot Point experiences much small plane use. A new strip at Ugashik has recently been completed.

The highly seasonal nature of the cash-producing salmon fishery on the Bristol Bay side leads to a strong dependence on subsistence activity by residents of these three villages. Besides salmon retained from commercial activities, Port Heiden villagers use caribou, moose, waterfowl, shellfish, and berries. Similar use is made by people from Pilot Point and Ugashik, who reportedly also use ptarmigan, bear, and a wider variety of berries. Some subsistence activity from these three villages does take place within Aniakchak's boundaries.

Public Use Patterns

Subsistence Use. As indicated earlier, residents of nearby villages continue to depend in varying degrees on subsistence activities, including hunting, fishing, trapping, berry picking, and collecting other plant products. The actual number of animals taken and the specific areas from which they are taken vary from year to year. To village residents, subsistence activity is an integral part of existence regardless of his or her ability to substitute cash-purchased food and clothing. Therefore, to village residents around Aniakchak, it is essential that lands traditionally used for subsistence, although not necessarily used every year, continue to be available for such use.

ANILCA, in its establishment of Aniakchak and elsewhere (section 201(1) and title VIII), makes clear that the opportunity for continued subsistence use is guaranteed in both the monument (where traditional) and preserve. The state of Alaska is given the responsibility to monitor and regulate subsistence harvest; in Aniakchak, subsistence hunting is currently undertaken under the same seasonal closures and bag limits as sport hunting.

Sport hunting is not allowed in the monument, but may be allowed under state regulations within the preserve subject to the broad provision that where there is conflict with subsistence use, the latter will be given priority. Sportfishing is permitted in both the monument and the preserve under state regulations.

To the extent specific information exists, areas used for subsistence by the villages nearest Aniakchak are shown on the Subsistence and Sport Harvest map and described below. The indicated ranges primarily reflect broad areas where caribou and moose hunting occurs; other uses (e.g., waterfowl harvesting) would have a much more limited distribution inside the same general areas.

Subsistence users from the Chignik villages are active primarily on the southern slopes of the Aleutian Range down into the Pacific coastal lowlands and bays. There is some distinction between the three Chigniks: Chignik Lake residents apparently limit themselves to the taking of caribou and moose in this general area; Chignik Bay and Chignik Lagoon users engage in a wider variety of activities in Aniakchak, including taking caribou and moose in the lowlands, gathering marine invertebrates along the coast of Aniakchak Bay, and harvesting waterfowl along the northern coast of Kujulik Bay. Some trapping is done along the coast of Aniakchak Bay, with Chignik Lagoon residents also trapping along Black Creek, the lower Aniakchak River, and the north coast of Kujulik Bay. Chignik Bay and Chignik Lagoon residents also harvest marine mammals throughout Aniakchak, Amber, and Kujulik bays.

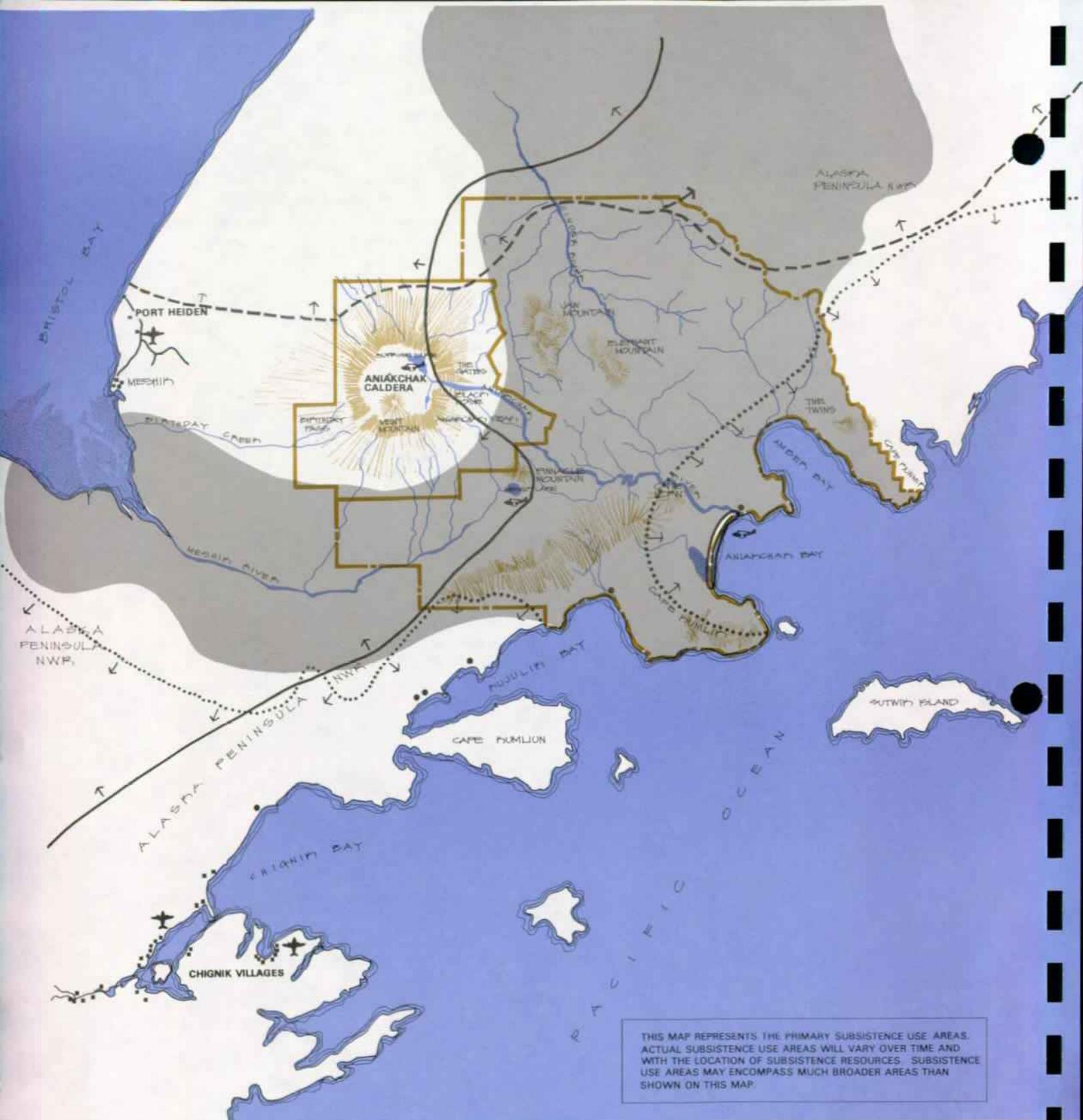
Subsistence users from west of the monument in Port Heiden take caribou and moose from the monument (including the caldera at times) and southwestern parts of the preserve west of the Aleutian Range. Moose are taken along the Meshik drainage, including the upper tributaries west of Meshik Lake in the preserve.

Subsistence users from Pilot Point and Ugashik take caribou and moose along the northern boundaries of both the monument and preserve. Trapping occurs along the Pumice Creek drainage; waterfowl are taken in both the Cinder River and Pumice Creek drainages.

Commercial Fishing. Although commercial fishing on the Pacific Coast takes place in waters outside the boundaries of the preserve, it is a pattern of public use of considerable importance because of its proximity. In the summer fishing season, Chignik and Kodiak seining boats operate in Amber, Aniakchak, and Kujulik bays. These vessels spend many days either working or anchored in bays whose coastal resources are within the preserve. While not actually fishing, boat crews go ashore for subsistence or sport hunting or gathering invertebrates, or they take the small high-powered boats used to set the nets up the lower portions of the rivers in search of wildlife or for exploration.

Recreational Use. Recreational use in the Aniakchak area includes sport hunting and fishing, as well as nonconsumptive leisure activities such as backpacking, rafting, camping, exploration, photography, and nature study. Guided recreational use is considered an element of recreational use.

Sport Hunting and Fishing. Local reports suggest that a small number of private unguided parties or individuals (perhaps four or five

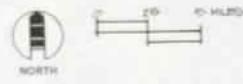


THIS MAP REPRESENTS THE PRIMARY SUBSISTENCE USE AREAS. ACTUAL SUBSISTENCE USE AREAS WILL VARY OVER TIME AND WITH THE LOCATION OF SUBSISTENCE RESOURCES. SUBSISTENCE USE AREAS MAY ENCOMPASS MUCH BROADER AREAS THAN SHOWN ON THIS MAP.

- MONUMENT BOUNDARY
- - - PRESERVE BOUNDARY
- ✈ COMMERCIAL AIRSTRIP
- ⊕ AMPHIBIOUS AIRCRAFT LANDING (UNIMPROVED)
- VILLAGE BUILDINGS
- CABINS

- USERS FROM PORT HEIDEN
- ⋯ USERS FROM CHIGNIKS
- ⊥ - - - USERS FROM NORTHERN VILLAGES
- SPORTRHUNTING

NOTE: SPORTFISHING TAKES PLACE IN MONUMENT / PRESERVE
 SOURCE: ALASKA DEPARTMENT OF FISH AND GAME 1983



SUBSISTENCE AND SPORT HARVEST ANIAKCHAK

NATIONAL MONUMENT AND PRESERVE
 UNITED STATES DEPARTMENT OF THE INTERIOR
 NATIONAL PARK SERVICE

1983 1000000
 DPC 1 MAP 10

ON MICROFILM



EXISTING USES

COMMERCIAL

important salmon fishery; also crab and shrimp

SUBSISTENCE

users from Port Heiden
 users from Chignik
 users from northern villages

**SPORT HUNTING/
FISHING**

may occur throughout preserve; hunting guide areas assigned but not mapped

RECREATION

Caldera exploration
 whitewater rafting

SOURCE FOR SUBSISTENCE, WILDLIFE, AND FISHERIES:
ALASKA DEPARTMENT OF FISH AND GAME 1983

RESOURCE VALUES

SCIENTIFIC AND SCENIC

designated wild river
 geologic/scenic areas

WILDLIFE

Note: only areas critical in species life cycles are shown

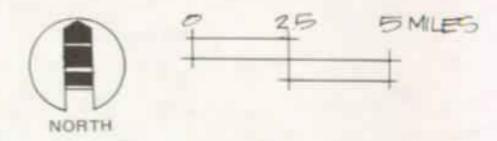
brown bear: spring use (also summer along streams)
 moose: winter use
 caribou: spring calving
 caribou: migration corridors
 harbor seal: haulout area

Not shown bald eagle: nest along streams

No endangered species known.

FISHERIES

Not shown most major streams are salmon fresh-water habitat



EXISTING USES AND RESOURCE VALUES
ANIAKCHAK NATIONAL MONUMENT AND PRESERVE
 UNITED STATES DEPARTMENT OF THE INTERIOR
 NATIONAL PARK SERVICE
ON MICROFILM
 101 20023 B
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per year) will enter the preserve by small plane and land on ash fields at higher elevations on Aniakchak's slopes (hunting caribou), gravel bars in the Cinder River drainage (moose or caribou), or Pacific-side river drainages (moose, caribou, brown bear, and river fishing). The extent to which these private parties might be local village residents engaged in subsistence use versus nonresident sportsmen is not clear. However, the use of aircraft for subsistence activities is not permitted in Aniakchak National Monument.

The Alaska State Guide License Control Board has assigned eight hunting guide areas that include parts of the monument or preserve. (Only those in the preserve actually have legal status because sport hunting is not allowed within the monument.) Assignment of an area does not, however, necessarily mean active use within the preserve. During 1983-84, only one of the eligible (i.e., assigned) hunting guides has applied for and received his annual \$50 commercial use license. In this instance, no activity was reported in 1983.

It is possible that the remaining eligible hunting/fishing guides are either inactive or not aware of the requirement to obtain a separate commercial use license now that the area is a monument/preserve. Some guided hunting/fishing in the preserve may therefore be going unreported. Apparently there are about five guides who operate at times from Port Heiden; several operators out of King Salmon are capable of offering trips into the Aniakchak area for hunting/fishing or other recreational activities.

Backpacking, Rafting, Etc. Statistics for nonconsumptive recreational use are also scarce, principally because such use may have gone unreported by guides or private parties. Private parties are not actually required to report activities within the monument/preserve, and most of the information on this use category comes indirectly from informal reports of the air-taxi operators who provide transportation.

In the six seasons since Aniakchak became a unit of the national park system (first as a monument in 1978), fewer than 25 nonconsumptive recreational visitors are known to have entered the area. Most of those have been transported by amphibious aircraft into Surprise Lake in Aniakchak caldera and picked up sometime later after hiking and exploring within the caldera. A few parties have landed on Meshik Lake for camping and local exploration.

Although the caldera and the Aniakchak River and Meshik River corridors are currently attractive resources for nonconsumptive recreational visitors, and are expected to see increased use, there may be other areas of interest in the future. The entire Pacific Coast is extremely scenic and, with care, is probably accessible by seagoing kayak in challenging trips beginning with an airplane entry somewhere in Amber or Aniakchak bays and ending at the Chigniks.

Three persons currently hold commercial use licenses for river running in the monument and preserve, but none of these reported activity in the 1983 season.

Air-taxi service or a private aircraft is essential in gaining access to interior parts of the monument/preserve for recreational use. However, it is possible to gain access to the caldera overland from Port Heiden in a one or one and a half day backpack if the correct route is followed. Access to the Pacific Coast by boat is technically feasible from the Chigniks or Kodiak, but the distances are substantial.

One air-taxi operator (from King Salmon) is currently licensed to operate within Aniakchak, and it is this service that has provided the majority of access to recreational visitors over the last five years.

Trends and Projections in Recreational Use. There are simply no reliable statistics on which to base trends and projections in recreational use. The following discussion provides some theoretical considerations that may apply.

For sport hunting and fishing, the area's attractiveness may well increase if and when native corporation selected lands are conveyed and public hunting on native lands is restricted or is subject to payment of fees. If that occurs, an unknown proportion of the annual hunting and fishing parties currently guided out of Port Heiden or the Chigniks may shift to preserve or refuge lands. How many would actually choose the preserve is unknown, but only four or five more groups per year would double the estimated present use.

Rafting and backpacking use, now thought to be only one or two groups (less than 10 persons) per year, could very well increase. Remote, challenging wilderness tourism--particularly in small guided parties--has increased dramatically elsewhere in Alaska and worldwide in the past decades.

Scientific Research and Resource Survey Use. A fourth distinct use category is that of the scientific research and survey group. Historically, there have been more scientific expeditions than recreational ones, focusing in particular on the remarkable volcanic features of the caldera and the ash flows that radiate from it. Emphasis has shifted more recently to groups surveying for potential oil, gas, and mineral resources. Though the latter survey work will undoubtedly continue until the potential is well-evaluated, increasing emphasis will be placed on habitat and vegetation study in support of more effective wildlife resource management.



APPENDIX A: MANAGEMENT OBJECTIVES

ADMINISTRATION

Conduct, sponsor, and encourage continuing studies and other information-gathering methods so that management has increased data on which to base decisions.

Study alternatives to determine the most effective administrative arrangements such as locating a headquarters and providing the staff, facilities, equipment, and support services necessary to manage the resources of the monument and preserve and serve the visiting public.

Prepare and implement a staffing plan in accordance with local hire provisions of ANILCA and recognizing the knowledge and skills of local persons and the effects of working under severe environmental conditions.

Work cooperatively with the state of Alaska, local governments, and native interests in order to arrive at appropriate management plans and activities compatible with the purposes of the monument and preserve.

NATURAL RESOURCES

Manage natural resources of the monument and preserve for the purpose of perpetuating the ecological processes and systems.

Place particular management emphasis on the caldera and its associated volcanic features and on plant and animal communities typifying natural succession so that these outstanding resources may be adequately protected.

Develop and implement plans for the perpetuation of wildlife and their habitat while simultaneously accommodating sport hunting in the preserve and subsistence activities and sport fishing throughout the monument and preserve.

Work toward accomplishing cooperative agreements with Alaska Department of Fish and Game and Public Safety, local government entities, Koniag Native Corporation and village corporations, and private interests for monitoring and perpetuating the area's natural resources.

Work cooperatively with private interests--particularly the oil and gas industries--to maintain high environmental standards incidental to exploration and, potentially, development activities.

CULTURAL RESOURCES

Identify and evaluate the unit's historical, archeological, and cultural resources in a manner consistent with NPS policies and legislative and executive requirements.

Assemble cultural resource information--including oral and written information from "old timers" of the area--to be used in interpretive materials and programs for the enjoyment and education of visitors.

Encourage and assist local people, groups, and native corporations to perpetuate the cultural heritage of the region.

VISITOR USE AND INTERPRETATION

Study and inventory recreational resources as a basis for providing visitor access and services necessary for visitors to see and experience the unit without adversely impacting its resources.

Encourage and provide information and technical assistance to private enterprise to provide appropriate visitor services, preferably with bases of operation outside the boundaries of the monument and preserve.

Develop appropriate interpretive information and programs describing outstanding resources, opportunities for visitor activities, and weather and other environmental factors influencing visitor use.

COMMERCIAL OPERATIONS

Identify appropriate levels and types of commercial services feasible for providing visitor services and issue permits and commercial use licenses as appropriate to meet the needs of visitors and to perpetuate resources.

APPENDIX B: FINAL RULES ON PUBLIC USE
OF NATIONAL PARK SYSTEMS UNITS IN ALASKA
(36 CFR 1.5 AND 13 AND 43 CFR 36)

31854 Federal Register / Vol. 46, No. 116 / Wednesday, June 17, 1981 / Rules and Regulations

**PART 13—NATIONAL PARK SYSTEM
UNITS IN ALASKA**

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- 13.2 Applicability and scope.
- 13.3 Penalties.
- 13.4 Information collection.
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- * ~~13.11 Motorboats.~~
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- * ~~13.13 Aircraft.~~
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Sec.

- 13.70 Lake Clark National Park and Preserve.
- 13.71 Noatak National Preserve.
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- 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 Title VIII of ANILCA.

(c) The use of snowmachines (during periods of adequate snow cover and frozen river conditions) for traditional activities (where such activities are permitted by ANILCA or other law) and for travel to and from villages and homesites and other valid occupancies 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 on 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.

**** § 36.12 Temporary access.**

(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.

(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 qualify 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, transporting 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 material.

(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 noncommercial gathering by local rural residents of fruits, berries, mushrooms, and other plant materials for subsistence uses, and the noncommercial gathering of dead or downed timber for firewood, shall be allowed without a permit in park areas where subsistence uses are allowed.

(c)(1) Notwithstanding 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

§ 13.60 Aniakchak National Monument and Preserve.

(a) *Subsistence.—(1) Resident Zone.*
The following communities and areas are included within the resident zone for Aniakchak National Monument:

Chignik
Chignik Lagoon
Chignik Lake
Meshik
Port Heiden

§ 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.

APPENDIX C

(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, 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 D: SUMMARY OF PROPOSED RESOURCE MANAGEMENT
PROJECTS FROM DRAFT RESOURCE MANAGEMENT PLAN

<u>General Type</u>	<u>Description</u>	<u>Number</u>	<u>Priority</u>
Natural Resources	Impact of sport hunting	ANIA N1	1
	Basic resource inventory (vegetation and wildlife)	ANIA N4	2
	Impact of subsistence use	ANIA N2	3
	Evaluation of local weather	ANIA N3	4
Cultural Resources	Characteristics of subsistence use	ANIA C1	1
	Basic resource inventory (archeological/historical)		2

E: WILD RIVER MANAGEMENT GUIDELINES

39458

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Section III—Management

Wild and scenic rivers shall be managed with plans prepared in accordance with the requirements of the Act, other applicable laws, and the following general management principles. Management plans will state: General principles for any land acquisition which may be necessary; the kinds and amounts of public use which the river area can sustain without impact to the values for which it was designated; and specific management measures which will be used to implement the management objectives for each of the various river segments and protect esthetic, scenic, historic, archeologic and scientific features.

If the classification or classifications determined in the management plan differ from those stated in the study report, the management plan will describe the changes in the existing condition of the river area or other considerations which required the change in classification.

General Management Principles

Section 10(a) states,

Each component of the national wild and scenic rivers system shall be administered in such a manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration primary emphasis shall be given to protecting its esthetic, scenic, historic, archeologic, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development on the special attributes of the area.

This section is interpreted as stating a nondegradation and enhancement policy for all designated river areas, regardless of classification. Each component will be managed to protect and enhance the values for which the river was designated, while providing for public

recreation and resource uses which do not adversely impact or degrade those values. Specific management strategies will vary according to classification but will always be designed to protect and enhance the values of the river area. Land uses and developments on private lands within the river area which were in existence when the river was designated may be permitted to continue. New land uses must be evaluated for their compatibility with the purposes of the Act.

The management principles which follow stem from section 10(a). Managing agencies will implement these principles to the fullest extent possible under their general statutory authorities and existing Federal, State and local laws. Because of these limitations, however, implementation of the principles may differ among and within components of the system depending on whether the land areas involved are federally, State, locally or privately owned.

Carrying Capacity. Studies will be made during preparation of the management plan and periodically thereafter to determine the quantity and mixture of recreation and other public use which can be permitted without adverse impact on the resource values of the river area. Management of the river area can then be planned accordingly.

Public Use and Access. Public use will be regulated and distributed where necessary to protect and enhance (by allowing natural recovery where resources have been damaged) the resource values of the river area. Public use may be controlled by limiting access to the river, by issuing permits, or by other means available to the managing agency through its general statutory authorities.

Basic Facilities. The managing agency may provide basic facilities to absorb user impacts on the resource. Wild river areas will contain only the basic minimum facilities in keeping with the "essentially primitive" nature of the area. If facilities such as toilets and refuse containers are necessary, they will generally be located at access points or at a sufficient distance from the river bank to minimize their intrusive impact. In scenic and

recreational river areas, simple comfort and convenience facilities such as toilets, shelters, fireplaces, picnic tables and refuse containers are appropriate. These, when placed within the river area, will be judiciously located to protect the values of popular areas from the impacts of public use.

Major Facilities. Major public use facilities such as developed campgrounds, major visitor centers and administrative headquarters will, where feasible, be located outside the river area. If such facilities are necessary to provide for public use and/or to protect the river resource, and location outside the river area is infeasible, such facilities may be located within the river area provided they do not have an adverse effect on the values for which the river area was designated.

Motorized Travel. Motorized travel on land or water is generally permitted in wild, scenic and recreational river areas, but will be restricted or prohibited where necessary to protect the values for which the river area was designated.

Agricultural and Forestry Practices. Agricultural and forestry practices should be similar in nature and intensity to those present in the area at the time of designation. Generally, uses more intensive than grazing and hay production are incompatible with wild river classification. Rowcrop production and timber harvest may be practice in recreational and scenic river areas. Recreational river areas may contain an even larger range of agricultural and forestry uses. Timber harvest in any river area will be conducted so as to avoid adverse impacts on the river area values.

Other Resource Management Practices. Resource management practices will be limited to those which are necessary for protection, conservation, rehabilitation or enhancement of the river area resources. Such features as trail bridges, fences, water bars and drainage ditches, flow measurement devices and other minor structures or management practices are permitted when compatible with the classification of the river area and provided that the area remains natural in appearance and the practices or structures harmonize with the

surrounding environment.

Water Quality. Consistent with the Clean Water Act, water quality in wild, scenic and recreational river areas will be maintained or, where necessary, improved to levels which meet Federal criteria or federally approved State standards for aesthetics and fish and wildlife propagation. River managers will work with local authorities to abate activities within the river area which are degrading or would degrade existing water quality.

Additional management principles stem from other sections of the Act as follows:

Land Acquisition: Section 6

Water Resource Development: Section 7

Mining: Section 9

Management of Adjacent Federal Lands:

Section 12(a)

Hunting and Fishing: Section 13(a)

Water Rights: Section 13(b)-(f)

Rights-of-Way: Section 13(g)

The following policies are consistent with and supplement the management principles stated in the Act:

Land Use Controls. Existing patterns of land use and ownership should be maintained, provided they remain consistent with the purposes of the Act. Where land use controls are necessary to protect river area values, the managing agency will utilize a full range of land-use control measures including zoning, easements and fee acquisition.

Rights-of-Way. In the absence of reasonable alternative routes, new public utility rights-of-way on Federal lands affecting a Wild and Scenic River area or study area will be permitted. Where new rights-of-way are unavoidable, locations and construction techniques will be selected to minimize adverse effects on scenic, recreational, fish and wildlife and other values of the river area.

Other legislation applicable to the various managing agencies may also apply to wild and scenic river areas. Where conflicts exist between the provisions of the Wild and Scenic Rivers Act and other acts applicable to lands within the system, the more restrictive provisions providing for protection of the river values shall apply.

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APPENDIX F: SUMMARY OF ACCESS PROVISIONS

<u>Provision</u>	<u>Reference</u>	<u>Changes Proposed in Plan</u>
<p>1. <u>Access to Inholdings</u> (Applies to holders of valid property or occupancy interest including mining claims)</p> <p>Ensures adequate and feasible access, subject to reasonable regulations to protect the natural and other values.</p>	<p>ANILCA 1110 36 CFR 13.31 43 CFR 36.10 43 CFR 36.11</p>	<p>None</p>
<p>2. <u>Temporary Access</u> (Applies to state and private land-owners not covered in 43 CFR 36.10 and 36.11)</p> <p>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.</p>	<p>ANILCA 1111 43 CFR 36.12</p>	<p>None</p>
<p>3. <u>Transportation and Utility Systems in and across, and Access into, Conservation System Units</u> Sets procedures for application and approval process; must be compatible with purposes for which the unit was established and no economically feasible and prudent alternative route exists; establishes terms and conditions of rights-of-way.</p>	<p>ANILCA Title XI 43 CFR 36</p>	<p>None</p>
<p>4. <u>RS 2477</u> 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." Aniakchak National Monument and Preserve 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</p>	<p>43 USC Alaska Statehood Act</p>	<p>None</p>

basis. These rights-of-way are discussed further in the "Public Access" section of the general management plan. A map illustrating the possible right-of-way that the state contends may be valid under RS 2477 is located in appendix M.

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|----|--|---|------|
| 5. | <u>Navigation Aids and Other Facilities</u>
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 |
| 6. | <u>Alaska Department of Fish and Game</u>
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 |
| 7. | <u>Alaska Mineral Resource Assessment Program</u>
Allows for access for assessment activities permitted by ANILCA 1010, subject to regulations ensuring that such activities are carried out in an environmentally sound manner. | ANILCA 1010 | None |
| 8. | <u>Helicopter Use</u>
The use of helicopters is generally prohibited. The superintendent may permit the use of helicopters subject to terms and conditions of a permit. | ANILCA 1110
36 CFR 13.31
43 CFR 36.11(f)(4) | None |
| 9. | <u>Easements</u>
Campsite and linear access easements may be reserved on native corporation lands that are within or adjoin the 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. | ANCSA 17(b) | None |

APPENDIX G: COST AND IMPLEMENTATION SCHEDULE FOR THE PLAN

The costs for combined recommendations for visitor services, administrative development, and physical construction are given below. These figures are in 1985 dollars. They do not include any costs associated with specific research projects, which will be estimated as the separate resource management plan is refined (see appendix D).

<u>Category</u>	<u>Estimate for Fiscal Year 1987</u>	<u>Typical Future Year at Full Development</u>
Staff	\$ 61,000	\$122,000
Operating expenses	<u>49,000</u>	<u>43,000</u>
Total Annual Costs	\$110,000	\$165,000
Construction	\$ 5,000	\$ 4,000

APPENDIX H: ANILCA SECTION 810 SUBSISTENCE EVALUATION

I. Introduction

Section 810(a) of the 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, occupancy or disposition of such lands which would significantly restrict subsistence uses shall be effected until the head of such Federal agency -

- (1) gives notice to the appropriate State agency and the appropriate local committees and regional councils established pursuant to section 805;
- (2) gives notice of, and holds, a hearing in the vicinity of the area involved; and
- (3) determines that (A) such a significant restriction of subsistence uses is necessary, consistent with sound management principles for the utilization of the public lands, (B) the proposed activity 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.

II. Purpose of the Monument/Preserve

ANILCA section 201(1), which establishes the monument and preserve, also states the following:

The monument and preserve shall be managed for the following purposes, among others: To maintain the caldera and its associated volcanic features and landscape, including the Aniakchak River and other lakes and streams, in their natural state; to study, interpret, and assure continuation of the natural process of biological succession; to protect habitat for, and populations of, fish and wildlife, including, but not limited to, brown/grizzly bears, moose, caribou, sea lions, seals, and other marine mammals, geese, swans, and other waterfowl and

in a manner consistent with the foregoing, to interpret geological and biological processes for visitors. Subsistence uses by local residents shall be permitted in the monument where such uses are traditional in accordance with the provisions of title VIII."

ANILCA section 601, in amending the Wild and Scenic Rivers Act (PL 90-542), October 2, 1968, provides designation of the Aniakchak River and its major tributaries as a wild river within the wild and scenic rivers system.

Components of the national wild and scenic rivers system are to be administered pursuant to the Wild and Scenic Rivers Act, which states, in part:

Each component of the national wild and scenic river system shall be administered in such a manner as to protect and enhance the values which caused it to be included in said system without, insofar as it consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration primary emphasis shall be given to protecting its aesthetic, scenic, historic, archeologic, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the special attributes of the area.

Subsistence uses are also to be permitted in components of the national wild and scenic rivers system in accordance with title VIII of ANILCA.

III. The Evaluation Process

A General Management Plan has now been prepared that evaluates alternative management and visitor use options and makes certain proposals.

The potential for significant restrictions on subsistence uses as a result of the proposal must be evaluated for the actions' effects upon ". . . subsistence uses and needs, the availability of other lands for the purposes sought to be achieved and other alternatives which would reduce or eliminate the use." Restriction on subsistence use would be significant if there were large reductions in the abundance of harvestable resources, major redistributions of those resources, substantial interference with harvester access to active subsistence sites, or a major increase in nonrural resident hunting.

By asking the following questions and analyzing the responses relative to the area and the proposed action, an evaluation of significance becomes possible.

1. Would the alternative cause a reduction in the population of wildlife, fish, and other resources upon which subsistence harvesting depends; and/or would the alternative cause a decline in the population of wildlife or fish harvested for subsistence by altering the distribution of those resources?

2. Would the alternative cause a restriction on access to the harvestable resources where harvesting has historically taken place?

3. Would the alternative lead to increased competition for the big game present there?

IV. Proposed Actions

The General Management Plan for Aniakchak proposes virtually no change in current public use, including subsistence activities, in the monument/preserve. The future management of harvestable resources is to be based on regulations made by the state in cooperation with the National Park Service. The GMP proposes research, survey, and monitoring efforts that will provide an objective basis for these regulations.

The proposed action does not include any physical development, improved access, or services intended to increase either sport hunting or nonconsumptive uses like hiking and rafting. However, it is realistic to assume some such increases will occur both in sport hunting (as native selected lands are conveyed and public hunting is restricted there, pressure may shift to the public lands) and in hiking/rafting (as Aniakchak becomes better known and wilderness tour operators develop it as a destination).

In terms of physical development and use, the GMP proposes that overall administrative responsibility be given to a permanent full-time area manager resident in King Salmon, but who spends considerable summer season time in the field or in aircraft patrol in Aniakchak. Seasonal rangers will provide field patrols. Two part-time resident village coordinators will provide logistic support and assistance to the manager and rangers, and liaison with subsistence and other users who are residents in Port Heiden and the Chigniks. Sport hunters, fishermen, and other users from outside the area will be offered information and interpretive service in King Salmon and seasonally in the Chigniks and Port Heiden.

No change in the present air charter access system is proposed, which now requires a business license that may be obtained by any qualified applicant. Subject to the area manager's authority to close an area or restrict an activity on an emergency, temporary, or permanent basis (36 CFR 13.30) no changes are proposed in current regulations permitting traditionally and customarily used access methods for subsistence users. This means that use of snowmachines, offroad vehicles, motorboats, and dogs or pack animals, where such uses have been traditional and

customary in subsistence activities within Aniakchak's boundaries, would still be permitted subject to applicable laws and regulations. Use of fixed-wing aircraft or helicopters in subsistence activities, unless special exceptions are granted, would not be permitted. Access modes for recreational users (including sport hunters, fishermen, hikers, rafters, and others) may include snowmachines, motorboats, fixed-wing aircraft, and dogs and pack animals. Offroad vehicles and helicopters are not allowed to be used in recreational activities.

Development proposed in the monument/preserve is limited to adaptive restoration of the APA bunkhouse at the Aniakchak River mouth for continued use by NPS staff and the public, and several temporary portable shelters to be used by administrative staff. A hiking access corridor from Port Heiden into the caldera would be marked, but no actual trail would be constructed.

V. Affected Environment: Current Subsistence Use

The wildlife resources and subsistence activities in Aniakchak are described in "The Aniakchak Environment" section. In summary, though no reliable estimates of actual harvest are available, it is known that subsistence hunting (primarily caribou, moose, and waterfowl), fishing, berry picking, trapping, and collecting other plant products are traditional activities within the monument and preserve. This includes use by Port Heiden residents along the western boundary of the monument and use by Chignik residents in the eastern preserve and along the Pacific shoreline.

VI. Evaluation

1. The potential to reduce populations of harvestable resources

Neither the proposal nor any of the alternatives considered would result in habitat manipulation or in physical development of a scale that would have any direct impact on reducing or redistributing harvestable wildlife or other subsistence resources. Although there are no proposals intended to encourage increased recreational use, one alternative would have immediately provided some shelters at campsites that might have been an encouragement to some camping visitors to the caldera. However, increases are expected regardless of lack of facilities or direct encouragement (see "Proposed Actions" above).

Concerning possible increased sport hunting impacts, see item 3 below. For increased hiking, rafting, and exploring visitors, the total increase is expected to be small (from one or two groups a season to three or four). Four groups in the caldera and/or going down the Aniakchak in one season, separated by one or more weeks, would probably have a minimum effect on displacing wildlife from the river corridor. Even if there was a displacement, it would take place in July and early August in advance of the fall hunting season and therefore have no impact on legal subsistence

hunting. No areas where hiking and rafting are expected to increase appear to be critical feeding habitat for subsistence used wildlife.

Conclusion. Neither the proposal nor any of the alternatives would cause a reduction in harvestable resources; if any redistribution occurs (e.g., displacement along the river) it would be temporary and outside the hunting season and therefore probably have no significant effect on subsistence harvest.

2. Restriction of access

Neither the proposal nor any of the alternatives would change currently allowed access means so long as these were traditionally and customarily employed prior to establishment of the monument/preserve. Relative to subsistence, this means that snowmachines, offroad vehicles, motorboats, dogs, and pack animals, if they can be shown to have been used traditionally and customarily, would still be permitted; fixed-wing aircraft and helicopters would not.

Conclusion. Since no changes in traditional subsistence access are proposed, no restriction of existing access to harvestable resources is anticipated under the proposed action.

3. Increase in competition

The potential for competition for big game or other harvestable resources would be a function of increases in sport hunting and fishing. Neither the proposal nor any of the alternatives would encourage increases in these uses. However, anticipated restrictions in accessibility to native lands for public hunting may increase sport hunting pressure on public lands such as the preserve or the Alaska Peninsula National Wildlife Refuge independent of NPS proposals for Aniakchak.

Conclusion. Proposed NPS actions would not lead directly to increased competition for big game or other harvestable resources. Decisions by other landowners may have indirect impacts on competition; these should not be attributed to the National Park Service. The proposed increase in research, survey, and monitoring within the monument and preserve should provide the basis for objective regulation of both sport and subsistence harvest; in the long term this should ensure that competition between the two is minimized.

VII. Availability of Other Lands for the Proposed Action

There are no other lands available for this action because the preserve boundaries were established by Congress to achieve specific purposes. However, there are lands outside the monument and preserve that are available for subsistence uses. The proposed plan is consistent with the mandates of ANILCA, including title VIII and the NPS organic act.

VIII. Alternatives Considered

The Draft General Management Plan analyzed three alternatives and the proposal. They ranged from the minimum legally required management with no facilities or separate staff, through a middle-road alternative (essentially the proposal), to an alternative that provided some immediate small shelter facilities and a permanent staff resident in local villages.

No alternative suggested changes in access modes or habitat manipulation or anything that would have directly affected subsistence uses. No alternative would have provided encouragement to increased sport hunting and directly increased the potential for competition.

In addition, it is possible for subsistence users to use other lands outside the monument/preserve, and they do. They use the lands most easily accessible that can provide for their needs and extend their activities to other areas on an "as needed" basis.

IX. Consultation and Coordination

The general management plan to which this evaluation is appended has been developed with extensive contact with state agencies, federal agencies, local and regional native groups, and conservation organizations (see "Legislative and Planning History" section).

X. Findings

This evaluation concludes that the proposed plan would not result in significant restrictions of subsistence uses in Aniakchak National Monument and Preserve.

APPENDIX I: DETERMINATION OF CONSISTENCY WITH ALASKA
COASTAL ZONE MANAGEMENT POLICIES

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."

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 for consistency determination. The Bristol Bay 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. Until it is approved, the standards established by the state of Alaska are applicable to Aniakchak National Monument and Preserve.

The ACMP identifies 12 primary categories that are to be used in consistency evaluations. The basis of the following consistency determination was the environmental assessment that accompanied the Draft General Management Plan for Aniakchak (March 1985). The highlights of this 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.

COASTAL DEVELOPMENT

6 AAC 80.040 (refers to ACMP section)

(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.

(b) The placement of structures and the discharge of dredged or fill material into coastal water must, at a minimum, comply with 36 CFR 320-323, July 19, 1977.

Proposal: Consistent. There would be no new NPS facility development. Existing cabin facilities would be used by seasonal ranger patrols. The placement of structures and the discharge of dredged or fill material into coastal waters would not be required.

Alternatives: Also consistent. No significant changes in existing use and development were considered.

GEOPHYSICAL HAZARD AREAS

6 AAC 80.050

- (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.

Proposal: There would be no new development. If there was evidence of renewed volcanic activity in Aniakchak caldera or elsewhere, restrictions on public use for safety considerations would be evaluated. The existing structure at Aniakchak Bay, which would be used by seasonal ranger patrols, is located some 30 miles from Aniakchak caldera and has remained intact over the last 60 years.

Alternatives: Also consistent. The only development proposed would have been shelter tent platforms in the caldera with minimal capital cost.

RECREATION

6 AAC 80.060

- (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.
- (b) Districts and state agencies will give high priority to maintaining and, where appropriate, increasing public access to coastal water.

Proposal and Alternatives: Consistent. Recreational activities and opportunities in the coastal region of the monument/preserve would continue.

ENERGY FACILITIES

6 AAC 80.070 Not applicable.

TRANSPORTATION AND UTILITIES

6 AAC 80.080

- (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.

Proposal and Alternatives: Consistent. Existing transportation methods and routes would not be affected, and no new NPS utility systems would be developed.

FISH AND SEAFOOD PROCESSING

6 AAC 80.090

Districts will identify and may designate areas of the coast suitable for the location or development of facilities related to commercial fishing and seafood processing.

Proposal and Alternatives: Consistent. There would be no developments to accommodate commercial fishing activities.

TIMBER HARVESTING AND PROCESSING

6 AAC 80.100 Not applicable.

MINING AND MINERAL PROCESSING

6 AAC 80.110

- (a) Mining and mineral processing in the coastal area must be regulated, designed, and conducted so as to be compatible with the standards contained in this chapter, adjacent uses and activities, statewide and national needs, and district programs.
- (b) Sand and gravel may be extracted from coastal waters, intertidal areas, barrier islands, and spits when there is no feasible and prudent alternative to coastal extraction which will meet the public need for sand or gravel.

Proposal and Alternatives: Consistent. Mining activities in Aniakchak National Monument and Preserve would include locatable mineral claims that may be filed on state lands inside the preserve and lands on which full title may be conveyed to village corporations or the Koniag Regional Corporation. It would also include extraction of oil and gas (not hard rock minerals) from lands on which Koniag, Inc. may eventually be conveyed oil and gas rights. In all these cases, mining activities must meet applicable state and federal environmental protection standards to minimize environmental impacts, which would be consistent with this standard.

SUBSISTENCE

6 AAC 80.120

- (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 or activity 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.

Proposal and Alternatives: Consistent. Existing subsistence uses, including hunting, fishing, trapping, and other uses of renewable resources would continue. Subsistence use is compatible with provisions of subsistence legislation and NPS policy. (Also see ANILCA Section 810 Subsistence Evaluation in appendix H.)

HABITATS

6 AAC 80.130

- (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, and
- (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.

Proposal and Alternatives: Consistent. Natural resources and associated processes would be protected. No NPS proposal would significantly affect any of the above-listed habitats.

AIR, LAND, AND WATER QUALITY

6 AAC 80.140

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 are incorporated into the ACMP.

Proposal and Alternatives: Consistent. All standards of the Alaska Department of Environmental Conservation will be met. Appropriate and necessary permits and review of proposed actions are an inherent part of the NPS general management plan process.

HISTORIC, PREHISTORIC, AND ARCHEOLOGICAL RESOURCES

6 AAC 80.150

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.

Proposal and Alternatives: Consistent. Historic and prehistoric surveys have been undertaken, and identified cultural resources are being protected according to NPS policies and standards. Procedures are in effect to protect any additional resources discovered during implementation of this plan. All standards of the ACMP have been met or exceeded.

CONSISTENCY CONCLUSIONS

The general management plan for Aniakchak National Monument and Preserve has been evaluated for consistency with the standards of the ACMP. The National Park Service has determined that the proposed plan conforms with all the requirements of the ACMP.

This determination was reviewed by the state of Alaska during May and June 1985, and notification that the plan is consistent with the program's goals was received from the Office of the Governor in a letter dated June 26, 1985. Compliance with the ACMP pursuant to section 307 of the federal Coastal Zone Management Act of 1972, as amended is thus assumed.

APPENDIX J: WILDERNESS MANAGEMENT

When Aniakchak National Monument and Preserve was created by ANILCA, Congress did not designate any wilderness. It did, however, in section 1317 request a suitability review by the secretary of the interior and presidential recommendations for potential wilderness additions. Should any wilderness lands be designated by Congress after the wilderness recommendation process is completed, they would be managed in accordance with the Wilderness Act of 1964, except as otherwise 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 the 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 (during periods of adequate snow cover), 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.

The continued use of airplanes in designated wilderness is allowed under the above-cited sections of ANILCA and the Code of Federal Regulations. Helicopter landings are prohibited except in compliance with a permit issued by the superintendent.

Motorboats may also be used on bodies of water within wilderness. Snowmachine access occurs and will continue to be allowed in designated wilderness under the above-cited sections of ANILCA and the Code of Federal Regulations. 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 shall 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.

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(a)(4), 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 states:

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.

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.

Section 1310, subject to reasonable regulation, provides 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.

Section 1316 provides that the secretary will permit, subject to reasonable regulations, temporary shelters and facilities on lands open to the taking of fish and wildlife (i.e., national preserves). However, such use may be denied if the secretary determines, subject to adequate notice, that such facilities constitute a significant expansion of existing facilities or are detrimental to unit purposes, including wilderness character, and thereupon deny such use. A finding of significant expansion is contained in this general management plan - see section on "Temporary Facilities in the Preserve."

The decision-making process established in title XI of ANILCA for the siting of transportation and utility systems applies to designated wilderness in Alaska.

APPENDIX K: COMPLIANCE WITH OTHER LAWS, POLICIES,
AND EXECUTIVE ORDERS

None of the actions in the plan would affect wetland areas; therefore, it would be in compliance with EO 11990 ("Protection of Wetlands"). Since no floodplain mapping exists for the monument/preserve, worst-case conditions would be assumed for placement of facilities in the plan, with the development of new facilities preceded by site-specific analysis. Therefore, all actions would be in compliance with EO 11988 ("Floodplain Management"). Backcountry camping involves no facilities and has no potential for effects on floodplains and is exempt from compliance with the NPS "Floodplain Management and Wetland Protection Guidelines."

Coastal development activity would be confined to Aniakchak Bay. The specific elements of the plan are believed to conform with the Estuary Protection Act (16 USC 1221), the Marine Protection, Research, and Sanctuaries Act of 1972 (16 USC 1431 et seq.), and the Coastal Zone Management Act of 1972 (16 USC 1451 et seq.). A determination of consistency with the Coastal Zone Management Act is included in appendix I.

The increments of water and air pollution resulting from implementation of the plan are expected to be too minor to measure or to require compliance with the Clean Water Act of 1977 (33 USC 1251 et seq.) or the Clean Air Act (42 USC 7401 et seq.). Water drawn for human consumption would be treated to meet state and federal standards in conformity with the Safe Drinking Water Act (42 USC 300).

No federally listed endangered or threatened wildlife are known to live in, or depend for existence on, habitats within Aniakchak National Monument and Preserve. Thus, formal consultation procedures with the U.S. Fish and Wildlife Service are not required for compliance with the Endangered Species Act of 1973 as amended (16 USC 1531 et seq.). The presence of two endangered species is possible but not documented. If either of these species was found during implementation of the plan, the Fish and Wildlife Service would be contacted, and appropriate measures would be taken to ensure their protection. None of the 29 plant taxa being considered for possible future listing pursuant to the Endangered Species Act have been recorded from Aniakchak.

No prime or unique farmland would be adversely affected by implementation of the proposal.

Subsistence uses, including hunting and trapping, and sport fishing in the monument and sport hunting, fishing, and trapping in the preserve would continue to be regulated by the state in accordance with established laws and regulations.

All public facilities outside the monument/preserve would be accessible to the handicapped to the extent possible and would comply with the requirements of the Architectural Barriers Act of 1968 (42 USC 4151 et seq.).

All proposed actions would be in full compliance with the Antiquities Act of 1906 (16 USC 431 et seq.), the Historic Sites Act of 1935 as amended (PL 94-458), the National Historic Preservation Act of 1966 (16 USC 470 et seq. as amended by PL 96-515), the Archeological and Historic Preservation Act of 1974, and the Archeological Resources Protection Act of 1979. 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 NPS-28. No undertaking that would result in the destruction or loss of known significant cultural resources is proposed in this document.

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 National Park Service has requested the advice and consultation of the Advisory Council and the Alaska state historic preservation officer during the preparation of this plan. A meeting was held in Anchorage in April and November 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. The advice and consultation of these offices will continue to be requested as the plan progresses. The council and the state historic preservation officer have received copies of the draft plan for comment, and will be invited to attend all future public meetings.

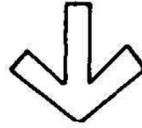
On April 17, 1985, the National Park Service provided copies of the draft general management plan/environmental assessment for Aniakchak to the Advisory Council on Historic Preservation for their review and comment. On September 19, 1985, the regional director was notified that the document does not 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 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.

In accordance with the 1982 NPS native American relationship policy, 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 monument/preserve. The planning team has contacted representatives of these groups at various stages of the plan's development. These individuals and groups have been placed on Aniakchak's 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.

APPENDIX L: NPS PLANNING PROCESS

ANILCA REQUIREMENTS

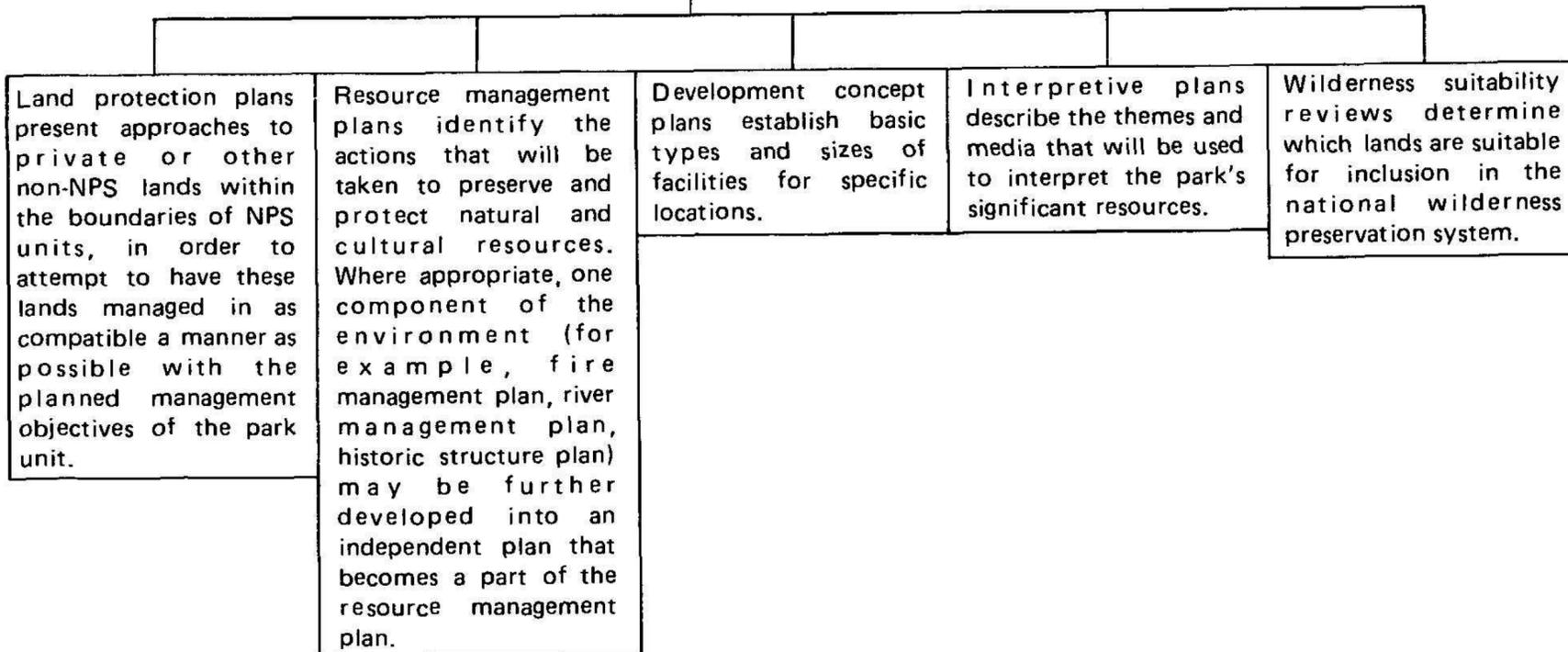
Section 1301 of the Alaska National Interest Lands Conservation Act (ANILCA: PL 96-487) requires the preparation of conservation and management plans for each unit of the national park system established or enlarged by ANILCA. These plans are to describe programs and methods for managing resources, proposed 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

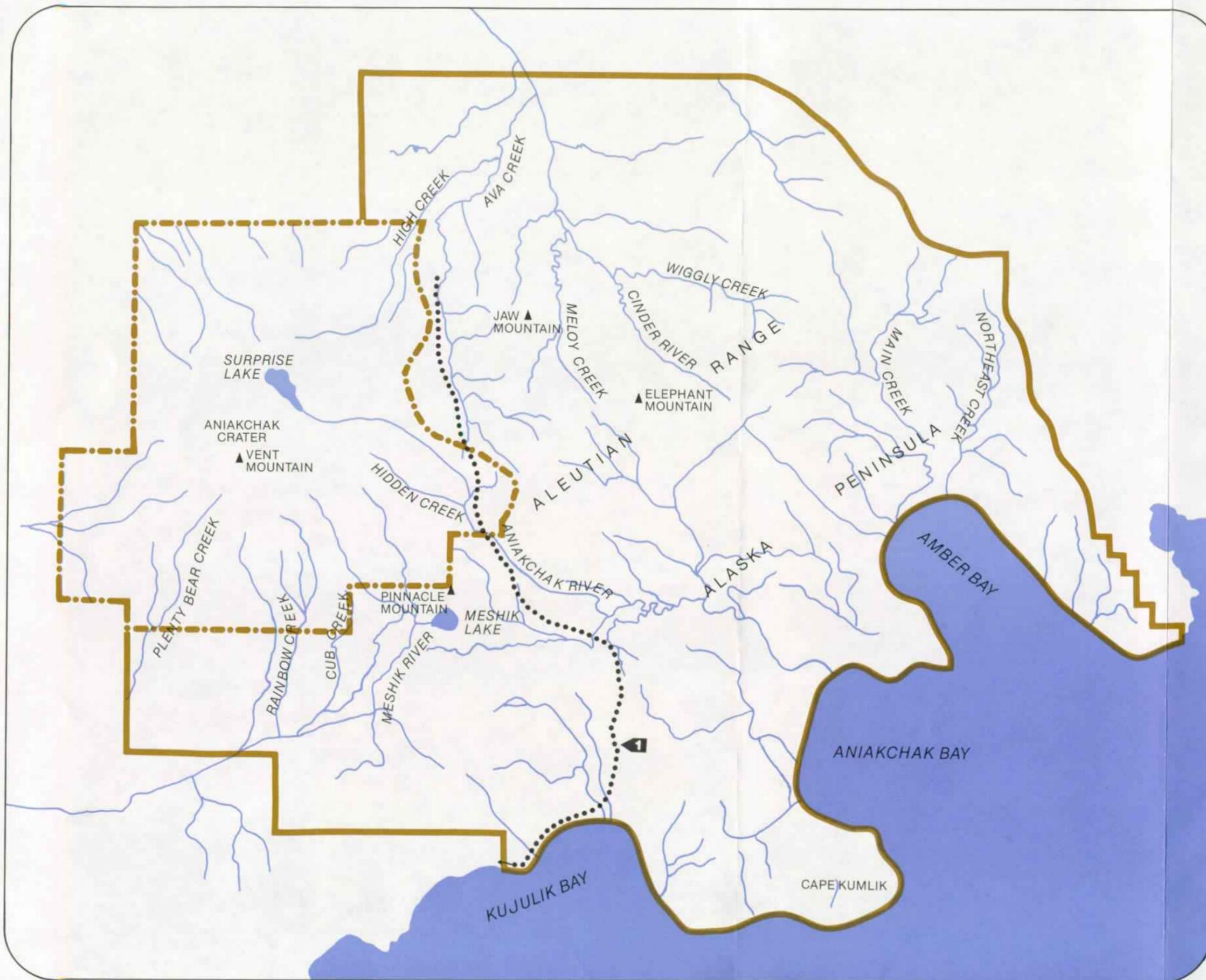
The National Park Service planning process for each park (preserve, monument, or other unit of the system) involves a number of stages, progressing from the formulation of broad objectives, through decisions about what general management direction should be followed to achieve the objectives, to formulation of detailed actions for implementing specific components of the general management plan.

The general management plan addresses topics of resource management, visitor use, park operations, and development in general terms. The goal of this plan is to establish a consensus among the National Park Service and interested agencies, groups, and individuals about the types and levels of visitor use, development, and resource protection that will occur. These decisions are based on the purpose of the park, its significant values, the activities occurring there now, and the resolution of any major issues surrounding possible land use conflicts within and adjacent to the park. The following kinds of detailed action plans are prepared concurrently with or after completion of the general management plan.



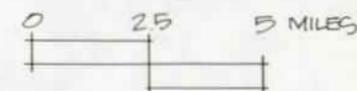
Depending largely on the complexity of individual planning efforts, action plans may or may not be prepared simultaneously with the general management plan. If they are prepared after the general plan, the NPS public involvement and cooperative planning efforts are continued until all of the implementation plans are completed.

THIS MAP 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 (E.O. 11644 AND 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.



POSSIBLE R.S. 2477 RIGHTS-OF-WAY
ANIAKCHAK National Monument and Preserve

- MONUMENT BOUNDARY
- PRESERVE BOUNDARY
- POSSIBLE R.S. 2477 TRAIL
- 1 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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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.

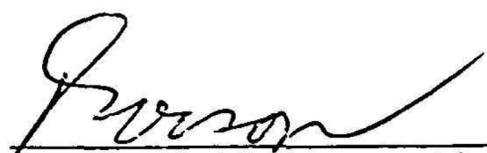
APPENDIX O: FINDING OF NO SIGNIFICANT IMPACT

The National Park Service is proposing to implement the final general management plan and land protection plan for Aniakchak National Monument and Preserve. The general management plan is intended to guide the management of the monument/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 monument/preserve.

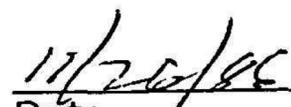
A Draft General Management Plan/Environmental Assessment, Land Protection Plan, and Wilderness Suitability Review was distributed to the public in the spring of 1985, and comments were accepted until the end of August. A subsequent revised draft was distributed for a 60-day public comment period in December 1985.

The environmental assessment analyzed the impacts of four alternative management strategies for the monument/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 upon natural and cultural resources within the monument/preserve as a result of natural resource research and monitoring, 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



Date

BIBLIOGRAPHY

ALASKA DEPARTMENT OF FISH AND GAME

- 1978 Alaska's Fisheries Atlas. Vols. 1 and 2. Tacoma, Washington: Print Northwest Company.
- 1982 "Resource Management Recommendations for Aniakchak National Monument and Preserve." Anchorage, Alaska.
- 1983 Fish and wildlife harvest maps and individual village subsistence maps covering Sutwik Island, Chignik, Bristol Bay, and Ugashik quadrangles. Prepared for the Bristol Bay Cooperative Management Plan.

ALASKA DEPARTMENT OF NATURAL RESOURCES

- 1982 "Five-Year Oil and Gas Leasing Program." Minerals and Energy Management Division.
- 1983 Map of estimated oil and gas potential of onshore and 3-mile limit offshore of Bristol Bay Cooperative Management Plan Study Region, by Cass Arie. Division of Oil and Gas.

BAILEY, EDGAR P., AND NINA H. FAUST

- 1981 "Summer Distribution and Abundance of Marine Birds and Mammals Between Mitrofanina and Sutwik Islands South of the Alaska Peninsula." The Murrelet 62:34-42.

DUMOND, DON E.

- n.d. "Prehistoric Ethnic Boundaries of the Alaska Peninsula." Anthropological Papers of the University of Alaska, vol. 16-1:1-7.

DUMOND, DON E., WINFIELD HENN, AND ROBERT STUCKENRATH

- 1976 "Archeology and Prehistory of the Alaska Peninsula." Anthropological Papers of the University of Alaska, vol. 18-19: 17-29.

DUMOND, DON E., LESLIE CONTON, AND HARVEY M. SHIELDS

- 1975 "Eskimos and Aleuts on the Alaska Peninsula: A Reappraisal of Port Moller Affinities." Arctic Anthropology, vol. 12-1:49-67.

ENVIRONMENTAL SERVICES, LTD.

- 1982 "Community Profiles for Lower Bristol Bay and the Alaska Peninsula." Prepared for State of Alaska, Department of Community and Regional Affairs.

FISH AND WILDLIFE SERVICE, U.S. DEPARTMENT OF THE INTERIOR

- 1984 Letter to Kenneth Raithel, Jr., Denver Service Center, National Park Service, from Jan Riffe, Deputy Regional Director, Anchorage, Alaska.

- 1985 Bristol Bay Regional Management Plan and Final Environmental Statement. Anchorage, Alaska.

GEOLOGICAL SURVEY, U.S. DEPARTMENT OF THE INTERIOR

- 1981a "Geologic Map of the Chignik and Sutwik Island Quadrangles, Alaska," by R.L. Detterman, T.P. Miller, M.E. Yount, and F.H. Wilson. Miscellaneous Field Studies Map I-1229.

- 1981b "Mineral Resource Maps of the Chignik and Sutwik Island Quadrangles, Alaska," by Dennis P. Cox, David E. Detra, and R.L. Detterman. Miscellaneous Field Studies Map K-1053.

- 1984 Letter to Kenneth Raithel, Jr., Denver Service Center, National Park Service, from Robert L. Detterman, Geologist, Menlo Park, California.

MILLER, THOMAS P., AND ROBERT L. SMITH

- 1977 "Spectacular Mobility of Ash Flows Around Aniakchak and Fisher Calderas, Alaska." Geology, 5:173-76.

NATIONAL MARINE FISHERIES SERVICE, U.S. DEPARTMENT OF COMMERCE

- 1983 Letter to Kenneth Raithel, Jr., Denver Service Center, National Park Service, from Robert McVey, Regional Director, Juneau, Alaska.

NATIONAL PARK SERVICE, U.S. DEPARTMENT OF THE INTERIOR

- 1974 "Proposed Aniakchak Caldera National Monument, Alaska: Final Environmental Statement." Alaska Planning Group

- 1983 "End of Season Report: Aniakchak National Monument and Preserve," by Lyn Fuller and George Stroud.

- 1984a "Statement for Management, Aniakchak National Monument and Preserve," Alaska Regional Office, Anchorage.

- 1984b "Issues and Management Alternatives--Aniakchak National Monument and Preserve/Alaska." General Management Planning Team.

- 1985a "Scope of Collections Statement."

- 1985b "Response of Tussock-Shrub Terrain to Experimental All-Terrain Vehicles 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.

NEBESKY, WILL, STEVE LANGDON, AND TERESA HULL

- 1983 "Economic, Subsistence, and Sociocultural Projections in the Bristol Bay." Institute of Social and Economic Research, Anchorage, Alaska.

SOIL CONSERVATION SERVICE, U.S. DEPARTMENT OF AGRICULTURE
1979 Exploratory Soil Survey of Alaska, by Samuel Rieger, D.C.
Schoephorster, and C.E. Furbush

1983 Personal communication with Lewis Fletcher. Anchorage.

STATE OF ALASKA

1984 Bristol Bay Area Plan for State Lands. Prepared by the
Departments of Natural Resources, Fish and Game, and
Environmental Conservation. September.

STATE OF ALASKA AND U.S. DEPARTMENT OF THE INTERIOR

1983 "Bristol Bay Cooperative Management Plan and Draft
Environmental Statement." Prepared by the Bristol Bay
Study Group and the Alaska Land Use Council.

TUTEN, MERRY ALLYN

1977 "A preliminary study of subsistence activities on the Pacific
Coast of the proposed Aniakchak Caldera National Monument."
Cooperative Park Studies Unit University of Alaska,
Fairbanks, Occas. paper No. 4, 92 pp.

UNIVERSITY OF ALASKA

1976 Alaska Regional Profiles, Southwest Region. Environmental
Information and Data Center, Anchorage, Alaska.

WIBBENMEYER, M., J. GRUMBLATT, JR., AND L. SHEA

1982 "User's Guide for Bristol Bay Land Cover Maps." Alaska
Department of Natural Resources, Anchorage.

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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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