Harding Icefield-Kenai Fjords National Monument

DEPARTMENT OF THE INTERIOR

Final
Environmental Statement

Proposed
HARDING ICEFIELD-KENAI
FJORDS NATIONAL MONUMENT
Alaska

Prepared by
Alaska Planning Group
U.S. Department of the Interior

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SUMMARY

( ) Draft (X) Final Environmental Statement

Department of the Interior, National Park Service, Alaska Planning Group

1. *Type of Action*:

Legislative and Administrative.

2. *Brief Description of Action*:

The Secretary of the Department of the Interior proposes that approximately 305,000 acres of lands and waters on the south coast of the Kenai Peninsula in Alaska be established legislatively by Congress as the Harding Icefield-Kenai Fjords National Monument and, further, that legislative recognition be given an Area of Ecological Concern (AEC) of 453,000 acres associated with the proposed monument The AEC lands and waters are considered desirable for inclusion in the monument but are withdrawn for Native village and regional deficiency purposes. Since all of the AEC acreage may not be selected by the Natives, the NPS proposes legislation to allow acreage not so selected to be added to the monument. It is further proposed that NPS enter into cooperative agreements with the Natives regarding Native-selected lands in the AEC to assure that AEC lands are managed in a manner compatible with the purposes of the monument and Native interests and to provide for possible boundary alterations for mutual advantage Also proposed is a conceptual master plan to guide the management of the area following its establishment as a national monument.

3. *Summary of Environmental Impact*:

The action would preserve a major portion of the unique south coast of the Kenai Peninsula including the Harding Icefield and other complete ecosystems. Mining, private settlement, and sport hunting would be prohibited. The proposal would affect land use patterns, wildlife, vegetation, the landscape, water and air quality, mining, hunting by non-Natives, commercial and sport fishing, timber resources, cultural resources, recreation, the area economy, Native subsistence use, transportation, education and the city of Seward.

4. *Alternatives Considered*:

(A) No action; (B) Alternatives to the Master Plan; (C) Alternative Management Systems: (1) General Multiple Use; (2) Multiple Use under a National Forest or NRA; (3) National Wildlife Refuge; (4) NPS and FWS management; (5) Wilderness; (D) Boundary Alternatives: (1) Original proposal; (2) Monument and AEC; (3) Harding Icefield; (4) Sierra Club proposal.

5. *Comments were Requested from the Following*:

(See attached pages.)

6. *Date Draft Statement Made Available to the Council on Environmental Quality (CEQ) and the Public*:

December 18, 1973.

7. *Date Final Statement Made Available to Council on Environmental Quality*:

Comments on the draft environmental statement were requested from the following agencies and organizations. Those that responded are indicated with an asterisk.

FEDERAL:

Department of Agriculture
*Forest Service
*Soil Conservation Service
*Department of Commerce
National Marine Fisheries Service
National Oceanic and Atmospheric Administration
Department of Defense
*Alaska Command
*Department of the Army, Corps of Engineers
Department of the Navy
*Department of Health, Education & Welfare
*Department of Housing and Urban Development
Department of the Interior
*Alaska Power Administration
*Bureau of Indian Affairs
*Bureau of Land Management
*Bureau of Mines
Bureau of Outdoor Recreation
*Bureau of Reclamation
Fish and Wildlife Service
*Geological Survey
Department of Transportation
*Federal Highway Administration
U.S. Coast Guard
*Federal Aviation Administration
*Environmental Protection Agency
Advisory Council on Historic Preservation
*General Services Administration

STATE:

*Governor of the State of Alaska (State Clearinghouse)
Alaska State Historic Preservation Officer

OTHER AGENCIES:

*Joint Federal-State Land Use Planning Commission for Alaska
*Kenai Peninsula Borough
Greater Anchorage Borough
City of Seward
City of Anchorage

NATIVE ORGANIZATIONS:

Chugach Natives, Inc.
Alaska Federal of Natives
English Bay Village Corporation
*Port Graham Village Corporation

ORGANIZATIONS:

*Sierra Club
*Friends of the Earth
*The Wilderness Society
National Parks and Conservation Association
*National Wildlife Federation
National Audubon Society
Alaska Historical Commission
*Alaska Conservation Society
Alaska Wilderness Council
Alaska Professional Hunters Association
Sea Grant Program
*Alaska Wildlife Federation and Sportsmen's Council
Alaska Miners Association
*The Conservation Foundation

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MAPS

I. DESCRIPTION OF PROPOSAL

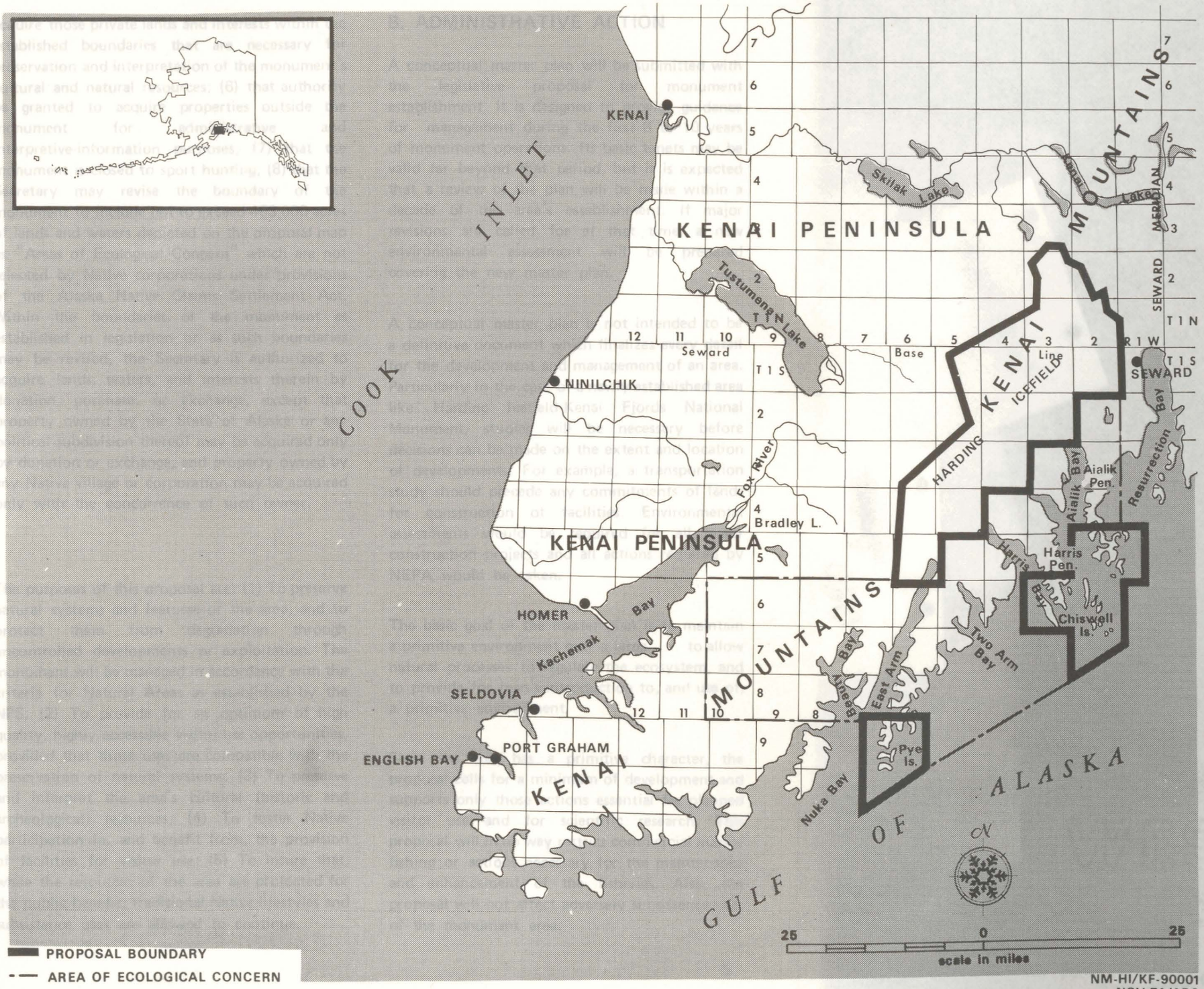
The Department of the Interior proposes (A) Legislative establishment of Harding Icefield-Kenai Fjords National Monument, under administration of the National Park Service, and (B) Administrative action consisting of the adoption of a conceptual master plan.

A. LEGISLATIVE ACTION

It is proposed that Congress legislatively establish the Harding Icefield-Kenai Fjords National Monument on the south coast of the Kenai Peninsula, Alaska. The proposed monument (hereafter referred to as the monument) encompasses approximately 305,000 acres in three parcels of d-2 (74,300 acres) and d-1 (230,700 acres) lands and waters. (See Section D-2 of this chapter for description of "d-1" and "d-2" lands.)

One of the parcels contains d-2 acreage only; the other two contain both d-2 and d-1 acreage. The two southern units, containing the lower Harris and Aialik Peninsulas and the Pye and Chiswell Islands, are proposed for joint management by the NPS and the Fish and Wildlife Service. Under Secretarial authorities, the Fish and Wildlife Service will assist in joint management of these areas with respect to the fish and wildlife resources and their respective habitats. A cooperative management agreement will be developed to identify and designate the specific responsibilities of each agency.

Other provisions of the proposal are: (1) that the Federal lands within the boundary of the monument are withdrawn, subject to valid existing rights, from location, entry, and patent under the public land laws, including all forms of appropriation under the United States mining laws, and from operation under the mineral leasing laws. A 1-year limit is established during which all mining claims must be recorded; an application for patent must be made within 3 years of recordation, or the claim will be presumed invalid; (2) that except as may be otherwise prohibited by Federal or State law, existing traditional subsistence uses of renewable resources will be permitted until it is demonstrated by the Secretary that utilization of these resources is neither economically or physically necessary to maintain human life nor necessary to provide opportunities for the survival of Alaskan cultures centering on subsistence as a way of life. If it is demonstrated that continued subsistence uses may result in a progressive reduction of animal or plant resources which could lead to long range alterations of ecosystems, the managing agency, following consultation with the Alaska Department of Fish and Game, communities and affected individuals, shall have the authority to restrict subsistence activities in part or all of the monument; (3) that within 3 years after establishment of the monument a study will be made and a report will be submitted by the Secretary of the Interior concerning the qualifications of any area within the monument for inclusion in the National Wilderness Preservation System. Any wilderness designation will be accomplished by legislation and in accordance with procedures stipulated by subsections 3(c) and 3(d) of the Wilderness Act; (4) that the Secretary be authorized to enter into cooperative agreements with Federal agency heads and owners of land within, adjacent to, or related to the monument. These agreements would be made for the management, protection, and public use of the monument and for the conduct of scientific research, historic preservation and environmental education. They would be drafted to insure management of the areas subject to the agreement in a manner consistent with the preservation of the monument, to foster and contribute to cooperative land use planning on a regional basis, and to establish a mutual working dialogue between Federal landowners and surrounding land managers. These agreements may be made, for example, with Federal agencies, State or local governments, Native corporations, villages or groups; (5) that the Secretary is authorized to


KENAI
COOK INLET
KENAI PENINSULA
Skilak Lake
Tustumena Lake
Seward
Base Line
T 1 S
T 1 N
R 1 W
SEWARD MERIDIAN
NINILCHIK
KENAI MOUNTAINS
ICEFIELD
HARDING
SEWARD
Resurrection Bay
Aialik Bay
Aialik Pen.
Fox River
Bradley L.
Harris Bay
Harris Pen.
Chiswell Is.
HOMER
Kachemak Bay
Two Arm Bay
Aialik Bay
East Arm
SELDOVIA
PORT GRAHAM
ENGLISH BAY
Pye Is.
Nuka Bay
GULF OF ALASKA
25 0 25
scale in miles
PROPOSAL BOUNDARY
AREA OF ECOLOGICAL CONCERN
NM-HI/KF-90001
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acquire those private lands and interests within the established boundaries that are necessary for preservation and interpretation of the monument's cultural and natural resources; (6) that authority be granted to acquire properties outside the monument for administrative and interpretive-information purposes; (7) that the monument is closed to sport hunting; (8) that the Secretary may revise the boundary of the monument to include not to exceed 453,000 acres of lands and waters depicted on the proposal map as "Areas of Ecological Concern" which are not selected by Native corporations under provisions of the Alaska Native Claims Settlement Act. Within the boundaries of the monument as established in legislation or as such boundaries may be revised, the Secretary is authorized to acquire lands, waters, and interests therein by donation, purchase, or exchange, except that property owned by the State of Alaska or any political subdivision thereof may be acquired only by donation or exchange, and property owned by any Native village or corporation may be acquired only with the concurrence of such owner.

The purposes of this proposal are: (1) To preserve natural systems and features of the area, and to protect them from degradation through uncontrolled developments or exploitation. The monument will be managed in accordance with the criteria for Natural Areas as established by the NPS; (2) To provide for an optimum of high quality, highly accessible visitor use opportunities, provided that those uses are compatible with the preservation of natural systems; (3) To preserve and interpret the area's cultural (historic and archeological) resources; (4) To foster Native participation in, and benefit from, the provision of facilities for visitor use; (5) To insure that, while the resources of the area are protected for the public benefit, traditional Native lifestyles and subsistence uses are allowed to continue.

B. ADMINISTRATIVE ACTION

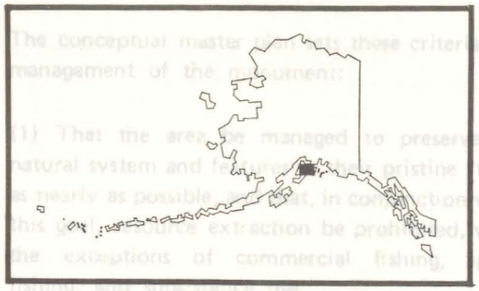
A conceptual master plan will be submitted with the legislative proposal for monument establishment. It is designed to provide guidance for management during the first 8 to 10 years of monument operations. Its basic tenets may be valid far beyond that period, but it is expected that a review of the plan will be made within a decade of the area's establishment. If major revisions are called for at that time, a new environmental assessment will be prepared covering the new master plan.

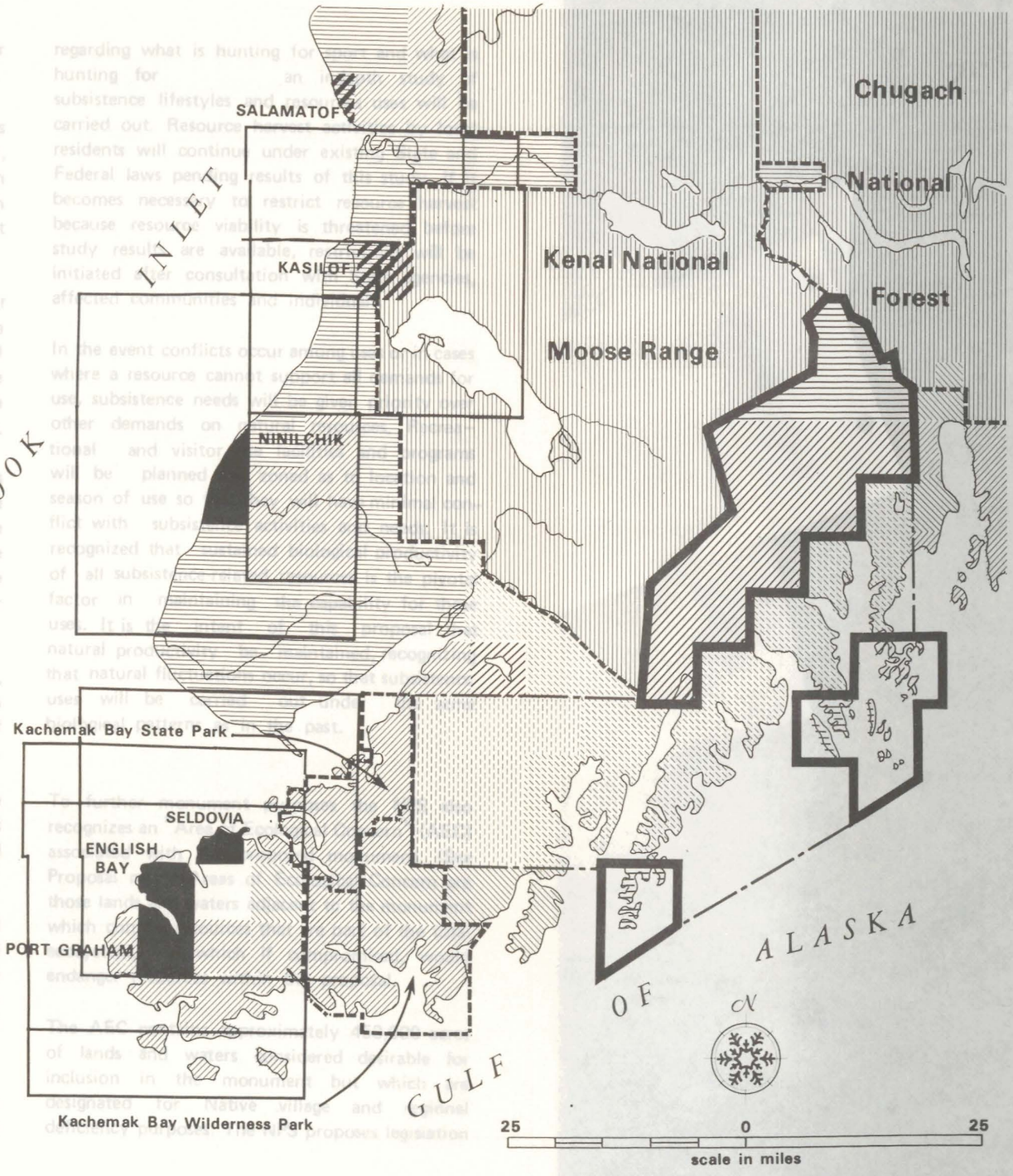
A conceptual master plan is not intended to be a definitive document which finalizes every detail for the development and management of an area. Particularly in the case of a newly established area like Harding Icefield-Kenai Fjords National Monument, studies will be necessary before decisions can be made on the extent and location of developments. For example, a transportation study should precede any commitments of lands for construction of facilities. Environmental assessments would be required for all major construction projects and all actions required by NEPA would be taken.

The basic goal of the master plan is to maintain a primitive environment over a large to allow natural processes to regulate the ecosystem, and to provide for man's introduction to, and use of, a primitive environment.

Since the area has a primitive character, the proposal calls for a minimum of development and supports only those actions essential for planned visitor use and for scientific research. This proposal will in no way restrict commercial marine fishing or actions necessary for the maintenance and enhancement of the fisheries. Also, the proposal will not affect adversely subsistence uses of the monument area.

LAND STATUS





WITHDRAWALS FOR NATIVE VILLAGES NOT FINALLY DETERMINED

MAJOR WITHDRAWALS PRIOR TO ANCSA (DEC. 18, 1971)

STATE SELECTIONS PATENTED

STATE SELECTIONS TENTATIVELY APPROVED

STATE SELECTIONS PENDING

NATIVE VILLAGE WITHDRAWALS

VILLAGE DEFICIENCY AREA

REGIONAL DEFICIENCY AREA

D-2 NATIONAL INTEREST LANDS

D-1 PUBLIC INTEREST LANDS

PROPOSAL BOUNDARY

AREA OF ECOLOGICAL CONCERN

The conceptual master plan sets these criteria for management of the monument:

(1) That the area be managed to preserve its natural system and features in their pristine state, as nearly as possible, and that, in conjunction with this goal, resource extraction be prohibited, with the exceptions of commercial fishing, sport fishing, and subsistence use.

(2) That opportunity be provided the visitor for a quality monument experience and use of the area's esthetic, recreational, and educational resources, and that the intensity of this visitor use be limited only to the optimum level compatible with the desired preservation of natural features.

(3) That the monument's cultural resources (historic, archeological, and architectural) be preserved from despoliation; that research be carried out to identify the nature and importance of these resources; and that these resources be made available and interpreted for visitor enjoyment and education.

(4) That cooperation be sought with local, Native, State, Federal agencies, and other groups, in providing optimum visitor use and management of the area and coordinated planning for the region.

(5) That encouragement, and assistance where possible, be afforded individuals or organizations wishing to do basic as well as management-directed research in the monument.

(6) That cooperation be sought with all concerned State agencies, communities and affected individuals in arriving at an equitable and workable management plan for subsistence resource uses in the proposal area, including indepth study of subsistence lifestyles and resource uses.

This proposal prohibits sport hunting within monument boundaries. Since uncertainty exists regarding what is hunting for sport and what is hunting for an indepth study of subsistence lifestyles and resources uses will be carried out. Resource harvest activities by local residents will continue under existing State and Federal laws pending results of this study. If it becomes necessary to restrict resource harvest because resource viability is threatened before study results are available, restrictions will be initiated after consultation with State agencies, affected communities and individuals.

In the event conflicts occur among uses or in cases where a resource cannot support all demands for use, subsistence needs will be given priority over other demands on natural resources. Recreational and visitor use facilities and programs will be planned and zoned as to location and season of use so that they will have minimal conflict with subsistence activities and needs. It is recognized that sustained biological productivity of all subsistence-related resources is the pivotal factor in maintaining the capability for these uses. It is the intent of this proposal that natural productivity be maintained, recognizing that natural fluctuations occur, so that subsistence uses will be carried out under the same biological patterns as in the past.

To further monument purposes the NPS also recognizes an "Area of Ecological Concern" (AEC) associated with the proposed monument. (See Proposal map.) Areas of Ecological Concern are those lands and waters adjacent to the monument which contain resources that are part of the total ecosystem, and which if compromised, would endanger resources within the proposal.

The AEC contains approximately 453,000 acres of lands and waters considered desirable for inclusion in the monument but which are designated for Native village and regional deficiency purposes. The NPS proposes legislation

to add to the monument all or portions of those lands and waters not selected by the Natives.

It is further proposed that cooperative agreements be made with the Natives regarding Native-selected lands in the AEC.

The purposes of these proposals concerning the AEC are: (1) To maintain the natural and ecological integrity of the lands abutting the monument by striving to insure that the Area of Ecological Concern is managed in a manner compatible with the purposes of the monument; (2) To assist the Native landowners to develop the area's visitor use potential for their own benefit while protecting the interests of the general public; and (3) To enlist the cooperation and support of the landowners adjacent to the proposal in the planning and implementation of innovative interpretive programs.

In line with the above criteria, the conceptual master plan calls for: (1) Adoption of a land classification plan based on the system developed by the Outdoor Recreation Resources Review Commission and modified by NPS. (See Land Classification map.) This plan provides that most of the monument will be designated Class IV (outstanding natural areas) or Class V (primitive areas) and will be managed as such. Class II (recreation areas) will be designated only in those areas considered essential for visitor use facilities. Class VI (historical and cultural) areas will be designated when identified by further research.

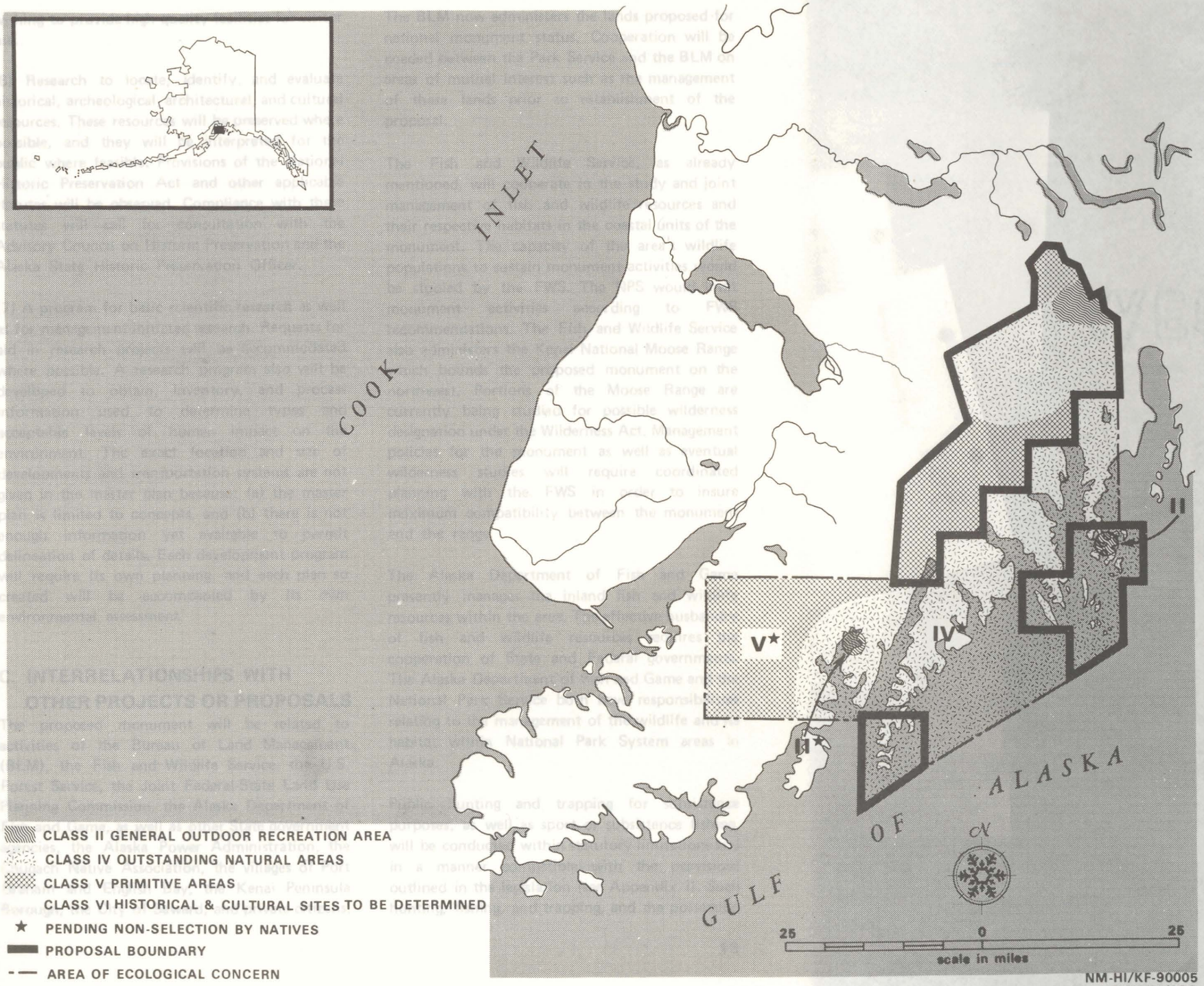
(2) A special study on development of an efficient visitor transportation system. This study would consider the possibilities of: large tour boats along the coast; aircraft to supplement boat service to selected coastal areas and to the Harding Icefield; tramway, or other mechanized access, to the Harding Icefield via Exit Glacier; multiple-passenger over-the-snow vehicles for interpretive tours on the icefield; and foot trails, where feasible. Separate impact statements would be prepared prior to any action or construction which would have a significant impact on the environment.

(3) Major developments at the periphery of the park, served by mass transit. The master plan also calls for a transit route to connect Seward with the icefield access point at Exit Glacier. An all-weather observation station is proposed for the icefield rim. A marine service facility and lodge are suggested for Pilot Harbor in Nuka Bay. Development site selection would be preceded by the transportation study, by special site quality and weather studies and by environmental assessments. The master plan recommends that major, overnight visitor facilities be provided to Seward by private enterprise. An NPS-Forest Service visitor center in Seward is also proposed.

(4) An interpretive program to reach the visitor whether he is on the icefield, at a lodge, on a boat, in a plane, or on a hiking trail. Interpretation will concentrate on the marine, coastal, mountain and icefield environments; on geological and geomorphic processes; and on historical and cultural aspects, especially relating to Seward and to Native groups, both past and present. Superb scenery with abundant marine life provides a rare setting for such interpretation. Harding Icefield offers the visitor types of experience available in few places in the world. The icefield also may offer opportunities for snowmobile tours, cross-country skiing, snowshoeing, and camping. Wilderness camping, hiking and mountain climbing, though limited by weather conditions, would be appropriate over most of the monument. The coastal area would offer boating and fishing.

(5) Cooperation with the State and Native or other groups in planning for management and development of the Area of Ecological Concern and other lands near the monument. High priority will be given to aiding individuals or groups

LAND CLASSIFICATION



wishing to provide high quality facilities for visitor use.

(6) Research to locate, identify, and evaluate historical, archeological, architectural, and cultural resources. These resources will be preserved where possible, and they will be interpreted for the public where feasible. Provisions of the National Historic Preservation Act and other applicable statutes will be observed. Compliance with these statutes will call for consultation with the Advisory Council on Historic Preservation and the Alaska State Historic Preservation Officer.

(7) A program for basic scientific research as well as for management-initiated research. Requests for aid in research projects will be accommodated where possible. A research program also will be developed to obtain, inventory, and process information used to determine types and acceptable levels of human impact on the environment. The exact location and size of developments and transportation systems are not given in the master plan because: (a) the master plan is limited to concepts, and (b) there is not enough information yet available to permit delineation of details. Each development program will require its own planning, and each plan so created will be accompanied by its own environmental assessment.

C. INTERRELATIONSHIPS WITH OTHER PROJECTS OR PROPOSALS

The proposed monument will be related to activities of the Bureau of Land Management (BLM), the Fish and Wildlife Service, the U.S. Forest Service, the Joint Federal-State Land Use Planning Commission, the Alaska Department of Fish and Game, as well as other State government agencies, the Alaska Power Administration, the Chugach Native Association, the villages of Port Graham and English Bay, the Kenai Peninsula Borough, the City of Seward, and private citizens.

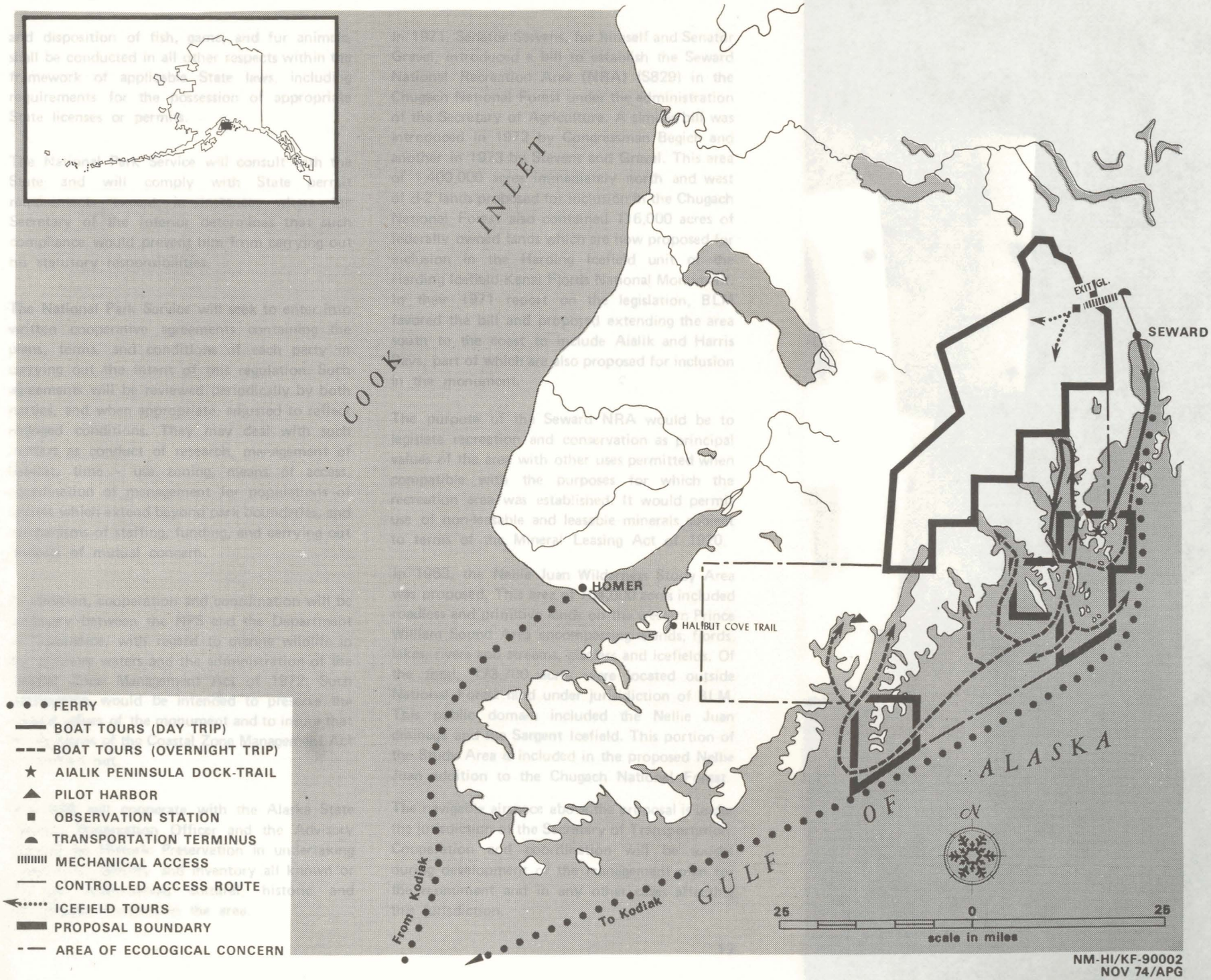
The BLM now administers the lands proposed for national monument status. Cooperation will be needed between the Park Service and the BLM on areas of mutual interest such as the management of these lands prior to establishment of the proposal.

The Fish and Wildlife Service, as already mentioned, will cooperate in the study and joint management of fish and wildlife resources and their respective habitats in the coastal units of the monument. The capacity of the area's wildlife populations to sustain monument activities would be studied by the FWS. The NPS would limit monument activities according to FWS recommendations. The Fish and Wildlife Service also administers the Kenai National Moose Range which bounds the proposed monument on the northwest. Portions of the Moose Range are currently being studied for possible wilderness designation under the Wilderness Act. Management policies for the monument as well as eventual wilderness studies will require coordinated planning with the FWS in order to insure maximum compatibility between the monument and the range.

The Alaska Department of Fish and Game presently manages the inland fish and wildlife resources within the area. The effective husbandry of fish and wildlife resources requires the cooperation of State and Federal governments. The Alaska Department of Fish and Game and the National Park Service both have responsibilities relating to the management of the wildlife and its habitat within National Park System areas in Alaska.

Public hunting and trapping for subsistence purposes, as well as sport or subsistence fishing, will be conducted within statutory limitations and in a manner compatible with the provisions outlined in the legislation (see Appendix I). Such hunting, fishing, and trapping, and the possession

GENERAL DEVELOPMENT



and disposition of fish, game, and fur animals, shall be conducted in all other respects within the framework of applicable State laws, including requirements for the possession of appropriate State licenses or permits.

The National Park Service will consult with the State and will comply with State permit requirements except in instances where the Secretary of the Interior determines that such compliance would prevent him from carrying out his statutory responsibilities.

The National Park Service will seek to enter into written cooperative agreements containing the plans, terms, and conditions of each party in carrying out the intent of this regulation. Such agreements will be reviewed periodically by both parties, and when appropriate, adjusted to reflect changed conditions. They may deal with such matters as conduct of research, management of habitat, time - use zoning, means of access, coordination of management for populations of species which extend beyond park boundaries, and mechanisms of staffing, funding, and carrying out projects of mutual concern.

In addition, cooperation and coordination will be necessary between the NPS and the Department of Commerce, with regard to marine wildlife in the offshore waters and the administration of the Coastal Zone Management Act of 1972. Such cooperation would be intended to preserve the natural values of the monument and to insure that the purposes of the Coastal Zone Management Act are carried out.

The NPS will cooperate with the Alaska State Historic Preservation Officer and the Advisory Council on Historic Preservation in undertaking research to identify and inventory all known or as yet undiscovered cultural, historic and archeologic resources in the area.

In 1971, Senator Stevens, for himself and Senator Gravel, introduced a bill to establish the Seward National Recreation Area (NRA) (S829) in the Chugach National Forest under the administration of the Secretary of Agriculture. A similar bill was introduced in 1972 by Congressman Begich and another in 1973 by Stevens and Gravel. This area of 1,400,000 acres immediately north and west of d-2 lands proposed for inclusion in the Chugach National Forest also contained 116,000 acres of federally owned lands which are now proposed for inclusion in the Harding Icefield unit of the Harding Icefield-Kenai Fjords National Monument. In their 1971 report on the legislation, BLM favored the bill and proposed extending the area south to the coast to include Aialik and Harris Bays, part of which are also proposed for inclusion in the monument.

The purpose of the Seward NRA would be to legislate recreation and conservation as principal values of the area with other uses permitted when compatible with the purposes for which the recreation area was established. It would permit use of non-leasable and leasable minerals subject to terms of the Mineral Leasing Act of 1920.

In 1968, the Nellie Juan Wilderness Study Area was proposed. This area of 704,000 acres included roadless and primitive lands on the western Prince William Sound Area encompassing islands, fjords, lakes, rivers and streams, glaciers and icefields. Of the total, 173,700 acres were located outside National Forest land under jurisidiction of BLM. This public domain included the Nellie Juan drainage and the Sargent Icefield. This portion of the Study Area is included in the proposed Nellie Juan addition to the Chugach National Forest.

The navigable airspace above the proposal is under the jurisdiction of the Secretary of Transportation. Cooperation and coordination will be sought during development of the management plan for the monument and in any other cases affecting this jurisdiction.

Kachemak Bay State Park and State Wilderness Park abut the proposed monument on the west and Caine's Head State Recreation Area is just to the east. Trail access from these units will be developed cooperatively.

A potential hydroelectric power project in the Bradley Lake Area at the head of Kachemak Bay on the western edge of the proposed AEC was authorized in the 1962 Flood Control Act. This was based on investigation by the Army Corps of Engineers. Economic factors since 1962 have precluded construction and studies are currently underway to reappraise the feasibility of the project.

The Chugach Native Association and village corporations in its region are entitled to select lands within the proposed Harding Icefield-Kenai Fjords Area of Ecological Concern. Cooperative proposals between NPS and Native Groups have already been outlined.

Equally important, will be cooperative planning and management arrangements between the NPS and the government of the Kenai Peninsula Borough and the City of Seward as well as groups of local residents. Some private citizens use, own, or claim lands and waters within the monument boundaries and the AEC. (See this chapter section D for detail on private land ownership within the monument and AEC.)

Section 17 of the Alaska Native Claims Settlement Act (ANCSA) established the Joint Federal-State Land Use Planning Commission for Alaska. Congress authorized the Commission to: "undertake a process of land-use planning, including the identification of and the making of recommendations concerning areas planned and best suited for permanent reservation in Federal ownership as parks, game refuges, and other public uses. . ." The recommendations of the Commission were submitted to the Secretary of the Interior in August 1973 and were carefully considered in developing this and other proposals. Further cooperation between the JFSLUPC and the Department of the Interior is anticipated during the Congressional review period for this proposal.

Under Section 17(b)(1) of ANCSA the JFSLUPC was authorized to study and identify public easements for transportation and utility corridors, and other purposes. Responsibility for this study has now been undertaken by the Bureau of Land Management.

As Alaska continues to develop, there will be a need for rights-of-way within corridors to adequately accommodate transportation and utility requirements. Studies to define these rights-of-way corridor needs are currently underway by the Interior Department but are not yet completed. It is possible that these transportation and utility corridor needs could impact the d-2 proposals. Applications for rights-of-way to facilitate the transportation of energy resources have recently been received by the Federal Government which, if issued, also might impact on the d-2 proposals. Actions pursuant to these applications, whether for a specific right-of-way within a corridor or other action, would be subject to the requirements of NEPA.

In sum, the proposed master plan includes concepts that will encourage joint management among the NPS and some of the above-mentioned groups, and between the NPS and private citizens. Further, it provides for cooperation with adjacent State parks, the Chugach National Forest and others to provide joint visitor facilities in Seward and at other locations.

D. BACKGROUND

1. THE PROPOSED MONUMENT

The proposed monument comprises nearly 65

percent of the Harding Icefield, plus the fjords, islands and peninsulas of the Kenai coast. The Harding Icefield is a 720-square-mile mass of snow and ice 4,000 to 5,270 feet high in the Kenai Mountains, a continuation of the Chugach Mountains to the northeast. So rare are such vast areas of ice that Harding Icefield has been suggested for recognition in NPS's "National Register of Natural Landmarks."

Harding Icefield is distinguished by its roughly circular icecap center which is 140 square miles in area and is nearly free of protruding peaks and blemishes. An average precipitation of 160 inches, with 400 inches of snowfall, blankets the icefield every year. These heavy snowfalls; alternately compacting, freezing, and thawing; form this world of ice. A few mountains protrude nearly 2,000 feet or so above the icefield but most of the peaks project only 200 to 400 feet above the ice surface.

Numerous valley glaciers flow outward from the icefield, some reaching the sea, others ending in lakes or on bare ground.

Approximately a three hour drive (120 miles) from Anchorage, the icefield offers the public a convenient opportunity to visit a true remnant of the Ice Age--a surviving expanse of Pleistocene glaciation large enough to contain 14 Manhattan Islands.

Along the coast glaciers have cut deep bays into the mountainous shoreline creating a series of indentations resembling the fjords of Norway. Heavy vegetation of almost rain forest proportions covers the tops of cliffs rising a hundred feet or more above the ocean.

The coastal area has abundant aquatic life, including seals, sea lions, sea otters and migrating whales. Sea birds in large numbers occupy the coastal cliffs in summer.

2. THE ALASKA NATIVE CLAIMS SETTLEMENT ACT

This proposal is a result of investigations conducted by the NPS to determine areas suitable for inclusion in the National Park System in accordance with Public Law 92-203, the Alaska Native Claims Settlement Act (ANCSA) of December 18, 1971 (35 Stat. 688). This act directed the Secretary of the Interior to withdraw from all forms of appropriation up to 80 million acres of public lands in Alaska for possible additions to the National Park, National Forest, National Wildlife Refuge and National Wild and Scenic Rivers Systems. The Secretary made his recommendations on potential additions to the systems on December 18, 1973. The Congress has allocated itself 5 years after that date in which to consider the proposals.

In addition to lands withdrawn for study for possible inclusion in the four systems, the Secretary has withdrawn lands for possible selection by Native groups, the State of Alaska, and for additional Federal study. Following is a brief description of the various land classifications related to this proposal.

NATIONAL INTEREST LANDS (d-2): National interest lands (d-2) are classified in section 17(d)(2) of ANCSA as lands withdrawn from all forms of appropriation under the public land laws (including the mining and mineral leasing laws, the Alaska Statehood Act, and from selection by Native corporations). The Secretary of the Interior was directed by ANCSA to place up to 80 million acres in d-2 classification for possible inclusion in one or more of the four systems.

PUBLIC INTEREST LANDS (d-1): Lands referred to as d-1 are lands withdrawn in the general public

interest pursuant to section 17(d)(1) of the act. This withdrawal reserves these lands pending further study and classification.

NATIVE VILLAGE WITHDRAWAL LANDS: Native village withdrawal lands are lands reserved for selection by village and regional corporations from lands withdrawn by the Secretary pursuant to section 11 of ANCSA. Under provision of ANCSA, each village will receive the surface rights of all lands within the township in which the village is located, and on two to six additional townships depending upon the size of the village population. Subsurface rights of village-selected lands are reserved in ownership by the appropriate regional corporation (section 12(a)(1)) except for lands selected by villages within the National Wildlife Refuge System or Naval Petroleum Reserve Number 4 in which case the regional corporation for that region may select the subsurface estate in an equal acreage from other lands withdrawn within the region (subsection 11(a)). ANCSA directed the withdrawal of each township which is contiguous to or corners on the township that encloses the village, and the withdrawal of each township which is contiguous to, or corners on, any of these lands. In general, this means that up to 25 townships have been withdrawn for each village.

OTHER ANCSA WITHDRAWALS: Section 14(h) of ANCSA authorizes the Secretary to withdraw and convey 2 million acres of unreserved and unappropriated lands outside the areas withdrawn by sections 11 and 16 on which existing cemetery sites and historical places are located, and for other purposes not applicable to this proposal.

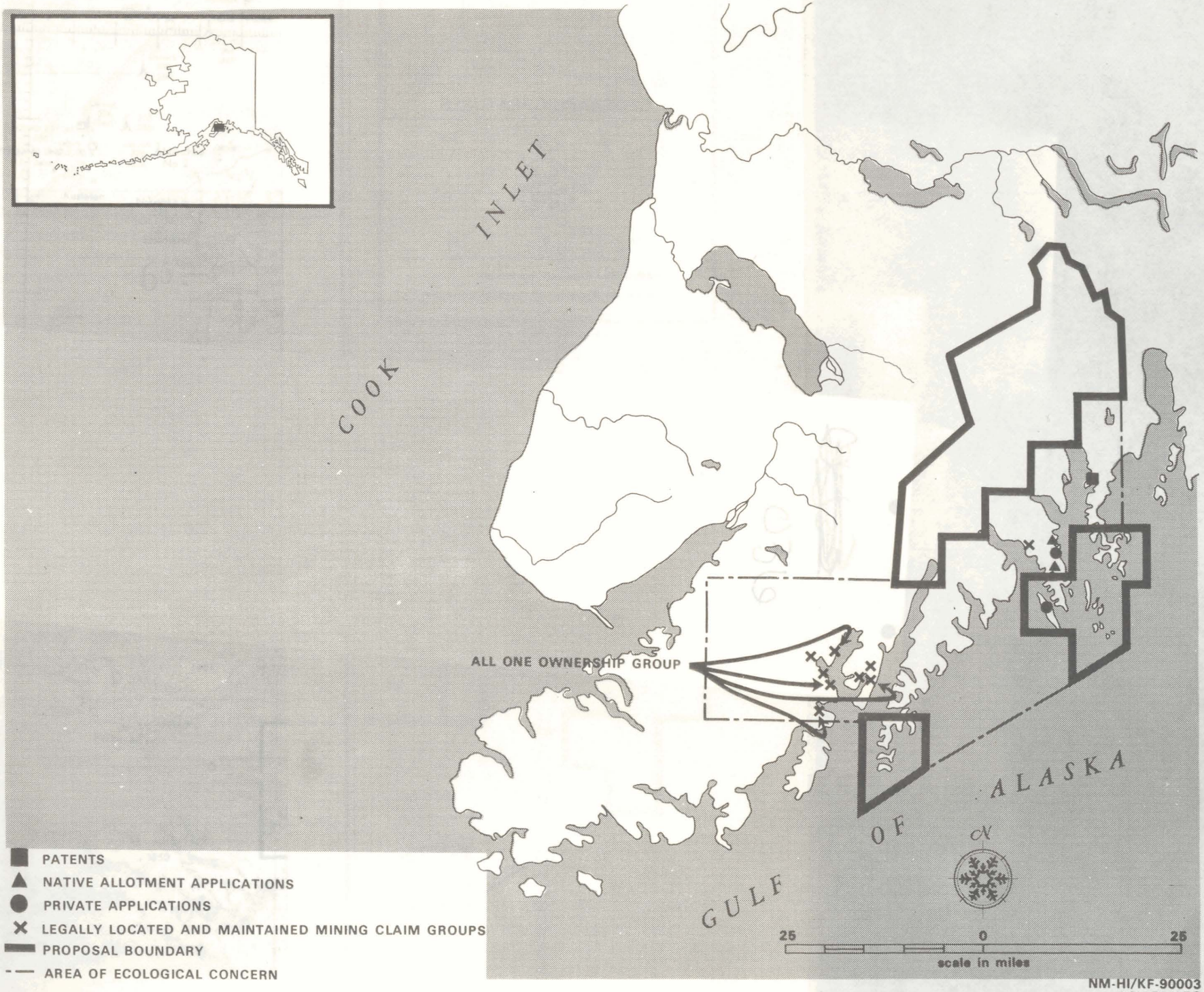
3. NATIVE ALLOTMENT LANDS

Native allotment lands are those lands to which individual natives are given title. ANCSA revoked the Alaska Native Allotment Act of 1906 (34 Stat. 197), and precluded any native covered by the provisions of ANCSA from applying for lands under the Act of February 8, 1887 (24 Stat. 389), or the Act of June 25, 1910 (36 Stat. 363). Under the provisions of the 1906 act, a native could secure title of up to 160 acres (in up to four separate tracts) of land which he had substantially used and occupied.

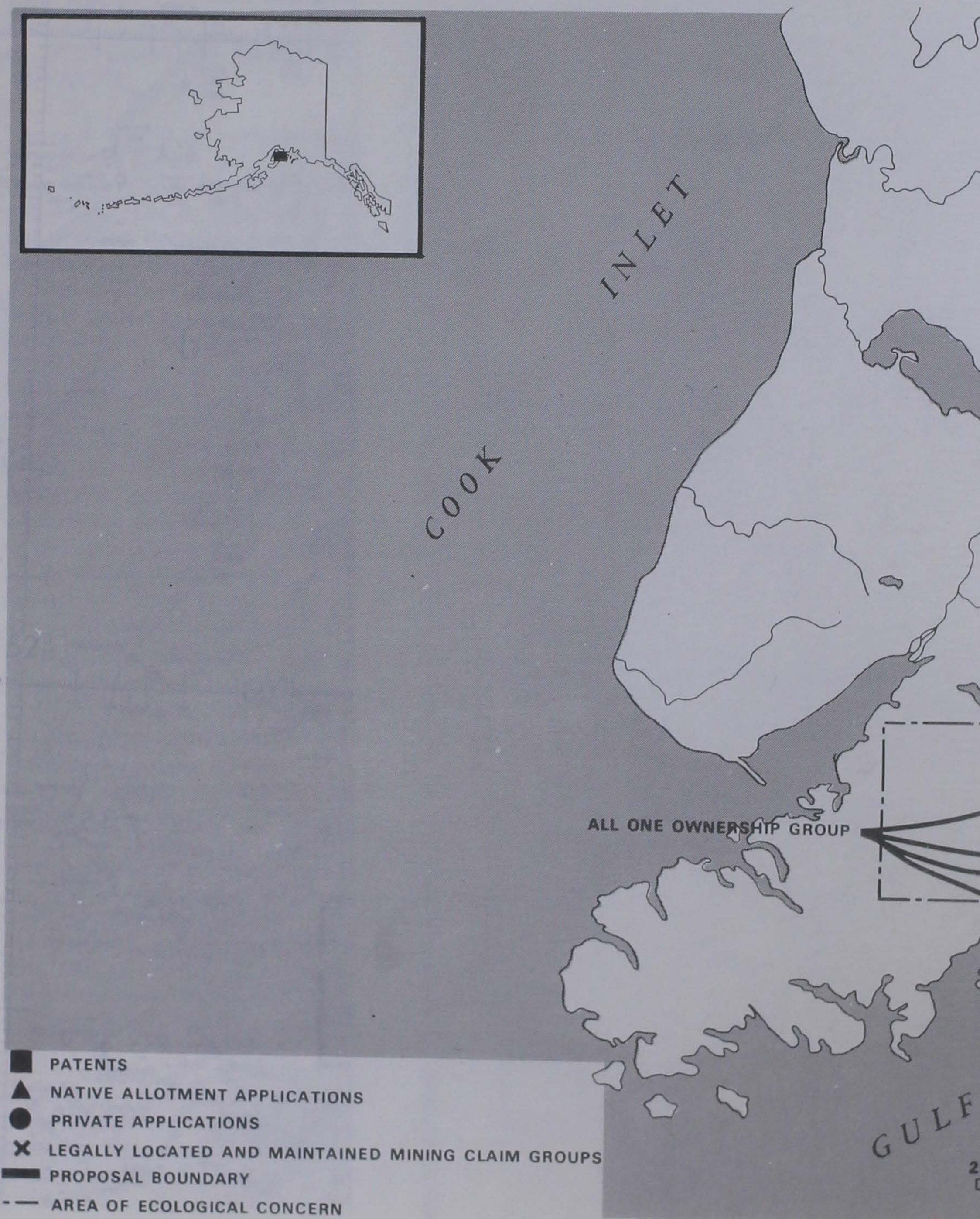
ANCSA also provided that allotment applications which were then pending before the Department of the Interior could continue to be processed. A native with an allotment application covering his primary place of residence had the option, through September 18, 1973, of continuing his claim under the allotment acts cited, or of obtaining title under subsection 14(h)(5) of the Alaska Native Claims Settlement Act, if the lands involved were located in an area available for such purposes.

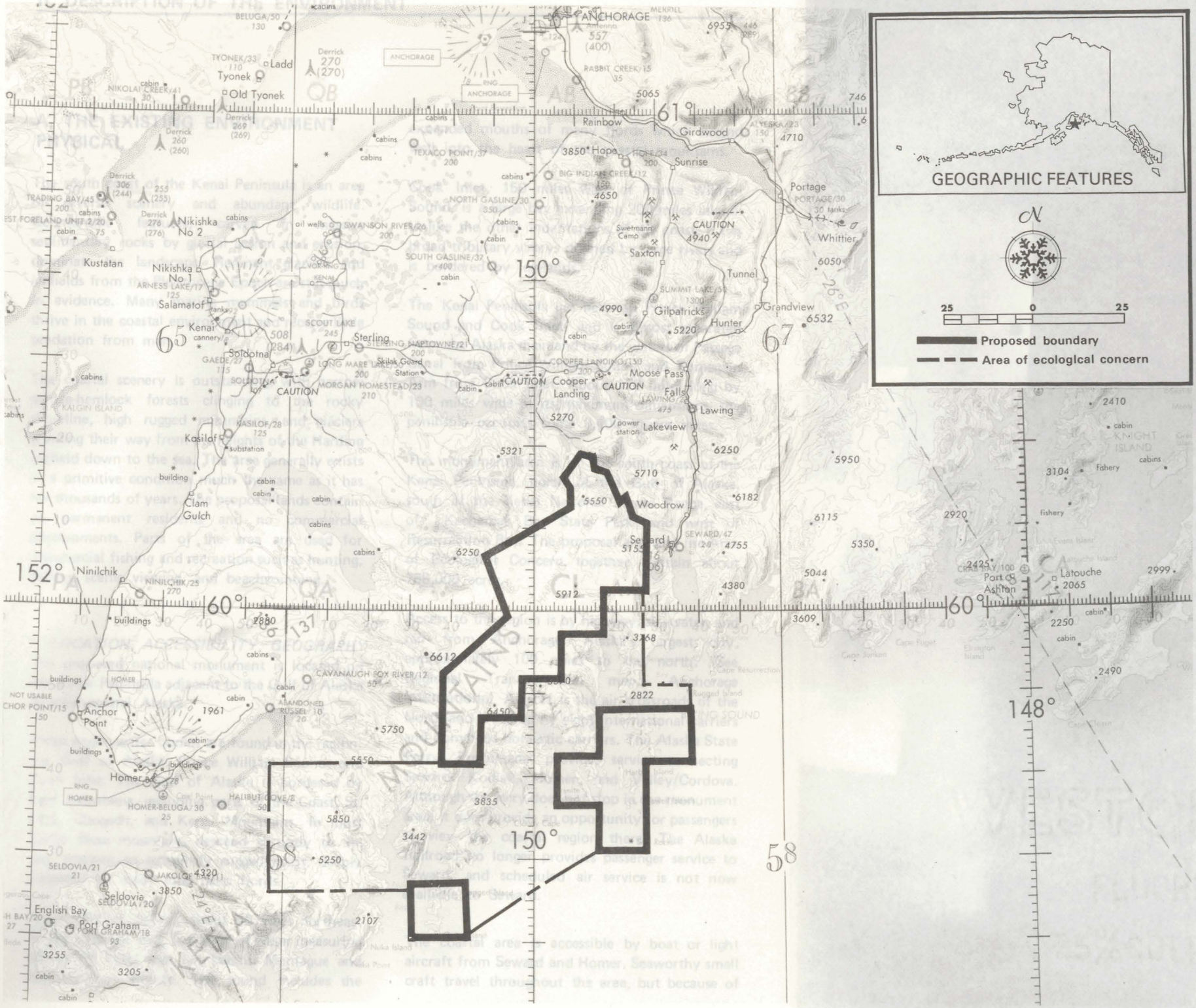
The BLM has now recorded and is examining and processing the Native allotment applications throughout Alaska. Within the proposed Harding Icefield-Kenai Fjords National Monument there are no Native applications, but one private land application does exist on the Harris Peninsula portion of the monument. In the area of ecological concern, there are two Native applications; one has gone to patent. There are also nine mining claim groups, one private land application and one other patented site.

REAL ESTATE AND CLAIMS



REAL ESTATE AND CLAIMS




GEOGRAPHIC FEATURES
N
25
0
25
Proposed boundary
Area of ecological concern
ANCHORAGE
Rainbow
Girdwood
Hope
Sunrise
Portage
Whittier
Saxton
Tunnel
Gilpatricks
Grandview
Hunter
Moose Pass
Cooper Landing
Falls
Lawing
Lakeview
Woodrow
Seward
Latouche
Port Ashton
Ninilchik
Anchor Point
Homer
Seldovia
English Bay
Port Graham
Kustatan
Nikishka No 1
Nikishka No 2
Salamatof
Kenai
Soldotna
Sterling
Kasilof
Clam Gulch
Ladd
Tyonek
Old Tyonek
CAUTION
152°
150°
148°
60°
61°
65
67
68
58

A. THE EXISTING ENVIRONMENT PHYSICAL

The south coast of the Kenai Peninsula is an area of diverse scenery and abundant wildlife. Geomorphic features, carved in massive sedimentary rocks by glacial action and erosion, dominate the landscape. Remnant glaciers and icefields from the Pleistocene Epoch are still much in evidence. Many marine mammals and birds thrive in the coastal environment and receive little predation from man.

The coastal scenery is outstanding, with narrow spruce-hemlock forests clinging to the rocky shoreline, high rugged mountains, and glaciers grinding their way from the heights of the Harding Icefield down to the sea. The area generally exists in a primitive condition much the same as it has for thousands of years. The proposal lands contain no permanent residents and no commercial developments. Parts of the area are used for commercial fishing and recreation such as hunting, fishing, scenic viewing, and beachcombing.

1. LOCATION, ACCESSIBILITY, GEOGRAPHY

The proposed national monument is located on the Kenai Peninsula adjacent to the Gulf of Alaska in southcentral Alaska.

Three major water bodies are found in the region: the Gulf of Alaska, Prince William Sound, and Cook Inlet. The Gulf of Alaska is bordered by high mountains, including parts of the Coast, St. Elias, Chugach, and Kenai Mountains. In most places these mountains descend abruptly to the sea, creating an extremely rugged coast, deeply indented by many long deep fjords.

Prince William Sound, about 60 miles northeast of the proposal area, is a body of water measuring 60 by 90 miles that lies behind Montague and Hinchinbrook Islands. The sound includes the expanded mouths of many fjords which extend well into the heart of the coastal mountains.

Cook Inlet, 150 miles west of Prince William Sound, is a large bay extending 200 miles inland. Unlike the other indentations of the coast, it has broad tributary valleys drained by large rivers and is bordered by lowlands.

The Kenai Peninsula lies between Prince William Sound and Cook Inlet, and is almost separated from the Alaska mainland by the waters of Passage Canal from Prince William Sound and Turnagain Arm from Cook Inlet. About 170 miles long by 100 miles wide at its maximum dimensions, the peninsula occupies some 9,400 square miles.

The monument area is on the south coast of the Kenai Peninsula, north of the Gulf of Alaska, south of the Kenai National Moose Range, east of Kachemak Bay State Park, and west of Resurrection Bay. The proposal area and the Area of Ecological Concern together contain about 758,000 acres.

Access to the region is by highway, air, water, and rail from Anchorage, Alaska's largest city, approximately 100 miles to the north. (See Regional Transportation map.) Anchorage International Airport is the air crossroads of the North and is served by eight international carriers and numerous domestic carriers. The Alaska State Ferry, Tustumena, provides service connecting Seward, Kodiak, Homer, and Valley/Cordova. Although the ferry does not stop in the monument area, it does provide an opportunity for passengers to view the coastal region there. The Alaska Railroad no longer provides passenger service to Seward, and scheduled air service is not now available to Seward.

The coastal area is accessible by boat or light aircraft from Seward and Homer. Seaworthy small craft travel throughout the area, but because of

the many storms that reach the coast along the Gulf of Alaska, pleasure boat traffic is severely limited. Floatplanes can land in most of the sheltered bays, and a privately maintained landing strip at the head of Beauty Bay, in the West Arm of Nuka Bay, is adequate for wheeled light aircraft.

On the western edge of the monument area there is summer ferry service between Homer and Kachemak Bay State Park. As yet, no trails exist between the ferry-landings and the monument area, but trails have been proposed by the State (Anchorage Daily Times, April 24, 1973). Ski-equipped light aircraft and helicopters can land on the Harding Icefield when weather permits. (For a list of anchorages see Appendix G.)

The Kenai Peninsula consists of the Kenai Mountains and a Kenai lowland. The Kenai Mountains comprise about 6,500 square miles of the peninsula, with a general altitude of 3,000 to 5,000 feet and a maximum of 6,400 feet. The higher peaks are randomly distributed and the slopes are steep. The coastline is very irregular, due to the large fjords and bays cut into the coastal mountains. There are also numerous offshore islands and sea stacks.

2. *GEOLOGY*

The Kenai Mountain Range, on the Kenai peninsula, was formed from strata of the Chugach Mountains Geosyncline. The axis of the geosyncline trends parallel to the Kenai range. Part of this mountain range is contained in the proposed monument and Area of Ecological The mountains in this range are composed predominately of regionally metamorphosed, marine sedimentary rock of Jurassic to late Cretaceous age. Younger marine and nonmarine sedimentary rocks of Tertiary age occur along the northwest flank of the mountains in the Kenai lowlands (northwest of the proposal) and along the southeast margin of the mountains in Prince William Sound. Interbedded slate and graywacke are the principal rock types; conglomerate, greenstone, tuff and chert are abundant locally. The rocks have been highly folded, faulted, and intruded by small granitic plutons.

During the Tertiary period and continuing into the Quarternary period, the region in which the proposal is located was uplifted and eroded several times. Unconsolidated glacial and fluvial deposits now overlie the bedrock in many places except on the steep higher slopes. The sedimentary rocks of Jurassic and late Cretaceous age were highly deformed and partly metamorphosed during post-Paleocene time.

Of all the rock types found in the region, the graywacke and slate units are those that make up most of the bedrock in the proposal area. Each "unit ranges from tens to hundreds of feet in thickness, however, individual beds especially within the slate units are generally less than a foot thick. Alternating, graded beds showing coarse graywacke base grading upward into fine-grained slate are common." (D.H. Richter 1973)

"The graywacke is a medium to dark gray, fine-to medium-grained, dirty sandstone. It is generally massive and indistinctly bedded. As it is more resistant to erosion than the slate, it commonly forms steep slopes ranging from 45° to more than 70°. The slate, a metamorphosed shale, is dark gray to nearly black and has a well-developed cleavage generally parallel to the bedding. Locally, where secondary micaceous minerals have developed, the rock is phyllitic." (D.H. Richter 1973)

Massive Tertiary and late Cretaceous intrusives, mainly granitic, make up the ends of the Aialik and Harris Peninsulas and their related offshore islands, all of which are proposed for inclusion in

Figure 1. The Coastal Environment is one of magnificent scenery — sheer mountains, forested islands, fjords, and glaciers grinding to the sea. It is also an area of abundant marine wildlife.

TABLE 1

MAJOR STRATIGRAPHIC AND TIME DIVISIONS IN USE BY THE U.S. GEOLOGICAL SURVEY

Era or	System or Period		Series or Epoch		Estimated ages of time boundaries in millions of years
Cenozoic	Quarternary		Holocene		2-3
			Pleistocene		
	Tertiary		Pliocene		12
			Miocene		26
			Oligocene		37-38
			Eocene		53-54
			Paleocene		65
Mesozoic	Cretaceous		Upper	(Late)	136
			Lower	(Early)	
	Jurassic		Upper	(Late)	190-195
			Middle	(Middle)	
			Lower	(Early)	
	Triassic		Upper	(Late)	225
			Middle	(Middle)	
			Lower	(Early)	
	Permian		Upper	(Late)	280
			Lower	(Early)	
Paleozoic	Carboniferous Systems	Pennsylvanian	Upper	(Late)	345
			Middle	(Middle)	
			Lower	(Early)	
		Mississippian	Upper	(Late)	
			Lower	(Early)	
	Devonian		Upper	(Late)	395
			Middle	(Middle)	
			Lower	(Early)	
	Silurian		Upper	(Late)	430-440
			Middle	(Middle)	
			Lower	(Early)	
	Ordovician		Upper	(Late)	500
			Middle	(Middle)	
			Lower	(Early)	
	Cambrian		Upper	(Late)	570
			Middle	(Middle)	
			Lower	(Early)	
Precambrian			Informal subdivisions such as upper, middle, and lower or upper and lower, or younger, and older may be used locally.		3,600

Figure 2. Long, steep fjords indent the coastline along the Gulf of Alaska. The longest is Nuka Bay's East Arm, at the center of the photo. Ragged Island is in the foreground.

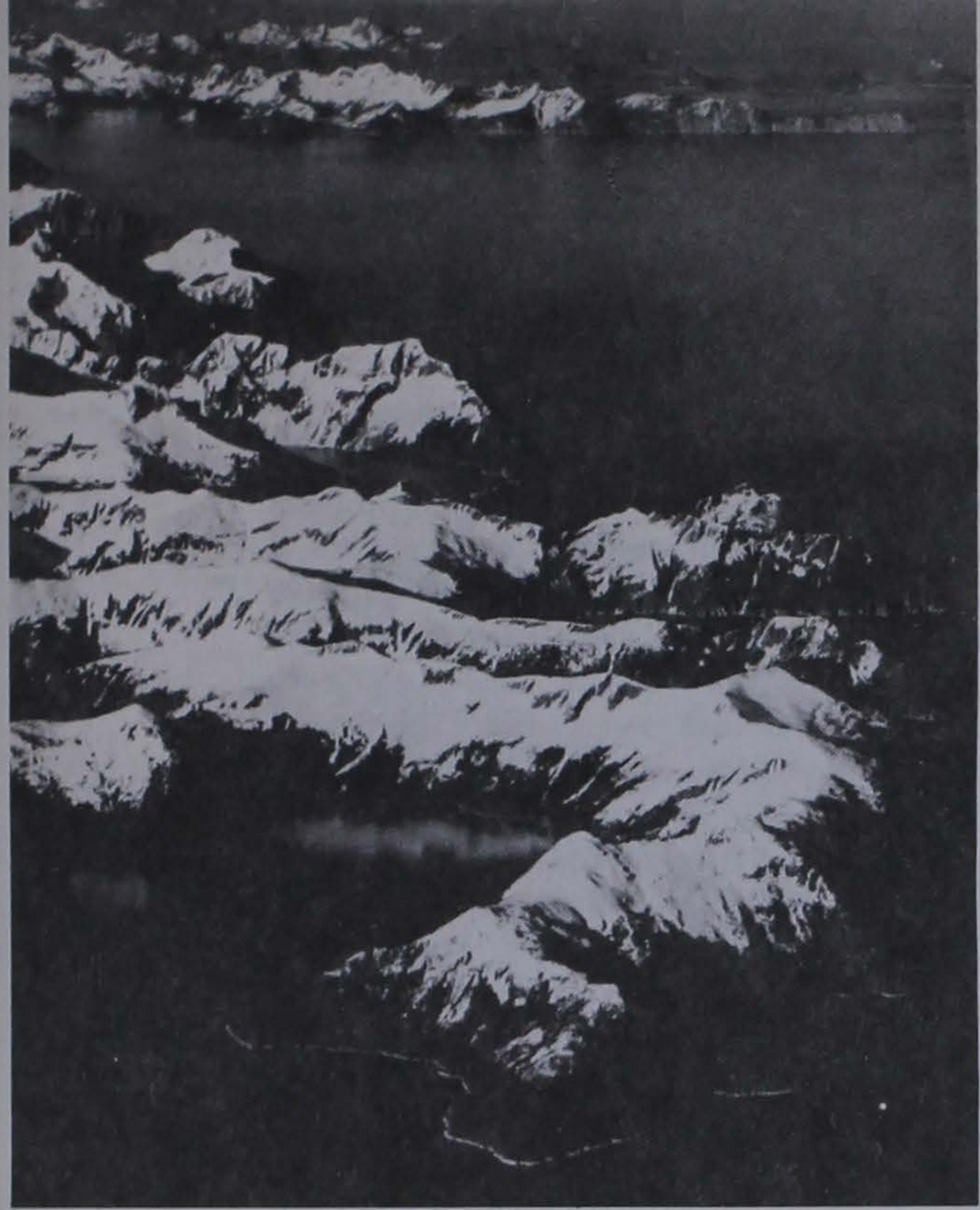


Figure 3. Mountains rise steeply from the bays and fjords, often forming long fingerlike peninsulas.

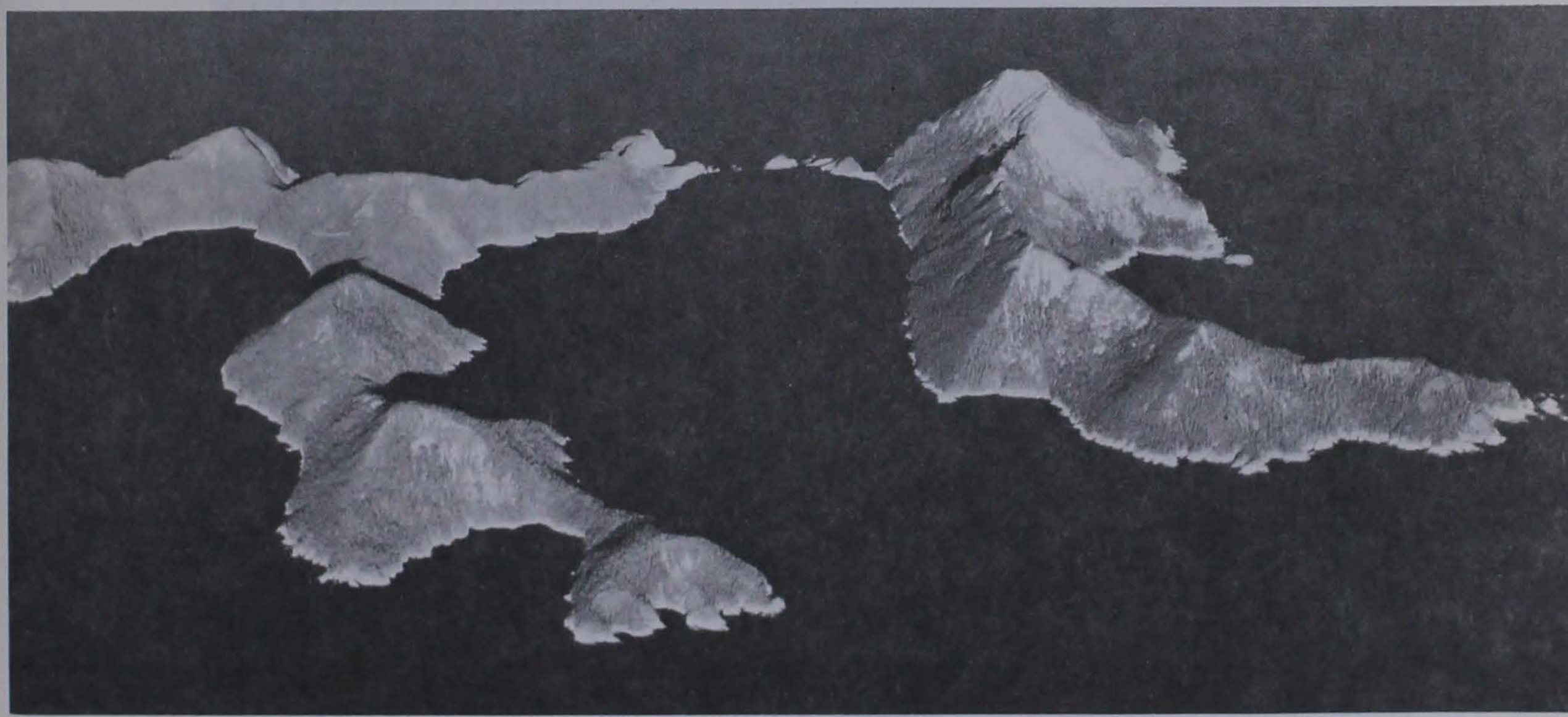


Figure 4. Outer Island, at right, and Rabbit Island, at center, in the Pye Islands group are typical of the forested islands on the outer coast.

the monument. The Pye Islands, at the mouth of Nuka Bay, are predominatly granitic intrusives.

Small granodiorite dikes fill tensional cross joints in the folded sediments and a few granodiorite sills are intruded along bedding and foliation planes (Capps, 1937; Grant, Plafker, Kachadorian, 1964; Lemke, 1967; Moffit, 1906).

Physiographically, the region and the study area lie within the Kenai-Chugach Mountains physiographic province, which is within the Pacific Mountain System physiographic division. The proposal is in the Kenai Mountains section of the Kenai-Chugach province.

The proposal is also in Alaska seismic Zone 3, where earthquakes can cause major structural damage. (Zone 3 is described as that area where earthquakes of a magnitude of 6.0-8.8 Richter may occur.) (Johnson & Hartman, 1969.) The general region is very active tectonically and recently (during the 1964 earthquake) considerable subsidence occurred on the Peninsula as a result of tectonic movement. (See map on Earthquake Damage)

The geomorphic land forms in the study area were carved from the sedimentary and granitic rocks of the region by glacial and stream erosion and other factors. A coalescent group of alpine glaciers existed on the peninsula during the glacial stages of the Pleistocene epoch. Through their scouring and deepening of valley walls and bottoms they tended to accentuate rather than obliterate the preglacial relief. (See Table 1 for geologic time scale.)

At present, the southern and eastern extensions of the mountains are interspersed with glaciers radiating from the Harding and Sargent Icefields. Small cirque glaciers are scattered throughout the entire mountain system.

The Harding Icefield is one of four icefields in the United States. The few remaining icefields present on the North American continent are in Alaska and Canada. The Harding, Sargent (25 miles west of Harding), and Bagley Icefields are entirely in the United States, and the Juneau Icefield lies in Alaska and Canada. The Sargent Icefield is now partly covered by the Nellie Juan Wilderness Study area and the remainder is proposed for addition to the Chugach National Forest. The Bagley Icefield would be included in the Wrangells-St. Elias National Park, if that proposal were enacted. Smaller areas of ice accumulation are also present, but unnamed, in the Canadian St. Elias Mountains, east of the Bagley Icefield and in the Chugach Mountains between the Sargent and Bagley Icefields.

An icefield may be defined as a small ice cap or ice sheet forming a continuous cover over a land surface with the ice moving outward in all directions. An icefield is the accumulation area--the source--of many glaciers.

During the Pleistocene, and probably late Pliocene, the area north of the Gulf of Alaska, the Kenai-Chugach-St. Elias Mountains, were covered with ice. Few vestiges of this ice mass remain. The westernmost example is the Harding Icefield. Extending north-northeast and south-southwest, it represents one stage in the decline of Pleistocene icefields. It covers about 720 square miles and lies generally between the elevations of 4,000 to 5,270 feet.

The icefield produces many glaciers flowing southeast into the coastal fjords, and northwest into the Kenai National Moose Range. It appears that the glaciers of the Kenai Peninsula are receding at a rapid rate.

Harding Icefield has been suggested as a potential national natural landmark under Theme I, Land Forms of the Present, Subtheme 9, the Work of

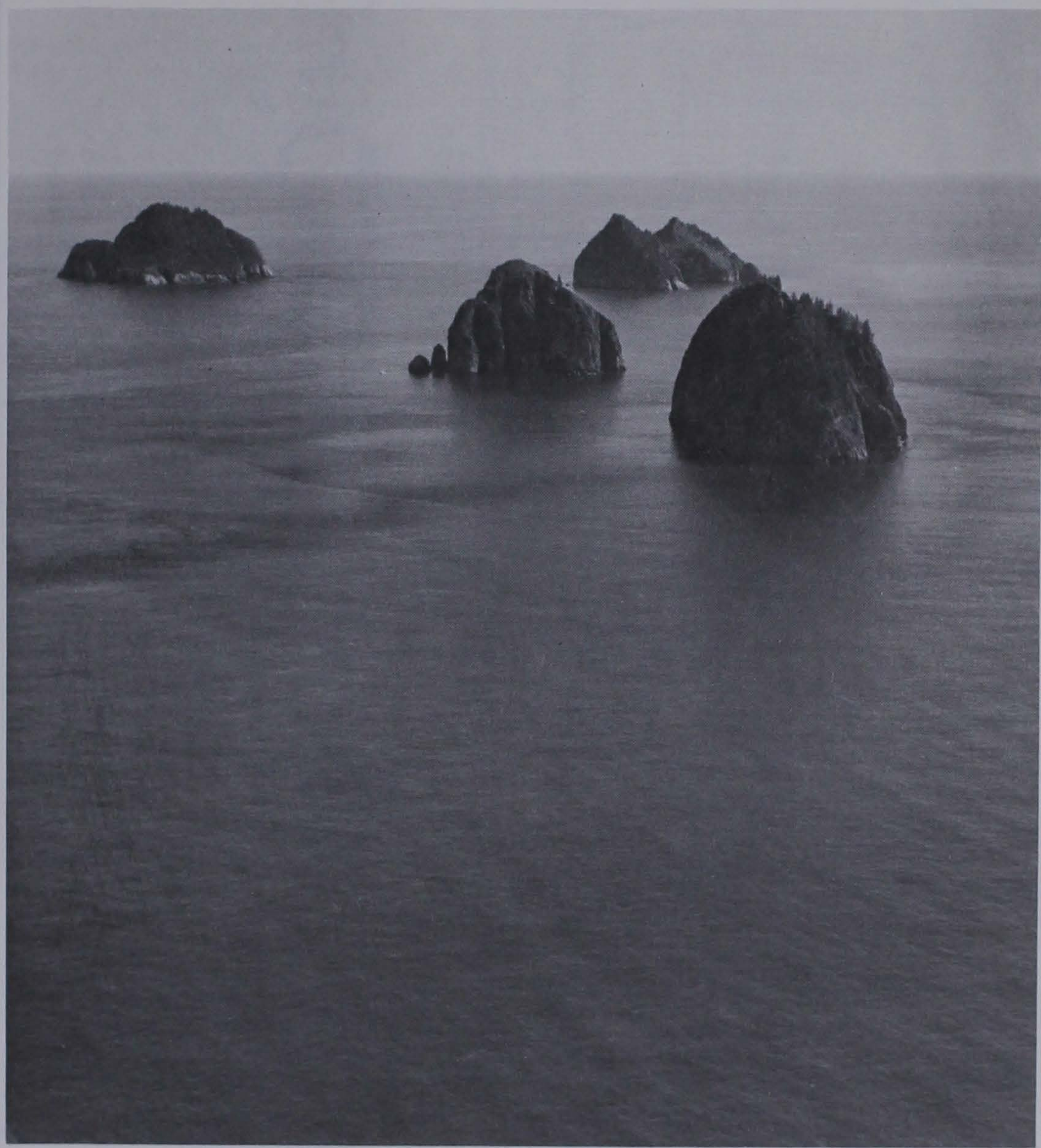
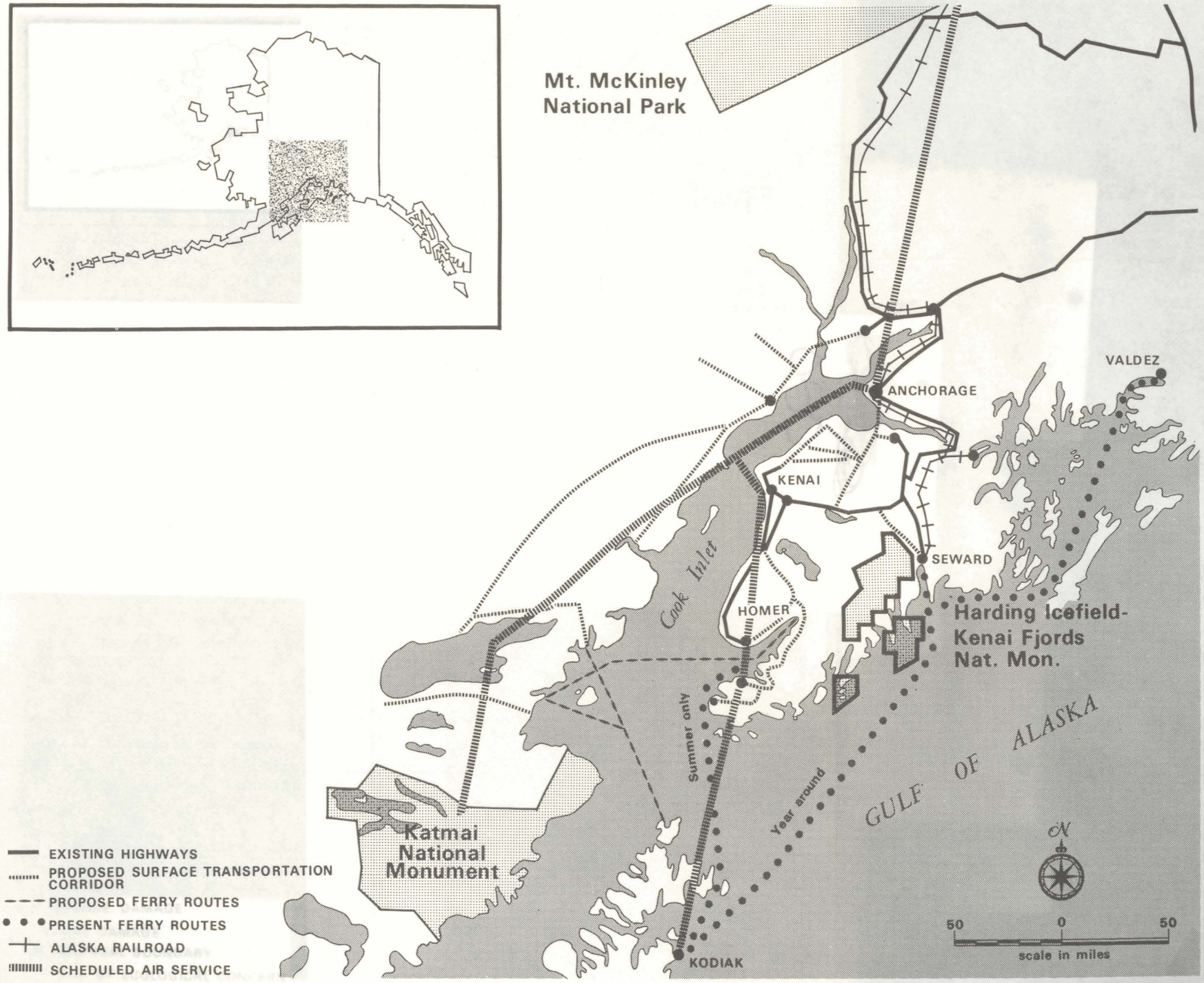


Figure 5. Sea stacks, with steep cliffs on all sides, are numerous off the south coast. Some are forested, some barren.

REGIONAL TRANSPORTATION



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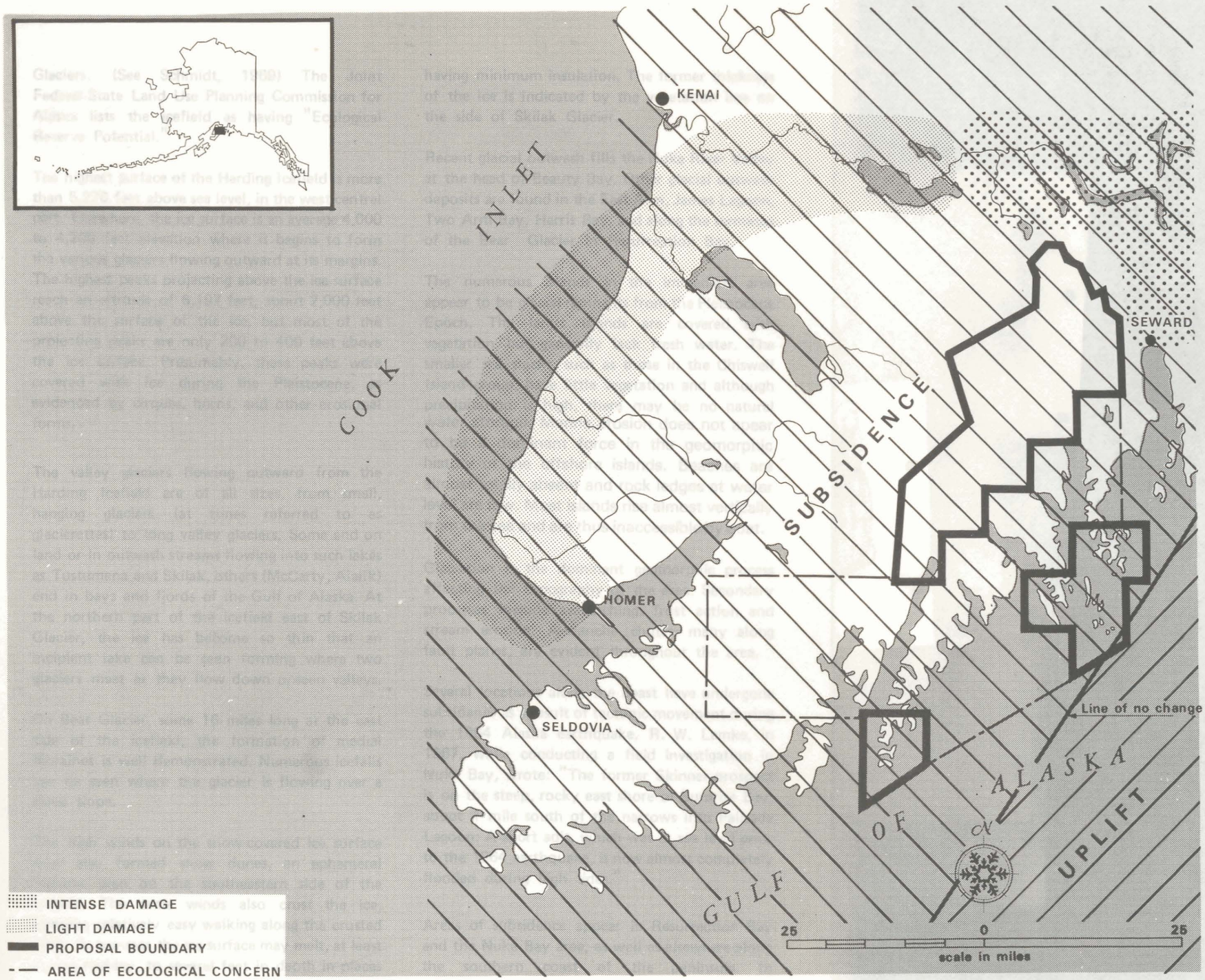
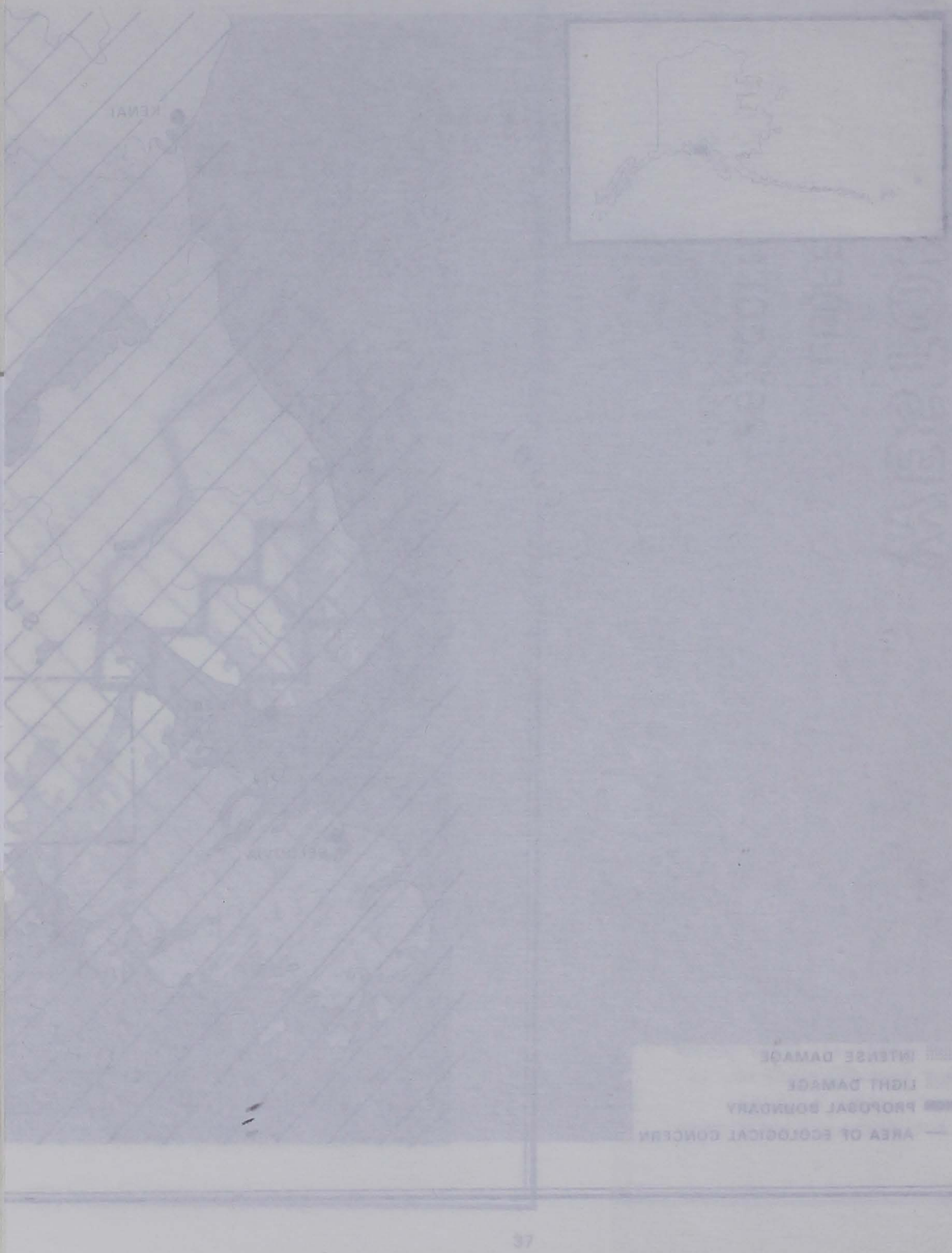
EARTHQUAKE DAMAGE

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Glaciers. (See Schmidt, 1969) The Joint Federal-State Land Use Planning Commission for Alaska lists the icefield as having "Ecological Reserve Potential."

The highest surface of the Harding Icefield is more than 5,270 feet above sea level, in the west-central part. Elsewhere, the ice surface is an average 4,000 to 4,200 feet elevation where it begins to form the various glaciers flowing outward at its margins. The highest peaks projecting above the ice surface reach an altitude of 6,197 feet, about 2,000 feet above the surface of the ice, but most of the projecting peaks are only 200 to 400 feet above the ice surface. Presumably, these peaks were covered with ice during the Pleistocene, as evidenced by cirques, horns, and other erosional forms.

The valley glaciers flowing outward from the Harding Icefield are of all sizes, from small, hanging glaciers (at times referred to as glacierettes) to long valley glaciers. Some end on land or in outwash streams flowing into such lakes as Tustumena and Skilak, others (McCarty, Aialik) end in bays and fjords of the Gulf of Alaska. At the northern part of the icefield east of Skilak Glacier, the ice has become so thin that an incipient lake can be seen forming where two glaciers meet as they flow down unseen valleys.

On Bear Glacier, some 16 miles long at the east side of the icefield, the formation of medial moraines is well demonstrated. Numerous icefalls can be seen where the glacier is flowing over a steep slope.

The high winds on the snow-covered ice surface have also formed snow dunes, an ephemeral features seen on the southeastern side of the icefield. The same winds also crust the ice, allowing relatively easy walking along the crusted areas. In summer the ice surface may melt, at least during midday, to several feet in depth in places having minimum insulation. The former thickness of the ice is indicated by the vegetation line on the side of Skilak Glacier.

Recent glacial outwash fills the Nuka River Valley at the head of Beauty Bay. Other glacial outwash deposits are found in the East Arm, James Lagoon, Two Arm Bay, Harris Bay, and along the terminus of the Bear Glacier in Resurrection Bay.

The numerous islands in the immediate area appear to be glacial remnants from the Pleistocene Epoch. The larger islands are covered with vegetation but generally lack fresh water. The smaller sea stacks, such as those in the Chiswell Island group, have little vegetation and although precipitation is high, there may be no natural water storage. Marine erosion does not apear to be a dominant force in the geomorphic history of the offshore islands. Beaches are almost totally absent and rock ledges at water level are few. Most islands rise almost vertically from the sea and are thus inaccessible by boat.

Glaciation is the dominant geomorphic process affecting the topography of the area. Secondary processes include avalanching, frost action and stream erosion. Avalanche chutes, many along fault planes, are evident throughout the area.

Several locations along the coast have undergone subsidence as a result of tectonic movement during the 1964 Alaska earthquake. R. W. Lemke, in 1967, while conducting a field investigation in Nuka Bay, wrote: "The former Skinner prospect is on the steep, rocky east shore of Surprise Bay, about 1 mile south of the narrows into Palisade Lagoon. A short adit, which was at sea level prior to the 1964 earthquake, is now almost completely flooded during high tides."

Areas of subsidence appear in Resurrection Bay and the Nuka Bay area, as well as elsewhere along the southern coast of the peninsula. In

Figure 6. The Harding Icefield is unusual among the icefields in Alaska. It is roughly circular. The 140-square-mile central portion is nearly free of protruding peaks and surface blemishes. The skier in this photo gives an indication of the extent of this central area.

Figure 7. A potential location for a proposed observation station is on the ridge at lower right. It would be reached possibly by a tramway up Exit Glacier shown at lower left.

Figure 8. Many valley glaciers flow from the Icefield to the heads of rivers or to the sea. McCarty Glacier reaches tidewater at the head of East Arm, more than 20 miles from the Gulf of Alaska.

Figure 9. This view shows the lower portion of Exit Glacier where, having fallen 3,000 feet from the Icefield, it contributes runoff water to the Resurrection River 10 miles from Seward.

Resurrection Bay, 60 miles northeast of Nuka Bay, which was closer to the epicenter of the earthquake, the subsistence has been calculated by the U.S. Geological Survey at approximately 3.5 feet (Lemke, 1967).

The monument area is often exposed to tsunamis (massive sea waves). One tsunami can cause instantaneously more change in landforms than many years of weathering by the processes previously mentioned, but the cumulative effects of weathering and other geomorphic processes are more significant in the long run.

3. ECONOMIC GEOLOGY

As in much of Alaska, this area has been incompletely explored for extractable minerals. About 80 percent of the proposed monument and about 65 percent of the combined monument and AEC are covered with permanent ice and most of the remaining terrain is steep and difficult of access. The following statements draw upon several sources (Bureau of Mines, Geological Survey, BLM, Alaska Department of Natural Resources, JFSLUPCA) and indicate a range of differing opinions on the mineral resources. However, all of the sources agree that exploration has been insufficient to assess the mineral values properly. Mining claim locations are shown on the Real Estate and Claims map.

The Geological Survey has conducted several reconnaissance geological surveys (mostly along the shoreline) on the Kenai Peninsula since the turn of the century; however, within the study area only a small area bordering the shoreline of Nuka Bay has been geologically mapped (Richter 1970). No modern geologic or geochemical studies have been made.

The proposal lies in an area which has been identified as a gold and copper metallogenic province (See Minerals map). This means that, based on known mineral deposits and projection of geologic trend (identification of rock types which are known to have been productive in the region), this area is judged to have moderate potential for small deposits of precious metals and copper, but low for large deposits. (Clark and others, 1972) (Alaska Geology Branch, 1972)

Although there are a fairly large number of locations where mining claims and prospecting occur in the region of the proposal, the only known mineral occurrences within the proposal itself are some small gold prospects near Two Arm Bay, several gold mines in Nuka Bay and a single group of gold claims near Harris Bay. The only legally located and maintained claims are 9 claim groups shown on the Real Estate and Claims map. Four of these groups are under one ownership and the rest are owned separately. Together these groups aggregate 22 lode claims and 4 placer claims totalling 520 acres. All of these claims are in the Area of Ecological Concern and none lie inside the proposed monument.

The former small gold-producing area at Nuka Bay was the scene of active exploration, development, and mining in the 1920-1940 period. Six of the gold claims date from 1909, when three were staked in Nuka Bay, two in East Arm, and one on the west side of the North Arm. By 1924 more than half a dozen properties were in the process of development and a mill was under construction at the Alaska Hills mine. Peak activity was reached in the early 1930's when at least four mines, each with its own mill, were producing gold. Toward the end of the 1930's activity waned, and by 1940 only two properties--the Nukalaska and Sonny Fox mines--were operating (Richter, 1970).

A measure of the size, economy, and needs of the Nuka Bay mining community during its peak years was the existence of a 30-gallon whiskey still in a secluded cove in Beauty Bay. Evidently the

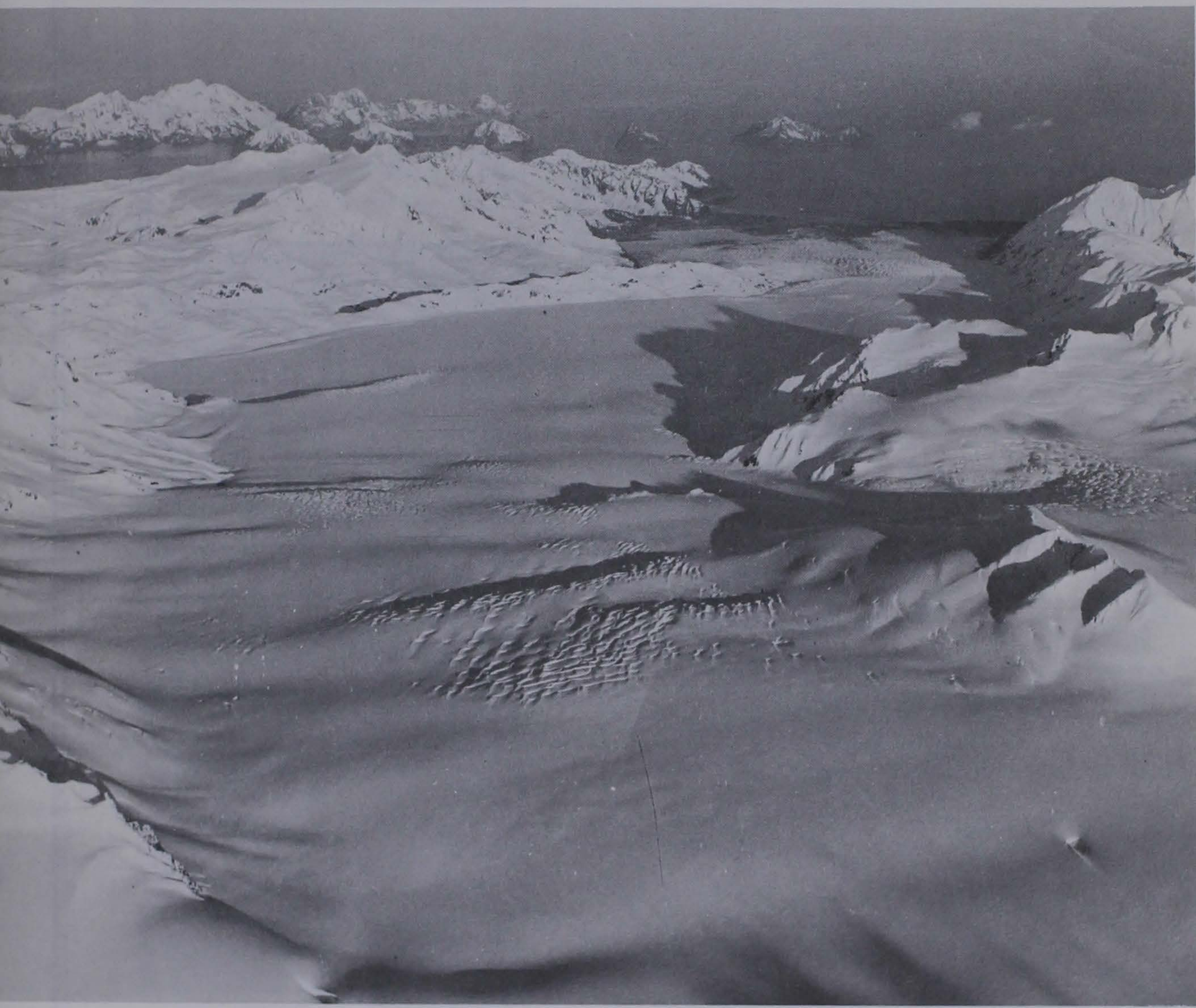
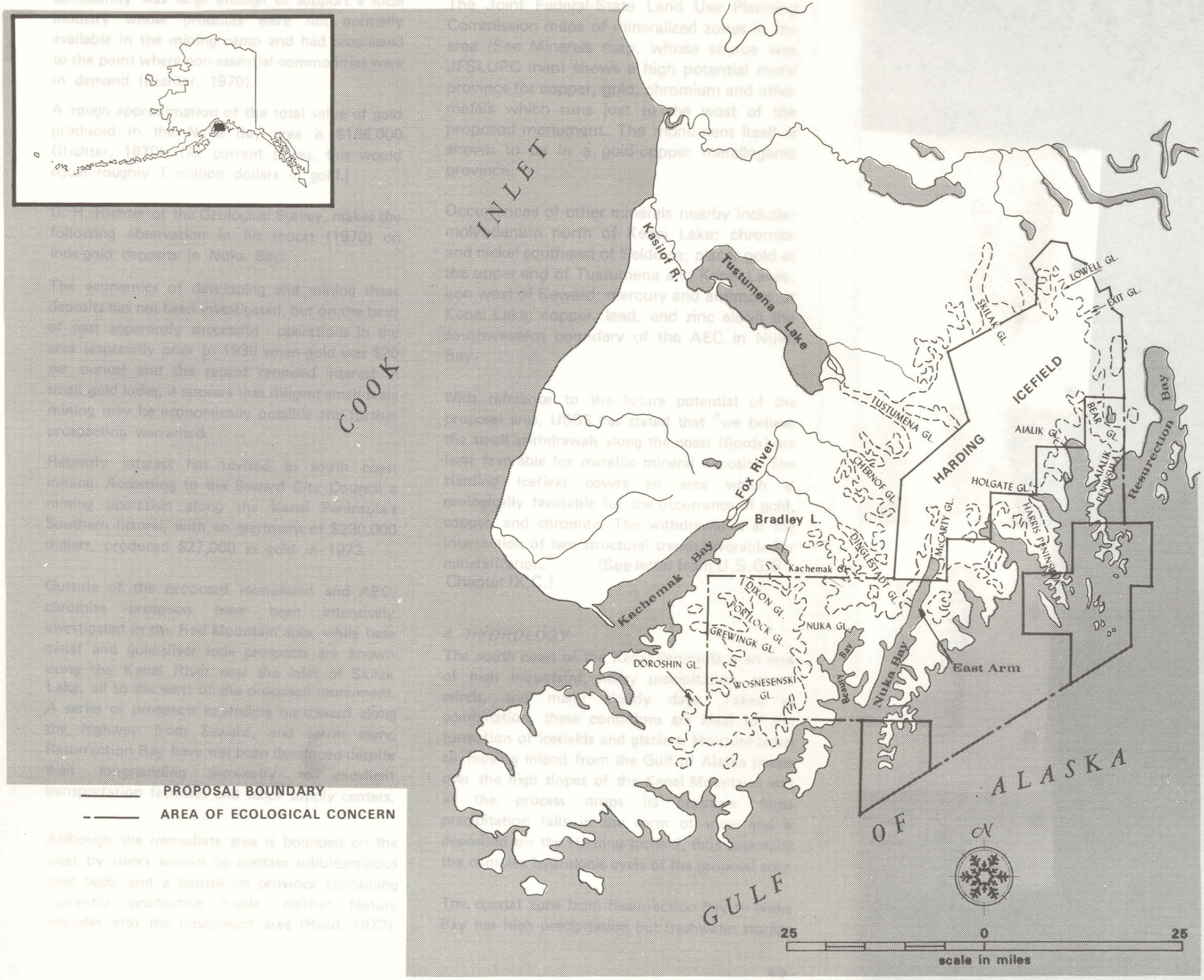


Figure 10. Bear Glacier, about 16 miles long, nearly reaches tidewater at Resurrection Bay. Snow dunes interrupt the smooth snow-covered glacier. In the distance, a medial moraine and icefalls are visible.

HARDING ICEFIELD AND GLACIERS



community was large enough to support a local industry whose products were not normally available in the mining camp and had progressed to the point where non-essential commodities were in demand (Richter, 1970).

A rough approximation of the total value of gold produced in the Nuka Bay area is $166,000 (Richter, 1970). (At current prices, this would equal roughly 1 million dollars in gold.)

D. H. Richter of the Geological Survey, makes the following observation in his report (1970) on lode-gold deposits in Nuka Bay:

The economics of developing and mining these deposits has not been investigated, but on the basis of past apparently successful operations in the area (especially prior to 1935 when gold was $20 per ounce) and the recent renewed interest in small gold lodes, it appears that diligent small-scale mining may be economically possible and further prospecting warranted.

Recently interest has revived in south coast mining. According to the Seward City Council a mining operation along the Kenai Peninsula's Southern littoral, with an ivestment of $230,000 dollars, produced $27,000 in gold in 1973.

Outside of the proposed monument and AEC, chromite prospects have been intensively investigated in the Red Mountain area, while base metal and gold-silver lode prospects are known along the Kenai River near the inlet of Skilak Lake, all to the west of the proposed monument. A series of prospects extending northward along the highway from Seward, and south along Resurrection Bay have not been developed despite their longstanding proximity to excellent transportation facilities and labor supply centers.

Although the immediate area is bounded on the west by rocks known to contain subbituminous coal beds, and a petroleum province containing currently productive fields, neither feature intrudes into the monument area (Reed, 1973).

The Joint Federal-State Land Use Planning Commission maps of mineralized zones in the area (See Minerals map, whose source was JFSLUPC map) shows a high potential metal province for copper, gold, chromium and other metals which runs just to the west of the proposed monument. The monument itself is shown to be in a gold-copper metallogenic province.

Occurrences of other minerals nearby include: molybdenum north of Kenai Lake; chromite and nickel southeast of Seldovia; placer gold at the upper end of Tustumena and Kenai Lakes; iron west of Seward; mercury and antimony at Kenai Lake; copper, lead, and zinc along the southwestern boundary of the AEC in Nuka Bay.

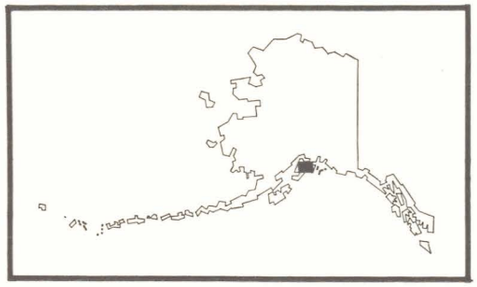
With reference to the future potential of the proposal area, USGS has stated that "we believe the small withdrawals along the coast (fjords) are least favorable for metallic mineral deposits. The Harding Icefield covers an area which is geologically favorable for the occurrence of gold, copper, and chromite. The withdrawal is at the intersection of two structural trends favorable for mineralization." (See letter from U.S.G.S., Chapter IX,C.)

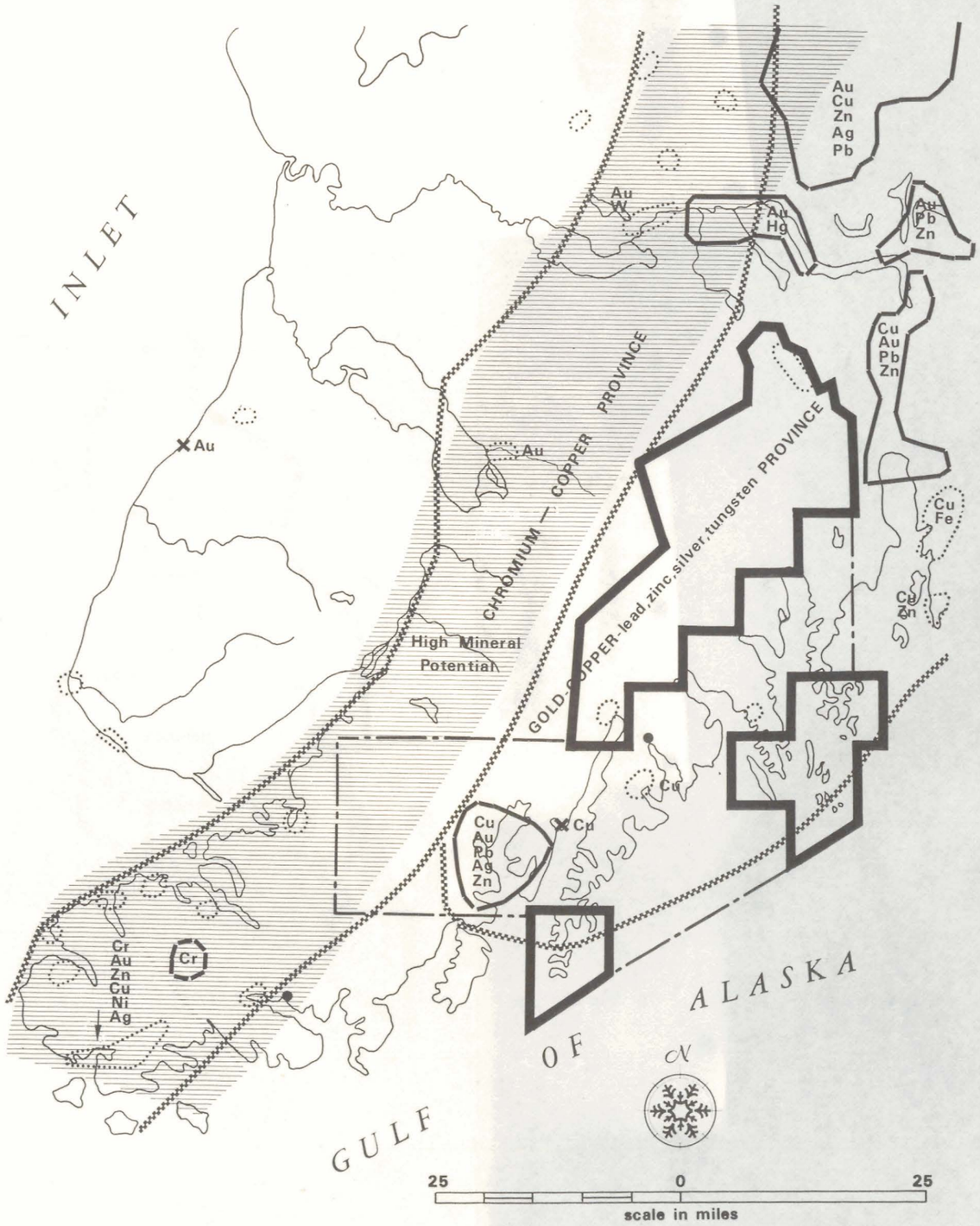
4. HYDROLOGY

The south coast of the Kenai Peninsula is an area of high mountains, heavy precipitation, strong winds, and many cloudy days. Taken in combination, these conditions are ideal for the formation of icefields and glaciers. Moisture-laden air moving inland from the Gulf of Alaska passes over the high slopes of the Kenai Mountains and in the process drops its moisture. Most precipitation falls in the form of snow and is deposited on the Harding Icefield, thus beginning the complex hydrologic cycle of the proposal area.

The coastal zone from Resurrection Bay to Nuka Bay has high precipitation but freshwater storage

MINERALS





Metal Province

High Mineral Developement Potential Area

Intensive Mining Claim Activity Area

Moderate To Low Mining Claim Activity Area

● Lode Deposit, Prospect, or Mine

✕ Placer Deposit, Prospect, or Mine

Au=Gold Cu=Copper Zn=Zinc Ag=Silver

Hg=Mercury Pb=Lead Ni=Nickel Fe=Iron

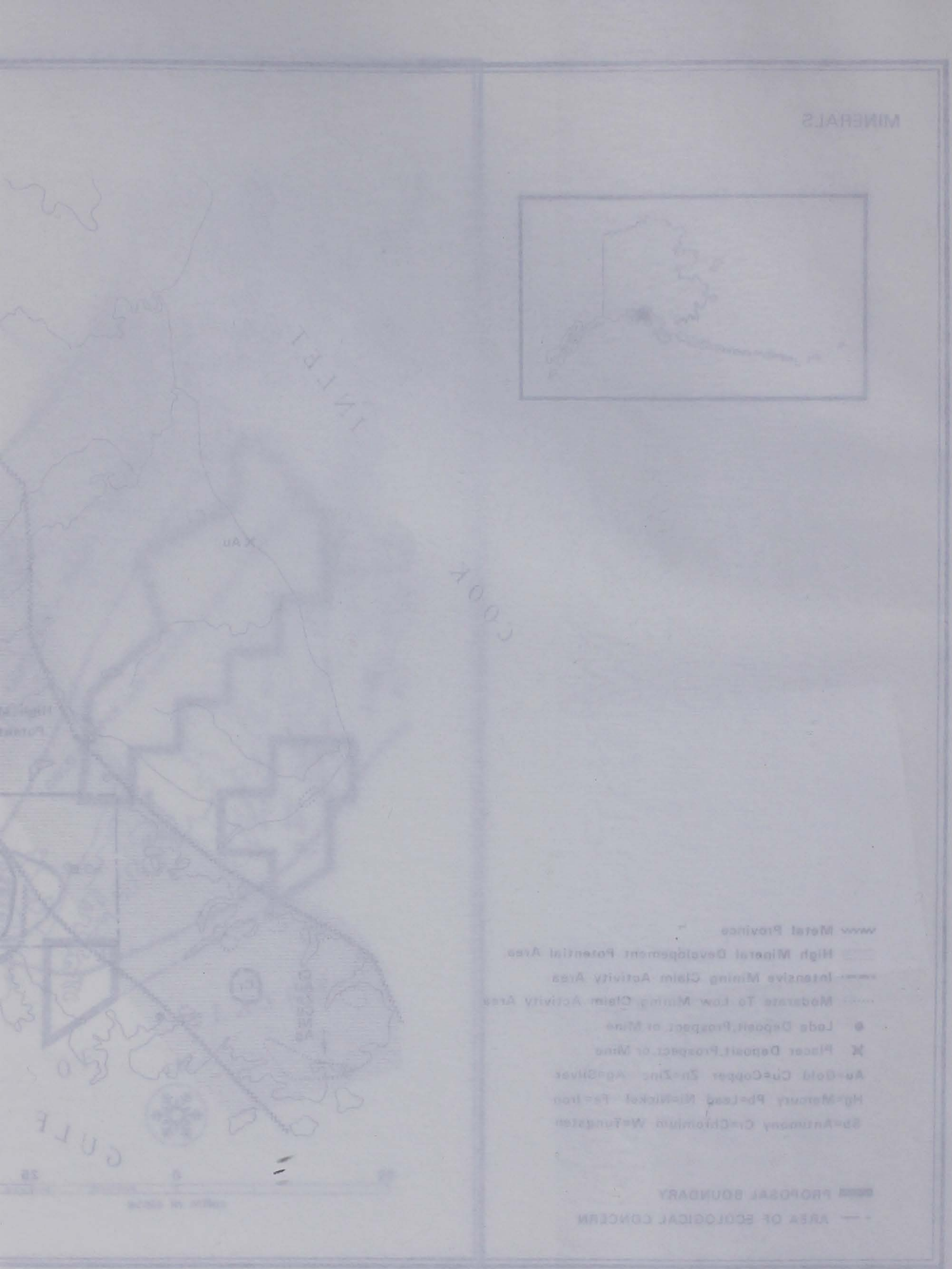
Sb=Antimony Cr=Chromium W=Tungsten

COAL BEDS OF MINEABLE THICKN

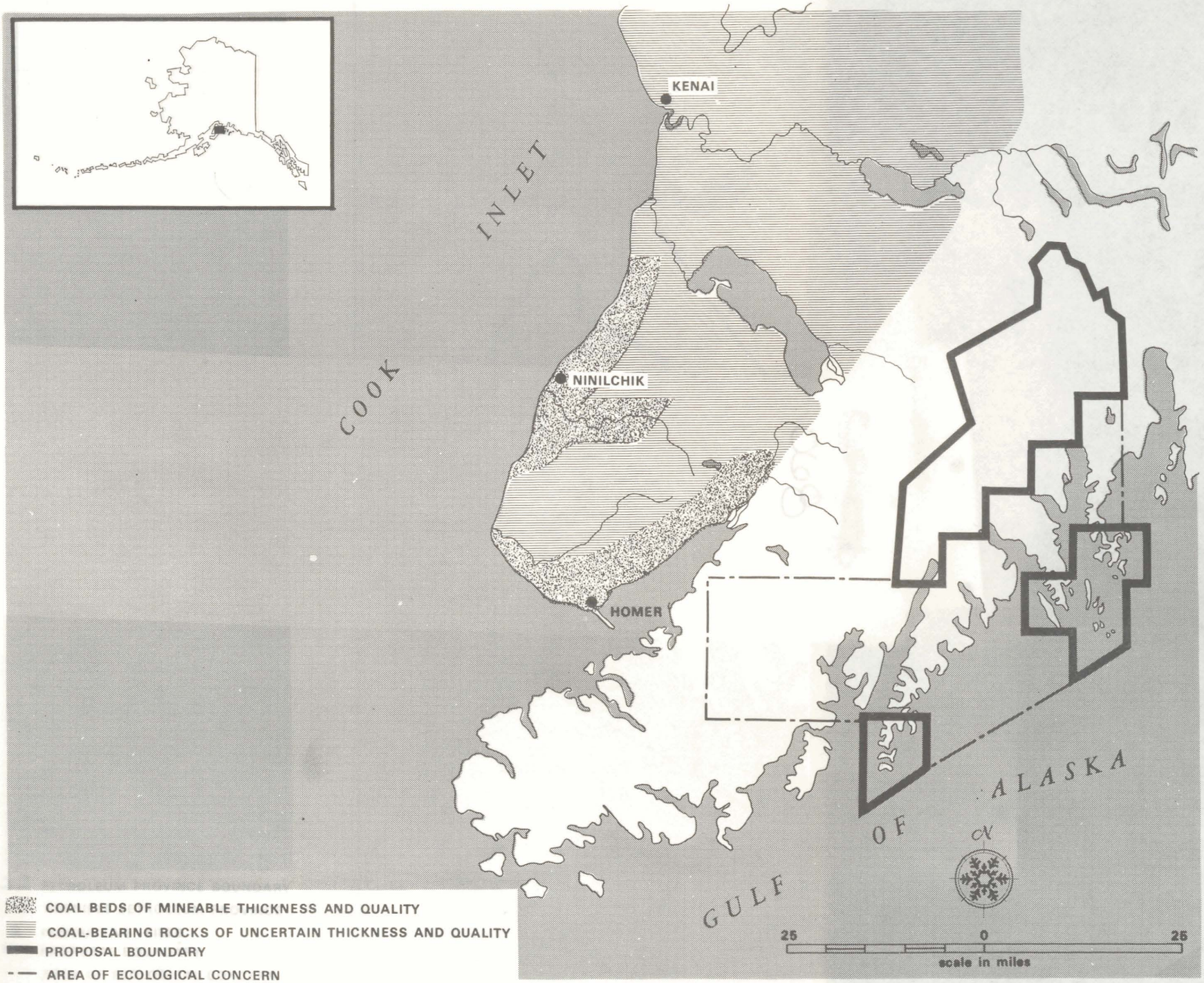
COAL-BEARING ROCKS OF UNCER

PROPOSAL BOUNDARY

AREA OF ECOLOGICAL CONCERN



COAL


KENAI
NINILCHIK
HOMER
COOK INLET
GULF OF ALASKA
COAL BEDS OF MINEABLE THICKNESS AND QUALITY
COAL-BEARING ROCKS OF UNCERTAIN THICKNESS AND QUALITY
PROPOSAL BOUNDARY
AREA OF ECOLOGICAL CONCERN
25
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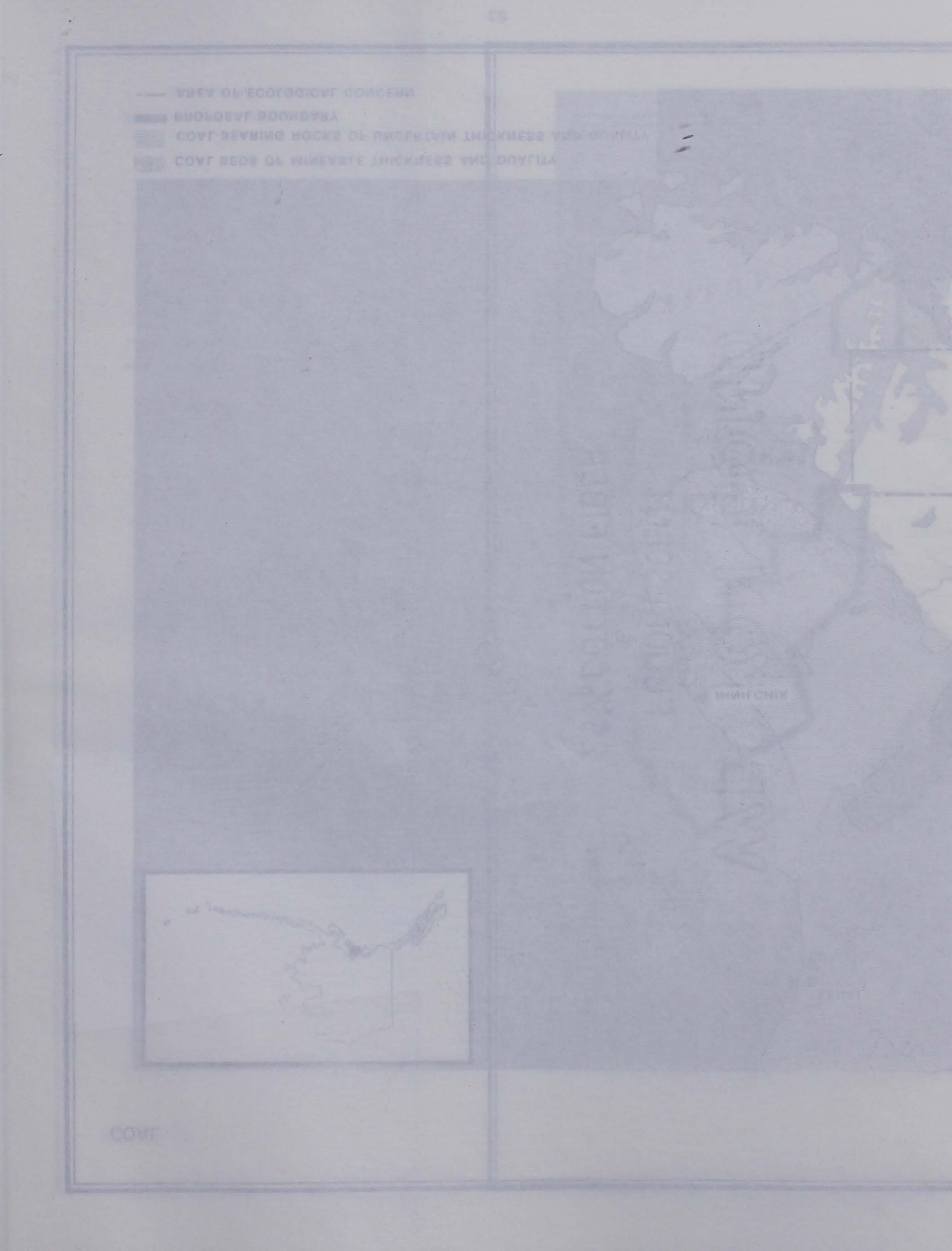
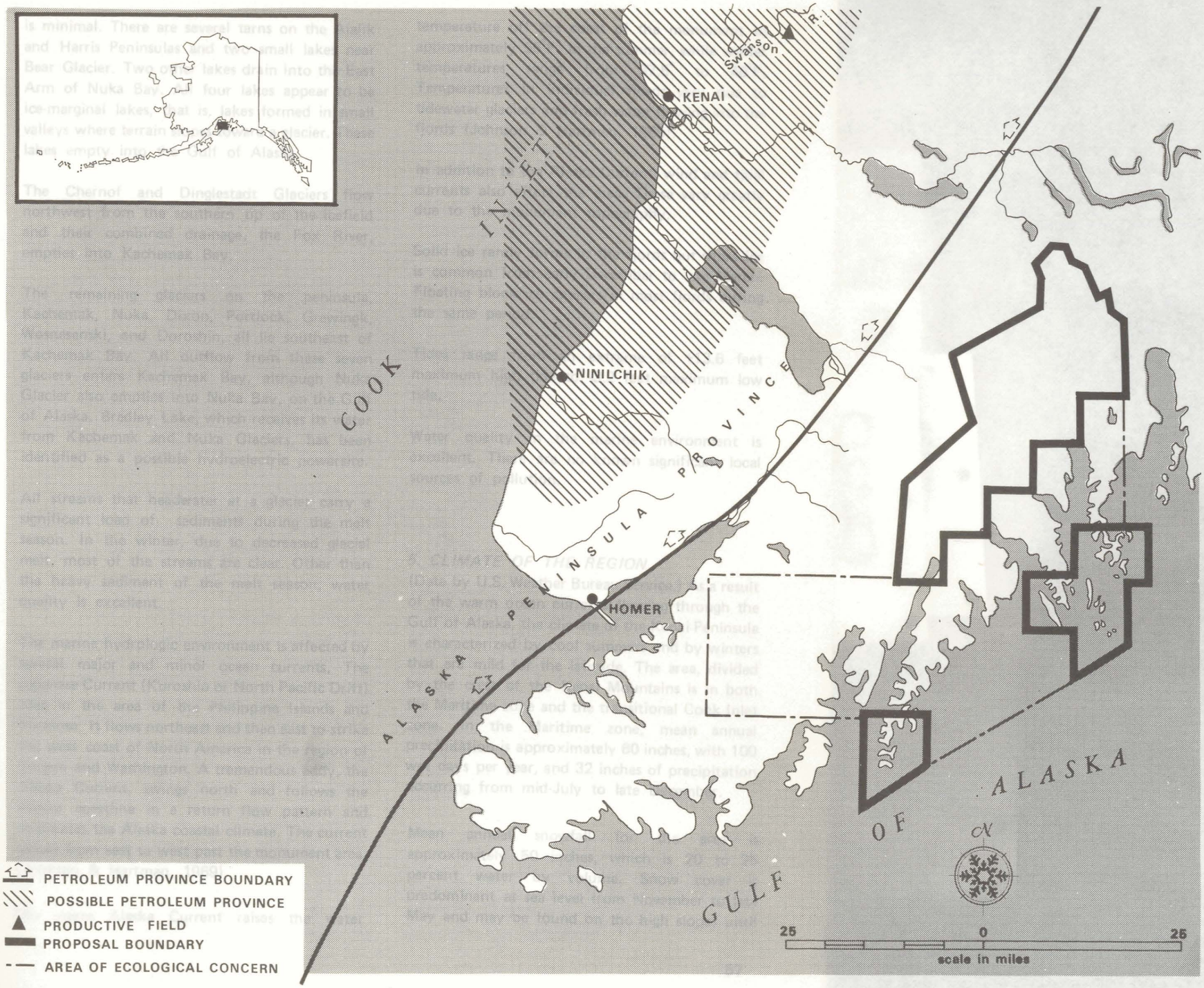
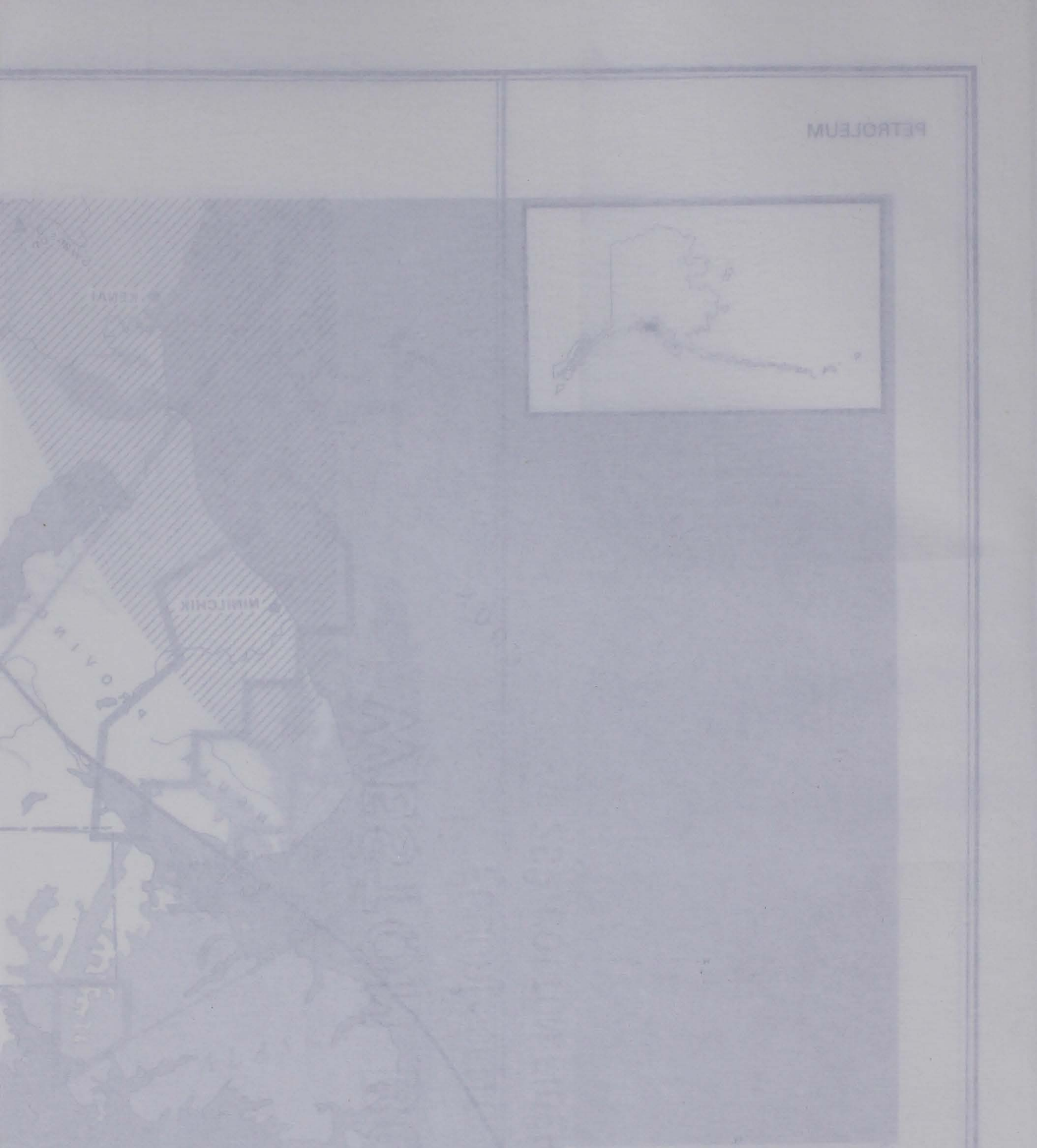
scale in miles



PETROLEUM


KENAI
Swanson R.
NINILCHIK
HOMER
COOK INLET
ALASKA PENINSULA PROVINCE
GULF OF ALASKA
PETROLEUM PROVINCE BOUNDARY
POSSIBLE PETROLEUM PROVINCE
PRODUCTIVE FIELD
PROPOSAL BOUNDARY
AREA OF ECOLOGICAL CONCERN
25 0 25
scale in miles


PETROLEUM
PETROLEUM PROVINCE BOUNDARY
POSSIBLE PETROLEUM PROVINCE
PRODUCTIVE FIELD
PROPOSAL BOUNDARY
AREA OF ECOLOGICAL CONCERN

is minimal. There are several tarns on the Aialik and Harris Peninsulas and two small lakes near Bear Glacier. Two other lakes drain into the East Arm of Nuka Bay. All four lakes appear to be ice-marginal lakes, that is, lakes formed in small valleys where terrain slopes toward a glacier. These lakes empty into the Gulf of Alaska.

The Chernof and Dinglestadt Glaciers flow northwest from the southern tip of the icefield and their combined drainage, the Fox River, empties into Kachemak Bay.

The remaining glaciers on the peninsula, Kachemak, Nuka, Dixon, Portlock, Grewingk, Wosnesenski, and Doroshin, all lie southeast of Kachemak Bay. All outflow from these seven glaciers enters Kachemak Bay, although Nuka Glacier also empties into Nuka Bay, on the Gulf of Alaska. Bradley Lake, which receives its water from Kachemak and Nuka Glaciers, has been identified as a possible hydroelectric powersite.

All streams that headwater at a glacier carry a significant load of sediments during the melt season. In the winter, due to decreased glacial melt, most of the streams are clear. Other than the heavy sediment of the melt season, water quality is excellent.

The marine hydrologic environment is affected by several major and minor ocean currents. The Japanese Current (Kuroshio or North Pacific Drift) rises in the area of the Philippine Islands and Formosa. It flows northeast and then east to strike the west coast of North America in the region of Oregon and Washington. A tremendous eddy, the Alaska Current, swings north and follows the Alaska coastline in a return flow pattern and moderates the Alaska coastal climate. The current moves from east to west past the monument area. (Johnson & Hartman, 1969)

The warm Alaska Current raises the water temperature off the coast of the monument to approximately 55°F. in the summer, while winter temperatures range from 37.5° to 40°F. Temperatures in individual fjords vary due to tidewater glaciers and fresh water flowing into the fjords (Johnson & Hartman, 1969).

In addition to the Alaska Current, wind and tidal currents also affect the area. These vary greatly due to the monument topography.

Solid ice rarely forms in the fjords but shore ice is common from early December to late March. Floating block ice appears in most fjords during the same period.

Tides range from an extreme of +13.6 feet maximum high tide to -3.2 feet maximum low tide.

Water quality in the marine environment is excellent. There are no known significant local sources of pollution.

5. CLIMATE OF THE REGION

(Data by U.S. Weather Bureau Service.) As a result of the warm ocean currents flowing through the Gulf of Alaska, the climate of the Kenai Peninsula is characterized by cool summers and by winters that are mild for the latitude. The area, divided by the crest of the Kenai Mountains is in both the Maritime zone and the transitional Cook Inlet zone. In the Maritime zone, mean annual precipitation is approximately 60 inches, with 100 wet days per year, and 32 inches of precipitation occurring from mid-July to late December.

Mean annual snowfall for the area is approximately 50 inches, which is 20 to 25 percent water by volume. Snow cover is predominant at sea level from November to late May and may be found on the high slopes until

late August. The Harding Icefield remains snow covered year-round, and total annual precipitation is 160 inches with 400 inches of snowfall.

The driest time of year is spring, but even then 4 inches or more of precipitation can be expected each month with half the days receiving some rain. Fall and early winter is the wet period and also the time for high winds (55 m.p.h. or greater). The average number of cloudy days per year is 260. Heavy fog can be expected along the coast about 2 days each month in winter, increasing to an August-September maximum of 8 to 10 foggy days. (Johnson & Hartman, 1969)

At Seward, on the eastern edge of the study area, January mean minimum temperature is approximately +20°F. and the maximum is +30°F. Mean July minimum is approximately +48°F., while July mean maximum is +63°F. The mean annual temperature ranges between +33° F. to +46°F. The absolute minimum temperature is -20°F., and the absolute maximum is +88°F., for a possible maximum yearly differential of 108°F. (Seward, Alaska--Johnson & Hartman, 1969)

The ocean-facing slopes of the south coast are subjected to the same climatic controls as the rest of the northwest coast of North America. The general climate is a consequence of the proximity of the waters of the North Pacific Drift. The humid character of the climate results from the cooling effect of the coastal mountains on the moisture-laden ocean air as it advances inland. The winter weather is dominated by a low pressure center in the area of the Aleutian Islands and in the summer by corresponding North Pacific high pressure.

Local weather conditions vary extensively. Topography plays a large role in altering wind directions, as do glaciers, thus creating numerous microclimates within the area.

6. AIR

Air movement in and over the area has a significant effect on the weather. Most storms come from the direction of the Gulf of Alaska, although during the winter months storms originating in the Bering Sea region penetrate this area. Cloudy weather prevails during much of the year with clear skies being more common during late winter and spring.

Winds are common as a result of cold air drainage from the Harding Icefield. Southerly winds blowing from the icefield prevail throughout the spring, summer, fall, and early winter. During late winter, the snow mantle over the remainder of the peninsula diminishes the effects of the icefield, and fewer storm tracks come from the south. However, cold air drainage from the mainland of Alaska during this time results in northerly winds. The intensity of these winds is often sufficient to hamper air and boat navigation.

Air quality throughout the area is excellent. There is no known information showing whether or not atmospheric pollution in other parts of the world has a direct effect on this area.

7. MAJOR ECOSYSTEMS

Despite its size, Alaska has a relatively simple arrangement of ecological systems when compared to other parts of North America, particularly in the West. This is primarily due to its northern location. All of Alaska is in the Boreal Region, which is divided into Arctic-alpine, Hudsonian, and Canadian zones. The monument is in all three zones, as well as in the coastal marine ecosystem.

In the monument area the Arctic-alpine zone is above the limit of tree growth, but it has a great variety of alpine or arctic plants, such as sedges, grasses, willows, and dwarf berry-bearing shrubs. The ptarmigan and shrew are characteristic animals of this life zone.

The Hudsonian zone consists of the interior valleys, together with narrow belts around all mountains. This zone is principally a forest of spruce and birch. Among its usual inhabitants are the wolverine, moose, and white-crowned sparrow.

The Canadian zone covers a relatively small area. Restricted to a narrow coastal strip, it contains a portion of the transcontinental coniferous forest. This zone merges and blends into the Hudsonian zone so intimately that it is often difficult to define the boundary in any specific locality. Such is the case near the northern boundary of the proposal area.

The Canadian zone is an area of heavy rainfall and contains the largest trees and finest forests in Alaska. It has such tree species as Sitka spruce, hemlock, western red cedar, and such shrubs and plants as devil's club, Alaska alder, and skunk cabbage. Winter wrens, Steller's jays, and hermit thrushes, as well as mountain goats, wolverine, moose, black bear, brown bear, and red fox typify this zone.

A fourth system, the coastal marine ecosystem, is an important part of the proposal area. This ecosystem is made up of numerous bays, lagoons, islands, beaches, and sea cliffs. It is a diverse ecosystem and supports an abundance of marine life, such as the sea otter; sea lion; killer whale; Dall porpoise; Harbor seal; king, dungeness, and Tanner crabs; shrimp; herring; pink, chum, and sockeye salmon.

The combined marine and terrestrial ecosystems make this area one of great diversity within a relatively small area.

8. WILDLIFE

Twenty-three species of marine mammals are known inhabitants of the coastal waters of the proposal during all or part of the year. These include whales, porpoises, dolphins, sea lions, seals, and sea otters.

Seven species of terrestrial mammals have been observed on the south coast of the Kenai Peninsula and 15 others are presumed to inhabit the area. Approximately 65 species of birds, the majority of which are marine or marine-associated, have been reported in the area.

Dolley Varden, silver, red, chum, and pink salmon, as well as a few rainbow trout inhabit the waters, lakes and streams along the south coast. (Most of these waters are in the AEC with few in the monument. The Resurrection River which borders the area on the northeast has a run of silver (or Coho) and chum salmon as well as representatives of the above mentioned species.

A commercial marine fishery based on shellfish and fin fish flourishes along the coast. (See Appendix C.) Few wildlife studies have been conducted on the south coast, and published information is limited (FWS, 1973). (For a complete annotated checklist of birds associated with the south coast, see Appendix A. Appendix B contains an annotated checklist of marine, marine-associated and terrestrial mammals. Appendix D lists land mammals that may occur in the proposal area. Appendix F lists freshwater fish.)

The sea otter was driven close to extinction by Russian fur traders during the 19th century. It has recently made a strong comeback and now exists in numbers which may be greater than their original populations. Approximately 1,500 inhabit the coastal shoreline of the proposal area.

At least 10 major concentrations of sea lions occur in the study area. The Chiswell and Outer Islands contain more than 4,000. These animals, which remain all year, have hauling areas on Matushka and Beehive Islands in the Chiswell group (Fish & Wildlife Service, 1973).

Figure 11. The largest sea otter populations are at Aialik, Harris, and Nuka Bays and total between 1,000 and 1,500 animals. Here, an otter dines on shellfish while swimming on his back.

Figure 12. Ten or more large colonies of Steller's sea lions remain all year along the South Coast. Seasonally used hauling grounds are also numerous in the area.

Of the many species of seal in Alaska, two are found along the south coast, the northern fur seal and the harbor seal. A yearly migrant, the fur seal breeds in the Pribilof Islands and winters as far south as Mexico. There are approximately 1.4 million fur seals in the Alaskan breeding stock.

A common inhabitant of the south coast, the harbor seal occurs in concentrations of several hundred at the heads of Aialik, Harris, and Nuka Bays. This seal is not adapted to living on the pack ice, as are other species, so it avoids the ice by wintering to the south. Many harbor seals spend the entire year in the south coast bays. No population estimates are available (Fish & Wildlife Service, 1973).

Dall sheep occur locally near Bradley Lake, less than 10 miles from the Area of Ecological Concern northern boundary. Robert Belous, a writer-photographer who has spent much time in the area, reports (personal communication) that the Dall sheep also venture out onto the Harding Icefield and can be found there in the summer on glacier-enclosed elevations called nunataks. These sightings are at the southern terminus of the Dall sheep range on the Kenai Peninsula. Alaska Department of Fish and Game personnel counted one ram in 1968 and five in 1972 in the Sheep-Katchemak Creeks area during aerial surveys. These sheep are considered a separate type by many hunters, some of whom attempt to take at least one of every "species" of big game.

Mountain sheep are primarily all-year grazers and require a relatively dry habitat where grasses and other alpine vegetation are available winter and summer. Thus, the sheep have not penetrated areas of heavy precipitation on the coastal side of the range (Alaska Department of Fish and Game, 1973).

Mountain goats occur throughout the mountainous parts of the area and are the most abundant of the larger terrestrial mammals in the region. In the summer months, goats frequent high alpine meadows where they graze on grasses, sedges and low shrubs. In winter, they migrate to lower elevations and spend a considerable amount of time at or below timberline. On clear, mild days goats move up to snow-free slopes to feed, returning again to timberline late in the day. Alaska Department of Fish and Game records show that only 9 goat hunters hunted in the area in 1973. The success ratio was good, however, as 4 goats were taken.

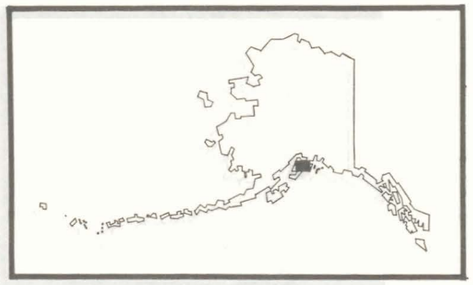
Moose, although not abundant, inhabit the general area. To the northwest, on the Kenai National Moose Range, they occur in larger numbers (Fish and Wildlife Service, 1973). Wolves could also inhabit the area although there are no records of their occurrence on lands proposed for inclusion in the monument or AEC.

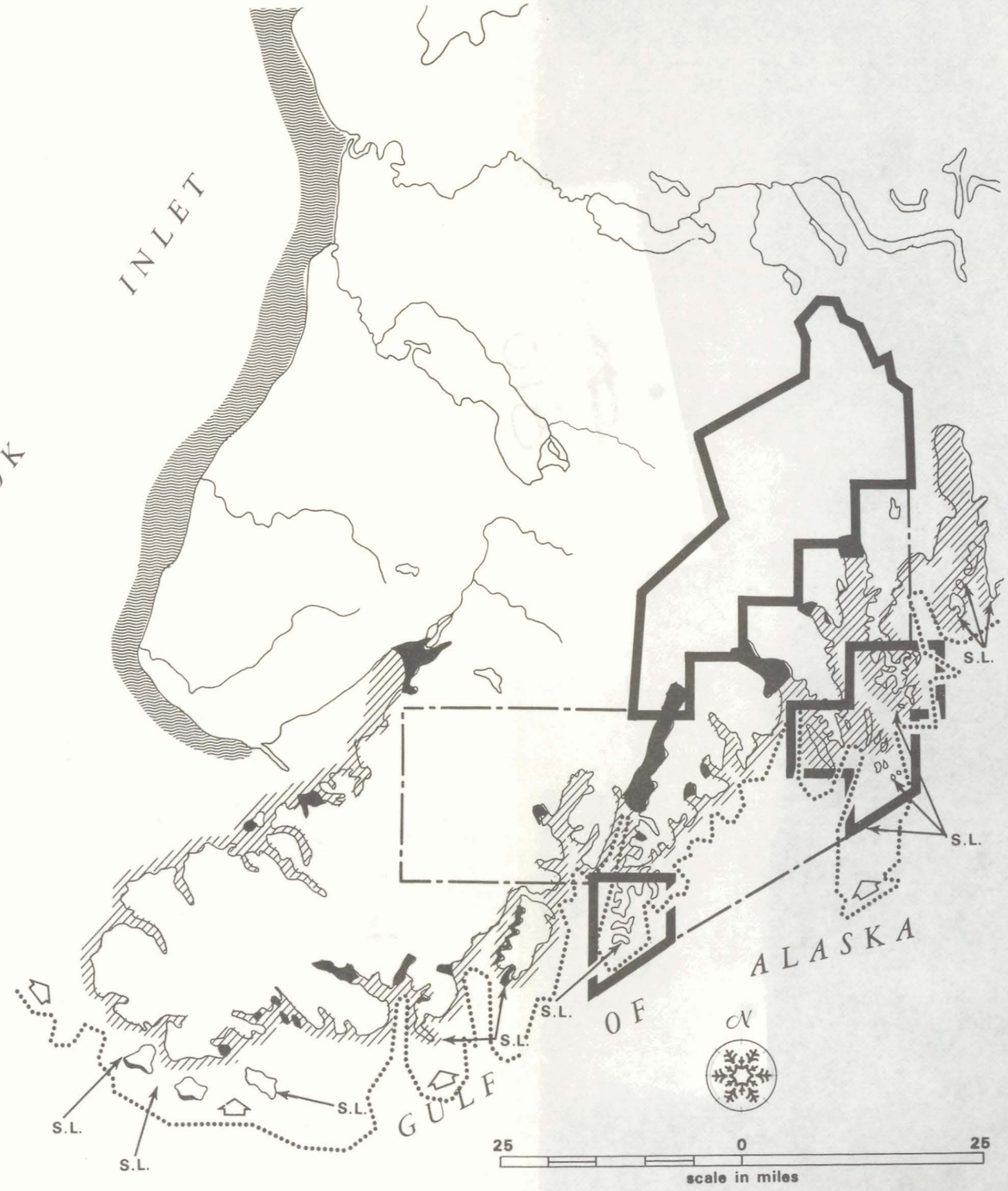
There are a few brown bears along the southwest side of Resurrection River and the east side of Kachemak Bay north of China Poot Bay, and on the northwest side of the area in the Kenai Moose Range. It is doubtful that brown bear occur throughout the area. Black bear are relatively abundant and widely distributed in the area. Black bear appear to be concentrated along fishing streams in the Resurrection River valley and at the drainages outside the proposal area to the northwest and south. The wolverine has been observed in the area (Alaska Department of Fish and Game, 1973).

Other species of terrestrial mammals are presumed to inhabit this region, but lack of research data has prevented confirmation of this report. (See Appendix D.)

Marine and marine-associated birds make up most of the avifauna in the area. Some 250,000 marine birds representing 17 species breed along the shore and on the many offshore islands and rocks (Fish

MARINE MAMMALS





SEA OTTER, SEAL, SEA LION (HABITAT)
SEA OTTER & HARBOR SEAL
HARBOR SEAL ONLY
HARBOR SEAL (HIGH DENSITY)
S.L. SEA LION CONCENTRATIONS
PROPOSAL BOUNDARY
AREA OF ECOLOGICAL CONCERN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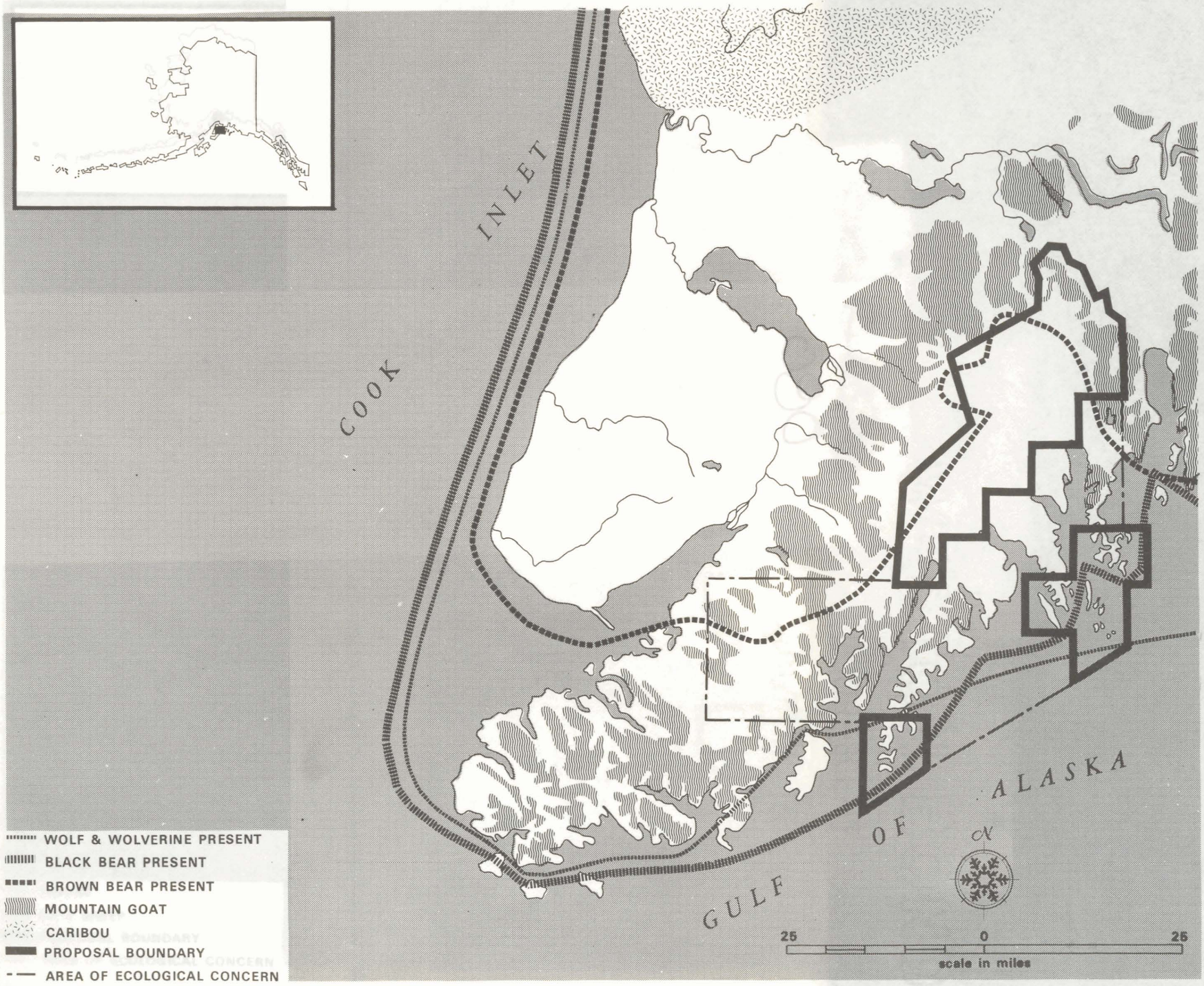
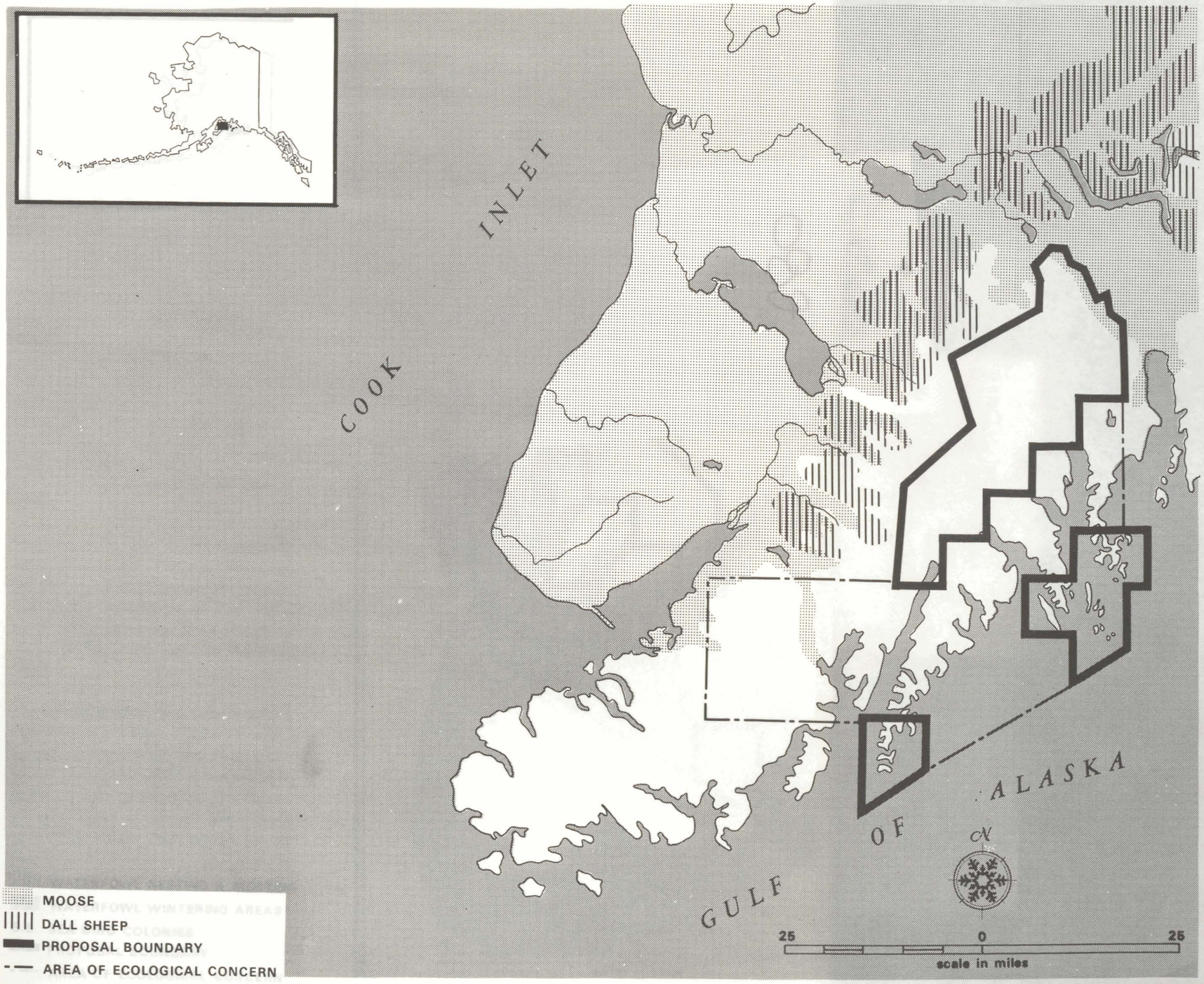
25
scale in miles

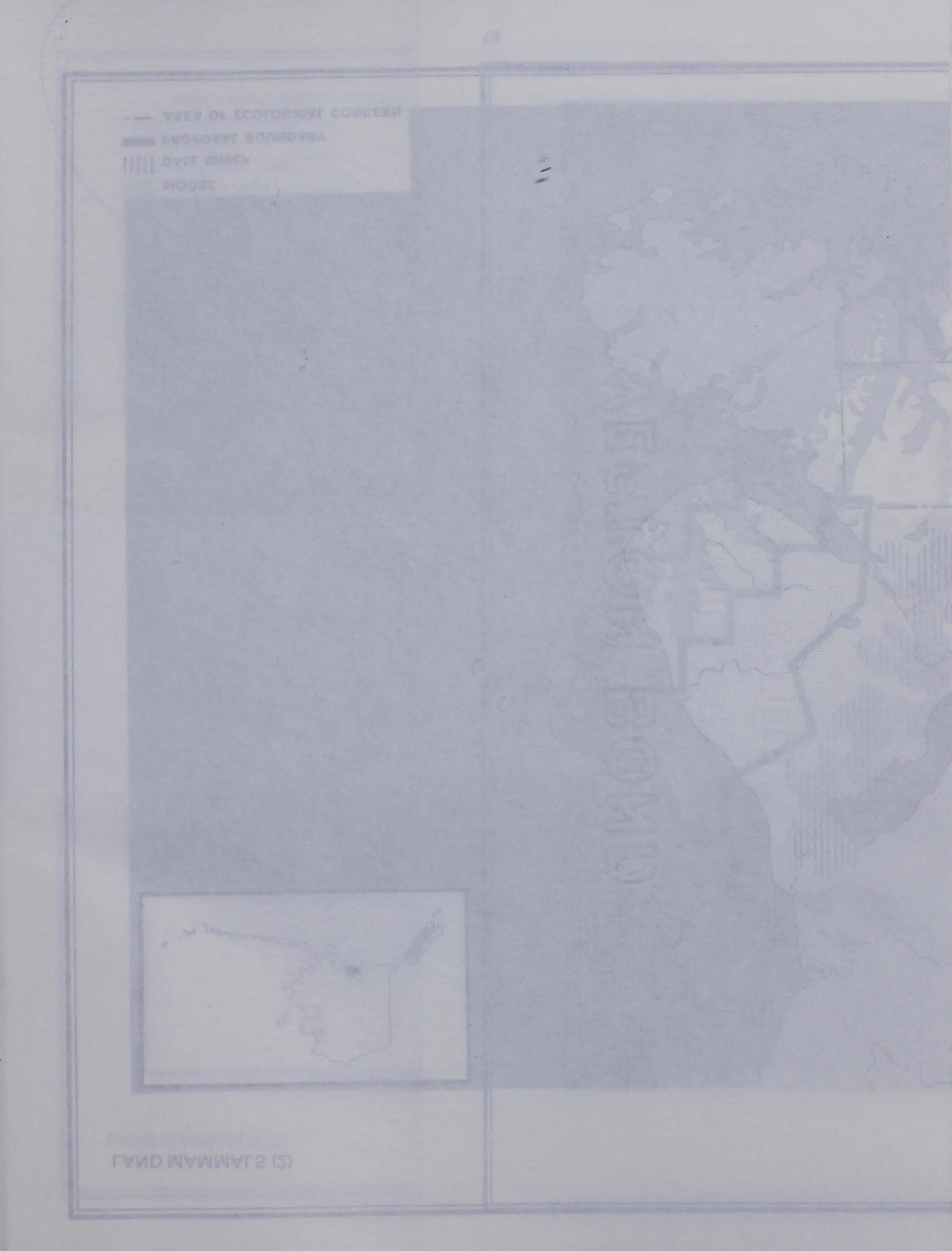
LAND MAMMALS (2)

LAND MAMMALS (1)

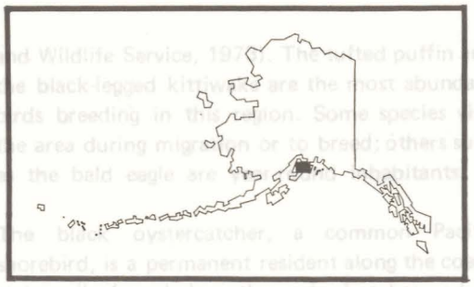


LAND MAMMALS (2)





BIRDLIFE



WATERFOWL NESTING & MOLTING AREAS
WATERFOWL WINTERING AREAS
S.B. SEA BIRD COLONIES
PROPOSAL BOUNDARY
AREA OF ECOLOGICAL CONCERN


ALASKA
GULF
25 0 25
scale in miles

and Wildlife Service, 1973). The tufted puffin and the black-legged kittiwake are the most abundant birds breeding in this region. Some species visit the area during migration or to breed; others such as the bald eagle are year-round inhabitants.

The black oystercatcher, a common Pacific shorebird, is a permanent resident along the coast. It is easily found along the rocky beaches and on the many offshore islands. This surf-bird breeds and winters in totally different environments; it breeds in the high mountainous area of interior Alaska and winters in the intertidal zone along the coast (Gabrielson, 1959).

The Kenai white-tailed ptarmigan is found in the mountainous regions just below the permanent snow and ice. It is the smallest of Alaska ptarmigan. The Valdez spruce grouse inhabits the forests along the coast and in the Resurrection River Valley. The ptarmigan and grouse are the only game birds found in the area. (Gabrielson, 1959)

The area is in the "Outer District of the Cook Inlet Commercial Fisheries Management Area" established by the Division of Commercial Fish of the Alaska Department of Fish and Game. The total salmon catch for the outer district in 1970 was 426,050, or one-eighth of the total Cook Inlet fishery.

The Outer District is predominately a pink and chum salmon fishery (Table II) with the largest harvest coming from the Port Dick area. The remainder of the catch comes primarily from the Nuka and Rocky Bay area. The Nuka and Rocky Bay areas also account for the majority of chum salmon harvested. Red salmon (or sockeye) are harvested in Aialik Bay.

The Outer District is not a major producer of herring, but it has been a producer in the past few years. (See Table III.) Bottom fish such as halibut are harvested in the waters of the district. The port of Seward ranks third in the nation as a port for halibut processing.

A small amount of kind crab has been harvested in the outer district annually since 1960. The 1970 production was 149,784 pounds. (See Table IV.) Tanner crab, Dungeness crab, and shrimp are also harvested from the waters of the outer district. (Alaska Department of Fish and Game, 1973, personal communication.) Further commercial fishing catch data can be found in the socioeconomic section of this chapter.

A thorough inventory of marine waters has not been completed, but there are some indications that the area is highly productive. It appears that 59 species of invertebrates may inhabit the waters as well as numerous commercial and noncommercial species of fin and shellfish. (See Appendix C for maps showing distribution of certain species.)

9. PLANTLIFE

Vegetation in the area is determined by the physiographic features and the climate. the abundant precipitation along the south coast of the Kenai Peninsula is in part responsible for the dense vegetation along the coast. Sitka spruce is found in a narrow belt along the coast and white spruce grows in suitable places throughout the Resurrection River Valley. Hemlock is found on the south coast from the timberline fringe as far down as sea level and often forms pure stands of trees 18 to 24 inches in diameter. Mountain hemlock is common throughout the mountains while western hemlock occurs on the south coast only.

Above timberline, vegetation is restricted largely to alpine forms with densities determined primarily by precipitation and exposure. A dense

TABLE II

SALMON CATCH, BY SPECIES, *OUTER DISTRICT,* 1954-1970

Year	Kings	Sockeye	Cohos	Pinks	Chums	Total
1954	13	4,927	369	82,205	112,877	200,391
1955	7	701	277	557,997	40,877	599,869
1956	23	2,889	190	42,368	19,248	64,718
1957	13	2,982	110	149,197	138,171	290,473
1958	1	1,719	83	739,768	100,386	841,957
1959	3	10,365	109	68,875	65,675	145,027
1960	4	1,336	533	328,501	67,187	397,561
1961	2	12,595	444	105,447	40,204	158,692
1962	2	8,697	1,893	1,684,023	126,750	1,821,365
1963	6	1,974	369	21,462	116,923	140,734
1964	2	1,370	431	767,396	269,512	1,038,711
1965	0	1,965	7	21,816	22,443	46,231
1966	1	2,710	357	398,751	87,620	489,439
1967	2	2,165	56	259,951	37,533	299,707
1968	1	1,550	106	191,691	20,283	213,631
1969	0	92	11	51,533	5,400	57,036
1970	5	4,177	243	302,879	118,746	426,050
Total	85	62,214	5,588	5,773,860	1,389,845	7,231,592
17-Year Average	5	3,660	329	339,639	81,756	425,388
Per cent	0.001	0.86	0.08	79.84	19.22	100.0

Source: Alaska Department of Fish and Game, Division of Commercial Fisheries

TABLE III

COOK INLET HERRING CATCHES, BY DISTRICT, IN POUNDS, 1969 - 1970

Year	District	Pounds	Landings	Vessels
1969	Southern	1,103,041	41	5
	Outer*	76,000	1	1
	Eastern	1,515,920	32	7
Total		2,694,961	74	13
1970	Southern	5,417,385	104	11
	Eastern	4,200,550	81	11
Total		9,617,935	185	22

*Outer District is within study area.

Source: Alaska Department of Fish and Game, Division of Commercial Fisheries/

TABLE IV

Cook Inlet king crab catch in pounds, by district, 1951-1970

Year	Kachemak	Kamishak	Outer	Eastern	Total
1951	6,619				6,619
1952	2,900				2,900
1953	1,359,854				1,359,854
1954	1,275,852				1,275,852
1955	1,915,821				1,915,821
1956	2,129,035				2,129,035
1957	620,858				620,858
1958	752,990				752,990
1959	2,191,437				2,191,437
1960	4,219,776		67,656		4,287,432
1961	2,988,880	1,205,679	61,837		4,256,396
1962	1,968,980	4,305,444	577,197		6,851,621
1963	2,667,279	5,538,349	175,535		8,381,163
1964	1,760,660	4,967,824	43,908		6,772,392
1965	1,813,135	963,412			2,776,547
1966	1,887,948	1,974,559	37,656		3,900,163
1967	1,286,789	1,821,269	16,033	418	3,124,509
1968	1,004,163	2,965,658	39,112		4,008,933
1969	1,303,655	1,422,587	130,928		2,857,170
1970	1,495,759	2,237,259	149,784		3,882,802

Source: Alaska Department of Fish and Game, Division of Commercial Fisheries

alder belt usually occurs for several hundred feet above timberline, with finger stands extending well down into the timber where light and moisture conditions are suitable.

Between timberline and the snowfields, plant succession is typically alpine, with trees and other lower altitude plants occurring only around the perimeter of the area and in the few valleys that are below timberline. The alpine communities are influenced by slope, exposure, altitude, drainage, and underlying soil type, but they show pronounced similarities throughout the area.

Dry conditions, such as exist on the high ridges and mountain tops, determine the plant communities of these areas. Although precipitation is heavy in these upper reaches, the thin soil mantle, which allows rapid drainage, and the drying effects of continual winds combine to produce alpine heath communities. Plants are therefore low-growing, perennial forms adapted to resist desiccation.

On the driest areas, such as talus slopes and rock screes, such plants as arctic willow, arctic wormwood, and low-growing forms of grasses and sedges grow individually in the deeper soil pockets with intervening areas occupied by prostrate forms such as moss pin, diapensia, and several lichens. As the soil moisture increases, the density of the upright forms becomes greater, crowding out the prostrate forms.

Saxifrages, eight-petaled dryad, black oxytrope, grape fern, and several rushes grow as scattered constitutents of these dry areas. Plant communities of high, rock-outcrop areas, where soil and water are confined to a few crevices among the rocks, are made up of Hepburn sedge, moss pink, and several forms of cinquefoil, and other dwarf xerophilous forms.

Alpine meadows or "herbmats" occur in sites where well-drained soils are fed by water from snowdrifts, cirque glaciers or from water stored in the thick mantle of well-weathered soils. Vegetation is lush with grasses and sedges occupying most of the ground surface. Arctic wormwood also does well in these sites. Luetkea, Ross avens, and several forms of lousewort are usually restricted to moist alpine meadows.

On slopes at the upper fringe of the alders, where drainage is good, plant forms are typically alpine, but woody shrubs such as bog blueberry, shrubby cinquefoil, and creeping juniper become important components of the plant assemblages. Common and alpine bearberry, crowberry, and Alaska heather form dense mats that occupy a large percentage of the ground surface.

The alder belt extends from approximately 2,000 feet elevation down to the upper limits of timber and varies greatly in altitudinal width, according to edaphic and local climatic conditions. In some sites on north slopes the alder belt extends from near sea level to elevations of over 2,000 feet, while in other areas, where soil conditions permit, conifers occupy the entire zone below timberline.

The alder belt in most areas is an almost pure stand of Alaska alder with devil's club, skunk cabbage, and several forms of Athyrium making up the understory. Where the soil mantle is deeper and better drained, nearly pure stands of blue-joint reed-grass interdigitate with the alder. Scattered throughout the tall grass are common fireweed and Martens sedge.

Rock-outcrop areas among the alders and timber cause breaks in the canopy and permit the growth of shade-intolerant shrubs such as buffalo berry, serviceberry, red-berried alder, red currant, highbush cranberry, and western mountain ash.

The forest plant communities north of the area are mostly pure stands of white or Sitka spruce

Figure 13. In forested bays along the Gulf of Alaska, spruce-hemlock forests begin at tidewater and extend to 400-600 feet above sea level.

with mountain hemlock occurring in a dwarfed condition in the subalpine areas. The ground cover beneath the climax conifer stands varies considerably in density according to moisture and light conditions. Where moisture is limited and crown closure is complete, the stands are relatively parklike. Bunchberry and mountain cranberry are scattered throughout this vegetative mat. Increased moisture and light bring about an increase in shrub forms such as devil's club and buckbrush. Alluvial fans, gravel bars, and other recently established sites at low elevations and with suitable drainage support subclimax stands of black cottonwood and Kenai birch.

Along the south coast, timber (mostly Sitka spruce) is scattered and occupies a limited area just above tidewaters. It grows well with most mature stands composed of 18- to 30-inch diameter trees. Alder occurs mostly in scattered clumps with bluejoint reed-grass occupying the openings and occurring for several hundred feet above the alder belt. Devils' club, salmonberry, red-berried elder, and skunk cabbage are much more common on the lower slopes of this region than in the less humid regions of the interior of the Kenai Peninsula. Vegetation in general is more lush. Deformation caused by wind is evident in most exposed areas, especially on the offshore islands (Klein, 1953, Hjeljord, 1971).

Merchantable timber, except for stands in the Resurrection River Valley, seems to be confined to areas along the south coast. Further study is needed to determine the feasibility of commercial harvesting of coastal timber. The relatively small volume of timber available and the inaccessibility of its location would seem to be major detractions from its merchantable value. Cost benefit studies will also be needed for the Resurrection River Valley timber stands to determine possible detriment to recreational and scenic resources.

The intertidal zone of Alaska is incompletely known, especially within the monument area. The following information on marine flora may be described as indicating that which probably exists in the region.

There are usually three distinct zones on all shores in which the substrate is stable in the presence of wave action. These zones succeed each other vertically. The lowest zone is defined by eelgrass beds, where the substrate is mud or sand, or by a mixture of large laminarian algae, where a rocky substrate occurs. This zone is continuous subtidally and extends up to between mean low water and approximately 1.5 feet above that level.

The middle zone is usually dominated by the alga Fucus distichus. The tidal limits of this zone vary depending on aspect and wave action. On protected shores the upper limit is usually near mean tide level, whereas on exposed rock faces it approaches mean high tide.

The highest zone is usually devoid of large algae and is dominated by one or more of the barnacles [*balanus cariosus, Balanus glandula, Chthamolus dalli*]. *Balanua cariosus* is also a common dominant in the *Fucus* zone.

The influx of fresh water is assumed to have a great effect on the distribution and abundance of organisms.

Kelp is abundant in relatively shallow waters which have a mud or sand substrate and which remain subtidal (Nybakken, 1969).

10. SOILS

(The information on soils in this section was taken from the JFSLUPC "Resources Inventory", January 1974, revised May 1974)

The information and soils descriptions available for the proposal area and the south coast region

of the Kenai Peninsula are "primarily an extrapolation from a literature data base which is sometimes incomplete. Accordingly, in certain instances, additional primary research may be required to"...vertify this soils information. (JFSLUPC, 1974.) Further such research would be carried out during the ongoing planning process for the monument and would precede specific proposals for construction of visitor use facilities or similar development.

In the general region of the proposal, the dominant soils of forested uplands are shallow, gravelly and acidic, with a high content of organic matter. These are indicated as zone 1 on the Soils map and often occur in association with organic fibrous peat soils. The principal use of this soil is normally for production of commercial timber, although there has been no commercial timber harvesting in the proposal area (and the small size of stands along the coast in the monument and AEC would seem to limit their commercial production). On these soils the limitations for use in timber production, road construction, and site development are moderate. Limitations on potential agricultural crop production would be severe. The potential for erosion is moderate on steep slopes. (JFSLUPC, 1974)

Within the boundaries of the proposed monument and AEC most of the land area is barren rock or ice, shown on the Soils map as zone 2. Approximately 90 percent of the proposal lands within this zone are primarily unvegetated snowfields or rock promontories. However, the zone also contains limited areas (notably the upper Resurrection River Valley) with very gravelly, well-drained and poorly drained soils of types similar to those found in the adjacent zone 1.

The proposal lands which are indicated on the Soils map as being in zone 1 are composed primarily of mountain slopes along the coast, offshore islands, and some of the small river valleys. Approximately 30 percent of the proposal lands in this zone have very gravelly and stony loam or silt loam, which is strongly acidic and occurs on portions of mountain foot slopes and moraine hills not affected by seepage. Vegetation on this well-drained soil is usually Sitka spruce and western hemlock below tree line and alpine forms above tree line.

Very gravelly and stony loam also occurs to some degree on lower slopes which are affected by seepage. This poorly-drained soil covers about 15 percent of the proposal lands in zone 1. Vegetation on this soil is also primarily Sitka spruce and western hemlock.

Approximately 20 percent of the proposal lands in zone 2 have soil made up of partially decomposed peat. This occurs on lower slopes affected by seepage. Vegetation is dominately sedges and mosses with some western hemlock. Another 15 percent of the proposal lands in this zone are mucky peat over compact, very gravelly loam. This soil also occurs on lower slopes affected by seepage, and is forested with Sitka spruce and hemlock.

The remaining 20 percent of the proposal lands in zone 1 are made up of various types of soils--from strongly acid, very gravelly and shallow soils on high steep slopes to compact glacial till in riverbeds.

B. THE EXISTING ENVIRONMENT - SOCIAL AND ECONOMIC

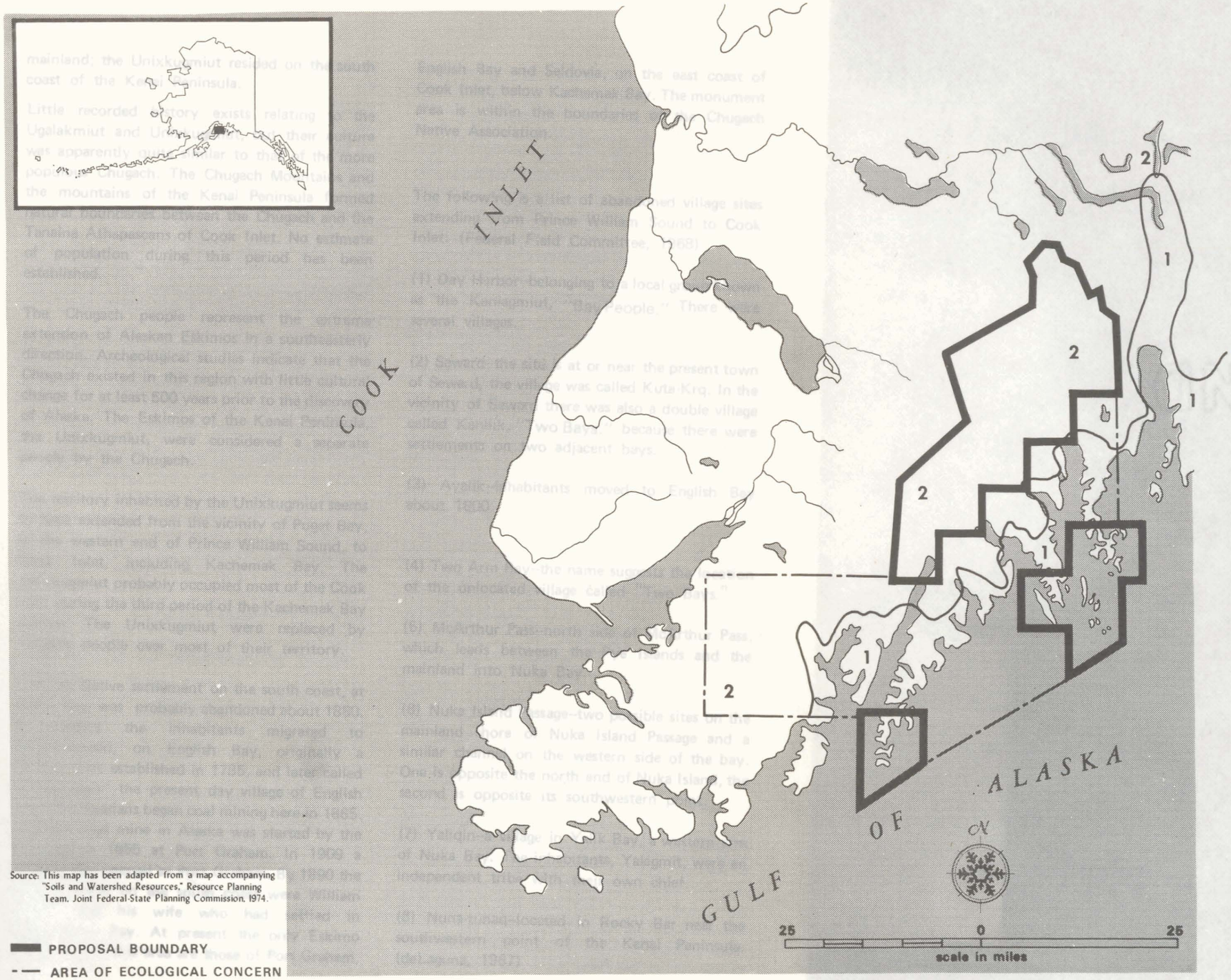
1. HISTORY AND ARCHEOLOGY

The aboriginal people who occupied this general area comprised both Eskimos and Indians. Of the Eskimos, the Chugachigmiut (now Chugach) lived in and adjacent to Prince William Sound; the Ugalakmiut occupied Kyak Island and the adjacent

SOILS MAP LEGEND

1. Well drained, gravelly, strongly acid soils interspersed with poorly drained, partially decomposed peat. Predominantly steep slopes.

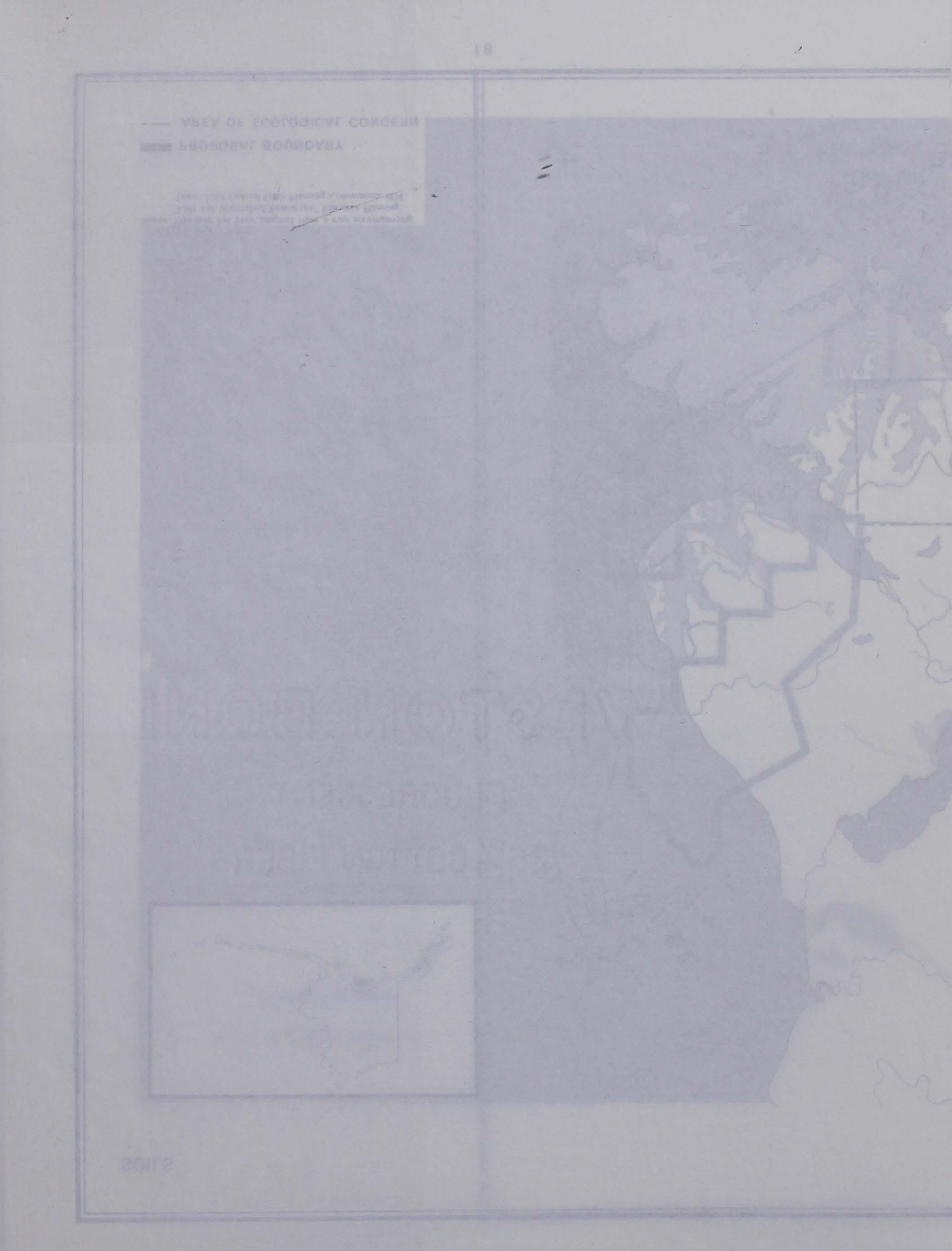
2. Predominantly rock or ice-covered land. Steep slopes.



Source: This map has been adapted from a map accompanying "Soils and Watershed Resources," Resource Planning Team, Joint Federal-State Planning Commission, 1974.

PROPOSAL BOUNDARY

AREA OF ECOLOGICAL CONCERN



mainland; the Unixkugmiut resided on the south coast of the Kenai Peninsula.

Little recorded history exists relating to the Ugalakmiut and Unixkugmiut, but their culture was apparently quite similar to that of the more populous Chugach. The Chugach Mountains and the mountains of the Kenai Peninsula formed natural boundaries between the Chugach and the Tanaina Athapascans of Cook Inlet. No estimate of population during this period has been established.

The Chugach people represent the extreme extension of Alaskan Eskimos in a southeasterly direction. Archeological studies indicate that the Chugach existed in this region with little cultural change for at least 500 years prior to the discovery of Alaska. The Eskimos of the Kenai Peninsula, the Unixkugmiut, were considered a separate people by the Chugach.

The territory inhabited by the Unixkugmiut seems to have extended from the vicinity of Puget Bay, at the western end of Prince William Sound, to Cook Inlet, including Kachemak Bay. The Unixkugmiut probably occupied most of the Cook Inlet during the third period of the Kachemak Bay culture. The Unixkugmiut were replaced by Tangena people over most of their territory.

The last Native settlement on the south coast, at Aialik Bay, was probably abandoned about 1880. It appears the inhabitants migrated to Alexandrovski, on English Bay, originally a Russian port established in 1785, and later called "Odinochka" the present day village of English Bay. The Russians began coal mining here in 1865. The first coal mine in Alaska was started by the Russians in 1855 at Port Graham. In 1909 a cannery was opened at Port Graham. By 1890 the only residents on the south coast were William Lowell and his wife who had settled in Resurrection Bay. At present the only Eskimo settlements in this area are those of Port Graham, English Bay and Seldovia, on the east coast of Cook Inlet, below Kachemak Bay. The monument area is within the boundaries of the Chugach Native Association.

The following is a list of abandoned village sites extending from Prince William Sound to Cook Inlet: (Federal Field Committee, 1968)

(1) Day Harbor--belonging to a local group known as the Kaniagmiut, "Bay People." There were several villages.

(2) Seward--the site is at or near the present town of Seward, the village was called Kuta-Krq. In the vicinity of Seward there was also a double village called Kanilik, "Two Bays." because there were settlements on two adjacent bays.

(3) Ayalik--inhabitants moved to English Bay about 1800.

(4) Two Arm Bay--the name suggests the location of the unlocated village called "Two Bays."

(5) McArthur Pass--north side of McArthur Pass, which leads between the Pye Islands and the mainland into Nuka Bay.

(6) Nuka Island Passage--two possible sites on the mainland shore of Nuka Island Passage and a similar channel on the western side of the bay. One is opposite the north end of Nuka Island, the second is opposite its southwestern point.

(7) Yaliqin--a village in Yalik Bay, a western arm of Nuka Bay. The inhabitants, Yalegmit, were an independent tribe with their own chief.

(8) Nuna-tunaq--located in Rocky Bar near the southwestern point of the Kenai Peninsula. (deLaguna, 1967)

Sites 3 through 8 on this list may exist within the proposed monument and AEC. The undiscovered site of Baronov's Shipyard may also be within the proposed boundaries.

The cultural (historic, archeological, architectural) resources of the proposal area are imperfectly identified. To identify them more fully, studies will be initiated to locate and evaluate all cultural resources within the monument. At present, no properties now listed in the National Register of Historic Places will be affected by the proposed monument.

Recorded history of the area begins with the incursions of the early explorers and the Russian traders.

Captain Vitus Bering explored part of the coast of Alaska in 1741 and was the first known non-Native to see the Kenai Peninsula. Captain James Cook of the British Admiralty is credited with the non-Native discovery of Cook Inlet and Turnagain Arm in 1778. After Cook's visit in search of the elusive Northwest Passage, the area became the scene of bitter strife among rival fur companies seeking to exploit the natural resources of Russian America. The Russian-American Company won a monopoly over Alaska in 1799 but foreign competition persisted for decades.

Alexander Baranov, first manager of the Russian-American Company in Alaska, named Resurrection Bay in 1792, finding it a welcome refuge from Pacific storms.

In 1794 Baranov selected the sheltered bay for a shipyard site to be established probably near present-day Seward. The nearby timber was suitable for shipbuilding, and the rise and fall of the tides made ship launching possible. "Phoenix," the name chosen for the first vessel, was appropriate. Like the legendary bird after which it was named the boat literally rose from ashes, because tons of wood were burned to make charcoal for forging bolts and nails.

Baranov had Aleuts beachcomb Kodiak Island for salvage from wrecked ships. The shipbuilders had no tools except axes. Forest moss, mixed with hot pitch, was used for caulking; whale oil, thickened with red ochre from iron deposits, was used for paint.

A summer, a winter, another summer and winter went by while Baranov and his shipbuilder, James Shields, improvised and invented ways to build the 100-ton, 79-foot-long vessel--the first to be launched on the northwestern Pacific coast of North America. Two more were built in 1795. Shipbuilding was carried on later at Sitka until 1867, when Alaska was purchased by the United States.

The islands guarding Resurrection Bay hide its entrance. Long after other ports of coastal Alaska were settled, Resurrection Bay was left to itself. The Lowells of Boston, cited above as residents in 1890, are credited with being the first non-Native settlers on the site that was to become Seward.

The first official American mention of Resurrection Bay is found in an expedition report of Lt. W. R. Abercrombie, who explored Prince William Sound in the same year as Lowell's arrival. Even the prospectors streaming into the Hope and Sunrise areas just to the north bypassed the future port. They either portaged at the head of the sound at Whittier or sailed up Turnagain Arm.

In 1898, another official exploring party, attempting to find possible railway routes, came into the bay. This group found four or five houses built along the shore and reported that a railroad could be built from there to Sunrise, a busy gold-mining center on Turnagain Arm.

By 1902, John Ballaine of Seattle had organized

the Alaska Central Railroad, and selected a terminal at Seward. Surveys began in 1903, and construction started in 1904. Plagued by financial problems, the company went into receiver's hands about 1908, after having constructed 41 miles of roadway. On April 15, 1910, Alaska Central was taken over by the Alaska Northern Railway Company. In the next few years, the Alaska Northern, a single track, standard-gauge line, was extended to Turnagain Arm, for a total track length of 70.8 miles. This line was purchased by the U.S. Government in 1915, and eventually became part of the Alaska Railroad (Prince, 1964).

By 1923, Seward had a population of 1,500. During World War II, the town boomed. The volume of military freight handled here was said to be among the largest in the world. After the war came the doldrums, and a local business depression appeared to foreshadow Seward's economic extinction.

2. THE PEOPLE

The area of socioeconomic concern includes the community of Seward at the head of Resurrection Bay on the south side of the Kenai Peninsula, and the small villages of English Bay, Port Graham and Seldovia at the southern tip of the Kenai Peninsula, 30 to 40 miles west of the proposal boundaries.

Across Kachemak Bay from Seldovia is Homer at the terminus of a highway network serving the west coast communities of the Kenai Peninsula. Anchorage, about 128 miles north of the area, has a population of nearly 150,000 and is linked by highway, ferry, and railroad to Seward.

The present-day villages of English Bay and Port Graham, members of the Chugach Native Regional Corporation, claim lands in the vicinity of the proposal.

The several communities of the area represent a diverse population and patterns of social and economic life. The present-day towns of Seward (pop. 1,760), Homer (pop. 1.142), and to a certain extent, Seldovia (pop. 464) are urban in character with a predominatly non-Native population. The villages of Port Graham (pop. 132) and English Bay (pop. 69) remain predominantly Native places, with some people continuing to follow subsistence lifestyles. All communities of the area, however, rely heavily on the rich marine resources. Commercial fishing occupies most of the people, and its seasonal and cyclical nature influences community social and economic life.

Seward, a modern community oriented to the market economy of the State, served as an important link in the State's marine, highway and railroad transportation network prior to the 1964 earthquake. Nevertheless, its transportation links are still potentially important connections from Anchorage and places inland to the communities of southeast Alaska and the lower 48 States. The town stands as evidence of the determination and energies of its residents. The threat that it would become a ghost town following the boom of the war years was real but the people coaxed new businesses to the area, built up dock and harbor installations, and made public improvements. Seward became a bustling, thriving community and was chosen an "All-American City," the second smallest city ever so honored, in March 1964.

Then on March 27, Good Friday Earthquake struck. In a few hours, Seward was blackened by fires, battered by earth shocks and inundated by tidal waves. Some 95 percent of its industry was destroyed. Dun and Bradstreet estimated the loss as total.

In 1965, however, the city again won an All-American City award. It is experiencing a steady growth. In 1970 the census placed its

TABLE V

CURRENT POPULATION ESTIMATE AND NATIVE ENROLLMENT

Village	Native Enumeration July 1973	Non-Native Population U.S. Census 1970	Total Current Population Estimate	Percent Native	Native Enrollment[1] July 1973
English Bay	64	5	69	93	71
Port Graham	121	11	132	92	194
Homer	102	1,040	1,142	9	62
Seldovia	143	321	464	31	251
Seward[2]	385	1,375	1,760	22	362
Totals	815	2,752	3,567	23	940

[1] Native Alaskans must enroll at a particular village, not necessarily current place of residence, to receive benefits under the Alaska Native Claims Settlement Act. There has been some duplication of enrollment and enumeration which BIA will correct by December 1973. Enumeration figures indicate only Natives actually residing in the village at the time of enrollment.

[2] The 1970 Census of Population shows an additional 749 people in the Seward Census Division outside the city of Seward. Of these 46 were Native.

Sources: P. C. Lin. "Alaska's Population and School Enrollments," *Review of Business and Economic Conditions*, Dec. 1971. Vol. VIII, No. 5. Institute of Social, Economic and Government Research, University of Alaska.

Alaska Native Enrollment—Summary Listing, July 1973. Department of the Interior, Bureau of Indian Affairs, Anchorage.

population at 1,760 in the city limits, and an additional 749 people in the urban fringe. The Seward Comprehensive Plan gives a higher 1970 population figure (2,170) and a total area population of 3,000 (Sherwood, 1970a).

The Native population in July 1973 was 385 according to the Native enrollment under ANCSA. This figure is a considerable increase over the 1970 census of 212 and may represent some people who come to town for seasonal commercial fishing and other wage employment.

The Seward Comprehensive Plan has projected a 1975 city population of 2,260, and 3,300 for the trade area (Sherwood, 1970a).

Seward is a "home rule" city with a council-manager form of government. It is a part of the Kenai Peninsula Borough, and elects two Assembly members to serve on the Borough Assembly, and participates with the other communities of the Borough in areawide regional governing responsibilities. The Kenai Peninsula Borough has the powers of tax assessing and collecting, planning, zoning, and education. It has assumed a non-areawide function for a water service area - in Seldovia (Kenai Peninsula Borough, 1967).

The Kenai Peninsula Borough has its offices in Soldatna, north and west of Seward, on the western side of the peninsula. Seward, situated at the end of the Seward Highway and separated from the other population centers of the region by mountainous terrain, including the Harding Icefields and Kenai Mountains, has a distinct local economy. However, the town's participation in the borough allows it to feel the influence of development and growth in other parts of the region.

Seward's social and economic life reflects the effects that the climate has on most Alaskans. Winter weather is mild for the latitude. Heavy snowfalls may render road travel to the city difficult. Since much employment is seasonal, winter brings a reduction in population, and a slower tempo of life. The waters of Resurrection Bay do not freeze over in winter, so some shipping activity does continue. Local and State government functions continue--including the city schools and the state-operated adult vocational training school, the Seward Skill Center.

Summer brings an influx of people to take part in the commercial fisheries and timbering, and in the growing tourist industry. Travelers and tourists arrive by ferry and highway. Sport fishermen and outdoor recreational users from Anchorage, other parts of the State, and the lower 48 come to Seward to take advantage of the recreational and scenic values.

In a 1968 survey, the Comprehensive Planning Program for the Kenai Peninsula Borough identified some of the special characteristics of Seward area communities and their people, as follows:

(1) Marked interest in the preservation of open space to the end of preserving and developing hunting, fishing, and wilderness areas.

(2) An interest in privacy. Area residents are known for their hospitality to strangers, but there is a concern for preserving privacy and choice of location, in light of the rather sudden, recent economic boom.

(3) A sense of individuality, rational community action, and the democratic process.

(4) An evident interest in the history of the Kenai Peninsula region and the State of Alaska.

(5) An increasing awareness of the regional character of the planning area. The local

population clearly recognizes that whatever occurs on the Kenai Peninsula affects the development of the State's economy in other areas.

(6) Concern over transportation. An efficient transportation system integrated with the State transportation network is recognized as essential to the proper development of the area.

(7) Concern over community facilities, especially schools.

Despite its small size, Seward offers an array of community services. Within the city limits the borough government maintains a grade school and a high school. There are 2 hospitals, a dental clinic, 13 churches, a library, 2 parks, and a museum. A newspaper, the Seward-Phoenix Log, is published weekly. There is a variety of retail establishments, several restaurants, a bank, and approximately 94 hotel or motel rooms.

The city has several indoor and outdoor recreation facilities and numerous clubs and lodges. The Army and Air Force maintain recreational facilities for their Alaska personnel in the area. The area within the city limits is served by sewer and water lines. A study is underway to consider a sewage treatment plant. It has not been finalized and the study continues. (Department of Economic Development, State of Alaska) (Seward Chamber of Commerce)

Seward has a municipal airport suitable for light and medium aircraft. Charter air services are available throughout the year. Alaska Airlines has a franchise for regular air service but does not at present exercise this option.

The city maintains an excellent small boat harbor for pleasure craft and small commercial boats. Numerous recreational charter boats operate from this facility during the summer and fall. These facilities, especially the small boat harbor, provide the base for the recreation-tourism industry.

The people of Seward are well-educated with 12.1 median school years completed by residents 25 and over, comparable to the State median of 12.4. However, only 77.4 percent of youths 14-17 were in school in 1970, considerably less than the State average of 91 percent. (1970 Census of Population-General Social and Economic Characteristics, Alaska.)

In 1972-73 total enrollment in the city schools was 592. An additional number are enrolled at the Seward Skill Center, a vocational training school for Alaska Natives.

3. THE ECONOMY

The socioeconomic area is a part of the market economy of south central Alaska. The people share in the wage employment and cash income opportunities of the region.

Subsistence activities, once vital to the Native people, have diminished with growth of the market economy. The size of the subsistence harvests and the areas where they occur are not well known. At least some subsistence fishing for salmon, shellfish, and herring roe takes place in the coastal areas of the Barren, Pye, Granite and Chiswell Islands, and the Aialik Peninsula (Joint Federal-State Land Use Planning Commission for Alaska, JFSLUPCA).

The people of Port Graham and English Bay are probably involved in some hunting and fishing for subsistence in the areas closest to the villages. Hair seal and mountain goats are hunted in the Chiswell Islands and on the Aialik Peninsula (JFSLUPCA 1973). Some seal hunting may be done for sale of furs.

4. CASH INCOME AND WAGE EMPLOYMENT

Most of the residents participate in the cash and wage economy processes. Principal sources of cash income and employment are derived from the commercial fisheries, transportation, tourism, forestry, and government sectors. A small retail business and service sector at Seward provide additional income and employment. (See Table VI.) Though much local employment is seasonal, Seward is the center of economic activity on the south coast of the Kenai Peninsula. The market economy of the town is not very strong, but it is progressing steadily.

Commercial fishing must be considered as a mainstay of the community. At present more than a hundred fishing vessels work from the Seward area bringing in halibut, crabs of several species, as well as salmon, scallop and herring. The Port of Seward ranks third in the nation as a port for halibut processing. Commercial fishing also draws a substantial transient population and provides jobs and income for local residents. Seward's fishing boats ply the coastal fishery waters in the Outer District of the Cook Inlet Commercial Fisheries Management Area.

The principal species fished commercially are the sockeye (red), pink, and chum salmon. Some halibut, herring, king crab, king salmon and silver salmon also are harvested commercially. The Outer District fishery is only a small proportion of the total Cook Inlet commercial fishery.

Local residents in commercial fishing also participate in the fisheries of the other Cook Inlet management districts. Tables II, III, and IV show data on commercial catches. There are canneries at Port Graham, English Bay and two in Seward Seward's fish processing operation with a gross income of nearly $1 million in 1972 is the largest manufacturing industry in the area. The plants employ both local residents and outside workers in the processing operation. Others participate in the commercial fisheries as tender operators, laborers, and dock workers. A scallop processing company has located in Seward recently.

Also natural resource-based is the timber industry. A Seward mill, which processes lumber for export and local consumption, is the area's second largest industry. The mill produces about 8 million board feet per year; it has a 20 million-board-feet capacity. Kenai Lumber Company is one of the principal employers in Seward.

Commercial fish-processing and lumber-processing activities accounted for most of the area's manufacturing in 1971 and provided approximately 200 jobs at the peak of the season (Table VII).

Transportation has been a continuing sector of the local Seward economy. As noted above, the industry suffered serious reverses from the 1964 earthquake. Much of the marine traffic destined for transshipment to the Alaska Railroad is now routed to Whittier, to the north and east on Prince William Sound. Seward continues to serve as an important ferry terminal for intra-Alaska ferry routes. The Alaska Railroad is the principal employer in the public sector, Northern Stevedoring and Handling Co. in the private sector.

5. GOVERNMENT

Government services provide a steady source of employment and income. The city's elementary and high schools employ 39 people. The Seward Skill Center--a State adult vocational facility--employs 50 teachers and administrators (Alaska Educational Directory, 1972-73).

Government employment includes Alaska Railroad employees and State Division of Highways and other State agency workers. The U.S. Forest Service, Coast Guard, Customs Bureau and the

TABLE VI
SEWARD LABOR AREA BUSINESSES

	Number of Businesses		
	Seward	Moose Pass	Cooper Landing
Fisheries	2		
Contract Construction			
General Building	1		
Highway	1		
Plumbing, Heating	2		
Misc. Spec. Trade	1		
Manufacturing			
Sea Food Processing	2		
Sawmills and Planning Mill	1		
Printing	1		
Ship and Boat Bldg.	1		
Jewelry	1		
Transportation			
Trucking, Lcal & Lng. Dis.	1		
Services Incidental to	3		
Noncertific. Carriers	1		
Public Utilities	1		
Wholesale Trade	1		
Retail Trade			
Lumber, Other Bldg. Mat.	1		
Misc. Gen. Merchandise	3	1	
Grocery Stores	3		
New, Used Mtr. Veh. Dlrs.	1		
Gas Serv. Stations	2		
Misc. Air Marine Auto	1		
Clothing	2		
Eating, Drinking	10	1	2
Fuel, Ice Dealers	2		
Financial-Insurance			
Real Estate			
Insurance Agents & Brokers	1		
Subdividers & Devlprs.	1		
Services			
Hotels, Motels, etc.	1		
Trailer Parks & Camps	2		
Laundires, Cl., Dyeing	1		
Servc. to bldgs.	1		
Motion Picture Theaters	2		
Physicians, Surgeons, Office	1		
Hospitals	2		
Legal Services	1		

Source: *Alaska Industrial Directory of Employers, 1972-73.* State Department of Economic Development, Juneau

Also: Restaurant at Kenai Lake, and air taxi service at Kenai Lake

Postal Service maintain staffs at Seward. Local government accounts for additional salaried employment for a limited number of people, including a police force.

Some unemployment compensation and social security payments are made and a few residents receive income supplements under State assistance programs for the blind, aged and disabled. In recent years, aid to families with dependent children has increased in Seward. The average annual household income from State welfare payments, judging from October 1972, a month the State Division of Public Welfare considers to be typical, is about $1,319.

6. RETAIL TRADE AND SERVICES

A growing retail trade and service sector provides some steady, year-round employment and income to local residents, and to others who come into the area during the summer season to operate private retail businesses.

Employment in the trade and service sectors expands during the summer season, reflecting the influx of transient workers in commercial fishing and timbering, and the arrival of tourists and recreational users. Peak employment in the trade and service businesses of the Seward labor area accounted for some 260 jobs in July 1970. (See Table VII)

7. RECREATION AND TOURISM

The recreation-tourism industry is becoming increasingly important in Seward. People are attracted to the area for its scenic values, opportunities for boating, fishing, hunting and camping. Its accessibility, via the Seward Highway, from Anchorage and its proximity to other popular areas of the Kenai Peninsula make Seward a logical destination for travelers and recreation users.

Recreational use in the Resurrection River Valley is still light, however (JFSLUPCA, 1973). Many recreational opportunities remain to be developed and utilized, and the people of Seward have undertaken several recreational events designed to increase the tourism. The annual Silver (Coho) Salmon Derby draws sport anglers in mid-August. A July 4 foot-race up Mount Marathon attracts athletes and spectators.

Some pleasure boating takes place in the many coves and arms of Resurrection Bay. Small craft are limited by weather to the sheltered bays close to Seward. Large boats are required for boating in the unprotected waters along the fjords.

In 1972, 40,000 man-days were spent in recreational fishing in the Seward area. Boating and fishing provide business for servicing, fuel and supply shops. Seward's small boat harbor brings substantial revenue to the town. It is recognized as being one of the finest in the State with an ever increasing number of boats requesting moorage. An addition this summer will complete the harbor's expansion possibilities and studies are under way to locate a new area for future needs.

Department of Fish and Game records show that only 9 goat hunters hunted the area in 1973. The success ratio was good, however, as 4 goats were taken. Hunting of mountain goats also occurs along the northern edge of the study area, where a few moose may also be taken. Access for hunting is limited by the rugged terrain, weather conditions and general inaccessibility.

Several touring and climbing parties have successfully crossed the Harding Icefield, since the 1800's, using Seward as a staging area. A group of Seward businessmen inaugurated flights from Seward to the Harding Icefield in 1970 as a business venture. Between 200 and 300 people

TABLE VII

SEWARD AREA NONAGRICULTURAL EMPLOYMENT – 1971[1]

	Number of Employees											
	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
Total-Nonagricultural Industries	637	647	667	641	776	803	991	1,068	844	808	704	688
Insured by Law	375	380	400	361	506	476	631	692	587	587	429	429
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Contract Construction	*	*	*	7	11	20	16	15	21	25	24	19
Manufacturing	67	55	50	56	11	95	212	207	154	100	98	70
Transportation–Communications & Utilities	*	*	*	*	*	*	*	*	*	*	*	*
Trade	108	122	116	103	112	114	141	141	126	131	126	120
Finance-Insurance & Real Estate	11	10	9	*	*	*	*	*	*	*	*	*
Services	120	121	122	119	121	126	120	118	124	119	119	115
Federal Government	37	38	39	41	46	45	48	50	44	40	40	33
State & Local Government	249	252	251	256	317	276	347	363	248	250	250	242
Miscellaneous & Unclassified	*	*	*	*	*	*	*	*	*	*	*	*

[1] Significant excluded segments are self-employed persons, unpaid family help, domestic, and most persons engaged in agriculture (including commercial fishing).

* Not shown to avoid disclosure of data for individual firms.

Source: *Statistical Quarterly,* 1971. Alaska Department of Labor, Employment Security Division, Research and Analysis Section

took the trip. Some used the service to reach skiing or snowmobile areas; others to view the scenic vistas. The enterprise ended when the BLM served a trespass notice on the operator, who had begun and was conducting his operations during a period of time when the lands were withdrawn from public domain status by Public Land Order No. 4582. No application for a Special Land Use Permit had been filed prior to commencement of operations, nor was any filed after the trespass notice was served.

The Caines Head State Recreation Area is located to the east of the proposal area on Resurrection Bay. In addition, much of the Icefield area, as well as part of the Chugach Forest in the northeast of the proposal, has been proposed for inclusion in a Seward National Recreation Area (see Chapter I, Section C for a detailed description).

Seward's Army and Air Force recreational facilities are popular with Alaskan military personnel. Summer tourism benefits the town's

TABLE VIII

RESURRECTION BAY SALMON SPORT HARVEST, 1961-1972

Year	Silver Salmon	Pink Salmon	King Salmon	Total
1961	5,050	140	100	5,290
1962	14,480	1,310	190	15,980
1963	7,290	380	260	7,910
1964	2,970	840	130	3,940
1965	4,020	310	230	4,560
1966	9,590	1,700	240	11,530
1987	17,330	460	70	17,910
1968	22,550	1,870	380	24,810
1969	15,040	450	600	18,090
1970	14,870	3,750	860	19,280
1971	20,600	750	2,390	24,740
1972	15,240	1,480	1,640	18,340
Total	149,090	13,400	6,890	169,380
Mean	12,424	1.117	574	14.115
Percent	88.0	7.9	4.1	100.0

Source: Alaska Department of Fish and Game, Division of Sport Fish

TABLE IX

NUMBER OF TOURISTS ENTERING ALASKA

FORECAST

REVISED MARCH 1973

Year	Number of Visitors	Growth
1973	215,700	18%
1974	252,500 (236,000 actual)	17% (10%+)
1975	287,800	14%
1976	328,000	14%
1977	373,900	14%
1978	426,200	14%
1979	485,800	14%
1980	553,800	14%

The sharp increase of 1973 and 1974 are attributable to a sudden projected increase in the capability of the cruise ship market given the implementation of current plans.

This updated chart also illustrates the additional growth that will be attainable with the development of the Japanese market and a longer tourist season. A 14% annual increase is equal to the historical average growth for the previous eight years.

TABLE X

NUMBER OF TOURISTS ENTERING ALASKA

BY

MODE OF TRANSPORTATION

	Cruiseship	Ferry	Airline	Highway	TOTAL
1964	11,000	11,650	13,250	23,300	59,200
1965	11,700	14,400	15,100	28,400	69,600
1966	12,400	17,300	16,250	27,150	73,100
1967	13,200	18,950	20,600	33,950	86,700
1968	17,300	19,000	32,000	40,500	112,000
1969	20,000	19,500	26,400	37,000	99,700
1970	27,000	20,000	38,000	44,000	129,000
1971	27,000	22,000	50,500	53,500	153,000
1972	27,800	24,500	67,000	63,000	182,000
1973	38,000	25,000	81,000	71,000	215,700

Source: Alaska Travel Division, State Department of Economic Development. November, 1973.

TABLE XI

COMPARISON OF WAGES, 1964-1972

Industry	Total Wages (millions of dollars) 1964	1967	1970	1972	Change 1967-1972 Amount	Percent	Change corrected for inflation* 1967-1972 Amount	Percent
Contract Construction	66.0	95.2	107.0	153.4	58.2	+61.1%	122.4	+28.6%
Oil & Gas	8.5	24.2	45.0	34.6	10.4	+43.0%	27.6	+24.0%
Logging, Lumbering & Pulp	19.8	27.6	28.2	40.8	13.2	+47.8%	32.6	+18.1%
Tourism	6.6	10.9	15.5	22.9	12.0	+110.0%	+18.3	+67.9%
Metal & Other Mining	4.3	4.2	5.0	31.3	27.1	+645.2%	25.0	+595.2%

*The deflator for 1972 is 125.3, with 1967=100. ($125.30 in 1972 buys the same amount as $100 did in 1967) Federal Reserve Bulletin Vol. 60, No. 6, June 1974, p. A55

Source: Alaska Department of Labor, Employment Security Division Non-Agriculture Wage and Salary Employment and Earnings by Industry, Statistical Quarterlies, 1964, 1967, 1970, 1972 (Figures rounded) and Alaska Travel Division

eating and drinking establishments, and hotel, motel, trailer park, campground, harbor, boat supply, and air taxi businesses.

The recreational opportunities in the area, as yet mostly untapped, are varied. Along the Barren, Pye, Granite and Chiswell Islands, and the Aialik Peninsula, recreational opportunities include wilderness hiking and camping, wildlife observation, ocean fishing and some hunting (JFSLUPC, 1973). Access to Harding Icefield would provide good year-round opportunities for sightseeing, icefield study, snowshoeing, wilderness camping, cross-country skiing, and snowmobiling. Such access probably requires construction of an aerial tramway, and one to the Harding Icefield from Resurrection River has been proposed (JFSLUPC, 1973).

A report evaluating the recreational potential of the Harding Icefield for the Kenai Peninsula Borough suggested the feasibility of a tramway serving the Icefield from Exit Glacier, with road access to the base of the facility. The report cited the year-round opportunities for skiing (Nishkian).

8. MINING INDUSTRY

In the Kenai Peninsula region, mining has played a substantial role in the economic development of the area and appears to have the potential for significant future contributions to the regional economy. Within the lands covered by the proposed AEC, mining was undertaken at a modest level between 1920 and 1940. Current mining activity in the AEC has involved at least one capital investment of $230,000 and has created a gross return of $27,000 in gold. There is no known mining activity within the proposed monument itself.

Since exploration and assessment of economic mining potential has been insufficient to assess mineral values properly, it is difficult to predict how large a role mining could play in future economic development. Within the general region, it seems evident that mining and other mineral extraction will maintain a position as a major sector of the regional economy. Within the proposed monument itself, no significant activity has taken place and although future development could take place, it is difficult to say with present information how significant it could become. (See this chapter, section on "Economic Geology" for detailed description of mining potential.)

9. TRANSPORTATION AND COMMUNICATION

Seward's social and economic life has been closely tied to the development of transportation and communication in southcentral Alaska since the town was established as a railroad terminus in 1902 because of its ice-free port. Prior to the 1964 earthquake, the railroad was a principal factor in the local economy.

While the role of transportation as a source of employment and income has declined, the transportation network continues to influence the community's economic growth. Seward is connected to Anchorage via all-weather road, and to Kodiak and Valdez via the ferry system.

Although the Alaska Railroad no longer provides passenger service to Seward, freight service is continuing. Whittier is a major competitor for freight transshipped from ocean-going barge to rail, destined for Anchorage and other interior points. At present the Seward Dock hosts a few log ships a year shipping cants to Japan, and also perhaps two or three ships a year hauling scrap iron to Taiwan. When the Cook Inlet ice becomes a problem, a few barges may come into Seward for unloading rather than face the hazards of the ice in Cook Inlet.

The ferry system, or marine highway, operated by the State connects Seward with the ports of Kodiak, Homer, and Valdez. At present, there is no scheduled air service between Seward and Anchorage, although charter and air taxi service does reach the area, including locations within the proposal area. Year-round ferry service operates between Seward and Kodiak. Service to Valdez and Cordova is available. The ferries can accommodate 200 passengers and 54 automobiles. Seward is a port of call for Alaska Barge and Salvage, Foss Tug and Barge, Northland Marine, Standard Oil, and U.S. Army vessels.

Seward has direct communications with the rest of the State and with the lower 48 by telephone cable. There is a local radio station, and Anchorage television reception via a booster system.

Most transportation between Seward and other population centers of the Kenai Peninsula and the Anchorage area is by private vehicle over the Seward and Sterling Highways. The highways provide a major impetus for development of a tourist industry.

The Joint Federal-State Land Use Planning Commission was given responsibility under Section 17(b)(1) of the Alaska Native Claims Settlement Act to identify public easements (or transportation and utility corridors) within the lands selected by Native village and regional corporations.

The LUPC, in the process of developing statewide transportation system proposals, received from the Alaska Railroad and Alaska Department of Highways (ADH) proposals on surface transportation and utility corridors. The LUPC held public hearings in April 1974 at various locations throughout the State to present surface transportation and utility corridor proposals, and to obtain input on Native concerns regarding surface transportation. Proposed transportation corridors recommended to the JFSLUPC by the ADH are shown on the Regional Transportation map. They include a proposed road up the Resurrection River Valley which would parallel the northeastern boundary of the proposed monument. They also include surface transportation connections to English Bay, Port Graham, Seldovia and Halibut Cove on the southeasterly side of Kachemak Bay. Responsibility for identifying statewide needs for transportation and utility corridors has now been undertaken by the Bureau of Land Management.

C. PROBABLE FUTURE OF THIS ENVIRONMENT WITHOUT THE PROPOSAL

If this proposal is not enacted, the lands involved probably would remain in Federal status and would be managed under multiple use principles as a part of a larger land management unit. The nationally significant resources of the area probably would not be singled out for recognition as specific units of a national preservation system. Without such recognition, the developments called for in this proposal possibly would not occur, at least not as soon, and tourist visitation to the area would not increase as rapidly or as immediately. Part of the proposal could be placed in the Seward National Recreation Area, in which event similar visitation patterns would accrue to the area as those discussed under the NPS proposal.

It is also possible that the lands involved could be designated as part of the National Wilderness Preservation System. Such designation would preserve the present primitive nature of the area, and tourist visitation to the area, especially to the Icefield, would probably not increase as rapidly as it would under recreational development. Finally, the recreational potential of the area could be developed by private sources: either local governments, individuals, or possiblyNative groups who would become landowners in the area.

However, while it is true that similar development of recreational resources in the area could occur under private as well as Federal management, the Park Service maintains that there are potential differences in predictable development patterns which can be discussed at this time. These differences (essentially between potential NPS and non-NPS development) are primarily ones of degree.

First, one can surmise that essentially the same recreational development plan would be followed by most of the potential future managers of the area: local groups or governments, the State, the NPS, or other Federal agencies. Second, it is difficult to predict the differences in future visitation to the area if it were included in a national recreation area, a private development, the proposed monument, etc. However, based on experience at Mt. McKinley National Park and with parks and recreation areas in the lower 48 States, it can be speculated that visitation to other than a national park or monument would grow less rapidly. Thus visitation related impacts, both beneficial and detrimental, would occur to a lesser degree. An NRA, or other development, might receive less publicity in the lower 48 or within Alaska itself, than would a monument, and the resultant lower visitation would lessen the impacts of recreational development.

Some of the lands could be made available for non recreational private use and development. There are some minor timber resources which could be harvested, prospecting probably would occur and commercially productive mines could be established. Most of these however, would probably be on lands in the AEC which would likely be open to mineral development even if the monument were established; provided that the lands were privately owned.

Homesteading or summer cabins could be developed along the coast, and hunting would be allowed. Lands along the edge of this proposal and in the AEC hold the most promise for private development. Private ownership of such lands could restrict public use of backcountry areas including the Icefield if public access through private lands were not allowed. Total restriction of access, however, is highly unlikely.

It is possible that the increased emphasis on cultural (archeologic, Native lifestyles, historic) preservation and interpretation which would occur under NPS management of the area would not occur with multiple use management. Yet private sources could undertake studies of cultural resources.

The islands and peninsula tips suggested for joint NPS-FWS management could still become part of the National Wildlife Refuge System. And similar protection of wildlife resources on these lands would occur in that event.

A. IMPACT ON WILDLIFE AND FISHERIES

The primary land mammal of the area is the mountain goat. Exact populations are not known, but some herds apparently occur throughout much of the south coast of the Kenai Peninsula. Black bear are relatively abundant in the area. Dall sheep occur in the proposal near the icefield and to the west of the boundary, in the Kenai Moose Range. (See Land Mammals (1) map.) Some brown bear, moose, and wolverine also occur in the proposal area and wolves may be present.

Marine mammals, including approximately 4,000 Steller's sea lions and 1,500 sea otters, use the proposal area. The sea otter was once hunted to the brink of extinction in this region. There are also uncounted numbers of harbor seals, fur seals and porpoises, and at least 13 species of whale.

An estimated 250,000 sea birds of 17 different species nest on the shoreline cliffs. Salmon and shellfish are abundant throughout the coastal waters. Harvesting of wildlife resources appears limited to fishing and some mountain goat hunting. Use of marine mammals for subsistence within the proposed monument boundaries is extremely light, if any.

The impact of this proposal on wildlife will be light. Release of hunting pressure on mountain goats probably will have little effect on their population because only a small number are taken annually from the proposal area. A slight increase in pressure on mountain goat populations outside the proposed monument might occur but, in view of the light volume of hunting in the general area, this effect is not expected to cause substantial changes in populations. (See Chapter II-A-8, Wildlife, for a further discussion of hunting.)

Localized disruption of wildlife use patterns could occur where intensive visitor use is planned. However in view of the relatively small area presently planned for recreational development, the small number of visitors (about 1,500) expected to use the backcountry areas of the monument, and the reclusive habits of most of the land mammals in the area, such disruption of wildlife use patterns is not expected to be significant. This assessment of visitor and wildlife related impacts would also apply to marine mammals, as most visitor use of the coast would be conducted in specific areas and in most cases would involve only the use of tour boats.

The impact of the proposal on marine mammals also will be light, at least in the short run, because present use is very light. Thus, the status quo is likely to be preserved, except for some possible increase in subsistence use. However, should man again threaten these populations, the hauling grounds in the monument will become more important to the regional survival of the species. (The Marine Mammals Protection Act of 1972 makes this last eventuality highly unlikely.)

Impacts on local bird populations also will be light because significant man-caused pressures are not known to exist on these rookeries. Nevertheless, the proposal will have the effect of protecting large bird populations from any potential future harm by man.

Impacts on the fishery of the coastal waters will be very limited. No protection will be afforded to these resources under the present proposal. Their uses are controlled by State and Federal laws and regulations. Some increase in sport fishing may result in increased pressure on the salmon fishery, but this effect should be negligible in comparison to the present annual commercial and sport catch in the area. In addition, increased boat traffic, with possible attendant impacts on water quality, could negatively impact the commercial fishery of the area. However the volume of increased traffic and reductions of water quality

are not expected to reach proportions where they would significantly impair the commercial fisheries of the Outer District of the Cook Inlet Commercial Fisheries Management Area.

B. IMPACT ON VEGETATION

Because of the icefield and the precipitious terrain, most of the land in the monument and AEC is barren of vegetation. Plantlife varies from a narrow band of spruce along the coast and white spruce in the Resurrection River Valley, to Alpine tundra on the tops of some of the ridges. Of all the vegetative cover in the study area, only slightly more than one-half of 1 percent, or 5,000 acres, is suitable for timber harvesting, though such harvest is not envisioned by present land managing agencies on the peninsula.

The NPS will prohibit the cutting of timber and other uses which may lead to massive destruction of plantlife where it occurs in the monument.

The impact of this proposal, except for preserving some small acreage of timber on monument lands, will be localized. Severe disruption of plantlife would occur where park facilities are constructed such as along the road to Exit Glacier, which will be improved and near the transportation terminus at the base of the glacier. There will also be a minimal degree of disruption along the proposed icefield access route.

Plantlife also will be affected along marked trails, around campsites (most of which will be outside the monument), and around docking or overnight facilities constructed along the shore. Damage to vegetation will be limited to that necessary for construction and visitor use. The Natives possibly will use local timber as building material and as fuel for tourist accommodations which they may construct on their own lands.

Though increased visitation generally increases the danger of man-caused fires, the high precipitation in this monument reduces that risk. Naturally caused fires will be allowed to burn unless they endanger human life or property, but will be carefully watched to assure they do not endanger developments or human life.

C. IMPACT ON THE VISUAL INTEGRITY OF THE LANDSCAPE

The landscape has several major features: the icefield, mountains, forests, cliffs, and a rocky shoreline. The impact of this proposal on these landscape features would, as in the case of vegetation, be localized. Major development could disrupt some landscape features. For example, the tramway considered for ascent up the side of Exit Glacier undoubtedly will affect landscape features even if the route does not interrupt the skyline. The transportation terminus and road at the base of the glacier would also alter the local landscape significantly as would construction of utility lines.

Potential impacts of a tramway are:concentration of people at terminals, construction scars, esthetic intrusions on primitive scenery, expansion of human use into a relatively undisturbed area, and conflicts with wilderness values. New dock and fuel storage facilities along the coast will have the same effect. Recreational use of the icefield will create visual and audible blight as well as waste disposal problems, thus affecting the esthetic integrity of the area.

In general, however, most of the monument's landscape and esthetic qualities will be protected from road scars, powerlines, facility development, and other man-caused disturbances. Overall, the impact will be preservation of the majority of the existing landscape.

D. IMPACT ON WATER QUALITY

The water quality in the immediate area is excellent, both of fresh and salt water. There are

no known, significant sources of pollution other than the fish processing plant and timber mill in Seward and these do not create substantial water pollution problems at present. The city of Seward has a central sewage system. It is understood to be inadequate for any possible increases in population, but can be improved and enlarged. In addition, a study is underway to consider a sewage treatment plant. Probable growth in recreation and other facilities outside the city limits and away from the sewage system could lead to some localized water pollution from human wastes in areas of heaviest development, if these were not subject to local or regional governmental controls.

The adverse impacts of this proposal on water quality will result mainly from increased boat traffic. Dock or marina construction could affect water quality. Storage and handling of petroleum products would cause small spills that would have an impact on water quality over a short period of time. Tidal variance in water level will expose bottom habitat to the effects of fuel spillage, but the tides also will mitigate this impact by flushing the contaminated area with unpolluted water. Tour boats also could increase the chance of fuel spillage.

Other adverse impacts on water quality may occur from improper human waste disposal at campgrounds, at the icefield, or in Seward should the sewage system fail to meet increased needs.

All of these impacts, however, would be local in nature and probably short in duration. It is not expected that the levels and types of activities outlined by the proposal will have a significant overall impact on the water quality of the region.

Prohibition of timber harvest, primarily in the northeast corner of the monument along the Resurrection River Valley, could have an important beneficial impact on water quality and possible fish spawning grounds in the river. This impact would be felt through the prevention of sedimentation which could be caused by increased runoff water in the area of lumbering operations.

1. HYDROELECTRIC POWER POTENTIAL

The monument area contains no potential hydroelectric projects, but just outside the area to the northwest at Bradley Lake, there is a powersite proposal. Plans for development at Bradley Lake call for some structures to be placed on lands proposed for inclusion in the Area of Ecological Concern (a diversion channel and a diversion dam).

If those lands in the Area of Ecological Concern which involve facilities for the Bradley Lake Project were not selected by the Natives and if they were then included in the monument, then this could preclude the development of the proposed diversion channel and dam inside the monument boundaries. If lands in the AEC which are planned for transmission line construction were included in the monument, then construction of the lines would require special justification and a study of alternatives under section 1653 (F) of the Department of Transportation Act of 1966. Transmission lines could be developed through the monument only if no feasible alternative was available. In the event that there was no alternative, then environmental protection stipulations on construction techniques and other mitigating measures would be required.

If an area within the AEC was designated for construction of project-related facilities, if it was not selected by the Natives under their entitlement, and if it was then included in the monument by the Secretary of the Interior; the possible preclusion, alteration or relocation of these facilities could have a significant impact on the power project. This could result in a reduction of power potential. Such reduction could affect the overall project feasibility.

However, the Park Service considers that there is only slight likelihood of all the above parameters becoming reality. If the lands involved with the power project were not included in the monument, then the impact on hydroelectric potential development would be negligible.

E. IMPACT ON AIR QUALITY

Air quality in the immediate area is excellent. The only known sources of pollution are residences, automobile traffic, the ferry system, and the timber mill. Their effects are insignificant.

Establishment of the monument would increase motor vehicle exhaust pollution since the number of vehicles in the area would increase. Electric generators will be needed to run proposed developments on the coast, and, if steam-powered by oil or coal, could cause some localized air pollution. However, the overall impact on air quality from these minor sources would be considered insignificant.

F. IMPACTS ON SOCIAL AND ECONOMIC CHARACTERISTICS

Land and resource uses in the proposal area consist primarily of sport hunting, fishing and boating. Other recreational uses include limited hiking, camping and rock climbing, sightseeing, skiing and snowmobiling. Commercial and recreational fishing, as well as subsistence activities are confined to the coastal lands and waters and are mostly on lands in the AEC. The southern coastal waters of the proposed monument are in the Outer District of the Cook Inlet Commercial Fisheries Management Area, and commercial fishing for salmon and shellfish is carried out there in season. No other commercial resource harvests presently occur on proposed monument lands and waters, although some mineral exploration and extraction has occurred in the past and recent mining activity has occurred in the AEC.

1. ON LAND OWNERSHIP PATTERNS

Establishment of the proposed monument would place approximately 305,000 acres of lands and waters under Federal ownership and with the exception of Native land selections under the provisions of ANCSA, would thus prevent all future private acquisition of lands within monument and AEC boundaries. Existing private lands within the Area of Ecological Concern are limited to 9 active mining claim groups and one mineral permit, one private application, and two Native Allotment applications one of which has gone to patent. Within the proposed monument itself, only one private application exists. (See Real Estate and Claims map.) The patented lands, and any approved applications would continue as private inholdings within the monument or AEC. The impact of monument establishment would be to relocate any future demand for private acquisition of lands (for summer homesites, or other purposes) to any State or privately owned lands adjacent to the monument which might be available for lease or purchase.

Lands adjacent to and in the vicinity of the monument with good recreational potentials might experience some increase in market value as a result of monument establishment. Present private landowners in the adjacent areas might experience some market pressures to sell property. Promising homesite locations occur on lands withdrawn for Native deficiency selections within the Area of Ecological Concern. It is likely that actual Native selections would include such sites, and these new landowners might be subject to similar market pressures.

On a regional basis, designation of the monument would contribute significantly to the impact of

federally reserved lands on the land ownership patterns of the Kenai Peninsula. Although the lands proposed for inclusion in the monument are presently federally owned, establishment of the proposal would add a significant amount of the peninsula to lands which are under "four systems" management. The monument, combined with the existing Kenai Moose Range and the proposed additions to the existing Chugach National Forest would place about two thirds of the peninsula in specific Federal management categories. This would have a significant impact on the options for private land ownership in the Kenai Peninsula region.

2. ON WILDERNESS LANDS

Most of the proposal area has a primitive untouched character, and thus may be considered wilderness lands, or at least lands of very light human use.

The impact of this proposal on wilderness lands would be to maintain the status quo. The present environment would be protected from man-induced change, and thus would be kept in its natural state. Although the importance of this protective impact is hard to gauge, it is possible that these natural areas would otherwise be spoiled through future uncontrolled, commercially oriented development. On the other hand, the area might not be disturbed for a very long time. Thus the importance of this impact lies in the way in which it would affect the uncertain nature of the area's future by assuring additional safeguards.

3. ON SUBSISTENCE USES

The extent to which the lands and waters proposed for inclusion in the Harding Icefield-Kenai Fjords National Monument are used for subsistence purposes has not been determined. It is, however, possible that residents of the villages of Port Graham and English Bay and perhaps, Seward, may hunt in the proposal area, and may use fisheries resources for subsistence. The Marine Mammal Protection Act of 1972 limits marine mammal harvests to Natives only when taken for subsistence purposes. Few, if any, marine mammals are currently being harvested in the area under these provisions.

Establishment of the proposed monument would permit subsistence uses of resources to continue throughout the area, both in the monument and on any lands added to the monument from the Area of Ecological Concern. Since the monument will be managed to preserve the natural functioning systems, and wildlife and plant resources will be managed with consideration of pertinent State and Federal fish and game laws including the Marine Mammal Protection Act, subsistence activities may be regulated accordingly. This would have the effect of assuring preservation of resources utilized for subsistence purposes. Since current and anticipated subsistence harvests in the proposed monument are thought to be light, the impact of such provisions on subsistence uses will be negligible, both in terms of any adverse impacts from constraints on users and any beneficial impact from protection of significant portions of subsistence resources for future subsistence users.

Increases in sightseeing, pleasure boating or other visitor activities in the monument area are not expected to interfere with subsistence activities. However, if such conflicts did arise in the future, visitor uses will be prohibited or periodically curtailed where and when necessary, to reduce such conflicts.

4. ON SPORT HUNTING, FISHING, AND OTHER RECREATIONAL USES

Establishment of the proposed monument would

encourage a variety of recreational activities and limit or preclude recreational pursuits considered incompatible with monument objectives. Thus, sport hunting would be prohibited within the monument boundaries. Current levels of sport hunting activity in the proposal area are low. Nine hunters used the area in 1973, primarily seeking mountain goat. According to the Alaska Department of Fish and Game, 4 goats were taken in the proposal in 1973. The number of black bear taken in the area is unknown but believed to be small. Other big game animals--Dall sheep and wolf--exist in such small numbers within the proposed monument, if at all, that they are unlikely hunting targets. The taking of marine mammals, except by Natives for subsistence purposes, has been banned by the Marine Mammals Protection Act of 1972.

The impact of prohibiting sport hunting within the monument would be to require local resident and nonresident hunters to relocate their hunting efforts for mountain goat. Several people active in hunting, or dependent on guiding as a source of income would be directly affected. Since 90 percent of the Kenai Peninsula mountain goat habitat is outside the proposal area, overall mountain goat hunting activities on the Kenai are not likely to be adversely affected.

Up to date information on the goat population of the region is unavailable, making it difficult to assess the herds' capability to stand increased hunting pressure. Thus, the probable result of this relocation of mountain goat hunting is difficult to predict. However, since the annual take from the proposal area and environs has been small, the increased pressure on herds outside the proposal area is expected to be minor.

Sport fishing and pleasure boating are becoming increasingly popular. Sport fishing is mostly of the salt-water variety. In 1972 an estimated 40,000 man-days of sport fishing occurred in the vicinity of Seward. The proposed monument would not preclude sport fishing. In fact, sport fishing could experience an added rise in popularity as a result of increased visitation brought about by monument establishment with a concommitant increased demand for sport fishing facilities, especially boat rentals and charters, fishing supplies, and equipment. Seward has the largest small boat facility in the State.

Other recreational activities in the proposal area and the vicinity include limited hiking, camping, sightseeing, ski touring, snowshoeing and snowmobiling. The Harding Icefield-Kenai Fjords Monument proposal would encourage these recreational activities in the monument, and would provide recreational facilities such as trails, boat tours, and a visitor center. Mechanical access would be provided to the icefield, where an observation station would be located. Interpretive tours would be planned for both the icefield and the fjords area. Recreational opportunities in the remote areas of the monument would be managed to emphasize the primitive character of these environments.

The overall impact of the proposed action on recreational uses would be that of expanding and adding variety to local recreational opportunities. Like the Colorado Rockies and the Andes, the proposed monument could become a summer attraction for winter sports enthusiasts - for cross-country skiing, snow camping, snowmobiling.

Seward presently attracts a significant number of tourists engaged in sightseeing, driving for pleasure and roadside camping. Establishment of the proposed monument, with its visitor use plan, would stimulate the anticipated increase in visitors brought about by monument establishment. This could have the effect of more than doubling the summer daily demand for service facilities in Seward. Winter demand could also increase

modestly in the long run (see next section for projected visitation levels). The most significant economic effect will be noticed in the retail services and transportation sectors of the economy.

An exact estimate of the timeframe in which these impacts could occur is extremely difficult. Due to the readily available transportation to the area--car, rail, boat, and plane--and the area's proximity to the population center of the State--Anchorage (only 3 hours by car), it is anticipated that visitation increases and attendant economic effects will occur rapidly, within 5 to 10 years of the monument's establishment. However, continued energy shortages which have recently developed in Alaska and the lower 48 States could delay or lengthen the timeframe in which increases in visitation to the area would occur. (See Table IX and X)

A discussion of the economic aspects of the monument's impact on recreational uses and on natural resource based industries in Seward and the region is included below, in the section dealing with impacts on the market economy.

5. ON THE MARKET ECONOMY

Economic activity in the region is based on commercial fishing, forestry, transportation, and tourism. The center of activity and the location of greatest economic development is Seward, just adjacent to the northeast corner of the proposal. (See Regional Transportation map.) Most of the social-economic effects of the proposal will occur there.

The monument proposal would encourage appropriate recreational land and resource uses over any commercial development of natural resources. The proposed visitor use plan would increase the intensity of recreational use at a few specific locations, raising it to levels higher than would otherwise occur. Total visitation to the monument is expected to reach 150,000 annually within 5 to 10 years of establishment. (As mentioned in the previous section, the energy crisis could lengthen this timeframe.) The level of visitation (as much as 225,000 visitor use days per year) probably will occur despite the exclusion of hunting from the monument. A large portion (90 percent) of visitor use is likely to be sightseeing at designated locations - at a transportation terminal site on the icefield, or via boat tour along the coast, at one or possibly two coastal sites where marinas would be located, and at Seward. A portion (approximately 10 percent) of the anticipated visitor use would be outdoor recreational uses, and this would occur along trails and across the icefield, as well as on other lands in the vicinity of Seward. (See Tables IX and X)

At peak use levels in July and August, the area may have as many as 2,500 visitors per day. As a complement to planned NPS operation of a visitor center and interpretive tours, private facilities and services such as hotels, campgrounds, restaurants and other tourist and traveller businesses are likely to experience an increased demand from increases in present levels of such recreational pursuits. Eventual inauguration of day-trip boat tour facilities, and transportation services to the icefield would be a focus for much of this activity.

The ability of the city and area economy to expand to meet this demand will be affected by the scheduling of facility development by NPS as well as other factors. The availability of visitor facilities and services in the private sector will in turn affect the level of visitation and the duration of visitor stays in the area.

The principal tourist attractions will be sightseeing, mountain climbing, camping and offshore fishing.

The general economic impact should be seasonally significant for Seward and also for the villages of Port Graham and English Bay. Lesser effects probably will extend to Homer and even to Anchorage as demand for transportation within the region increases.

In the present Seward economy, commercial fishing, the largest industry, and timber production, the second largest, together employ 50 percent of the city's work force. The waters in the vicinity of the proposed monument are part of the Outer District of the Cook Inlet Fisheries Management Area. The Outer District accounts for about one eighth of the total Cook Inlet fish catch. Salmon, king crab, herring, halibut, and scallops are harvested. There are canneries at Seward, English Bay and Port Graham. The proposal is not expected to adversely affect commercial fishing since nothing would prohibit it within proposed monument boundaries. However, increased pleasure boating might grow to a point where it would constitute a hindrance to commercial fishing operations. This would occur with or without establishment of the monument, although monument establishment might accelerate the growth of pleasure boating faster than would occur otherwise.

Seward has a small, but important timber industry. The local lumber mill produces some eight million board feet annually. At present, principal cutting areas are to the northeast of Seward (away from proposed monument) in the Chugach National Forest and on State lands. The U.S. Forest Service has determined that standard logging methods are not desirable on stands of white spruce in the Resurrection River valley, within and adjacent to the northeast boundary of the proposed monument; and though merchantable, any cutting would be modified because of higher values for recreational and scenic purposes. The proposed action would prohibit commercial harvesting of timber within the monument boundaries. The impacts of this provision on the local timber industry are considered to be slight in view of the availability of other timber resources in the region.

Within the proposed monument, the supply of merchantable timber appears to be extremely limited. Approximately 0.5 percent, or less than 5,000 acres of the proposed monument and AEC are forested. Except for the small portion of the stands of white spruce in the Resurrection River valley noted above, merchantable trees are generally confined to small stands of sitka spruce along the rugged coast. In these cases, the relatively small volume of timber available and its relative inaccessibility would make its commercial use highly unlikely.

The resource management plan of the proposed monument would permit timber cutting for local subsistence purposes, such as cabin construction or as fuel.

It is recognized that removal from potential production of any amount of merchantable timber in a region reduces the overall regional potential for timber harvest. However, supplies adequate to meet any increased demand for the foreseeable future appear to be available in the region on lands outside the proposed monument boundaries. Therefore, the amount of potentially productive timber that would be contained in the monument is considered insignificant to the regional timber supply.

This evaluation holds even if one considers the potential establishment of the Seward National Recreation Area and the Nellie Juan Wilderness proposal. The Forest Service reports that the Nellie Juan would not significantly affect the regional timber supply. The NRA would be open to timber harvesting, and sustained yield production would be modified only in cases of irreconcilable conflict with recreational resources. Thus the aggregate impact of these Federal proposals on the regional timber supply, although

it would reduce timber resources somewhat, is not considered significant.

In addition to timber, the Soil Conservation Service has identified some potential grazing lands for cattle or sheep in the northeast corner of the AEC (See Soil Conservation Service comment). Should these lands not be selected by the Natives, and should they then be included in the monument, then the proposal would prohibit any grazing on these lands. However, since no agricultural grazing presently occurs in the area, since the area involved is very small in comparison with other potential grazing lands in the region, and since the future agricultural potential of this area therefore appears to be minimal, this potential impact is considered insignificant. If the lands in question were not included in the monument, then there would be no impact on agricultural potential in the area.

Local and regional building trades and building materials supply firms could experience short-term, modest growth during the construction phase of the proposed monument management plan. Some increased demand from the private sector, for campground and recreational developments, would occur both in the short and long-term. This would contribute modestly to the growth of the local larbor market and local payrolls.

Construction of monument facilities and continuing management needs will modestly increase the role of the Federal Government as an employer. Seasonal maintenance and management jobs, and limited year-round employment by the National Park Service would contribute modestly to stability of the local economy.

Indirect impacts from the establishment of the monument will occur significantly in the private retail, service and transportation businesses, as the monument continues to attract increasing numbers of visitors. Employment in private retail and service businesses such as those providing lodging, food service, air transport and boat tours should also rise in direct response to increased tourist demand.

The overall economic effect of this proposal would be a substantial increase in demand for services and goods, especially during the summer season. This increase will be felt mostly at Seward, but also over the region. Increased employment, income, and some new capital investment will be the general areas of economic growth.

6. ON COMMUNITY SOCIAL AND CULTURAL LIFE

The Kenai Peninsula region is experiencing a period of population growth and economic expansion. Proximity to the major population center of the State, Anchorage, and improved ground transportation systems have brought about a significant increase in demand for recreational opportunities and facilities. The peninsula is an attractive vacation area for Alaskan residents, as well as out-of-state visitors. Communities of the region, including Seward,are becoming increasingly urbanized. Following the 1964 earthquake, the city of Seward, badly damaged physically and economically, declined in population. This trend appears to have been reversed. Seward's population is predicted to show a 10 percent increase between 1970 and 1975.

While the winter months are quiet, with little economic activity except for low levels of commercial fishing and some marine traffic, the summer months bring a large number of tourists and outdoor recreational users. The local Chamber of Commerce organizes the July 4th Mount Marathon footrace, which draws as many as 25,000 spectators and participants. Another event, the Silver Salmon Derby , draws additional crowds.

The business community, as well as other Seward residents appear to have adjusted to this dramatic seasonal change. Current numbers of visitors may irritate some local residents, and probably create considerable traffic and parking problems, congestion in stores and restaurants and other aspects of resort activities. The community, however, appears to favor increased growth in the tourism and outdoor recreation sector.

Establishment of the monument would contribute to the likelihood that this trend would continue, and it would probably accelerate it. Expansion of business opportunities would be likely to attract entrepreneurs from outside the community. This could aggravate the local business community if it brought unfair competition due to size and capital resources involved.

The median educational level of Seward residents is relatively high, comparable to the statewide average. In addition to the regular elementary and secondary schools, Seward is the site of an adult education and manpower training center - the Seward Skill Center, and the location of a unit of the University of Alaska's Marine Institute. The monument's conceptual master plan proposes that the National Park Service develop an environmental education program for Seward's schools, and provide opportunities for educational field trips in the monument area. Provisions for development of cooperative arrangements with the Seward Skill Center and the Marine Institute are included in the conceptual master plan.

The social impacts of these provisions of the proposed monument management plan would be important. Local educational institutions could benefit from ready access to the varied resources of the National Park Service local, State and national staffs, especially in the field of environmental education.

The quality of community social life generally experiences some adverse affects from rapid population growth, and large scale seasonal influx of visitors. The capacity of the local business community to respond to the demand for facilities and services from both additional permanent residents and from the seasonal visitors will greatly affect the extent to which community social life - public social, educational and medical services - suffers or benefits from the anticipated developments.

The manner in which the proposed monument resource management and visitor use plans are implemented, the scheduling and phasing of construction of facilities, and the quality of the communications and working relationships established between monument and the local community will all have an effect on how impacts of monument establishment are felt, and how the community responds to the economic opportunities and social pressures.

7. ON THE MINING INDUSTRY

While the mining potential of the Kenai Peninsula region has been well established, the proposed monument and AEC have been incompletely explored for extractable minerals, and thus projections concerning the future mining potential of the area should be considered tentative. About 80 percent of the proposed monument and about 65 percent of the combined monument and AEC is covered with ice and much of the remaining terrain is steep and difficult of access. This tends to make mining operations difficult.

The proposed monument lies in an area which has been identified by the JFSLUPC as a gold and copper metallogenic province. (See Minerals map, which is based on JFSLUPC maps.) The province has been judged by the U.S.G.S. to have moderate potential for small deposits of precious metals and copper, but low for large deposits (Clark et. al., 1972) (Alaskan Geology Branch, 1972).

With reference to the future potential of the proposal area, U.S.G.S. has stated that "we believe the small withdrawals along the coast (fjords) are least favorable for metallic mineral deposits. The Harding Icefield covers an area which is geologically favorable for the occurrence of gold, copper, and chromite. The withdrawal is at the intersection of live structural trends favorable for mineralization." (U.S.G.S. letter, Chapter IX,C)

Existing known mineral occurrences in the proposal area are confined to the Area of Ecological Concern. These include nine legally located and maintained mining claim groups (See Real Estate and Claims map). Past mineral production in the area prior to World War II removed $166,000 in gold (approximately $1,000,000 in today's prices). Recent production has grossed $27,000 in gold (1973).

Any potential mineral production within the proposed monument itself would be precluded under the establishing legislation. In view of the projected potential of the area, this could have a significant impact on future mining in the immediate area. However, in view of the relatively small amount of ice-free acreage in the proposed monument, it is unlikely that this could have a significant impact on the mining potential of the region.

Within the AEC, the proposal would have negligible effect on present mining activity on valid claims whose development would be allowed to continue. However, should any lands with moderate or high mineralogical potential not be selected by the Natives, and if they were then included in the monument, the preclusion of such lands from mineral exploration and development could be significant for the south coast area and for the region.

Overall then, the effects of this proposal on current mineral production would be negligible, but on future production in the monument and AEC, could be significant. A significant impact on the regional mining picture is also possible, but hard to gauge with current knowledge of mineral potential.

G. IMPACT ON TRANSPORTATION SYSTEMS

The Seward area is directly accessible from Anchorage by paved highway. Travel time from Anchorage to Seward by car is approximately 3 hours. The train trip takes an equal length of time, but service is presently limited to weekly freight and irregularly scheduled "excursion" type passenger trains.

Seward has an airstrip suitable for small and large aircraft, but no scheduled commercial service is now available there. A franchise for air service between Homer and Seward exists but has not been activated. The Kenai region is in the general air traffic pattern and congestion associated with Anchorage International Airport. Seward is served by summer ferry service from Kodiak, and Cordova/Valdez. Small boat facilities at Seward are among the best in the State.

The proposal area is accessible by aircraft and boat. The entire south coast-fjords section is navigable by seaworthy small craft, and there are sheltered landing sites available for floatplanes. Weather, however, is often stormy and limits both air and water travel. The icefield is accessible by ski-equipped aircraft or by helicopter. A dirt road runs to the base of Exit Glacier but access up the glacier is limited to climbing, which is difficult.

If the present proposal is approved, the NPS will encourage the Alaska Railroad to reinstate passenger service to Seward and would develop interpretive programs for the train trip. The existing road from Seward to the base of Exit

Glacier would be improved so that it can be traveled by multipassenger vehicles such as tour buses. Some form of all-weather access to the top of the glacier also will be built, possibly a tramway.

Boat tours will be provided along the coast as well as docking facilities and possibly overnight accommodations. Lastly, trails will be blazed through parts of the backcountry areas. The aggregate effect of these actions will be to intensify travel over existing corridors, increase small boat activity, and stimulate backcountry travel.

This monument would affect regional and local transportation systems in several ways. It will cause an increased demand for transportation facilities and services. The highway from Anchorage will receive heavier use from the tourism increase (see below). If the railroad does not resume passenger service, the highway's burden will certainly be even greater. Traffic on local city and area roads would increase with concomittant increase in maintenance costs and demand for automobile parking facilities.

The visitation estimates indicate that highway use could increase during the summer by as much as 1,000 vehicles per day, with accompanying maintenance and car service needs. Increased use of the State's ferry system in and out of Seward and a rise in the number of cruise ships stopping at Seward are likely. Harbor and dock operations and maintenance requirements would experience a parallel increase. If scheduled commercial air service becomes available and if the volume is sufficient, improvements in the airport facilities may be necessary. This could include increased upkeep or improvement of runways and additional terminal and other support facilities.

Activation of the monument could bring improved transportation to the icefield and to remote coastal areas. Relatively inexpensive boat tours could become available; the visitor must now own his own boat or charter one privately. Public transportation to the icefield could become available on a regular basis and hiking could become more practical because of newly developed trails.

Proposals for surface transportation and utility corridors have been made for the Resurrection River valley and for connecting road links and possible power transmission lines to Port Graham, Seldovia, English Bay and Halibut Cove.

If the monument were established prior to implementation of the proposal for the Resurrection Valley corridor, the road could be forced to remain north of the river in order to remain out of monument lands. This would have the impact of limiting options for route selection on this road and possibly could make construction of the road more difficult and expensive.

If the Harding-Kenai proposal is implemented, any road construction within the monument boundary would require a review and a determination under Section 4(f) of the DOT Act of 1966 as amended (49 U.S.C. 1653(f)). This would be in addition to environmental impact statements as required by NEPA. These studies would be to assure a bona fide need and no reasonable and prudent alternatives to the use of monument lands for the road.

In the case of a road north of the river and adjacent to the monument, specific determination of the applicability of Section 4(f) of the DOT Act of 1966 is within the authority of the Secretary of Transportation.

The impact of these requirements could involve imposition of environment protection stipulations on construction techniques (e.g., routing, cut and fill, and rehabilitation) and other mitigating

measures. In sum, the monument proposal could have the impact of making road construction more difficult or more expensive, could cause rerouting of the road, or could conceivably prevent road construction entirely by making the project impractical.

To the west of the proposed monument, there are transportation and utility corridor proposals along the south side of Kachemak Bay which could pass through the Area of Ecological Concern. Should these lands not be selected by the Natives, and should they then be selected for inclusion in the monument, then specific determination of the applicability of Section 4(f) of the DOT Act of 1966 would be within the authority of the Secretary of Transportation, and would be based upon the facts of record at that time, i.e., land ownership and land use. The impacts concerning Section 4(f) on the Kachemak Bay corridors would be similar to that discussed above for Resurrection Valley.

Overall, establishment of the monument would stimulate tourism and thus have a significant impact on the operation and maintenance costs and revenues to owners and operators--public and private--of transportation systems and facilities. The monument could also have a significant impact on implementation of two new road proposals for the area.

H. IMPACT ON ARCHEOLOGIC AND HISTORIC RESOURCES

The cultural (historic, archeological, architectural) resources of this area have not yet been completely researched. The Kenai Peninsula was once the territory of the Unixkugmiut Eskimo people, who are now extinct. The Unixkugmiut inhabited the area at least 500 years before the discovery of Alaska and were considered to be a separate tribe by the Chugach Eskimo people who inhabited the surrounding areas.

The Chugach Natives still live in the area. The area witnessed activities of the Russian American Company. Resurrection Bay was the site of the first Russian boat works in Alaska. The start of the 20th century brought railroad construction to the region, and later, small mining booms in the Nuka Bay area. For a summarized history see Chapter II, section B-1.

Pursuant to the National Historic Preservation Act of 1966 and Executive Order 11593, the NPS would undertake studies to identify and evaluate all cultural sites, especially archeological remains of the Unixkugmiut. Discovery locations in the monument will be identified as historic sites and preserved as such. The monument proposal may lead to the discovery of historical-archeological sites as a result of park-sponsored research.

The impact of this proposal on archeologic and historic resources in the area would be possible identification of new resources as well as preservation of those and existing resources. The proposal has no direct impact on sites listed in the National Register of Historic Places or on other archeologic and historic sites listed in the statewide inventory.

IV. MITIGATING MEASURES INCLUDED IN THE PROPOSED ACTION

Mitigating measures will be undertaken in three areas of impact. These are:

1. The effects of visitation on the natural and historical environment.

2. The effects of the proposal on the lifestyles of individuals now using the area; and

3. The effects on the local economy caused by withdrawal of lands for park purposes.

Development of a research program to obtain, inventory, and process information will be undertaken to determine the capacity of the environment for types of human impact. This extensive program of coordinated sociological and natural sciences research will develop methods to mitigate the increased demands for use of resources.

Such research will specifically include studies to determine the effect of existing and proposed activities and developments on critical wildlife habitats and communities and to develop measures to minimize such impact. The FWS will conduct studies to determine the capacity of the wildlife populations in those areas proposed for joint management by the National Park Service and the Fish and Wildlife Service to sustain park activities. The NPS will act in accordance with FWS recommendations.

Baseline research is proposed in order to provide the NPS and others with information against which to judge effects of other proposals in areas with similar conditions.

Because access systems can cause excessive environmental damage there will be studies on the feasibility and impact of possible transportation systems suitable for park use. Unavoidable impacts will be mitigated by careful site selection and other means recognized through the proposed study. Proposed research also will provide for continuing status and trend studies for wildlife species and for studies of hazardous animal-human interactions to determine means to minimize dangerous contacts.

The proposed conceptual master plan recognizes the need for future studies of the area's resources. It sets forth guidelines and recommendations for development rather than specific proposals.

Before any development proposal is implemented, research and detailed development plans will be prepared with the objective of preventing undue destruction or degradation of social and cultural patterns and natural, archeological, and historical resources known or as yet undiscovered. An environmental assessment will be prepared to analyze the alternatives in relation to the resources and patterns of the area, the function and scope of the proposed development, and the relationship of the proposal to the site. An environmental statement will be prepared for all development plans which are determined, through the assessment process, to have a significant impact on the natural and human environment. Public notification of the results of the assessment will be made, and the assessment will be available for public review at least 30 days prior to initiation of an environmental statement, or implementation of the action in any case where it may be found that no significant impact would occur.

No Federal action that might affect cultural, archeologic and historic resources will be undertaken without prior compliance with the procedures established under Section 106 of the National Historic Preservation Act (80 Stat. 915) or Section 2(b) of Executive Order 11593 (May 13, 1971) as applicable. Compliance with these procedures entails consultation with the Advisory Council on Historic Preservation and the Alaska State Historic Preservation Officer to help assure that no significant adverse effects will result.

Liaison will be maintained with other units of Federal, State and local government, as well as Native corporations and other groups and individuals, to assure that the introduction of monument facilities and operations will be as compatible as possible with the community and its needs. Cooperation will be pursued to resolve any problems or incompatible or conflicting uses that may arise to adversely affect preservation in the monument or activities conducted by others on lands outside the monument.

The NPS wishes to assist owners of contiguous lands in planning, construction, and maintenance of facilities complementary to those within monument lands. Every effort will be made to encourage coordinated and cooperative developments of facilities outside, but adjacent to the monument to assure minimum environmental destruction within the area set aside for preservation.

It is possible that monument-related tourist-serving developments could all occur on government owned lands within the proposal and that all could be government operated or controlled. The proposal suggests that local private enterprise be encouraged and assisted where possible in developing such facilities on private land outside but near to the monument. It is felt that this would provide for a more stable and diversified economic base than would be possible if all such facilities were provided within and by the monument.

To avoid possible loss of cultural elements due to increased contact with other cultures, Natives will be encouraged to capitalize on public interest in aboriginal modes of life by devising profitable enterprises centering on archeological sites, Native crafts, and knowledge of the countryside. This concept may provide a viable means of assisting the Native people in keeping their cultural heritage alive in the face of social change.

In order to mitigate the effects of precluding mining and prospecting in the area, the NPS will encourage and participate in appropriate ways in the study of geological resources within the proposal. Geological studies by recognized educational or scientific institutions, professional personnel of other agencies, and accredited individuals will be permitted and encouraged when in consonance with the purposes of the monument and the policies of the Park Service. Procedures which might result in damage or alteration to the resource would not be permitted.

V. ADVERSE EFFECTS THAT CANNOT BE AVOIDED SHOULD THE PROPOSAL BE IMPLEMENTED

1. Increased visitation will bring with it increases in many kinds of pollution (visual, aural, waste, etc.). These increases can only be partially offset by mitigating measures.

2. More facilities for visitor use will be constructed both inside and outside the monument; therefore, terrain, vegetative, and archeological values will be affected.

3. Fish and wildife harvest inside the monument will be altered by increased human pressure on fish and wildlife outside the monument.

4. Opportunities for resource extraction (mining, timbering, etc.) will be terminated. This proposal will unavoidably affect people wishing to extract resources from the lands proposed for monument status. Such people include prospectors, guides, trappers, hunters, and miners. These people either reside in local communities, in population centers or communities distant from the monument, or represent small and large companies that are Alaskan or that maintain representatives in Alaska. Local residents would be the most strongly affected. The companies, especially the nationally based firms, would be the least affected.

4. Lifestyles of individuals, both local and nonresident who now use the area, will be affected as presently allowed land uses are restricted or disallowed. The activities being restricted (e.g. hunting, trapping, prospecting, homesteading, and mechanized vehicle use) will affect the operations of an undetermined number of individuals in the future.

To the local resident being restricted, the restrictions severely limit choice of space in which to pursue his endeavor, especially since some of the remaining lands in the State may be placed off limits by other groups and agencies. This restriction in space may lead to too many people on too small a space or may lead to people retiring early, changing vocations, or moving out of the region.

5. Commercial enterprises interested in developing lands to be included in this monument will be affected as the lands are dedicated to preservation.

VI. RELATIONSHIP BETWEEN LOCAL SHORT-TERM AND LONG-TERM PRODUCTIVITY

A. BIOLOGICAL PRODUCTIVITY

Establishment of a Harding Icefield-Kenai Fjords National Monument would promote continuation of natural biological productivity in the included lands and waters.

Lands and waters within the proposal are in an essentially primitive state. If the proposal is enacted, emphasis will be placed on maintaining the primitive qualities of the area. The few developments envisioned would not significantly affect its primitive quality. Biological productivity of the area is at its natural or primitive level and would not be significantly affected by the proposal. Thus, long-term biological productivity at natural levels within the area would be assured if the proposal were to be enacted.

NPS operations in the area could also help assure similar conditions on adjacent lands through cooperative agreements as suggested in the proposal.

It is possible that long-term biological productivity could be altered by man to bring about increased production of certain species. Whether or not this would increase or decrease total biological productivity is unknown. In any event, enactment of the proposal would preclude significant man-caused reduction of biological productivity within the monument.

In the long term, monument establishment may make more valuable contributions to man's esthetic, scientific, and cultural needs than if the area's resources were consumed to benefit his material needs.

Biologically, the area will act as a reservoir for native wildlife which, if conditions permit, will move back and forth between the area and lands adjacent to the monument thus providing for better regional hunting and trapping outside the park over the long term by acting as a protected reservoir of undisturbed habitat.

Under NPS administration the area would serve as a control for experiments and uses on similar lands and waters outside the monument. This scientific procedure could contribute to a better understanding of the biological processes which allow man to manage more effectively the productivity of such lands and waters.

In summary, it appears that the net biological productivity of the area may or may not be affected by enactment of the proposal, but proposal enactment will help maintain long-term natural biological productivity levels.

B. ECONOMIC PRODUCTIVITY

A short-term decrease in economic productivity by local communities is possible if the proposal is enacted. Income from hunting and guiding would fall slightly because of the deletion of lands now used for those purposes. This activity is not considered important economically in the proposal area, however.

Long-term economic gain probably will result as tourism increases in the area. Some gains will be short term (e.g., during construction of facilities) but others will be largely long term through provision of services (meals, lodging, guiding, etc.) and some goods for the visiting public.

The proposal could cause some change in economic base from the present resource extractive base to a more diversified one that would include many of the previously listed activities, plus new ones.

Putting the area's mineral resources into preservation status now will have long-range economic consequences in at least two ways. If,

with time, extractive technology becomes more efficient, this technology should allow more complete and more profitable extraction of the resources should man's future needs dictate extraction. The establishment of the need for such extraction will, however, be made more difficult as a complete mineral survey of the area will not have been made. Should the need for mineral development become critical in the future, the lead time required prior to actual production would be increased by the need to conduct extensive exploration in the area. Nevertheless, should exploratory techniques be developed at some future date which would allow accurate assessment of resources without damage to the natural environment, then such exploration could take place and eventual lead time for development could be reduced. If other technologies bring about a lack of need for these resources, then postponement of extraction now, will allow perpetuation of natural values on these lands.

Preservation of the land and waters for monument purposes will increase, in the long run, the property values of adjacent private lands.

Overall, it is probable that monument establishment will in the long-term bring about economic gains to the local area. Whether or not these will be significantly greater than gains attributable to other potential land uses is not known. It is probable that these other potential uses would bring greater gains in the short-term, but not in the long run.

VII. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Any resource that may be prevented from development at present by this action may at a later date be committed to development by Congress. Hence there are no irreversible commitments of resources.

There will be some irretrievable commitments of resources in a technical sense due to the passage of time. The major commitment here would be of human resources, since some people will probably have to change lifestyles. All renewable resources that complete a natural life cycle without having been harvested by man will become in effect irretrievable if they could have been extracted in the absence of this proposal. At present these resource uses are largely confined to hunting and trapping of wildlife.

Opportunities for some individuals to recover nonrenewable resources at any specific time will become irretrievable. Specifically, the opportunity to retrieve mineral resources will be lost to any individuals who may wish to extract minerals on land in the proposed monument or those lands which are in the AEC and may in the future be included in the monument. However, the nonrenewable resource itself will remain retrievable so long as it remains in place and untouched and so long as the technology needed to extract it is not lost.

Alternatives considered for the proposed Harding Icefields-Kenai Fjords National Monument are as follows:

A. No Action Alternative
B. Alternatives to the Master Plan
C. Alternative Management Systems
D. Boundary Adjustments

A. NO ACTION ALTERNATIVE

If none of the lands are added to one of the four systems, the d-2 lands in the monument proposal area would be classified as d-1. All lands changed to a d-1 classification, as well as those lands currently classified d-1, will be subject to reclassification by the Secretary of the Interior. This reclassification could make these lands available for State selection, private ownership, or retention under Federal control, as d-1, or as open and unreserved lands.

The protection provided to d-2 status lands could be continued to be given to those lands that would have reverted to d-1 classification as of December 18, 1973. Pursuant to section 17 of ANCSA they are still withdrawn under d-1 until either the d-1 withdrawal is revoked, the land is classified for a public-land-law disposal and opened to that form or forms of entry, or the land is re-withdrawn for some other purpose.

Under d-1 withdrawal, the area would continue to be managed by the Bureau of Land Management. Since d-1 status is based on an administrative action of the Secretary, it can be changed relatively easily by other administrative action. It is assumed that no action on the proposal will ultimately result in amendment or removal of PLO 5179 although it would be presumptous to speculate on timing or to guess which portions of the area would be affected. The change or modification could be based on the results of planning or other grounds.

All management options are open to the Secretary by his administrative authority to withdraw and/or classify public lands. Possible actions range from the retention of the protective d-1 withdrawal for an indefinite period of time to opening the lands to all forms of use and entry allowed on unreserved public domain. Within these extremes, the Secretary may elect to classify the lands to the degree necessary to implement land planning recommendations developed by BLM through its planning system, which includes active public involvement. Impacts, both adverse and beneficial, would depend entirely on the options selected. Presumably, any future management option selected by the Secretary would be the subject of further study and environmental assessment.

Pending classification, and with the possible exception that d-2 type restrictions could remain in effect on d-1 lands, all lands administered by the Secretary of the Interior through the BLM would likely continue to be administered for multiple-use-sustained yield purposes. Under this form of management no priority is necessarily given to a specific use. Rather, the Secretary will authorize a use or combination of uses, taking into consideration all pertinent factors including, but not limited to, ecology, existing uses, and the relative values of the various uses and resources in specific areas. Multiple-use-sustained yield management by the BLM would likely continue whether the lands involved remained in d-1 or became open and unreserved lands.

Multiple-use management has been described as "The management of all the various renewable surface resources of the land so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to the changing needs and conditions; that some land will be used

for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output."

"Sustained yield of several products and services means the achievement and maintenance in pertetuity of a high-level annual or regular periodic output of the various renewable resources of the national forests without impairment of the productivity of the land." (U.S. Forest Service)

Multiple-use programs by the Bureau of Land Management are carried on under a myriad of laws and regulations. Management framework plans are developed for large blocks of public lands under its jurisdiction. These are prepared with public input and must comply with the provisions of the National Environmental Policy Act. The Bureau of Land Management could develop a framework plan for this area and recreation and scenic value could receive emphasis.

One possibility under "no action" is that the area could be reclassified for some form of primary use management in a category different from the presently proposed national monument. This could involve management as a national recreation area, a national wildlife refuge, or possibly some other form of primary use designation. These alternatives and their impacts are discussed in section C of this chapter, "Alternative Management Systems".

Nevertheless, because it is felt that multiple-use management is the most likely outcome of no action on the monument proposal, the impacts of such land management are discussed below. Also discussed are the impacts of potential reclassification as open and unreserved lands.

IMPACTS UNDER MULTIPLE-USE MANAGEMENT BY THE BUREAU OF LAND MANAGEMENT

Resources that would be impacted over the long term under the concepts of multiple-use as described above include: mining, watershed management, water quality, wildlife, timber harvest, recreation, wilderness, and visual integrity of the landscape and vegetation.

MINING

Although the mineral potential of the lands proposed for inclusion in the monument is not presently well known, prospecting and development of mineral resources could occur. This could lead to development and exploitation. However, under mineral leasing, BLM has full control as to if, where, and how leasing would be permitted. For locatable minerals, BLM has no firm control--only the power of persuasion. The area is not considered to have potential for discovery of leasable minerals and thus no impacts from oil, gas, or coal leasing are expected to occur. However, the area does have some potential for discovery of locatable minerals. Mining operations could be instituted on or near the periphery of the icefield, or elsewhere on lands in the area. (See Chapter III, F-7 for further detail on mining potential.) Such mining potential is not expected to be significant for the mining industry in the region but could be significant for individuals involved in the local area. Further, the impacts associated with prospecting and development could be significant to soils, vegetation, and wildlife.

WATERSHED MANAGEMENT

State water quality standards would continue to apply. It is anticipated that measures to protect water quality will be enforced and that the present

quality will be maintained. Some degradation of water quality could occur, however, as a result of mining or timber cutting operations on steep slopes or near presently clear streams. Such impacts could be locally significant.

WILDLIFE

Under "multiple-use management", sport hunting within the lands proposed for the monument would not be prohibited. This alternative would thus avoid the negative impacts on hunters who use the area. However, it would also result in continued, and possibly increasing, hunting pressure on the portion of the goat population using proposed monument lands. In addition, unrestricted backcountry use of snowmobiles could lead to disruption of wildlife habitat-use patterns. On the other hand, if less recreational use and development were to occur under multiple use than under monument designation, then disruptive human-wildlife interaction could be less severe in certain areas of the proposed monument. In sum, the significance of the impact on wildlife under monument designation or under multiple-use would depend on the levels of hunting and other recreational uses which might develop under the two types of management. Thus no action on the monument proposal could result in significant changes in the impacts on wildlife.

TIMBER HARVEST

There are approximately 5,000 acres of harvestable timber within the lands proposed for the monument and AEC. These could be developed under multiple-use management with attendant significant disruption of vegetation in the local area. However, due to the small volume of timber involved and its questionable commercial value, this impact is not considered significant for the regional lumber industry.

RECREATIONAL USE

Recreation might not receive the same emphasis under this alternative as it would under the recreational development plans proposed by the NPS. However, it is possible that, with establishment of a BLM-sponsored recreation area, recreational development would be equally emphasized. Such development could also occur if the city of Seward or some private developer were to obtain permission from the BLM to install recreational developments in the area. Management by a multiple-use agency probably would result in a lesser interpretive impact on the public. Impacts resulting from increased visitation and visitor development, both economic and environmental, beneficial and detrimental, probably would be less pronounced due to less promotion of public awareness about the national significance of the area.

Although it is very difficult to predict the differences in potential visitation to the area if it were included in an NRA, private recreational development, or the monument; based on experience at Mt. McKinley Park and with parks and recreation areas in the lower 48, it can be speculated that visitation related impacts would occur to a lesser degree with private or NRA development. These might receive less publicity in the lower 48 or within Alaska itself and the resultant lower visitation would lessen the impacts or recreational development, both beneficial and detrimental. A detailed description of the impacts of an NRA on the area is provided in the environmental statement for the Seward National Recreation Area dated December 1971 and published by the U. S. Forest Service.

WILDERNESS VALUES

As mentioned above, under multiple-use management backcountry areas could experience snowmobile use or other types of recreation which

would have been controlled in the proposed monument. This type of unrestricted use, or such potential development as mining or timber harvest, could result in degradation of wilderness values. Again, however, potentially increased recreational use of certain areas of the monument (see Class II lands on the Land Classification map) could causemore disruption of wilderness values in those areas than would occur with little or no recreational development.

VISUAL INTEGRITY AND VEGETATION

Developments such as mining and timber harvest which could occur under multiple-use management would involve the locally significant destruction of the existing landscape and vegetation. However, if less recreational development were to occur under multiple-use, then those areas proposed for recreational developments in the monument proposal would receive less disruptive impacts. Overall, the impact on the visual integrity of the area, however, could be significantly more disruptive under multiple-use, depending on what types and levels of development would occur.

IMPACTS WITH UNRESERVED PUBLIC DOMAIN

Under this management option, the Secretary would reclassify lands as vacant and unreserved public domain. This action would constitute the least restrictive management and would negate to a large measure the existing discretionary authority the Secretary would otherwise retain. This option is probably the least likely path that management would follow. However, if it were to occur, the following impacts would apply.

GENERAL IMPACTS

Lands would become open to indiscriminate settlement under the homestead, trade and manufacturing site, homesite and headquarters site provisions of public land laws. In addition, location of claims, prospecting and exploration, and mining under the 1872 mining law would not be managed in any manner. State and local governments would obtain unrestricted authority for right-of-way on unreserved public lands. Bureau of Land Management authority would be largely custodial. Opportunity to guide resource development would be severely limited, and protection could not be provided for natural values, archeological values, open space, or water quality. Land planning would be difficult.

As described above, open public domain could set in motion relatively rapid transfer of public lands to private interests. These lands could form the basis for further economic development through settlement or other development.

Key access sites such as the Icefield or backcountry areas and other desirable sites including archeological sites, natural areas, and key fish and wildlife habitats would be removed from public ownership and management.

Secondary impacts on natural resource values would be compounded as a result of unplanned settlement, development and access. These secondary impacts would include increased off-road vehicle use because of access development, and growth of the resident population of the area due to increased commercial development.

Impacts on mineral extraction, timber production and transportation would be similar to those described for the multiple use option but would be magnified in importance. Impacts on water, vegetation and other natural features, and recreation could be significantly increased from those described for the multiple use option. Impacts on wildlife, wilderness values, and subsistence could also be significant.

B. ALTERNATIVE MASTER PLAN

The proposed master plan (see Chapter I) is conceptual in intent and indicates that none of the proposed developments included in it will be undertaken until environmental studies have been accomplished.

1. ICEFIELD ACCESS

Studies have been made by private enterprise of routes and methods of access for a large number of persons to the icefield. An all-weather tramway is most often mentioned as the most desirable device. Alternatives to the tramway include fixed or rotary wing aircraft (lighter-than-air vessels have also been discussed), foot or ski trails, and various types of ski-lift type devices. Finally, there is the alternative of no convenient access for a large number of persons.

IMPACTS

The impacts of using aircraft rather than an all-weather tramway include: (1) Loss to the local economy of construction-related revenues and impacts. With aircraft access there would be no need for construction of new facilities, except possibly a waiting area at the present Seward airport. Further, the construction-related impacts on the landscape, particularly soil, vegetation and wildlife habitat within the proposal, and the impacts on Seward's and the local region's economy, as examples, would not occur. (2) Less public use than with the tramway. Aircraft travel would be limited by weather and reluctance of some visitors to fly, and probably would be more costly per person. Thus, fewer persons would be able to travel to the icefield. Impacts related to increased visitation would thus not occur to the degree described in Chapter III. The difference in visitation probably would be significantly less. (3) There would be differences in impacts due to noise, petroleum spills, exhaust fumes, etc., but the transportation proposals are now conceptual and make any specific estimates of these impacts impractical. (4) There would be a major impact on the visual integrity of the landscape in the Exit Glacier area. Aircraft use would avoid all or most of the visual impacts of the tramway discussed in Chapter III and would probably lessen concomitant impacts on the portion of the icefield itself which is proposed for the most recreational use.

The impacts of using ski or foot trails or ski-lift type devices rather than an all-weather tramway include impacts similar to those in (1) above. The difference would be in intensity of impact. Precision of prediction is not possible at this time in the planning effort. All of these alternatives and their impacts will be considered in detail at the appropriate time if the monument is established. Separate environmental assessments will be required for all major developments.

The impacts of no access would be those related to little or no visitation to the area. No access probably would limit visitation to such an extent as to reduce greatly or nearly eliminate the impacts suggested for increased visitation in Chapter III.

2. SNOWMACHINE USE OF ICEFIELD

One private planner has suggested that the icefield would be the ideal place to hold the "Indianapolis 500 of the snowmachine world." In contrast to this view, the NPS sees the icefield primarily as a primitive area where multiple-passenger snowmachines would furnish the means for sightseeing visitors to view this rare environment. These would be limited to specific areas. The icefield would thus retain its primitive character over most of its expanse for the benefit, enjoyment and education of the public. The land classification map in Chapter I demonstrates which

portions of the icefield are proposed for management as "outstanding natural areas", "primitive areas", and "recreation areas". Conceptual plans for the area call for multiple-passenger over-the-snow vehicles to take visitors out on the icefield. These vehicles would be regulated in numbers and in the routes they could take.

An alternative to the NPS proposal would be to allow or even encourage individual private (or rental) snowmachine use of the area in designated zones, or over the entire area.

IMPACTS

Allowing individuals to use snowmachines on the icefield could produce a severe impact on the primitive qualities of the area through noise, exhaust fumes, crowding, and marked courses. These impacts would be primarily visual in nature and could be severe during times of high level use. However, they would generally not be long in duration as signs of human use would quickly be covered by snowfall.

It is possible that visitation with private snowmachine use would exceed that expected under the present NPS proposal, especially if races were held. Thus, the impacts of increased visitation suggested in Chapter III could be moderately increased, but the overall difference is not considered substantial.

C. ALTERNATIVE MANAGEMENT SYSTEMS

1. GENERAL MULTIPLE-USE MANAGEMENT

(With no specific, legislative management proposal such as National Forest or NRA)

This alternative would be to manage the area under multiple-use involving classification such as authorized by the Multiple-Use-Sustained Yield Act of 1960 (74 Stat. 15). Such management would probably be by the BLM as described in Alternative A of this Chapter ("No Action Alternative"). Under this form of management no priority is necessarily given to a specific use. Rather, the Secretary will authorize a use or combination of uses, taking into consideration all pertinent factors including, but not limited to, ecology, existing uses, and the relative values of the various uses and resources in specific areas. Multiple-use management has been described as "The management of all the various renewable surface resources of (the land) so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the lands for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to the changing needs and conditions; that some land will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output." (See letter from U.S. Forest Service, Chapter IX.)

"Sustained yield of several products and services means the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the national forests without impairment of the productivity of the land." (U.S. Forest Service)

The proposal area could be opened under multiple-use to, for example, mineral exploration and development. Present trends in the area, however, seem to be away from resource extraction and in favor of recreational uses.

IMPACTS

In brief, under multiple-use management, there would be an opportunity for a wide variety of land and resource uses. The actual scope of the impacts would depend upon the type and amount of resource use. As an example, the type of access allowed for resource utilization will often dictate the intensity of the impact generated. Generally, however, over the short-term, management for multiple-use would have the same impacts as those which would occur as a result of no action by Congress on the NPS proposal. (See Alternative A above.)

2. MULTIPLE-USE MANAGEMENT UNDER NATIONAL FOREST OR NRA DESIGNATION

The Forest Service has considered adding the upper portions of the NPS proposal area to the Chugach National Forest and has also recognized a proposal that they be included in a Seward National Recreation Area. Such an NRA would include much of the Chugach National Forest which adjoins the monument proposal area along the Resurrection River, and the majority of the Harding Icefield. Inclusion of the icefield in the NRA proposal could ultimately lead to some or all of the developments that are suggested in the NPS conceptual master plan. The Seward NRA would be managed under multiple-use precepts, but recreation would be the dominant use and other uses would be allowed only so long as they did not seriously conflict with public recreation.

If the upper portions of the monument were to be included in the Chugach Forest but not the NRA, then they would likely be managed according to Forest Service multiple-use-sustained yield management precepts. A definition of these precepts is provided in section C-1 of this chapter (above) which was quoted from the U. S. Forest Service letter printed in Chapter IX,C.

IMPACTS

If only the icefield was added to the Forest Service or the NRA, impacts on the remaining lands (islands and peninsulas) would be as suggested above for d-1 lands in Alternative A ("No Action Alternative). Added impacts of Forest Service management on the icefield cannot be precisely predicted at this time as the U.S.F.S. has not developed specific plans for the area. However, recreation-related impacts would likely be the same as described in Chapter III for NPS proposed developments, except that they might be less in degree, be spread out over a longer time period, or have less recreational development if the area were included only in the Forest and not in the NRA.

Although it is very difficult to predict the differences in potential visitation to the area if it were included in the NRA, National Forest, or the monument, based on experience at Mt. McKinley Park and parks and recreation areas in the lower 48, it can be speculated that visitation related impacts would occur to a lesser degree with the NRA. An NRA might receive less publicity in the lower 48 or within Alaska itself and the resultant lower visitation would lessen the impacts of recreational development, both beneficial and detrimental. Detailed impacts of the entire NRA proposal are found in its separate environmental statement dated December 1971.

3. MANAGEMENT AS A NATIONAL WILDLIFE REFUGE

If the Harding Icefield-Kenai Fjords proposal were not implemented, then there is a possibility that Congress would include the coastal units, and possibly, part of the AEC, as part of the Alaska Coastal Wildlife Refuge suggested by the FWS as described in Chapter I, section C. The lands not included in the refuge would be returned to or retained in d-1 status with the impacts described

in the "no action" alternative taking place upon them.

IMPACTS

On the refuge lands, impacts would be related to Congressional recognition of the wildlife values of the refuge area (the islands and peninsulas), and these lands would receive the special protection afforded by refuge status. The essential effect would be wildlife protection. (For complete description of the impacts of refuge status see Chapter VIII of the FWS impact statement on Coastal Wildlife Refuges.)

4. MANAGEMENT AS A UNIT OF BOTH THE NATIONAL MONUMENT AND THE NATIONAL NATIONAL REFUGE

The proposal area could be included in both the monument and as a unit of the Alaska Coastal National Wildlife Refuges. The Icefield portion of the monument would be in the monument. The coastal sections would be either in the refuge or in both the park and refuge systems.

IMPACTS

Impacts of including the area in both systems would generally be the same as those outlined in Alternative 3 (Management as a National Wildlife Refuge) and Chapter III. However, joint management would require the development of joint management agreements to determine management and development plans compatible for both agencies.

5. IMMEDIATE WILDERNESS DESIGNATION

One aspect of the proposal, as discussed in Chapter I, is that within 3 years after the monument is established, the NPS will study the area for wilderness recommendation to the Congress. An alternative to this action would be to include, at this time, a wilderness recommendation with the legislation establishing the area.

Subject to final determination by the Congress, the landing of aircraft and use of motorboats will be permitted as means of access to designated wilderness units, subject to restrictions deemed necessary by the Secretary. Use of motorized over-the-snow vehicles for subsistence purposes may be permitted within wilderness areas in Alaska. When such uses are recommended for continuation following wilderness designation, the levels of use and types of equipment utilized prior to the enactment date of ANCSA will be permitted to continue for subsistence purposes. Should such uses be shown as adversely affecting the plant and animal resources in a progressive and depleting manner, additional restrictions may be promulgated by the Secretary after consultation with representatives of subsistence users and other agencies.

In the Harding-Kenai area--a region that has received virtually no influence from the works of man--almost the entire proposed monument would qualify for wilderness, as defined by the Wilderness Act of 1964. Certain conflicts could exist, however, through proposed uses of the monument. Therefore, any NPS wilderness proposal for the area would not include 100 percent of the area.

In general, those areas best suited for wilderness designation, and compatible with the proposed master plan would be those lands and waters designated Class IV and V in the land classification plan. (See Land Classification map.) In addition, those areas which might in the future be designated Class VI when surrounded by either Class IV or Class V lands generally would also qualify for wilderness status.

IMPACTS

The immediate designation of wilderness would place a legislative mandate over the precise uses that would be allowed and the management techniques to be followed in the area. The major impacts associated with wilderness in this area would be through restrictions on use and development. Since there is essentially no use of most of the area now, such impacts would be confined to future options for use.

If the entire area were to be made wilderness, then the impacts listed in Chapter III would not hold and there would occur only those impacts associated with keeping the land in its present state and not allowing developments within it. If the immediate wilderness designation allowed exclusion from wilderness of proposed development sites, then the impacts of wilderness designation would be the same as those detailed in Chapter III. If not, then the impacts of recreational development both detrimental and beneficial, would be very much less pronounced. This would involve the removal of visual impacts such as those from the potential tramway and a lessening of other types of impacts. It might also involve a substantial lessening of impacts associated with high visitation levels, as these levels could be lowered by lack of convenient access and recreational development in the icefield.

D. ALTERNATIVE BOUNDARY PROPOSALS

1. MONUMENT OF 305,000 ACRES INCLUDING HARDING ICEFIELD, COASTAL AND ISLAND AREAS AND EXCLUDING THE AREA OF ECOLOGICAL CONCERN

This alternative proposal would establish Harding Icefield-Kenai Fjords National Monument on the south coast of Kenai Peninsula, encompassing approximately 305,000 acres of land in three parcels. All lands within this alternative are classified as d-2 and d-1. The inland area of this proposal consists primarily of a highly scenic and extensive icefield with a potential for outdoor recreation activities. The coastal and islands areas are also scenic and are valuable as fish and marine mammal habitat.

This alternative would change approximately 305,000 acres from public domain status to National Park System lands. Mining, timber harvest, and sport hunting would be prohibited. Emphasis would be placed on conventional national park recreational activities such as sightseeing and hiking. Some vehicular and other forms of outdoor recreation such as snowmobiling, would be restricted.

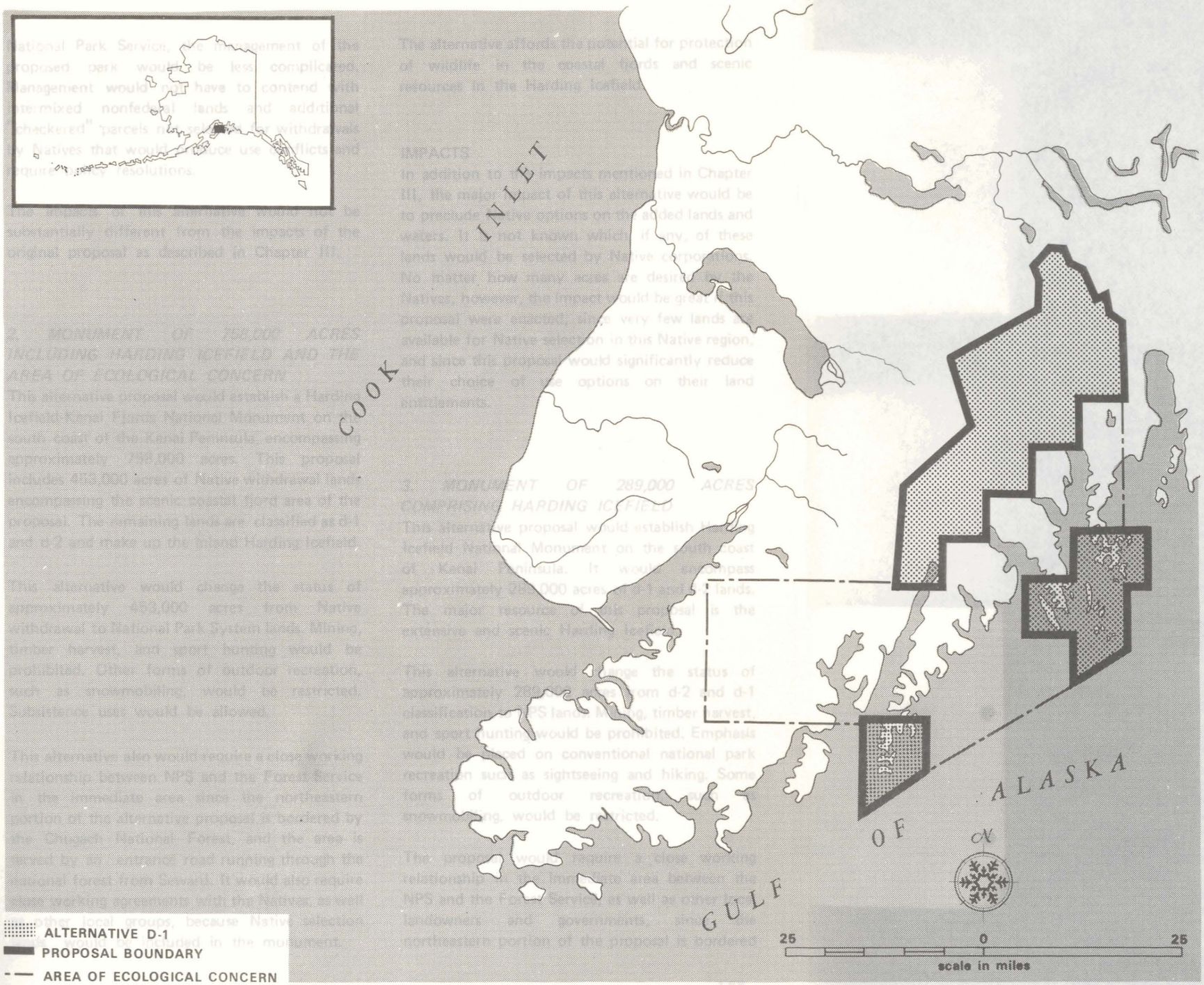
This alternative also would require a close working relationship in the immediate area between the NPS and the U.S. Forest Service since the northeastern portion of the alternative proposal is bordered by the Chugach National Forest, and the area is served by an entrance road running through the national forest from Seward.

IMPACTS

This proposal would be less diverse than a proposal that includes an Area of Ecological Concern encompassing much of the scenic coastal fjords area. This alternative could eliminate the potential for cooperative management practices with the Native landowners in the Area of Ecological Concern, and could therefore in turn remove any potential agreed upon land use restrictions in the area. It could also lead to the likelihood of less Native involvement in the NPS plans for interpretation of the area.

Although the scenic fjord area would lose the protection afforded by a complementary management plan between the Natives and the

BOUNDARY ALTERNATIVE D-1



National Park Service, the management of the proposed park would be less complicated. Management would not have to contend with intermixed nonfederal lands and additional "checkered" parcels not selected for withdrawals by Natives that would produce use conflicts and require policy resolutions.

The impacts of this alternative would not be substantially different from the impacts of the original proposal as described in Chapter III.

2. MONUMENT OF 758,000 ACRES INCLUDING HARDING ICEFIELD AND THE AREA OF ECOLOGICAL CONCERN

This alternative proposal would establish a Harding Icefield-Kenai Fjords National Monument on the south coast of the Kenai Peninsula, encompassing approximately 758,000 acres. This proposal includes 453,000 acres of Native withdrawal lands encompassing the scenic coastal fjord area of the proposal. The remaining lands are classified as d-1 and d-2 and make up the inland Harding Icefield.

This alternative would change the status of approximately 453,000 acres from Native withdrawal to National Park System lands. Mining, timber harvest, and sport hunting would be prohibited. Other forms of outdoor recreation, such as snowmobiling, would be restricted. Subsistence uses would be allowed.

This alternative also would require a close working relationship between NPS and the Forest Service in the immediate area since the northeastern portion of the alternative proposal is bordered by the Chugach National Forest, and the area is served by an entrance road running through the national forest from Seward. It would also require close working agreements with the Natives, as well as other local groups, because Native selection lands would be included in the monument.

The alternative affords the potential for protection of wildlife in the coastal fjords and scenic resources in the Harding Icefield.

IMPACTS

In addition to the impacts mentioned in Chapter III, the major impact of this alternative would be to preclude Native options on the added lands and waters. It is not known which, if any, of these lands would be selected by Native corporations. No matter how many acres are desired by the Natives, however, the impact would be great if this proposal were enacted, since very few lands are available for Native selection in this Native region, and since this proposal would significantly reduce their choice of use options on their land entitlements.

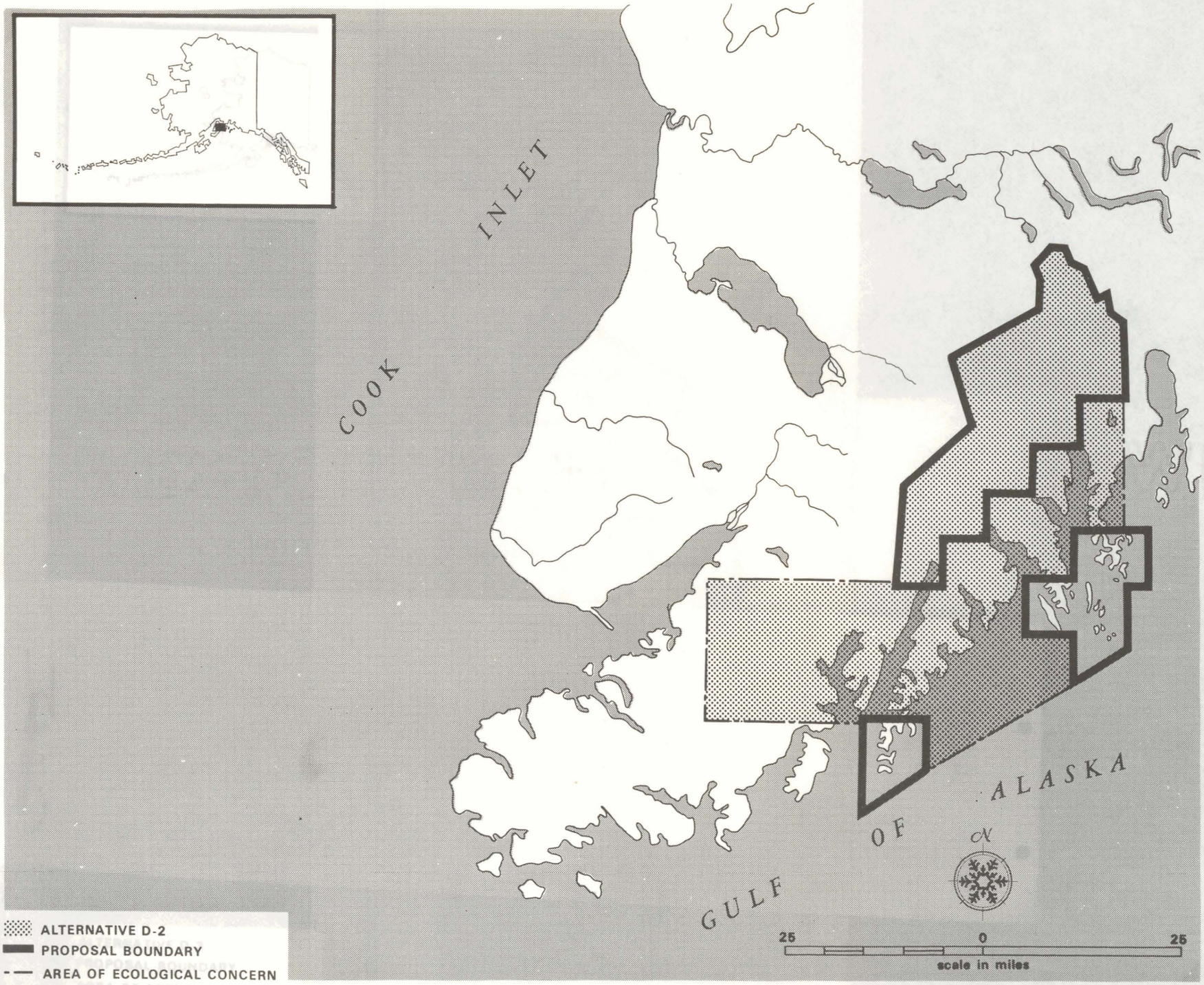
3. MONUMENT OF 289,000 ACRES COMPRISING HARDING ICEFIELD

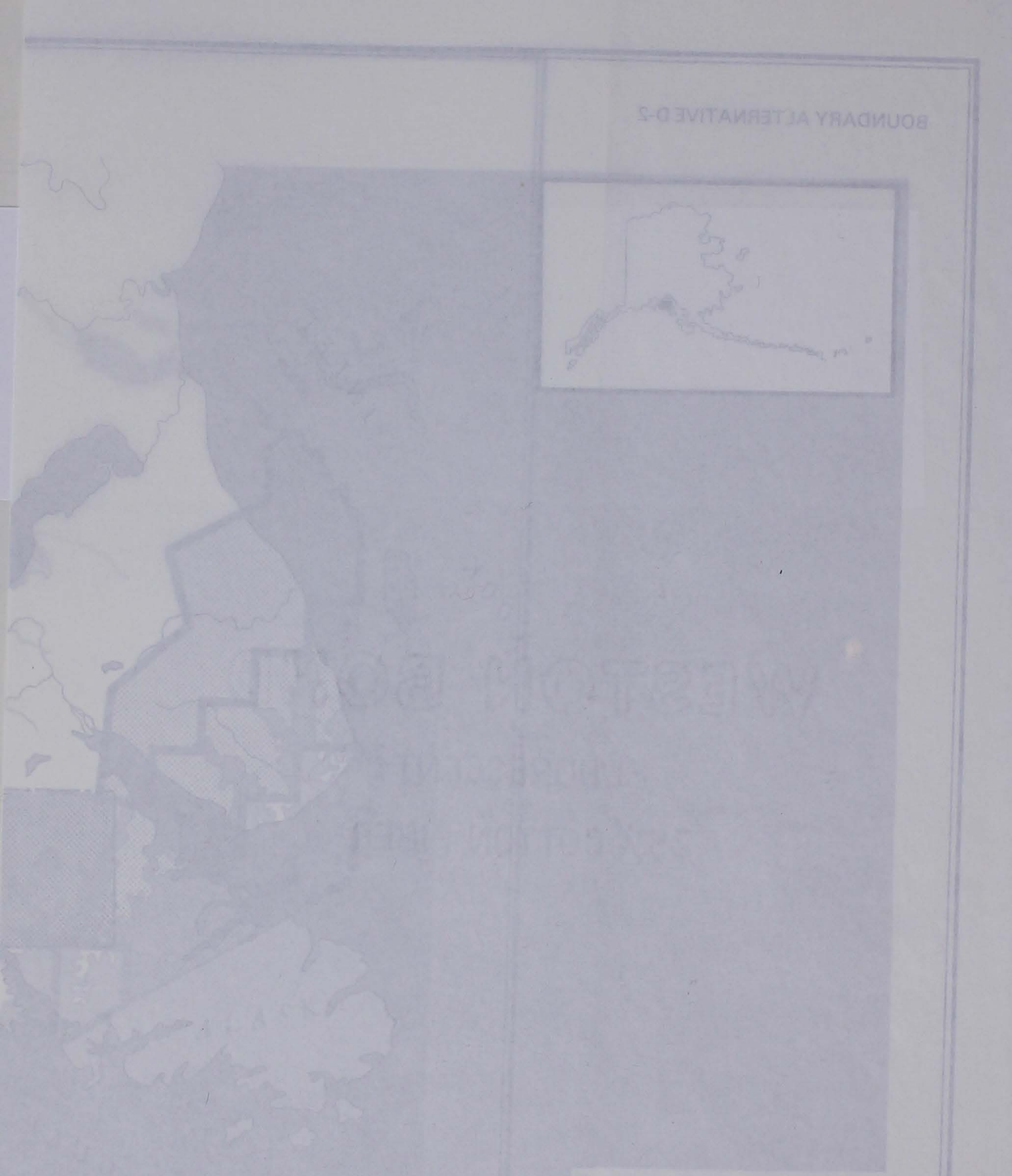
This alternative proposal would establish Harding Icefield National Monument on the south coast of Kenai Peninsula. It would encompass approximately 289,000 acres of d-1 and d-2 lands. The major resource of this proposal is the extensive and scenic Harding Icefield.

This alternative would change the status of approximately 289,000 acres from d-2 and d-1 classification to NPS lands. Mining, timber harvest, and sport hunting would be prohibited. Emphasis would be placed on conventional national park recreation such as sightseeing and hiking. Some forms of outdoor recreation, such as snowmobiling, would be restricted.

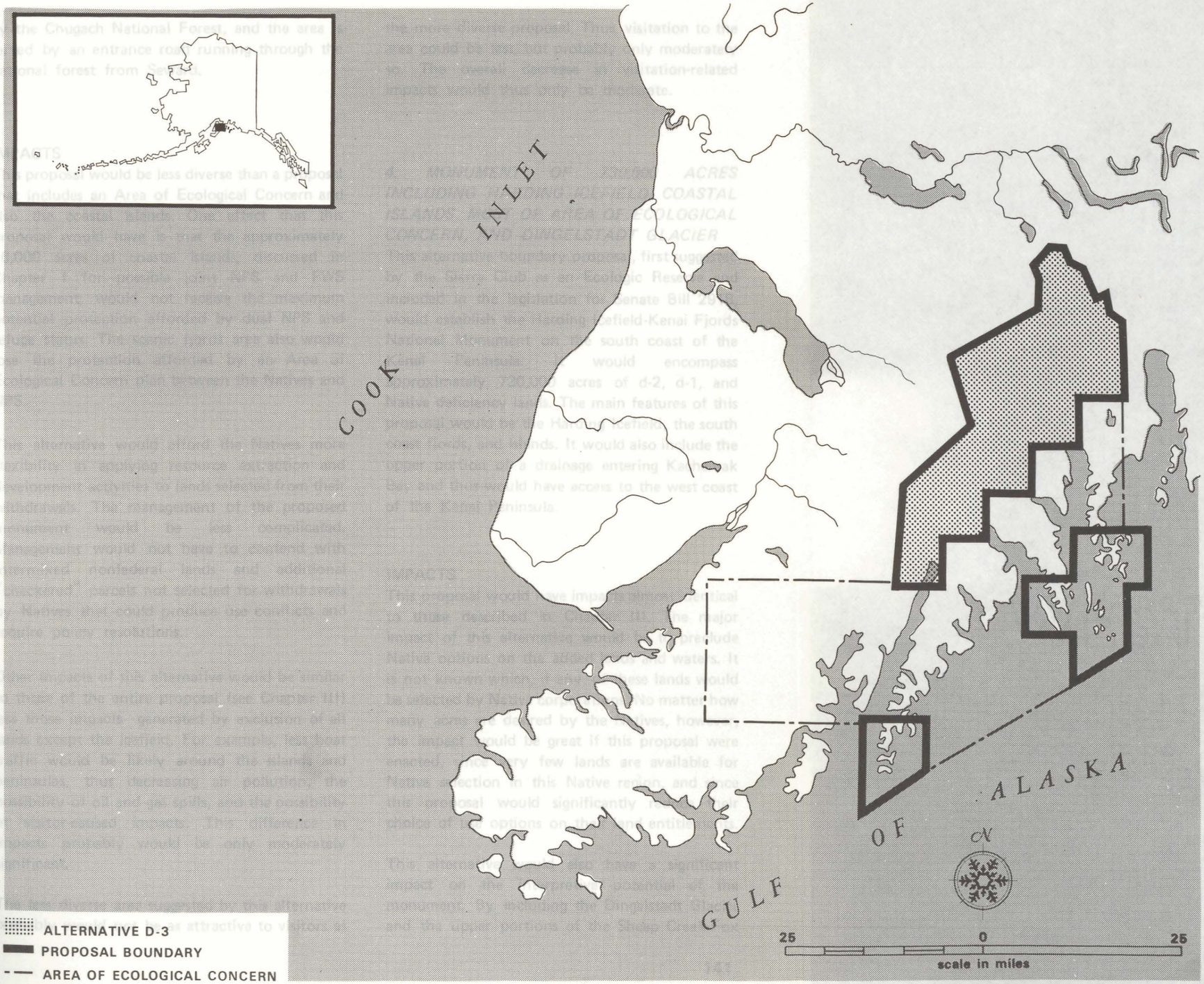
The proposal would require a close working relationship in the immediate area between the NPS and the Forest Service, as well as other local landowners and governments, since the northeastern portion of the proposal is bordered

BOUNDARY ALTERNATIVE D-2




BOUNDARY ALTERNATIVE D-2
ALTERNATIVE D-2
PROPOSAL BOUNDARY
AREA OF ECOLOGICAL CONCERN

BOUNDARY ALTERNATIVE D-3



by the Chugach National Forest, and the area is served by an entrance road running through the national forest from Seward.

IMPACTS

This proposal would be less diverse than a proposal that includes an Area of Ecological Concern and also the coastal islands. One effect that this proposal would have is that the approximately 16,000 acres of coastal islands, discussed in Chapter I for possible joint NPS and FWS management, would not receive the maximum potential protection afforded by dual NPS and refuge status. The scenic fjords area also would lose the protection afforded by an Area of Ecological Concern plan between the Natives and NPS.

This alternative would afford the Natives more flexibility in applying resource extraction and development activities to lands selected from their withdrawals. The management of the proposed monument would be less complicated. Management would not have to contend with intermixed nonfederal lands and additional "checkered" parcels not selected for withdrawals by Natives that could produce use conflicts and require policy resolutions.

Other impacts of this alternative would be similar to those of the entire proposal (see Chapter III) less those impacts generated by exclusion of all lands except the icefield. For example, less boat traffic would be likely around the islands and peninsulas, thus decreasing air pollution, the possibility of oil and gas spills, and the possibility of visitor-caused impacts. This difference in impacts probably would be only moderately significant.

The less diverse area suggested by this alternative probably would not be as attractive to visitors as the more diverse proposal. Thus, visitation to the area could be less, but probably only moderately so. The overall decrease in visitation-related impacts would thus only be moderate.

4. MONUMENT OF 730,000 ACRES INCLUDING HARDING ICEFIELD, COASTAL ISLANDS, MOST OF AREA OF ECOLOGICAL CONCERN, AND DINGELSTADT GLACIER

This alternative boundary proposal, first suggested by the Sierra Club as an Ecologic Reserve and included in the legislation for Senate Bill 2918, would establish the Harding Icefield-Kenai Fjords National Monument on the south coast of the Kenai Peninsula. It would encompass approximately 730,000 acres of d-2, d-1, and Native deficiency lands. The main features of this proposal would be the Harding Icefield, the south coast fjords, and islands. It would also include the upper portion of a drainage entering Kachemak Bay and thus would have access to the west coast of the Kenai Peninsula.

IMPACTS

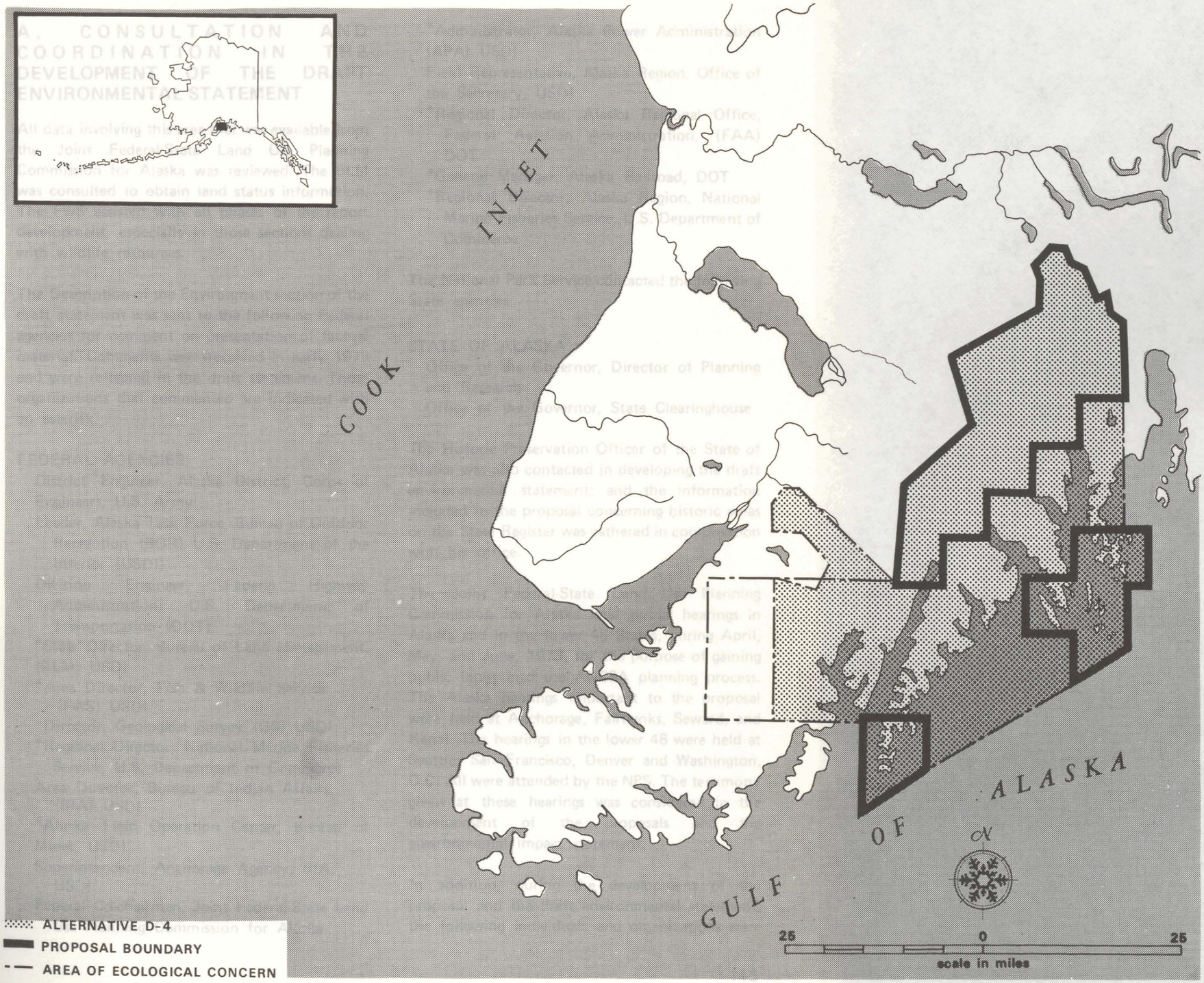
This proposal would have impacts almost identical to those described in Chapter III. The major impact of this alternative would be to preclude Native options on the added lands and waters. It is not known which, if any, of these lands would be selected by Native corporations. No matter how many acres are desired by the Natives, however, the impact would be great if this proposal were enacted, since very few lands are available for Native selection in this Native region, and since this proposal would significantly reduce their choice of use options on their land entitlements.

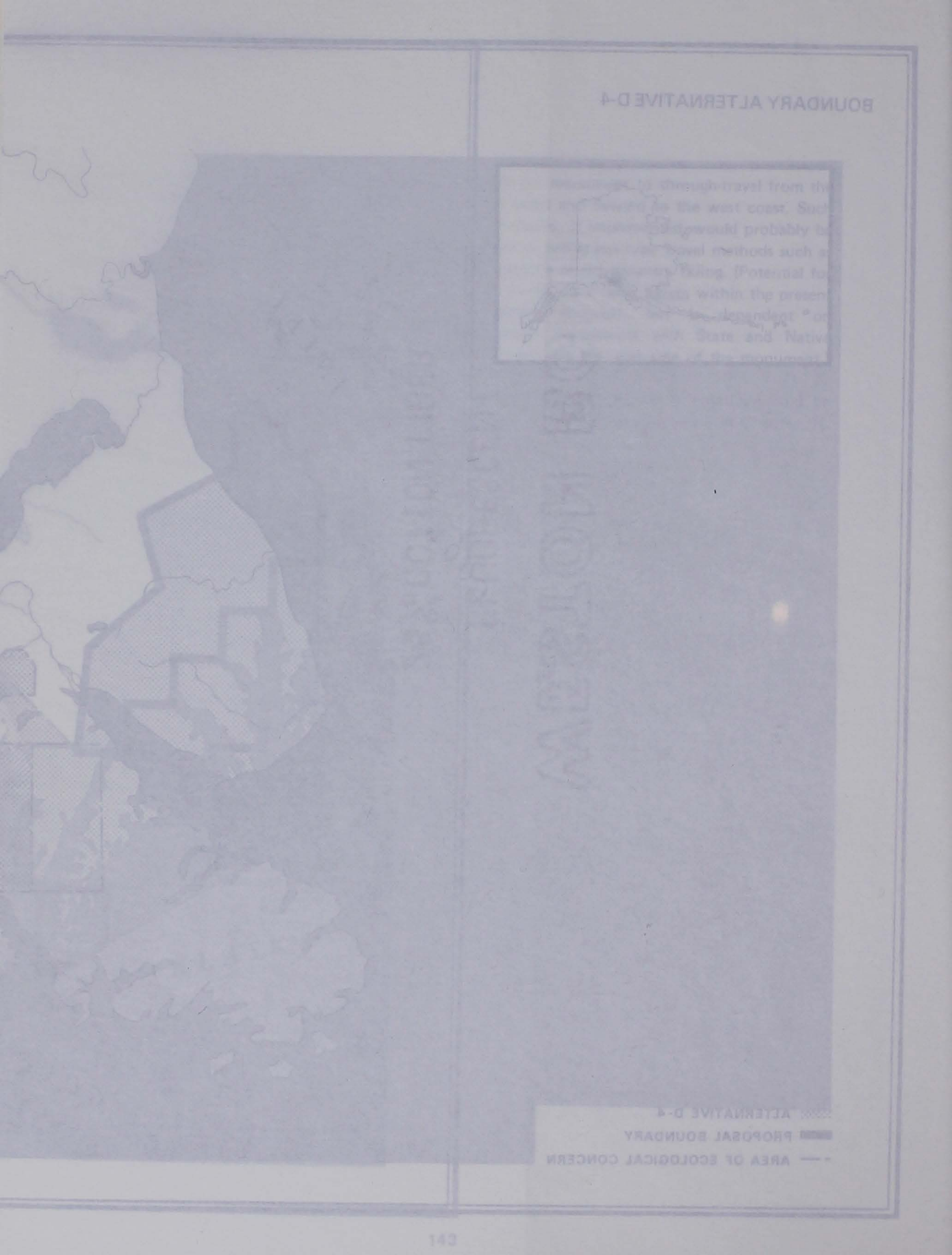
This alternative would also have a significant impact on the interpretive potential of the monument. By including the Dingelstadt Glacier and the upper portions of the Sheep Creek-Fox

River drainage, it would give the monument convenient access to Kachemak Bay and thus to Cook Inlet on the west coast of the Kenai Peninsula. This would allow the Park Service to develop potential visitor facilities on the west coast of the Peninsula and would contribute to the development of trail access from the west by removing total dependence on cooperative agreements with landowners on that side of the monument. This could allow significant changes in the intramonument transportation scheme, possibly from a generally circular pattern of travel within the monument to through-travel from the south coast and Seward to the west coast. Such travel routes, if implemented, would probably be limited to wilderness-type travel methods such as backpacking or crosscountry skiing. (Potential for trails to the west coast exists within the present monument proposal, but is dependent on cooperative agreements with State and Native landowners on the west side of the monument.)

All other impacts of this alternative would be essentially unchanged from those in Chapter III.

BOUNDARY ALTERNATIVE D-4





A. CONSULTATION AND COORDINATION IN THE DEVELOPMENT OF THE DRAFT ENVIRONMENTAL STATEMENT

All data involving this area that was available from the Joint Federal-State Land Use Planning Commission for Alaska was reviewed. The BLM was consulted to obtain land status information. The FWS assisted with all phases of the report development, especially in those sections dealing with wildlife resources.

The Description of the Environment section of the draft statement was sent to the following Federal agencies for comment on presentation of factual material. Comments were received in early 1973 and were reflected in the draft statement. Those organizations that commented are indicated with an asterisk.

FEDERAL AGENCIES:

District Engineer, Alaska District, Corps of Engineers, U.S. Army

Leader, Alaska Task Force, Bureau of Outdoor Recreation (BOR) U.S. Department of the Interior (USDI)

Division Engineer, Federal Highway Administration, U.S. Department of Transportation (DOT)

*State Director, Bureau of Land Management, (BLM) USDI

*Area Director, Fish & Wildlife Service (FWS) USDI

*Director, Geological Survey (GS) USDI

*Regional Director, National Marine Fisheries Service, U.S. Department of Commerce

Area Director, Bureau of Indian Affairs, (BIA) USDI

*Alaska Field Operation Center, Bureau of Mines, USDI

Superintendent, Anchorage Agency, BIA, USDI

Federal Co-chairman, Joint Federal-State Land Use Planning Commission for Alaska

*Administrator, Alaska Power Administration (APA) USDI

Field Representative, Alaska Region, Office of the Secretary, USDI

*Regional Director, Alaska Regional Office, Federal Aviation Administration, (FAA) DOT

*General Manager, Alaska Railroad, DOT

*Regional Director, Alaska Region, National Marine Fisheries Service, U.S. Department of Commerce

The National Park Service contacted the following State agencies:

STATE OF ALASKA

Office of the Governor, Director of Planning and Research

Office of the Governor, State Clearinghouse

The Historic Preservation Officer of the State of Alaska was also contacted in developing the draft environmental statement; and the information included in the proposal concerning historic areas on the State Register was gathered in coordination with his office.

The Joint Federal-State Land Use Planning Commission for Alaska held public hearings in Alaska and in the lower 48 States, during April, May, and June, 1973, for the purpose of gaining public input into the ANCSA planning process. The Alaska hearings important to the proposal were held at Anchorage, Fairbanks, Seward, and Kenai. The hearings in the lower 48 were held at Seattle, San Francisco, Denver and Washington, D.C. All were attended by the NPS. The testimony given at these hearings was considered in the development of the proposals and the environmental impact statement.

In addition, during the development of the proposal and the draft environmental statement, the following individuals and organizations were

consulted in gathering information to supplement published materials.

INDIVIDUALS:

James A. Kross, Environmental Consultant, Anchorage
Alex Shadora, Cook Inlet Regional Corporation
William Workman, Alaska Methodist University, Archeology Dept.
Ross Schaff, Alaska Methodist University, Geology Dept.
Jack Hession, Sierra Club, Alaska representative
Ernest Mueller, Alaska Conservation Society, President
James Kowalsky, Friends of the Earth, Alaska representative
Larry Oskolkof, Cook Inlet Regional Corporation
Cecil Barnes, Chugach Native Association

ORGANIZATIONS:

Chugach Native Association
City of Seward
Seward Chamber of Commerce
Joint Federal-State Land Use Planning Commission for Alaska
Reeve Aleutian Airlines
Advisory Council on Historic Preservation
Staff, Alaska State Historic Preservation Officer

B. COORDINATION IN THE REVIEW OF THE DRAFT ENVIRONMENTAL STATEMENT

Comments on the draft environmental statement were requested from the following agencies and organizations. Those that responded are indicated with an asterisk.

FEDERAL:

Department of Agriculture
*Forest Service
*Soil Conservation Service
*Department of Commerce
National Marine Fisheries Service
National Oceanic and Atmospheric Administration
Department of Defense
*Alaska Command
*Department of the Army, Corps of Engineers
Department of the Navy
*Department of Health, Education & Welfare
*Department of Housing and Urban Development
Department of the Interior
*Alaska Power Administration
*Bureau of Indian Affairs
*Bureau of Land Management
*Bureau of Mines
Bureau of Outdoor Recreation
*Bureau of Reclamation
Fish and Wildlife Service
*Geological Survey
Department of Transportation
*Federal Highway Administration
U.S. Coast Guard
*Federal Aviation Administration
*Environmental Protection Agency
Advisory Council on Historic Preservation
*General Services Administration

STATE:

*Governor of the State of Alaska (State Clearinghouse)
Alaska State Historic Preservation Officer

OTHER AGENCIES:

*Joint Federal-State Land Use Planning Commission for Alaska
*Kenai Peninsula Borough
Greater Anchorage Borough
*City of Seward
City of Anchorage

NATIVE ORGANIZATIONS:

Chugach Natives, Inc.
Alaska Federal of Natives
Alaska Native Foundation
English Bay Village Corporation
*Port Graham Village Corporation

ORGANIZATIONS:

*Sierra Club
*Friends of the Earth
*The Wilderness Society
National Parks and Conservation Association
*National Wildlife Federation
National Audubon Society
Alaska Historical Commission
*Alaska Conservation Society
Alaska Wilderness Council
Alaska Professional Hunters Association
Sea Grant Program
*Alaska Wildlife Federation and Sportsmen's Council
Alaska Miners Association
*The Conservation Foundation

C. CONSULTATION OF THE PUBLIC REVIEW IN PREPARATION OF THE FINAL ENVIRONMENTAL STATEMENT

The draft environmental statement for Harding Icefield-Kenai Fjords National Monument was available for review by the public from December 18th 1973 through July 22nd 1974. A total of 203 letters from 224 authors were received on the draft statement. These included 18 letters from Federal agencies, 1 letter from a State agency, 5 letters from 4 other governmental agencies, 3 letters from Native organizations, and 28 letters from 29 other organizations (one letter was jointly authored). 148 letters were received from 169 individuals. All letters were analyzed and 68 are printed. These include all agency and Native corporation letters, all 28 organization letters, and 13 individual letters.

Of the 13 individual letters which were printed, one letter (see letter from Billy C. Wallace) represents 106 other letters not printed which made the same comments as Mr. Wallace. All of these commented on the adequacy of the environmental statement.

In addition, out of 13 individual letters printed, two (see letters from Steve Marquess and John A. Pierog) were included as examples of 29 other letters which did not comment on the adequacy of the environmental statement. All of these letters commented on the draft statement as a means of registering either support or opposition to the proposal and thus the Pierog and Marquess letters were printed as examples of the different viewpoints expressed.

The draft statement was circulated for review of the accuracy of the information it contained and the adequacy of the environmental analysis. As has been noted, many comments went beyond this and voiced support or rejection of the proposal itself. The proposal is before Congress, and the legislative process for considering the proposal will continue until at least December 1978. These legislative channels are open to any group or individual wishing to express a position on the proposal.

Comments which raised questions requiring written response are numbered in consecutive order throughout the series of letters. The responses correspond in number to the comments and immediately follow each letter. Since similar questions were posed by several reviewers, the first time a question appears in the series of letters, it is fully answered. From then on, responses to the similar questions are in many cases referred back to the first answer. To facilitate this referral system, letters are organized by category and placed in alphabetical order within each category as follows: Federal government agencies, State agencies, Federal-State agencies, other governmental agencies, Native corporations and associations, organizations, and individuals.

TABLE XII

INDEX OF CORRESPONDENCE RECEIVED,
(Not included: Individuals)

FEDERAL AGENCIES

Department of Agriculture
- Forest Service
- Soil Conservation Service

Department of Commerce

Department of Defense
- Alaskan Command
- Corps of Engineers

Department of Health, Education and Welfare

Department of Housing and Urban Development

Department of the Interior
- Alaska Power Administration
- Bureau of Indian Affairs
- Bureau of Land Management
- Bureau of Reclamation
- Geological Survey

Department of Transportation
- Federal Aviation Administration
- Federal Highway Administration

Environmental Protection Agency
- Alaska Office
- Washington Office

General Services Administration

STATE AGENCIES

State of Alaska

FEDERAL-STATE AGENCIES

Joint Federal-State Land Use Planning Commission for Alaska

OTHER GOVERNMENTAL AGENCIES

Fairbanks North Star Borough
Kenai Peninsula Borough
Seward City Council

NATIVE CORPORATIONS AND ASSOCIATIONS

Cook Inlet Region, Inc.
Doyon Ltd.
Port Graham Corporation, Land Selection Committee

ORGANIZATIONS

Alaska Center for the Environment
Alaska Conservation Society - Tanana-Yukon Chapter
Alaska Geological Society
Alaska Wildlife Federation and Sportsmen's Council
Bryan Outdoor Resources Group
Business and Professional Women's Clubs, Inc.
The Conservation Foundation
Ecology Center of Southern California
Exxon Company, U.S.A.
Fairbanks Environmental Center with Friends of Earth
Friends of Earth, Arizona Branch
International Pacific Halibut Commission
International Pacific Salmon Fisheries Commission
National Association of Countries
National Society of Professional Engineers
National Wildlife Federation
Nature Conservancy
Northwestern University-Public Lands Project
Saguaro Ecology Club
Seward Chamber of Commerce
Sierra Club
Society of American Foresters-Alaska Section
Society of American Foresters-Juneau Chapter
Society of American Foresters-Sitka Chapter
University of Alaska, Institute of Social, Economic
and Government Research; Victor Fischer
University of Alaska, Institute of Arctic Biology, Lawrence Irving
Western Wilderness Association
The Wilderness Society

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
Washington, D.C. 20250

5510

JUL 22 1974

Mr. Theodor R. Swem, Chairman
Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem:

Here are our comments on the remaining 18 legislative proposals recommended by the Secretary of the Interior pursuant to the Alaska Native Claims Settlement Act (P.L. 92-203). Comments on the first six proposals were transmitted to you in June.

Our comments are organized in a "general comments" section which applies to all 28 proposed units of National Parks, Forests, Refuges, and Wild and Scenic Rivers and in "specific comments" sections covering each Park, Refuge and Wild & Scenic River proposals. We have not commented on the National Forest proposals since we will be involved in cooperating and assisting you in the preparation of the final statements for those.

We suggest that the general section of comments be included in the Final Environmental Statement of all the proposed units and the specific section be included only in the Statement to which it applies.

General Comments

Relationships Between Proposals

The 28 statements, in a sense, are related since they are a product of ANCSA. Collectively, the proposals create a significant impact not only on the State of Alaska as a whole but nationally as well. The individual statements describe the various impacts involved for that unit, however, the cumulative effect of the impacts of the several parks, forests, refuges and wild rivers is not discussed. 1

An example is the impact on sport hunting. Planning or curtailing hunting on one National Park may have a minor effect on guides, sportsmen and hunted populations whereas closing, carefully restricting or possibly closing eleven units within 10 years could have a major impact and could result in serious long-range consequences by directing intense hunting pressure into areas remaining open. Secondary effects on subsistence living could be severe. The State of Alaska can take steps on other lands to reduce possible adverse results but it should be forewarned by complete discussion of possible cumulative impacts.

In each instance where land is withdrawn from some form of current or recent public use (e.g., mining, entry, hunting, travel) an evaluation should be made in each Statement based on the assumption that many or all of the units will be approved so the impact of the individual proposal can be related to the other units in the legislative package.

The approval of 83 million acres of reserved Federal system lands is another example of cumulative impact that should be addressed. This action makes a long-term commitment of land and each unit should not be considered in isolation. It would be pertinent to point out in this regard that the ANCSA also makes a positive commitment of some 45 million acres to private (Native) ownership. In making the Settlement, the State of Alaska will be free to complete its 103.5 million acres entitlement -- another long-term allocation of Alaska land and resources. The part each unit plays in the total commitment to environmental quality, national economic development and regional development should be displayed so that the relationship of the proposals to the entire State can be more easily understood.

In this regard, some of the refuge proposals show the relationship of waterfowl populations to the entire North American continent. These kinds of relationships should be emphasized.

The geographic relationships of Federal reserves in Alaska should also be discussed. For example, the continuum of Park and Refuge status proposed through the Brooks Range from the Canadian border to the Chukchi Sea, broken only by 48 miles along the pipeline corridor and 16 miles at Noatak Village, should be discussed with relationship to the impact it may have on the future of the Arctic. These total impacts may be viewed positively or adversely but they should be revealed.

Additionally, the impact of these proposals on the management systems to which they are added should be discussed.

We plan to include such discussions in the Final Environmental Statements for National Forest proposals.

Multiple Use - Sustained Yield

The descriptions of multiple use given in the several statements vary in their accuracy and objectivity and, in several instances are conflicting. In addition to comments we have given in those specific instances we wish here to quote the definition of multiple use as contained in the Multiple Use-Sustained Yield Act of 1960 (P.L. 86-517) as well as the definition of sustained yield. Any discussion of this subject is incomplete without these definitions.

"Sec. 4. As used in this Act, the following terms shall have the following meanings:

(a) "Multiple use" means: The management of all the various renewable surface resources of the national forests so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform the changing needs and conditions; that some land will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output.

(b) "Sustained yield of the several products and services" means the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the national forests without impairment of the productivity of the land."

We appreciate the opportunity to comment.

Sincerely,

R. MAX PETERSON
Deputy Chief

Enclosures

HARDING ICEFIELD-KENAI FJORDS NATIONAL MONUMENT PROPOSAL
(DES 73-86)

Specific Comments

1. In the Legislative Action section (p.2) a clear definition of subsistence hunting is needed so that the impact can more objectively be determined. This is especially true since page 131 states, "The extent of subsistence use here, if any, is unknown...". 3

2. The statement in "Transportation and Communication" (p. 111) that "The highways provide a major impetus for development of a tourist industry." Appears to be inconsistent with viewpoints expressed in the other National Park proposals. (e.g. Gates of the Arctic, Katmai, Lake Clark, etc.). 4

3. The "Probable Future of this Environment if Proposal Is Not Enacted" section (p. 111) offers little justification that "... the developments called for in this proposal possibly would not occur, at least not as soon and tourist visitation to the area would not increase as rapidly or as immediately." 5

4. Statements in section on "Impact on Land Use Patterns" (p. 113) appear to conflict. For example one statement concludes that "Hiking, camping, and rock climbing may occur, but the areas rugged inaccessibility limits these activities." However, in the next paragraph it is concluded that "There is potential for far more recreational use of the land area and potential also exists for increased mineral exploration and timber harvesting." 6

5. The "Impact on Vegetation" section (p. 116) contains statements which appear emotional and which the given statistics fail to justify. For example on page 117 it states, "The NPS will prohibit the cutting of timber and other uses which may lead to massive destruction of plant life in the monument." This statement is made even though on page 116 it states "of all the vegetative cover in the area, only one-half of one percent (5,000 acres) is suitable for timber harvesting, though such harvest is not envisioned by present land managing agencies on the peninsula. 7

RESPONSE TO COMMENTS BY
U.S. FOREST SERVICE

1. In passing the Alaska Native Claims Settlement Act of 1971, Congress itself gave very clear attention to the regional, state and national effects of the Alaska land transfers necessary to provide Native claim settlement, to meet the outstanding requirements of Alaskan statehood, and to provide the continuing administration of the public lands. It directed the Secretary to withdraw lands for the Four Systems of National Parks, Forests, Wildlife Refuges and Wild and Scenic Rivers after other factors were taken into account in the planning process. Congress further provided for the establishment of a Joint Land Use Planning Commission and the orderly implementation of the planning process concerning areas planned and best suited for permanent reservation in Federal ownership. It called for recommendations to insure that economic growth and development was planned in an orderly and compatible way with State and national environmental objectives and the public interest in public lands, parks, forests, and wildlife refuges in Alaska, as well as economic and social well-being of the Native people and other residents of Alaska. Agreement was reached with the State on the general area of the Four System proposals more specifically set forth here. These considerations and steps were examined and implemented prior to the individual development of Federal proposals with finite boundary lines and acreage limits. The need to consider cumulative impacts was recognized also during the development of the environmental impact statements on the detailed proposals. The cumulative aspects of each proposal, where they could be detected with reasonable assurance of significance, are noted in the evaluations of that proposal. Appropriate analyses in the statements are developed on a regional basis for some proposals and in other cases, on a statewide or broader basis. It would be repetitive to undertake an additional EIS to the 28 already completed.

Anyone wishing to ascertain overall effect, may do so by reading the aggregate impact of all or part of the proposals that would be involved and considering them the same as the sum of the impact discussed in each of the environmental statements. The statements are being issued and are available on the basis of sets of 28. Where the total cumulative impact in a region or the State appears particularly significant in relationship to a given proposal, the subject statements involved are modified

to include any additional impact considerations not previously described among the analyses involved. It is the considered opinion of the Department that these foregoing actions and the statements themselves taken together do constitute a good faith effort at providing a fair and accurate evaluation of aggregate or cumulative impact on major regions, the State and the Nation as a whole.

It is recognized that the proposed Harding Icefield-Kenai Fjords National Monument would have an aggregate impact on the Kenai Peninsula region when considered in conjunction with the proposals for the Seward National Recreation Area, the additions to the Chugach National Forest and the proposals for wilderness on the Kenai Moose Range and the Nellie Juan Wilderness Area (in the Chugach Forest). These five proposals, in addition to the existing Chugach National Forest and Kenai National Moose Range, in many areas overlap, but do cover about two-thirds of the lands on the Kenai Peninsula. Each proposal and existing area varies somewhat in the nature of its restrictions and management policies.

In the case of Harding-Kenai specifically, the impacts section of Chapter III:F1,F3,F4,F5,F6,F7 and G, as well as other sections of the statement, have been revised to examine regional aspects of these impacts. This includes sport hunting (Chapter III:F4), even though the regional impact is considered to be very slight--as it involves less than 10 goats taken annually and surrounding federally owned areas are open to hunting. The aggregate impact on land ownership patterns and availability in the region that would result from implementation of Harding-Kenai and the other proposals has been discussed in section III:F1. The aggregate impacts on subsistence uses have been discussed in III:F3; sport hunting and recreation in III:F4; timber harvesting and the market economy in III:F5; community social and cultural life in III:F6; mining industry in III:F7; and on transportation in section III:G.

2. The "No Action" and "Multiple Use" alternatives in Chapter VIII have been revised to include this information and to present a more balanced view of potential use management. (See Chapter VIII, sections A and C.)

3. Subsistence activities are recognized as a traditional, dynamic, cultural activity within the general region of the proposal. Significant subsistence uses of lands proposed for inclusion in the monument or AEC are presently unknown to the National Park Service. It is also recognized that no definition of subsistence, as such, has been established. The Park Service will work with all concerned State agencies, communities, and affected individuals in arriving at an equitable and workable understanding for a management plan for subsistence resource uses in the proposed monument.

Additional discussion of legislative and administrative proposals for subsistence management has been added to Chapter I, sections A and B. Also, a discussion of cooperative efforts concerning subsistence has been added to section C of Chapter I.

4. The City of Seward, immediately east of the Harding-Kenai proposal, is currently accessible year-round by paved highway. This road, in conjunction with other transportation facilities available in the area, makes the proposal readily accessible to visitation from the State's population center at Anchorage. This accessibility, in turn, is judged by the Park Service to be one of the major assets of potential tourist development in the area. The proposed monument, itself, has been planned and designed to take the present accessibility and potential tourist visitation into full account. This was the reason for the statement in the "Transportation and Communication" section of Chapter II.

   We do not believe that it is inconsistent with the other NPS proposals, because those proposals are not at present readily accessible by car or, for that matter, by any other form of cheap and convenient access. In view of the fact that they are not readily accessible or close to Anchorage, the development concepts for those areas were based on long-range development potential. Often, these development concepts had to be worked out on the assumption that road access would be a very long time in coming, if at all. Thus, tourism and related facilities have been planned for these areas within a framework of no road access.

5. The "Probable Future" section of Chapter II (section C) has been rewritten to remove any bias and to present a more balanced viewpoint.

   While it is true that similar development of recreational resources in the area could occur under private as well as Federal management, we believe that there are potential differences in predictable development patterns which can be discussed at this time. These differences (essentially between potential NPS and non-NPS development) are primarily ones of degree.

   First, one can surmise that if recreational development were to occur, essentially the same development plan would be followed by most of the potential future managers of the area: local groups or governments, the State, the NPS, or other Federal agencies. Second, it is difficult to predict the differences in future visitation to the area if it were included

in a national recreation area, a private development, the proposed monument, etc. However, based on experience at Mt. McKinley National Park and with parks and recreation areas in the lower 48 States, it can be speculated that visitation to other than a national park or monument would grow less rapidly, thus visitation related impacts, both beneficial and detrimental, would occur to a lesser degree. An NRA, or other development, might recieve less publicity in the lower 48 or within Alaska itself, than would a monument, and the resultant lower visitation would lessen the impacts of recreational development.

6. The "Impact on Land Use Patterns" has been rewritten (see Chapter III, section F1, "Land Ownership Patterns"). Much of the area is difficult of access and thus hardy, wilderness-type recreation is in order. However, proposed transportation to the surface of the Icefield itself plus boat or plane access to the coastal areas would open much of the monument for increased recreational use by less hardy souls. (See Chapter III, sections F4 and F5; and Chapter II, B 7.

7. The "Impact on Vegetation" section has been rewritten. Statements referring to possible disruption of the natural resources in the proposal referred in general to localized, critical ecosystem disruption. It is true that on an area-wide basis, the potential for disruption of large areas the natural environment from such uses as mining and lumbering is relatively low as most of the proposed monument is covered with barren rock and ice. However, where timber stands do occur, mostly on steep slopes, destruction of vegetation would be significant. Further, it is conceivable that mining could occur on a fairly large scale in the area if significant deposits of economically developable ore were discovered. With new technological developments such mining could even occur near the perimeter of the Icefield, and although it now seems unlikely, this could involve significant destruction of the natural values of the area.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
204 East 5th Avenue, Room 217, Anchorage, Alaska 99501

July 19, 1974

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem:

The twenty-eight draft environmental impact statements for inclusion of federally-owned lands into four national systems - The National Parks, Forests, Wildlife Refuges, and Wild and Scenic Rivers, addressed to the Soil Conservation Service, Washington, D. C., on December 28, 1973, were referred to the Soil Conservation Service, Anchorage, Alaska, for review and comment. This response and attached specific remarks represent all comments of the Soil Conservation Service for the twenty-one statements requested by July 22, 1974.

The task force that developed the proposals and environmental impact statements is commended. The statements represent considerable effort in the collection of available basic data and in effective presentation of numerous pertinent facts. The following general comments are presented for your consideration. We suggest that they be reproduced for distribution with the specific comments which are attached.

GENERAL COMMENTS

1. Use of soils information. Soils information available in the form of published soil surveys and in the recently completed "Exploratory Soil Survey", which is being prepared for publication by the Soil Conservation Service, contains specific and general soils information which would be useful in evaluating potential land uses. The National Cooperative Soil Survey is a continuing activity between the Department of Agriculture, the University of Alaska, and other state and federal agencies. More detailed information will be available over a period of time and should be used in developing more specific plans for the areas under consideration. 8

2. Alternative land uses. The range of choices for land uses on specific areas may be limited because of climate, soils, and topography. Where such choices do exist, the areas should be analyzed in terms of 9

tradeoffs (benefits foregone and benefits realized) under various potential land use choices and combinations. The short-term versus long-term impacts on both natural environment and human environmental needs from potential uses should be portrayed. 9

3. Options for future use. Even if archeological values, historic values, unique land forms, and fish, wildlife, and other natural environmental values may seem of highest priority at the present time, flexibility for accommodating different compatible uses in future years should be maintained. Research, experience, and needs of people will need to be evaluated periodically and changes in land use priorities considered. It appears that only those systems which propose multiple use can provide for a full range of agricultural activities should it be determined in the future that this is the highest and best use of the land. 10

4. Compatibility with land use plans. Land use plans for the State of Alaska are at an early development stage. A master plan for the State may be years away. Use of one-fourth of the land in the State for wildlife areas, national forests, national parks, and scenic rivers may be well justified. However, the exact locations, sizes, and distribution of such areas should be compatible with and a part of the overall land use plan for Alaska. 11

We appreciate the opportunity to comment.

Sincerely,

Ralph M. Bell (acting)

Weymeth E. Long
State Conservationist

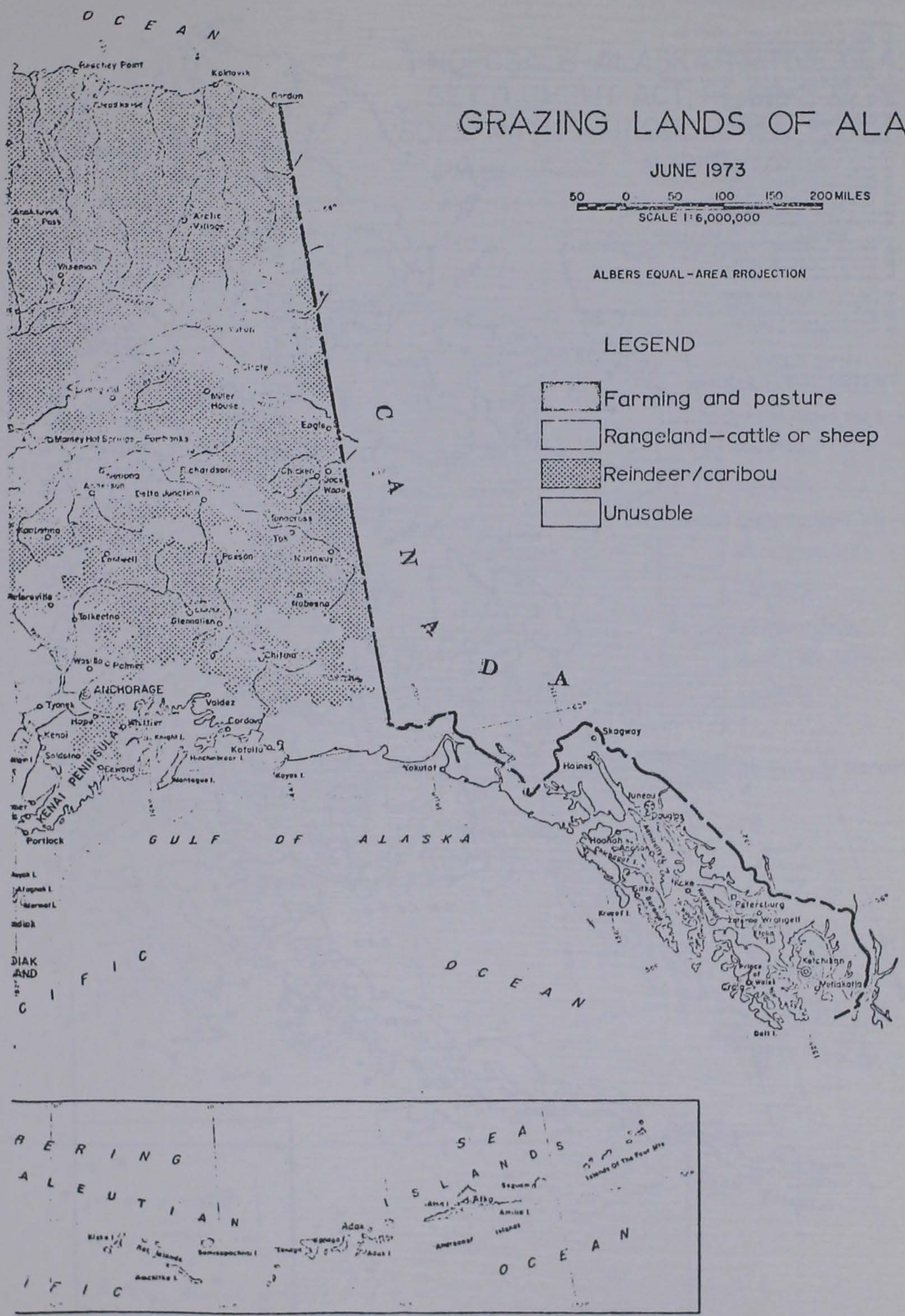
Attachments

cc:
Kenneth E. Grant, Administrator, SCS, Washington, D.C.
Council on Environmental Quality (5 copies)
USDA Coordinator of Environmental Activities

UNIVERSITY OF ALASKA
Institute of Agricultural Sciences

UA

D C Tomlin
January 1974



GRAZING LANDS OF ALASKA

JUNE 1973

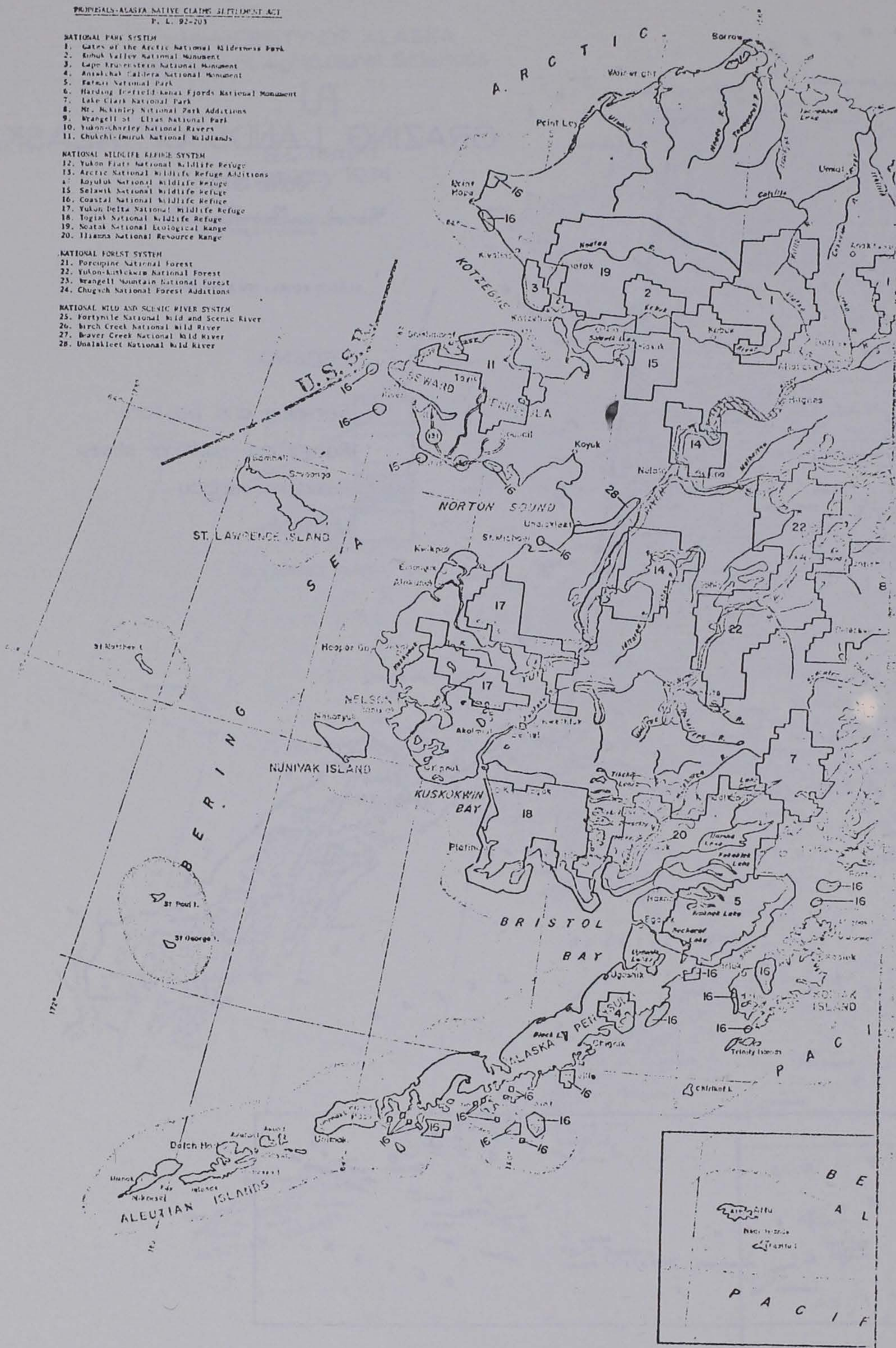
50 0 50 100 150 200 MILES

SCALE 1:6,000,000

ALBERS EQUAL-AREA PROJECTION

LEGEND

☐ Farming and pasture
☐ Rangeland—cattle or sheep
▨ Reindeer/caribou
☐ Unusable



PROPOSALS-ALASKA NATIVE CLAIMS SETTLEMENT ACT
P. L. 92-203

NATIONAL PARK SYSTEM
1. Gates of the Arctic National Wilderness Park
2. Kobuk Valley National Monument
3. Cape Krusenstern National Monument
4. Aniakchak Caldera National Monument
5. Katmai National Park
6. Harding Icefield-Kenai Fjords National Monument
7. Lake Clark National Park
8. Mt. McKinley National Park Additions
9. Wrangell St. Elias National Park
10. Yukon-Charley National Rivers
11. Chukchi-Imuruk National Wildlands

NATIONAL WILDLIFE REFUGE SYSTEM
12. Yukon Flats National Wildlife Refuge
13. Arctic National Wildlife Refuge Additions
14. Koyukuk National Wildlife Refuge
15 Selawik National Wildlife Refuge
16. Coastal National Wildlife Refuge
17. Yukon Delta National Wildlife Refuge
18. Togiak National Wildlife Refuge
19. Noatak National Ecological Range
20. Iliamna National Resource Range

NATIONAL FOREST SYSTEM
21. Porcupine National Forest
22. Yukon-Kuskokwim National Forest
23. Wrangell Mountain National Forest
24. Chugach National Forest Additions

NATIONAL WILD AND SCENIC RIVER SYSTEM
25. Fortymile National Wild and Scenic River
26. Birch Creek National Wild River
27. Beaver Creek National Wild River
28. Unalakleet National Wild River

U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

PROPOSALS-ALASKA NATIVE CLAIMS SETTLEMENT ACT, PL 92-203 AND SOILS WITH AGRICULTURAL POTENTIAL

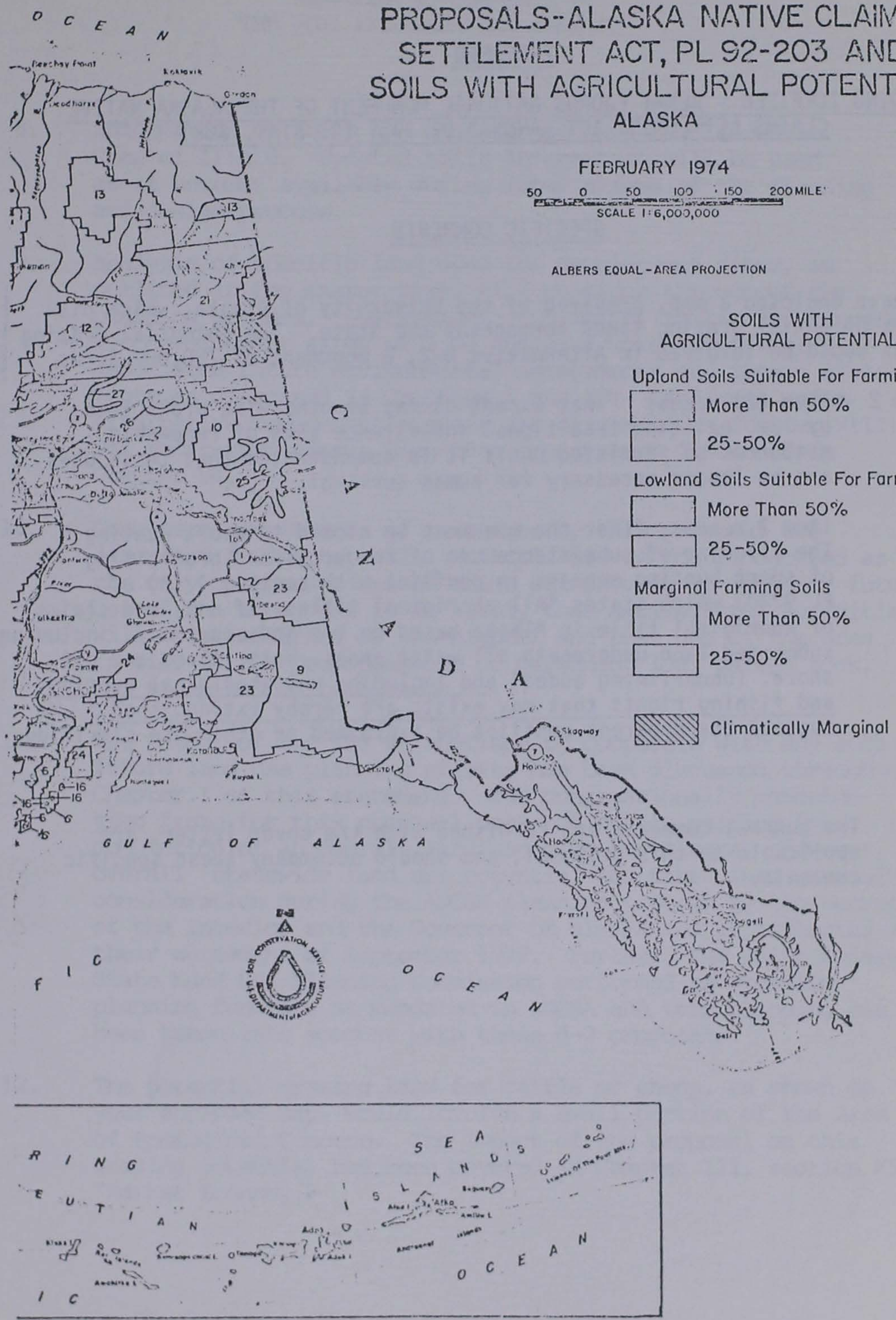
ALASKA

FEBRUARY 1974

50 0 50 100 150 200 MILES

SCALE 1:6,000,000

ALBERS EQUAL-AREA PROJECTION



PROPOSED

HARDING ICEFIELD - KENAI FJORDS NATIONAL MONUMENT OF THE ALASKA NATIVE CLAIMS SETTLEMENT ACT (ANCSA) OF 1971 (35 STAT. 688)

SPECIFIC COMMENTS

We have enclosed a map, prepared by the University of Alaska, which displays potential grazing lands throughout the State. The potential grazing lands would be involved in Alternative D-2, a monument of 760,000 acres. 12

Page 2 - Item (2) reads: "That except as may be otherwise prohibited by law, existing traditional subsistence uses of renewable resources be permitted until it is demonstrated that these uses are no longer necessary for human survival. . . ."

Item 7 reads: "That the monument be closed to sport hunting." The allowing of subsistence use of resources and prohibiting of sport hunting appears in conflict with section 4 (B) of PL 92203 which states "All aboriginal titles, if any, and claims of aboriginal title in Alaska based on use and occupancy, including submerged land underneath all water areas, both inland and offshore, (underlining added) and including any aboriginal hunting and fishing rights that may exist, are hereby extinguished." We suggest the apparent conflict be explained or otherwise clarified. 13

NOTE: The general comments are furnished with the cover letter, are applicable to this proposal, and should accompany these specific comments.

RESPONSE TO COMMENTS BY
THE SOIL CONSERVATION SERVICE

8. Information on soils and a soils map have been added in Chapter II:A10. Updated soils information will be used as it becomes available during later stages of the planning and design process.

9. Analysis of specific land uses for development sites, as outlined in the master plan, will continue throughout the planning process. Limitations of climate, soils, and topography for development sites will be analyzed more specifically in associated future environmental assessments and impact statements as discussed in Chapters I and IV. Land uses under alternative management systems are discussed in Chapter VIII:C. The short-term versus long-term impacts are discussed in Chapter VI.

10. Long-term commitments of resources by this proposal are discussed in Chapter VII. Multiple use is not recognized as the only management system which can provide options for future use of the area, nor is it likely that agricultural activities will be established as the highest and best use of the area in view of the preponderence of permanent ice, barren rock, and steep-sloped topography.

11. The intent of the NPS to continue to cooperate with any such future land use planning efforts has been discussed throughout Chapter I of this statement. The congressionally mandated time frame for this proposal does not permit waiting for completion of an overall land use plan for Alaska. However, overall statewide land use potential was taken into careful consideration during the ANCSA planning process by the Secretary of the Interior and the Governor of Alaska and is reflected in their agreement of September 1972. Further, the Joint Federal-State Land Use Planning Commission performed an overview planning function as mandated in ANCSA and this planning has been taken into account with these d-2 proposals.

12. The potential grazing land for cattle or sheep, as shown on your enclosed map, would involve a small portion of the Area of Ecological Concern. The impact of the proposal on this grazing potential has been covered in Chapter III, section F5, "Market Economy."

13. The NPS recognizes subsistence as a dynamic cultural activity and not as an aboriginal hunting and fishing right. The proposal contains no recommendation for special privileges on the basis of race or ethnic identify but rather recommends provisions which would pertain to all subsistence users. These recommendations are made on the basis of acknowledgement of the vital importance of subsistence activities and harvests for subsistence users and of the intent of Congress, in enacting ANCSA, that the subsistence resources would be protected as necessary. The proposal for continued subsistence activities is described in a revised discussion in Chapter I: A, B, and C.

In its report, the congressional conference committee on ANCSA made clear that it did not expect that subsistence activities would be eliminated on lands managed by the Department of the Interior (see ANCSA, Joint Statement of the Committee of Conference, section I:C2). On the other hand, the Act extinguished all aboriginal title and rights. This proposal does not grant or confirm aboriginal title or rights. Also, traditional subsistence activities in NPS areas will be permitted without regard to race or previous aboriginal title or rights.

UNITED STATES DEPARTMENT OF COMMERCE
The Assistant Secretary for Science and Technology
Washington, D.C. 20230

July 3, 1974

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, D. C. 20240

Dear Mr. Swem:

The draft environmental impact statement for "Proposed Harding Icefield - Kenai Fjords National Monument, Alaska," has been received by the Department of Commerce for review and comment.

The statement has been reviewed and the following comments are offered for your consideration.

Summary

1. An overall environmental impact statement is required covering the cumulative impact of all 28 proposed withdrawals. Section 1500.6(d)(1) of the Council on Environmental Quality Guidelines states: "Agencies should give careful attention to identifying and defining the purpose and scope of the action which would most appropriately serve as the subject of the statement. In many cases, broad program statements will be required in order to assess the environmental effects of a number of individual actions on a given geographical area." This is one Federal action - not 28 - and the impact is aggregate. Particular emphasis should be placed on the benefits of environmental protection versus the costs to other national goals such as "Project Independence" with its heavy reliance on Alaskan petroleum. Consideration should be given to the effect of reduced domestic minerals supply on the overall economy in light of Secretary Morton's Foreword to his 1973 report to the Congress under the Mining and Minerals Policy Act where he stated that ". . .energy and minerals are the lifeblood of our industrial economy. . ." and ". . .development of our domestic resources is not keeping pace with our needs. . ." 14

2. The 28 draft environmental impact statements do not fulfill the National Environmental Protection Act requirements as set out in the decision of the D. C. Circuit Court in the Calvert Cliffs case construing the requirements of Section 102(2)(C) to include an economic and environmental cost/benefit analysis. 15

Page 27 of the decision reads as follows: "In each individual case, the particular economic and technical benefits of planned action must be assessed and then weighed against the environmental costs. . ." The decision clearly calls for cost/benefit analyses which are not contained in the draft environmental impact statement in even rudimentary form.

3. Section 1500.2(b)(3) of the CEQ Guidelines state that: "In particular, agencies should use the environmental impact statement process to explore alternative actions that will minimize adverse impacts and to evaluate both the long- and short-range implications of proposed actions to man, his physical and social surroundings, and to nature." Consideration of man's social (economic) surroundings are completely deficient in the 28 statements. 16

4. Section 1500.8(a)(1) of the CEQ Guidelines requires that: "The interrelationships and cumulative environmental impacts of the proposed action and other related Federal projects shall be presented in the statement." The 28 statements, on the contrary, completely disaggregate all impacts, social and environmental. 17

5. Section 1500.8(a)(2) of the CEQ Guidelines specifically requires impact statements to cover "the relationship of the proposed action to land use plans, policies and controls for the affected area. This requires a discussion of how the proposed action may conform or conflict with the objectives and specific terms of approved or proposed Federal, State and local land use plans, policies and controls." The draft statements do not discuss the recommendations of the Federal-State Land Use Policy Commission, nor do they make any evaluation of the impact on the State of Alaska transportation plan. The responsibilities of the State and the Department of Commerce under the Coastal Zone Management Act of 1972 (P.L. 92-583) should also be considered in the statement. 18

6. Section 1500.8(c) of the CEQ Guidelines requires each statement "be prepared in accordance with Section 102(2)(A) of the Act that all agencies of the Federal government 'utilize a systematic interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental arts in planning and decision making which may have an impact on man's environment.'" Social science (economic) input, essential to balancing the needs of man's environment against the environmental needs of flora and fauna, is not apparent in the statements. 19

General Comments

The aggregate "Four Systems" acreage is included in 28 separate proposals as follows: 11 additions to National Park Service areas, 32.2 million acres; 9 additions to the National Wildlife Refuges, 31.5 million acres; 4 additions to National Forest areas, 18.8 million acres; and 4 Wild and Scenic Rivers areas proposals, totalling approximately 1 million acres.

If these proposals are realized, Alaska will contain nearly 85 percent of the National Wildlife Refuges, 61.5 percent of the National Park lands and 16 percent of the National Forests as its portion of the total U. S. areas for the reserves. The distribution of the proposal areas will furthermore, become a serious obstacle to further resource and economic development in the State.

Taken independently, most of the proposals are excessively large for single use designation. When taken as a group, and in addition to other existing excessively large, single-use Federal land withdrawals in Alaska, the combined pattern interdicts a much greater area by restricting use and access. When the areas are also combined with another classification introduced in the proposals (areas of environmental concern, to be managed in a manner complementary to the initial proposal area), the total exceeds twice the stated withdrawal area. The restrictive areas include resource-rich but undeveloped areas which could be supporting prosperous regional economies as well as contributing essential raw materials to the gross national product.

Alaska's contribution to the national prosperity is currently limited by surface transportation and land classification problems. The proposals will compound these problems. Meanwhile, a recent set of figures states that for every Federal dollar collected in Alaska, 23 are spent in the State. This is far from a contributory position and raises questions of how withdrawals can be justified which perpetuate this economic dependency.

At the time of enactment of the Alaska Native Claims Settlement Act, less than 0.5 percent of Alaska was in private ownership. With full selection by the Native corporations and individual Natives, 10.7 percent of Alaskan land will be in corporate or private Native ownerships. State selections entitled under the Alaska Statehood Act should eventually reach 27.4 percent of the land area. This land currently stands at 9.7 million acres patented and 4.3 million acres tentatively approved. Patenting of Native lands has just begun.

The approach taken in preparation of the individual statements ignores the cumulative effect of its impact in addition to each of the other proposals and existing withdrawals. Each discussion, furthermore, approaches its area with single or limited resource purpose as its objective, and with a purely agency oriented interest. Assumptions far outnumber facts in discussions of alternatives and these assumptions commonly apply only if the subject area were the single representative of its category. 20

The cumulative result will be more serious, as noted. The effect would not only cripple Alaskan economic development, but would also restrict the growth of the national economy by withholding sorely needed mineral raw materials from development. Present estimates are that Alaska can provide a continuing supply of mineral products on an orderly basis using only 0.3 percent of the surface area provided most of the required 0.3 percent is not locked up in single purpose withdrawals.

Some long-term environmental interests are ignored. These vast areas of scenery and wildlife habitat are restricted to the use and enjoyment of a handful of those physically or 21

financially able to enter the undeveloped wilderness. The great majority of people can only receive their impressions from the records and writings of the privileged few. 21

The 28 draft environmental statements are completely descriptive with little or no analysis. In all but the four National Forest additions, they use the argument that preservation is necessary for preservation's sake. Neither alternative uses nor the multiple use concept are weighed. Cost/benefit relationships are not attempted. 22

Specific Objections

Section 17(d)(2) of the Alaska Native Claims Settlement Act directs the Secretary of the Interior to withdraw "up to, but not to exceed, eighty million acres." The "Four Systems" proposals total 83.5 million acres. In addition, most of the impact statements define "areas of ecological concern" surrounding the proposed withdrawals. These areas appear to have no legislative authorization, are given no convincing rationale and further confuse an already complex land use policy issue. 23

The Joint Federal-State Land Use Planning Commission, established by Section 17 of the Alaska Native Claims Settlement Act, made recommendations to the Secretary of the Interior in July 1973, regarding areas to be withdrawn and under what conditions. These recommendations have been substantially ignored; particularly the multiple use management concept and the recommendations that specific language providing for continuation of subsistence hunting and fishing be included in all withdrawal actions. Many of the withdrawals are far too excessive for the stated purpose. Mineral and petroleum evaluations on the withdrawals are minimal and go largely on the basis that if it has not been mined or drilled, it probably is not there. Even on this basis, significant resources are shown for many of the withdrawals. More information on which to base a legitimate cost/benefit relationship exists in: 24

a. U.S.G.S. Bulletins Number 1246, 1374, 1242-B
b. Reports soon to be printed by the Federal-State Land Use Planning Commission

c. Extant information from the Division of Geological and Geophysical Surveys, Department of Natural Resources, State of Alaska. Open File Report Number 44 is particularly applicable to petroleum resources

d. Senate Interior and Insular Affairs Committee Report, Mineral and Water Resources of Alaska, 1964

While hard information on mineral and petroleum deposits is generally scanty, indicators are not and our information is that the Department of the Interior (Park Service and Bureau of Land Management) may be inhibiting State, Native and even Federal (U.S.G.S.) attempts to further quantify deposits in the withdrawal areas. 25

The proposed withdrawals would seriously restrict proposed transportation corridors to the detriment of a viable transportation infrastructure of the State. In June 1973, the Alaskan Highway Department prepared a map showing proposed transportation system extensions plotted against extant and "Four Systems" Federal withdrawals. While the proposed corridors have been modified somewhat in the interim and the proposed withdrawals plotted at the same time have been significantly expanded, the map graphically illustrates the problem. While the Secretary of the Interior makes mention of this problem in his letter of December 17, 1973, transmitting the "Four Systems" Bill to the Senate, it is not provided for in the legislation itself. Without specific provision, any attempt by the Secretary to allow a transportation corridor through withdrawal areas would come under the National Environmental Protection Act with ensuing "quality of life review" and possible court actions such as was faced by the Trans-Alaska Pieplines. 26

With the exception of the cities of Anchorage and Juneau, Alaska as a whole is classified by the Economic Development Administration as a depressed area. No indications of aggregated economic impact are supplied. Local economic impacts are mentioned only in passing and then frequently play up visionary benefits from tourist dollars and employment by the Department of the Interior. 27

Economic Potential

The environmental impact statement should consider the economic potential of the area. This would consist principally of resource development, the qualitative importance of which is recognized but the quantitative significance of which is inadequately assessed. The environmental impact statement should address the question: How essential are the available resources for national economic needs and well-being? Thus, the environmental impact statement should go beyond citing the existence of potential mineral resources. It should report on the potential contribution of mineral resources to national needs in terms of volume, volume relative to total national production and imports, and value. It is essential to know whether there is an actual or anticipated need for these minerals and whether these resources can be tapped readily. These considerations need also to be addressed with respect to timber and other resources within the area.

The potential development of mineral or other resources will set in motion forces that will alter the income and employment prospects of the area. Therefore, the potential gains in income and employment need to be assessed, quantitatively to the extent possible. In the event that potential mineral development is precluded by the use of the land for other purposes, the income and employment foregone should be included as a cost. 28

The process of resource development and income generation requires both capital and manpower resources. Capital may be obtained from within the State by being diverted from other uses (opportunities foregone should be noted) or capital may be obtained from outside the State. With respect to manpower, a full discussion is necessary of the area's (and the State's) manpower resources to meet the growth potential. This necessitates an examination of prospective population growth, both natural and through migration.

Potential development of the area's resources will mean community development in the form of transportation facilities, structures (schools, etc.), and other infrastructure. Since these entail both benefits and costs, the net benefits or costs should be ascertained.

Costs Associated with the Development of Economic Potential

Set against the benefits to be derived from development of the area's resources are the costs of doing so.

The environmental impact statement should discuss in concrete terms how much environmental protection would be lost by resource development -- in terms, for example, of land area displaced, wildlife killed or displaced, and vegetation destroyed. Whenever possible, quantitative estimates of the costs should be included. 29

The environmental impact statement should also evaluate how much control over environmental preservation would be lost if resource development should take place in the area.

Environmental Protection

The environmental impact statement should document how essential environmental preservation of the area is and will be to the Nation's needs and well-being in terms, for example, of the preservation of wildlife, preservation of vegetation, and preservation of the culture of the area's inhabitants. This part is emphasized in the environmental impact statement, but is is not balanced against considerations relating to economic potential. 30

The environmental impact statement should then consider, if the environment is preserved, what derivative benefits accrue, for example, through tourism and recreation. To say that tourism will be fostered is not enough. The gains from tourism need to be measures against the losses from other economic activities that are foregone. 31

Costs Associated with Environmental Protection

The question must be asked: How much economic potential would be lost by environmental preservation? The answer would be derived from the estimates of development potential that is available and would not be exploited because of the setting aside of lands. 32

The environmental impact statement should also present an evaluation of how much control over potential economic development would be lost as a result of environmental preservation measures. One aspect of this question that must be addressed is the interrelationship between preserved areas. The environmental impact statement cannot be considered in isolation; it must take account of the economic effects that may arise from environmental preservation covering a broader land area. 32
The environmental impact statement should address the question: How much of the State's economic potential will be shut off from use if this and other protected areas are established.

The framework suggested above would not militate against economic development or environmental protection. It would place each of these objectives in a more balanced perspective.

Fisheries Impact

With regard to meeting the provisions of Section 102(2)(C) of the National Environmental Policy Act of 1969, Public Law 91-190, we believe the proposed action will have no significant adverse environmental impact upon the marine, estuarine, inland commercial, or certain anadromous fishery resources and their particular environments for which we have responsibility.

Our only specific comment deals with the monument proposal as it relates to other projects and proposals (p. 17-18). The Coastal Zone Management Act of 1972 (P.L. 92-583) has estab- 33
lished a national policy and program for the management, beneficial use, protection and development of the submerged lands of the territorial sea and the adjacent shorelands having a direct and significant impact on such waters. The Act calls for the Department of Commerce to administer the program in conjunction with participating states and carry out extensive consultation and coordination with all Federal agencies on management programs presented by individual states prior to their approval. In turn, the Act calls for all Federal agencies engaged in programs affecting the coastal zone to cooperate and participate with state and local governments and regional agencies in effectuating the purpose of the Act. We believe the proposed establishment of any Federal refuge, monument, park or forest including coastal zone lands should take cognizance of the pending development of a coastal zone management program

by the State of Alaska and should provide for the full coordination of any such Federal action with the State in accordance with provisions of this Act.

Thank you for giving us an opportunity to provide these comments which we hope will be of assistance to you. We would appreciate receiving a copy of the final statement.

Sincerely,

Sidney R. Galler
by Jane Ziese

Sidney R. Galler
Deputy Assistant Secretary
for Environmental Affairs

RESPONSE TO COMMENTS BY
THE U.S. DEPARTMENT OF COMMERCE

14. In passing the Alaska Native Claims Settlement Act of 1971, Congress itself gave very clear attention to the regional, State and national effects of the Alaska land transfers necessary to provide Native claim settlement, to meet the outstanding requirements of Alaskan statehood, and to provide for the continuing administration of the public lands. It directed the Secretary to withdraw lands for the Four Systems of National Parks, Forests, Wildlife Refuges, and Wild and Scenic Rivers after other factors were taken into account in the planning process. Congress further provided for the establishment of a Joint Land Use Planning Commission and the orderly implementation of the planning process concerning areas planned and best suited for permanent reservation in Federal ownership. It called for recommendations to insure that economic growth and development was planned in an orderly and compatible way with State and national environmental objectives and the public interest in public lands, parks, forests, and wildlife refuges in Alaska, as well as economic and social well-being of the Native people and other residents of Alaska. An agreement was reached with the State on the general area of the Four System proposals more specifically set forth here. These considerations and steps were examined and implemented prior to the individual development of Federal proposals with finite boundary lines and acreage limits. The need to consider cumulative impacts was recognized also during the development of the environmental impact statements on the 28 detailed proposals. The cumulative aspects of each proposal, where they could be detected with reasonable assurance of significance, are noted in the evaluations of that proposal. Appropriate analyses in the statements are developed on a regional basis for some proposals and in other cases, on a broader basis. It would be repetitive to undertake an additional FIS to the 28 already completed.

Anyone wishing to ascertain overall effect, may do so by reading the aggregate impact of all or part of the proposals that would be involved and considering them the same as the sum of the impacts discussed in each of the environmental statements. The statements are being issued and are available on the basis of sets of 28. Where the total cumulative impact in a region or the State appears particularly significant in relationship to a given proposal, the subject statements involved are modified

to include any additional impact considerations not previously described among the analyses involved. It is the considered opinion of the Department that these foregoing actions and the statements themselves taken together do constitute a good faith effort at providing a fair and accurate evaluation of aggregate or cumulative impact on major regions, the State and the Nation as a whole.

It is recognized that the proposed Harding Icefield-Kenai Fjords National Monument would have an aggregate impact on the Kenai Peninsula region when considered in conjunction with the proposals for the Seward National Recreation Area, the additions to the Chugach National Forest and the proposals for wilderness on the Kenai Moose Range and the Nellie Juan Wilderness Area (in the Chugach Forest). These five proposals, in addition to the existing Chugach National Forest and Kenai National Moose Range, in many areas overlap, but do cover about two-thirds of the lands on the Kenai Peninsula. Each proposal and existing area varies somewhat in the nature of its restrictions and management policies.

In the case of Harding-Kenai specifically, the impacts sections of Chapter III: F-1, F-3, F-4, F-5, F-6, F-7 and G, as well as other sections of the statement, have been revised to examine regional aspects of these impacts. The aggregate impact on land ownership patterns and availability in the region that would result from implementation of Harding-Kenai and the other proposals has been discussed in section III: F-1. The aggregate impacts on subsistence uses have been discussed in III: F-3; sport hunting and recreation in III: F-4; timber harvesting and market economy in III: F-5; community social and cultural life in III: F-6; mining industry in III: F-7; and transportation in section III: G.

15. By directing the Secretary of the Interior to withdraw up to 80 million acres of land as units of the four national systems, Congress recognized the desirability of providing environmental protection and management for some of the natural resources in Alaska under recognized and existing national management systems--systems with a spectrum of different objectives and emphasis in their management, not all economically oriented or subject to the quantification of cost-benefit analysis techniques.

This does not mean that Congress failed to consider environmental costs and environmental benefits or even economic costs and economic gains, for it clearly did recognize and consider them in the review and planning procedures established in the Act and in the differing objectives set to be met by the Act's

implementation. Nor does it mean that the Department of the Interior failed to consider economic or environmental benefits and costs in the planning process of developing these proposals in response to the congressional mandate. It is true that the environmental statement itself does not contain a quantitative and traditional cost-benefit ratio of the type referred to in the above comment, for very good reasons; but it is not correct, as implied, that the planning process did not consider economic as well as environmental implications in advancing the proposals.

Thus, the Department's planning and decision process is consistent with the Calvert Cliffs decision which indicated that NEPA requires that "...the particular economic and technical benefits of planned action must be assessed and then weighed against environmental cost...." Calvert Cliff's Coordinative Comm'n, Inc., v. United States Atomic Energy Comm'n, 449 F. 2d 1109, 1123 (D.C. Cir. 1971).

Moreover, the Department has complied with that section of the CEQ Guidelines which states "in each case the analysis should be sufficiently detailed to reveal the agency's comparative evaluation of the environmental (emphasis supplied) benefits, costs and risks of the proposed action and each reasonable alternative." (CEQ Guidelines, August 1973, FTC Vol. 38, No. 147). This portrayal of the environmental benefits, risks and costs is undertaken in these statements, even if not in quantified form.

Each proposal and alternative attempts to identify as completely as possible, with the available information, the identity and scope, trend or tendency, and size or relative significance of any significant environmental costs or environmental benefits inherent in the particular action or alternative. Where risks and uncertainties are involved, they too are noted. The nature of the actions themselves and the frequent lack of data involved in the different subject areas do not always lend this treatment to quantitative presentation, but it is undertaken qualitatively so that objective description is provided to the reader and comparison by the reader is made possible.

It should be noted that the Department of the Interior does not habitually prepare economic cost-benefit analyses of land and recreation resource actions, land transfers, and land classification actions. This is the case for the economic and technical reason that many aspects of such actions deal with the economic concept of "public goods." Public goods not being traded in the marketplace frequently deal with aesthetic and other intangible values of the environment not subject to readily agreed upon or

rigorously disciplined systems of marketplace evaluation and quantification. Further, the incomplete evaluative nature of the economic cost-benefit ratio as a decision tool has been widely recognized even where it is used.

16. The socioeconomic environment of the Harding-Kenai area is examined in Chapter II, B. The socioeconomic impacts of the proposed monument and AEC have been discussed in Chapter III, sections F-1, F-2, F-3, F-4, F-5, F-6, F-7, and G. All of these sections, especially those in Chapter III, have been rewritten to include additional analysis and information.

17. See the response to question 14 of this letter.

18. The recommendations of the Joint Federal-State Land Use Planning Commission were taken into consideration by the Secretary in making his recommendations on all of the d-2 lands. In addition, information gathered during the studies was augmented with information at the Federal-State Land Use Planning Commission public hearings on use of the 17(d)(2) withdrawal lands. The National Park Service had representatives at the public hearings to identify and take note of special problems requiring consideration. Comments received as a result of the public review of the draft environmental statement have also been considered in development of this final statement. Recognition of the Commission's recommendations is discussed in Chapter I, C. Impacts of the proposal on proposed transportation and utility corridors are discussed in Chapter III, G. Responsibilities of the State of Alaska and the Department of Commerce under the Coastal Zone Management Act of 1972 are recognized in Chapter I, C.

19. See the response to question 16 of this letter.

20. The statement is an analysis of the Department's management proposal for Harding Icefield-Kenai Fjords National Monument. Analyses of the proposal in Chapters III through VII are necessarily oriented to that management proposal. The discussions of alternatives have been revised to provide a more indepth analysis. See response 14 of this letter for discussion of the issue of cumulative effects and aggregate regional impacts of the Harding-Kenai and neighboring proposals.

21. The master plan proposals are specifically designed to provide for visitor use of the monument. Proposed visitor use facilities and a transportation system are described in Chapter I, B. The monument will provide for both backcountry and more structured visitor use. In view of the accessibility of the area by automobile, it is certainly reasonable to expect that

large numbers of visitors can reach the area and, with the proposed recreational developments, that they could enjoy the monument itself. (See Chapter III, F-4 and F-5.)

22. Chapters III through VII present analyses of the impacts of the management proposal. This study recommends lands and resources for preservation management as a unit of the National Park System under mandates by Congress in section 17(d)(2) of ANCSA for the four systems studies. Management alternatives for wildlife and multiple use management are discussed in Chapter VIII, A and C. See response 15 of this letter for discussion of cost-benefit analysis.

23. "Areas of Ecological Concern" are just that, areas of interdependent relationships to the proposal area in terms of wildlife habitat maintenance, maintenance of visual and scenic integrity, protective buffers around key waters and shoreline and significant areas of cultural (archeological, historical and sociological) relationship to the proposal or an adjacent Native culture or population. It is hoped that specific cooperative agreements can be negotiated with any adjacent landowners and managers within the Areas of Ecological Concern to insure complementary protection of the values and resources of the proposal, with control and management of such lands retained by the owners and managers.

Management of the proposals, as well as the Areas of Ecological Concern, should include a mutual working dialogue between Federal landowners and surrounding land managers. It is reasonable that if landowners in areas of ecological concern are to consider managing their lands in a manner compatible with proposal values, then in return, their views should be considered, within the limits of applicable laws and regulations, in the management of Federal lands.

It should be noted that agreements regarding Areas of Ecological Concern represent only one approach to protection of Federal lands and that the broad authority given the Secretary under 43 U.S.C. 1363 remains unaffected by the legislative proposal.

24. The recommendations of the Federal-State Land Use Planning Commission have not been ignored and are discussed in Chapter I, C. Also, see response 18 of this letter. The multiple use management alternative has not been ignored and is discussed in Chapter VIII, A and C. Provision for continued subsistence activities is included in the proposal. This provision is described in Chapter I, A and analyzed throughout the statement. The discussion of potential mineral resources in the Harding-Kenai area has been revised and contains current information from the literature and open mine files, as well as the comments. Evaluation of the impacts of the proposal on potential mineral resources is discussed in Chapter III, F-7.

25. It is agreed that there is not enough information available on the hard rock mineral potential in the proposed monument and AEC; however, a discussion of the types of mineral research that would be allowed is included in Chapter IV.

26. The proposed Harding Icefield-Kenai Fjords National Monument could affect two transportation and utility corridors in the area. The seriousness of this impact would depend on the potential routing and on the application of section 4(f) of the D.O.T. Act of 1966. There is no provision in the legislation which would preclude the applicability of NEPA to any transportation or utility proposals in the area. A discussion of the impact of this proposal on transportation corridors is provided in Chapter III G.

27. The impact of the proposal on the area and regional economy is recognized and is discussed in Chapter III, F-5, which has been rewritten to reflect a more comprehensive analysis of the economy.

28. The purpose of the environmental statement is to analyze the impact of the proposal on the natural and human environment of the area. It is not the intent of the statement to evaluate the economic potential of the area. The supply and demand of resources by the national economy is a function of the economic system. Evaluation of the national economic system is not a responsibility of this environmental statement. Potential alteration of economic forces in the area with resource development activities is recognized and discussed in Chapters III and VIII. (See response 15 of this letter for further discussion on cost/benefit analysis).

29. The environmental costs of resource development for elements of the proposal are recognized and discussed throughout Chapter III. In addition, when development plans are prepared, those plans will also be analyzed through the NEPA process. This intent is discussed in Chapters I and IV.

30. The environmental statement is an analysis of the Department's management proposal for Harding-Kenai proposal. If the documentation you request were provided, it would involve the environmental statement in a justification of the proposal, and this we do not consider to be part of the purpose of the statement. We do not consider these documents to be proposal justifications, but our best effort with limited information and time to present the possible future environmental impacts which could reasonably be expected to result from the proposed changes in land status and management. These statements were

developed in accordance with NEPA requirements and CEQ guidelines and in our opinion make a good faith effort to consider and display all relevant and important impacts, even on alternatives that were sometimes environmentally more advantageous than some proposals. Items raised in review have been substantially changed to remove any significant justificatory tone noted to us in the review process.

31. The economic and other kinds of impacts related to increased tourism, both beneficial and detrimental, as well as other economically related impacts of this proposal are discussed at length in Chapter III; F-1, F-2, F-3, F-4, F-5, F-6, F-7, and G.

32. The economic potentials foregone by implementation of the proposal are discussed in Chapter III, F and V. The aggregate impacts of the Harding-Kenai proposal and the other 27 system four proposals and the objective analysis of environmental costs and benefits have been discussed in responses 14 and 15 of this letter.

33. Enactment of this proposal will result in the transfer of some authorities and jurisdictional responsibilities to the Congressionally designated Federal managing agency. Under the legislative proposal, lands contained within the proposal boundary which lie above mean high tide are considered to be under Federal jurisdiction. The legislative proposal for Harding-Kenai does not adjust any Federal-State jurisdictional responsibilities, nor does it amend, by implication, the Submerged Lands Act or the Coastal Zone Management Act. A discussion of NPS cooperative relationships under the Coastal Zone Act is discussed in Chapter I, C.

HEADQUARTERS, ALASKAN COMMAND
APO SEATTLE 98742

Mr. Theodor M. Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, DC 20240

Dear Mr. Swem,

Reference Department of the Interior letter, serial 2650(911), dated 16 January 1974, and subsequent press releases extending the deadline for comment to 22 July 1974.

Comments pertaining to 21 of the Draft Environmental Impact Statements are presented below. Our comments for the remaining seven areas were furnished to your office by our letter of 19 February 1974. It is assumed the maps shown in the published proposals accurately depict the areas under consideration. Copies of these maps are attached in Attachments 1 and 2. Changes in the area boundaries will require review to update our comments.

The following comments pertain to all 28 of the areas. The enacting legislation should:

a. Allow the yearly resupply of Air Force installations by Cool Barge (sealift barge) and commercial barges by coastal and inland waterways as scheduled without change of route or docking area unless agreed to otherwise by both government agencies.

b. Provide authorization to operate military controlled aircraft below 1,000 feet altitude when required for emergency/rescue operations, and for FAA agreed low-level training routes.

c. Provide for the removal of all land use restrictions during a national emergency.

34

More detailed comments are presented for Draft Environmental Impact Statements 73-84, Katmai National Park; 73-101, Yukon Delta National Wildlife Refuge; 73-100,

Togiak National Wildlife Refuge; 73-96, Iliamna National Resource Range; 73-103, Porcupine National Forest; and 73-105, Yukon-Kuskokwim National Forest in Attachment 2.

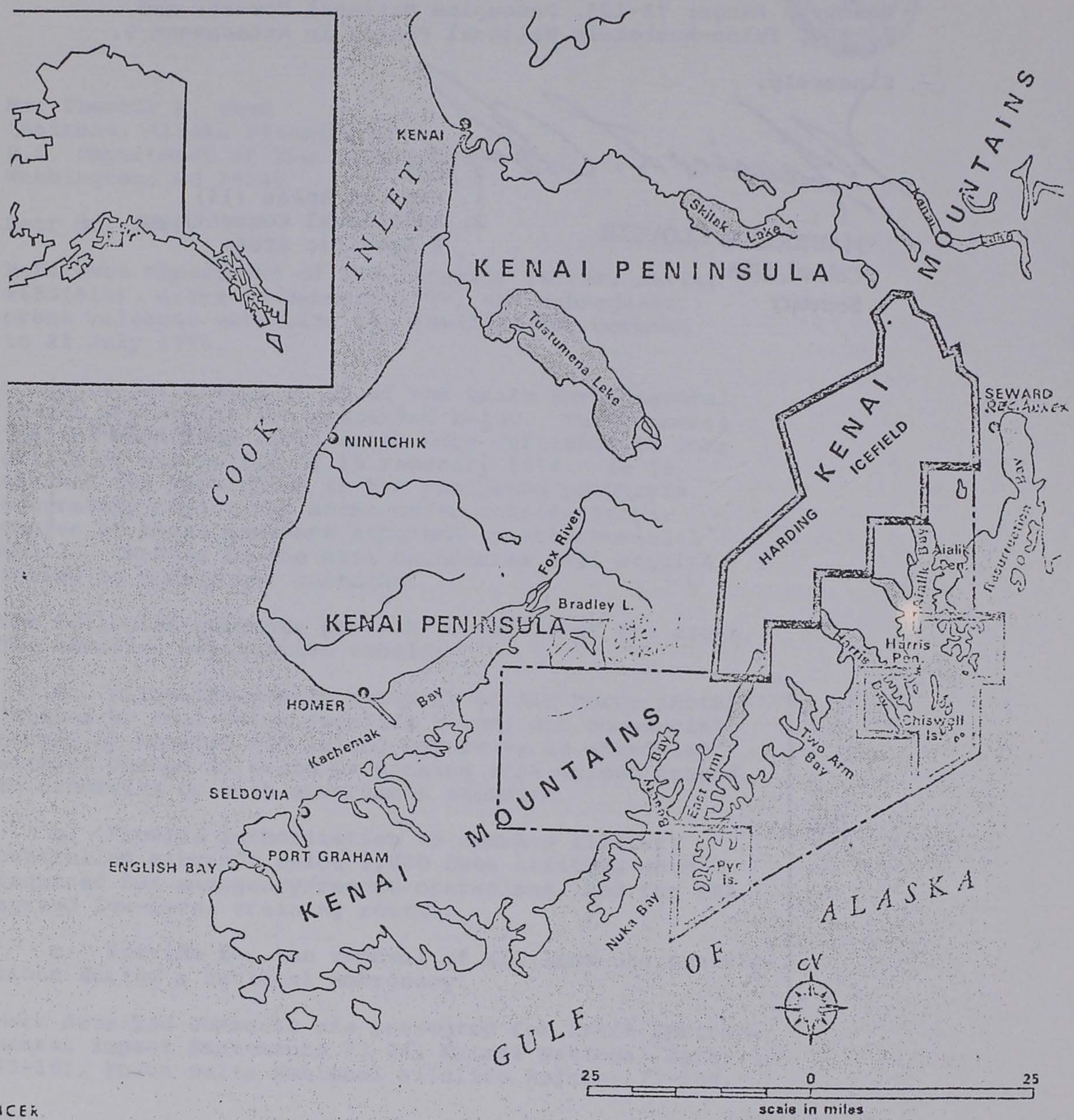
Sincerely,

Maurice L. Clouser

MAURICE L. CLOUSER
Colonel, USA
Secretary

2 Atch
1. Maps of Areas (14)
2. Additional Comments on 6 Specific Areas

SEE MAP 35



HARDING ICEFIELD-KENAI FJORDS NATIONAL MONUMENT

NM-HI/KF-90001
Dec 73 - APG

RESPONSES TO COMMENTS BY
HEADQUARTERS, ALASKA COMMAND

34. We see no conflict with the requirements of the Alaska Command for resupply activities, flight altitudes as stipulated in the comment and land use restrictions during true national emergency. The Harding-Kenai proposal does not affect the areas served by barge supply. The Department recognizes and would seek cooperation with the Federal Aviation Administration authorities over flight path regulation, and the Department recognizes and would respond to national emergencies. Therefore, we see no need for additional legislation.

35. The Bradley Lake powersite withdrawal, as shown on your map, is discussed in Chapter I, C, and III, D-1. The land status of the Bradley Lake township however is now d-1 instead of power withdrawal. The Seward Recreational Annex is also discussed in Chapter I, C, and Chapter II, B-7.

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, D.C. 20314

REPLY TO
ATTENTION OF:

DAEN-CWP-W

30 July 1974

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U. S. Department of the Interior
Washington, D. C. 20240

Dear Mr. Swem:

This is in further response to your letter of 28 December 1973 to the Executive Director of Civil Works, Chief of Engineers, concerning the Draft Environmental Statements in regard to the Alaska Native Claims Settlement Act of 1971. In my letter of 15 February 1974 to you, I indicated that: (1) the proposals contained in the seven Draft Environmental Statements for which the review period ended 20 February 1974 did not adversely affect the water resources development program of the Corps of Engineers; and (2) that comments of a substantive nature would be furnished you on one or more of the remaining proposals.

The State of Alaska is dependent upon its many waterways for transportation and communication. These waterways not only form a vital part of the existing socio-economic welfare of the people but also are necessary to future development of the State's resources. The Corps of Engineers has not made a detailed study of the Alaska waterways for navigability classification. Thus, we cannot specifically comment on each proposal as to its exact effect on navigable waterways. While many of the land withdrawals will curtail natural resource development within the proposal area, the potential will still exist for resource development to take place upriver of the protected area. This resource development, in most cases, will be contingent upon an efficient means of import and export transportation; i.e., river traffic. Thus, future development may require river traffic through the proposal areas. Most of the proposals indicate that regulations may be imposed for commercial and recreational use of waterways affected. Thus, it appears that these proposals will have a future impact on river navigation development and use when resource development occurs. 36

The 1969 Federal Power Survey assessed the potential of hydropower in the State of Alaska. It is quite apparent that the proposed land withdrawals will have a significant adverse impact upon further hydropower development in Alaska. Inclosure 1 is a listing of proposals and hydro projects affected. Inclosure 2 is an analysis of the effect on hydropower. The first category tabulation shows 11 sites would be completely eliminated from further hydropower consideration due to complete overlap of withdrawal areas on potential dam and reservoir locations. These 11 potential projects total approximately 39 percent of the listed hydropower potential as appraised by FPC. It should be noted that over half of this 39 percent is attributed to one project, Rampart Canyon. An additional eight sites, Category 2, or 36 percent of FPC total hydropower potential would be affected to the extent that the projects would possibly need to be rescoped in size or location. It should be recognized that future detailed studies may find a large number of these projects not compatible with the proposed land use. Category 3 lists two sites as being above withdrawal proposals and hence would have downstream effects on proposed withdrawals and would involve about 1.2 percent of the listed hydropower potential. In summary, a total of about 76 percent of the potential hydropower projects in Alaska will be directly or indirectly affected by the Department of the Interior's proposals. Impacts on existing and potential transmission line routes were not evaluated. 37 38

Of primary concern to us is the major adverse impact proposed land withdrawals will have on the State of Alaska's future potential energy resources. Outright elimination of 39 percent of the State's hydro potential, coupled with an unknown impact on an additional 36 percent of this resource could greatly constrain available options, and result in consumption of large amounts of rapidly diminishing non-renewable energy resources, and could adversely affect the social, economic, and environmental welfare of the State of Alaska. We believe that further studies should be made to properly evaluate the magnitude of the trade-offs and losses in preserving one resource for another. Therefore, on this basis, we recommend that the 21 proposed land withdrawals not be made at this time. 39

Sincerely,

J. R. Kelly BG USA

J. W. MORRIS
Major General, USA
Acting Director of Civil Works

2 Incl
As stated

POTENTIAL HYDROPOWER AFFECTED IN DES's
SHOWING
FPC HYDROELECTRIC POTENTIALS
DATED
1969

DES 73-87 CAPE KRUSENSTERN NATIONAL MONUMENT
(1) Agashashok

DES 73-83 MOUNT McKINLEY NATIONAL PARK
No listed sites affected by main proposal

DES 73-86 HARDING ICEFIELD-KENAI FJORDS NATIONAL MONUMENT | 37 CON'T.
No listed sites affected by main proposal

DES 73-84 KATMAI NATIONAL PARK
(30) Naknek

DES 73-91 GATES OF THE ARCTIC NATIONAL PARK
No effect on viable sites.

DES 73-93 CHUKCHI-IMURUK NATIONAL RESERVE
(5) Tuksuk

DES 73-92 YUKON-CHARLEY NATIONAL RIVERS
(22) Wood Chopper
(20) Rampart

DES 73-89 LAKE CLARK NATIONAL PARK
(27) Tazimina
(28) Ingersol
(31) Crescent Lake
(32) Chakachemana

DES 73-90 WRANGELL-ST ELIAS NATIONAL PARK
(53) Wood Canyon

DES 73-101 YUKON DELTA NATIONAL WILDLIFE REFUGE
No listed sites affected by main proposal

DES 73-99 SELAWIK NATIONAL WILDLIFE REFUGE
No listed sites affected by main proposal

DES 73-95 ARCTIC NATIONAL WILDLIFE REFUGE
No listed sites affected by main proposal

DES 73-97 KOYUKUK NATIONAL WILDLIFE REFUGE
(6) Holy Cross
(7) Dulbi

DES 73-100 TOGIAK NATIONAL WILDLIFE REFUGE
No listed sites affected by main proposal

DES 73-102 YUKON FLATS NATIONAL WILDLIFE REFUGE
(21) Porcupine
(22) Woodchopper
(76) Yukon_Taiya
(20) Rampart

DES 73-96 ILIAMNA NATIONAL RESOURCES RANGE
(26) Lake Iliamna
(27) Tazimina
(28) Ingersol (Lackbuna Lake)
(29) Kukaklek

DES 73-98 NOATAK NATIONAL ARCTIC RANGE (NOATAK NATIONAL ECOLOGICAL RANGE)
Three potential hydro-electric sites--one name given
(1) Agashashok

DES 73-109 FORTYMILE NATIONAL WILD RIVER
(23) Fortymile

DES 73-110 UNALAKLEET NATIONAL WILD RIVER
No listed sites affected by main proposal

DES 73-103 PORCUPINE NATIONAL FOREST
(20) Rampart
(21) Porcupine
(22) Woodchopper
(76) Yukon-Taiya

DES 73-105 YUKON KUSKOKWIM NATIONAL FOREST
(6) Holy Cross
(11) Ruby
(24) Crooked Creek

SUMMARY Twenty-one (21) listed FPC sites affected of listed 76 total for state of Alaska. Affects--Yukon River, Kuskokwim River, Naknek River, Noatal River, Porcupine River, and others.

LEGEND ( ) Denotes FPC site number

CATEGORY-1

IF PROPOSAL GOES THROUGH THE FOLLOWING PROJECTS WOULD BE COMPLETELY ELIMINATED.

Data compiled from 1969 Federal Power Commission study & DES's

	SITE	KWH x 10^6
23	Forty Mile	723
6	Holy Cross	12,300
11	Ruby	6,400
24	Crooked Creek	9,400
30	Naknek	473
7	Dubli	1,070
28	Ingersol	630
31	Crescent Lake	179
29	Kukaklek	232
26	Lake Iliamna	1,370
20	Rampart	34,200
	TOTAL 11 Sites for	66,977

% of FPC listed Firm Energy $\frac{66,977}{171,840} = 39.0\%$

CATEGORY-2

IF PROPOSAL GOES THROUGH THE FOLLOWING PROJECTS WOULD HAVE TO BE RE-SCOPED

NOTE: As limited study has been accomplished on below list projects, future detailed study may find some incompatable with land withdrawals and eliminated as hydropower potential.

	SITE	KWH x 10^6
1	Agashashok	820
5	Tuksuk	289
27	Tazimina	224
53	Wood Canyon	21,900
76	Yukon Taiya	21,000
22	Wood Chopper	14,200
21	Porcupine	2,320
32	Chakachamna	1,600
	TOTAL 8 Sites	62,353

% of FPC listed Firm Energy $\frac{62,353}{171,840} = 36.3\%$

CATEGORY-3

IF PROPOSAL GOES THROUGH, FOLLOWING PROJECTS WOULD HAVE DOWNSTREAM EFFECTS

	SITE	KWH x 10^6
8	Hughes	482
9	Kanuti	1,612
	TOTAL 2 Sites	2,094

% of FPC Listed Firm Energy $\frac{2,094}{171,840} = 1.2\%$

RESPONSE TO COMMENTS BY
DEPARTMENT OF DEFENSE CORPS., OF ENGINEERS

36. Navigable waters are recognized in Chapter I, C.

37. Although, as stated in your letter, there are no hydro-electric sites or proposals affected by the proposed monument, there is a possibility that the Area of Ecological Concern in this proposal could affect the Bradley Lake proposal to some degree. The impact of the proposal on this site has been discussed in Chapter III, D-1. (For further discussion see responses 43 through 48 of the Alaska Power Administration letter). We recognize, however, that a large number of the identified hydroelectric proposals are not compatible with the four systems proposals.

38. There are no existing power transmission lines in the area. The impact of the proposal on possible future transmission lines is now discussed in Chapter III, G.

39. Since the monument would likely have little or no direct impact on the Bradley Lake project (depending on final disposition of AEC lands involved with the project), it would make only a marginal contribution, if any, to the recognized statewide impact of the four systems proposals on hydro-electric proposals. (Note that the listing on page three of your comment shows no sites affected by Harding-Kenai).

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
REGION X
ARCADE PLAZA BUILDING
1321 SECOND AVENUE
SEATTLE, WASHINGTON 98101

July 15, 1974

OFFICE OF THE REGIONAL DIRECTOR

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem:

This letter is in response to the 28 draft Environmental Impact Statements prepared by the Department of the Interior for the disposition of some 83.5 million acres of public land in Alaska. This land became available to the Federal government under terms of the Alaska Native Claims Settlement Act of 1971, Public Law 92-203.

Several persons within the Regional Office have reviewed various statements. Because the actions are fairly similar, involving the placement of land under the protection of the National Park Service, I find it most appropriate for DHEW to make general comments applicable to the actions in total.

In this vein, I must confess that I found the magnitude of the material submitted almost overwhelming. I am sure that the DoI must have had some master plan guiding the proposed disposition (or designation) for each of the 28 areas. I believe DoI should have provided an overall summary of the total effects of all these actions upon Alaska, especially upon the social, economic, and cultural framework of Alaskan Native life. In this regard, I refer you to Section 1500.6(d) of the Council on Environmental Quality's "Guidelines for the Preparation of Environmental Impact Statements" (Federal Register, Wednesday, August 1, 1973, pp. 20550-20562). 40

DHEW Region X finds the intention of these actions laudable, recognizing in them the desire to protect and maintain both the wildlife and topography in a natural state. In this respect, the proposals are well conceived.

As mentioned previously, DHEWs concerns center around the impact of these actions upon the Native population. I did not always find it clear what restrictions the various land designations would place upon the Native's subsistence or cultural activities.

I would like to quote comments made by Region Xs Indian Health Services liaison person: 41

> "Review indicates that the subjects of 'subsistence' and 'Native culture' are dealt with in varying degrees, both in the general

text and alternatives of the proposals. While the purpose of the proposals are laudable relative to enhancing the environment of the areas discussed, it must be remembered that the Alaska Native and his culture are important components of the total scene and must be dealt with accordingly. It is my fondest hope that the proposers do not assume that the ANCSA lands distribution will solve all problems of Native cultural retention and subsistence. 41

"To assure and insure that cultural retention and subsistence activities are guaranteed, this should be spelled out and factored into each alternative so that acceptance of any one alternative will not destroy the Native features of the environment."

Another reviewer is concerned that consideration be given to the concept of training and utilizing Alaskan Natives as professional staff for the various new positions created to manage these lands on a protective basis. Page 20 of the EIS for the proposed Arctic National Wildlife Refuge indicates that Native employment will only be in non-professional capacities. 42

Region X DHEW appreciates the opportunity to comment upon these proposals.

Sincerely,

David P. Miller

David P. Miller
Acting Regional Environmental Officer

RESPONSES TO COMMENTS BY
DEPARTMENT OF HEALTH, EDUCATION AND WELFARE

40. A thorough discussion of the need for an overall summary impact statement is provided in the response to question 1 of the Forest Service letter. In relation to the aggregate impact of this proposal; it is recognized that the proposed Harding Icefield-Kenai Fjords National monument would have an aggregate impact on the Kenai Peninsula region when considered in conjunction with the proposals for the Seward National Recreation area, the additions to the Chugach National Forest and the proposals for wilderness on the Kenai Moose Range and the Nellie Juan Wilderness area (in the Chugach Forest). These five proposals,in addition to the existing Chugach National Forest and Kenai National Moose Range,in many areas overlap, but do cover about two thirds of the lands on the Kenai Peninsula. Each proposal and existing area varies somewhat in the nature of its restrictions and management policies.

In the case of Harding-Kenai specifically, the Impacts sections of Chapter III: F-1, F-3, F-4, F-5, F-6, F-7 and G, as well as other sections of the statement, have been revised to examine regional aspects of these impacts. The aggregate impact on land ownership patterns and availability in the region that would result from implementation of Harding-Kenai and the other proposals has been discussed in section III, F-1. The aggregate impacts on subsistence uses have been discussed in III, F-3; sport hunting and recreation in III, F-4; timber harvesting and the market economy in III, F-5; on community social and cultural life III, F-6; on the mining industry F-7; and on transportation in III, G.

41. Subsistence policies and cooperative management concepts have been reworked in Chapter I: A, B, and C. They state in part that, except as may be otherwise prohibited by Federal or State law, existing traditional subsistence uses of renewable resources will be permitted until it is determined by the Secretary that utilization of these resources is neither economically nor physically necessary to maintain human life and necessary to provide opportunities for the survival of Alaskan cultures centering on subsistence as a way of life.

If it is demonstrated that continued subsistence uses may result in a progressive reduction of animal or plant resources which could lead to long range alternations of ecosystems, the managing agency, following consultation with the Alaska Department of Fish and Game, communities and affected individuals, shall have the authority to restrict subsistence activities in part or all of the monument.

Also, an analysis of the proposal's impact on social, economic, subsistence, and cultural activities is provided in Chapter III sections F-1, F-4, F-5, F-6, and H.

42. It is the intent of the NPS to cooperate with nearby Native landowners and villages in the development of recreational resources for the monument, AEC and possibly other lands in the immediate vicinity of the proposal. Specifically, purpose number four of the legislative proposal reads as follows: "To foster Native participation in, and benefit from, the provision of facilities for visitor use." We would also anticipate Native cooperation in the management of the proposal and nearby lands. Specific agreements with respect to these cooperative considerations would be worked out during the ongoing planning process for the monument.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
ARCADE PLAZA BUILDING, 1321 SECOND AVENUE
SEATTLE, WASHINGTON 98101

February 12, 1974

REGION X

Office of Community Planning
and Management

IN REPLY REFER TO:
MS 307

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem:

Subject: Draft Environmental Impact Statement, Number 73-83 thru 73-110

We have reviewed the appropriate portions of your draft statements submitted with your December 28, 1973 letter.

The statements include proposals covering 28 different sites in Alaska. Your proposals are to preserve significant archeological sites, preserve and investigate geological and biological features, encourage the preservation of native cultures and in general to develop an administrative and management plan for each site. You also indicate the planning process to include state, local and citizen input. We find nothing in your proposals that would have a significant adverse impact in our areas of concern. Thus, we have no objection to your proposals.

Thanks for letting us comment.

Sincerely,

for John R. Merrill
Assistant Regional Administrator
for Community Planning and Management

cc: CEQ (10)
Miller
Moore
Peyton
Riddell

United States Department of the Interior
ALASKA POWER ADMINISTRATION
P. O. BOX 50
JUNEAU, ALASKA 99801

IN REPLY REFER TO:
700

July 16, 1974

AIRMAIL

To: Chairman, Alaska Planning Group
Department of the Interior

From: Administrator

Subject: Review of Draft Environmental Statement, Proposed "Harding Icefields-Kenai Fjords National Monument", DES 73-86

The subject draft statement covers one of the Department's proposals under Section 17(d)(2) of the Alaska Native Claims Settlement Act.

We have reviewed the draft from the viewpoint of Alaska Power Administration program areas of water, power, and related resources planning.

The proposal involves, in addition to establishing the new National Monument, creation of sizeable area of ecological concern "on neighboring lands and establishing primitive area management in the area of ecological concern. The draft statement does not discuss the environmental, economic, and resources implication of establishing the "area of ecological concern" and determining its management. 43

Our other comments concern the Bradley Lake Project and its relationship to the proposal.

1. At page 18, the reference to Bradley Lake should be changed to indicate that the project was authorized in the 1962 Flood Control Act based on investigation by the U.S. Army Corps of Engineers, that economic factors since that time have precluded construction, and that there are current studies underway to reappraise project feasibility. The project would affect relatively small areas within the proposed area of ecological concern. 44

2. We note that the description of environment, resources, and economy contains no information on Bradley Lake or its relative significance. A copy of materials previously furnished on the project is enclosed for reference if it is decided to include this information on the final statement. 44

3. At page 120, under the subheading "Impact (of the proposal) on Air Quality", the draft has two paragraphs discussing impacts on hydroelectric potential. We assume the outline problem will be corrected in the final statement. 45

The first paragraph under hydroelectric potential at page 120 should be revised to indicate some features of the Bradley Lake Project would involve lands proposed for inclusion in the area of ecological concern, but that the project would not involve lands proposed for the Monument. 46

The next paragraph should be modified to indicate the effects that establishing the area of ecological concern may have on the Bradley Lake Project. If it is the intent of the proposal to preclude power facilities within the area of ecological concern, the impact would be a significant reduction of the power potential of the project, and such reduction could affect overall project feasibility. 47

4. The statement provides no indication that development of the Bradley Lake Project would in any way detract from the resources involved in the proposal Monument. We would anticipate that a review of this matter would indicate that the project is compatible with the Monument. 48

J. V. Fowler

Enclosure

cc: Assistant Secretary -- Energy and Minerals
Attention: Mr. J. Emerson Harper

Report No. 16

Bradley Lake

Project:

(50.) Bradley Lake

Bradley Lake Project

1. Relationship to River Basin and Regional Development

The Bradley Lake hydroelectric project was authorized by the Flood Control Act of 1962. The project is located at the head of Kachemak Bay, on the Kenai Peninsula, 25 miles north of Homer, Alaska. The proposed plan would fully develop the hydro potential of the small drainage basin and also use water diverted from two adjacent watersheds.

The transmission line would serve Anchorage, but would also tie into an existing transmission system which extends from Anchorage to Seward and on around the coast from Kenai to Homer. In addition to being close to the existing load center, the project would firm up reliability of the existing system by providing generation capacity at the far end of the line

Although Bradley Lake is the best hydroelectric potential on the Kènai Peninsula, the energy is not presently marketable due to prevailing high interest rates, and the small size of the market.

2. Project Description

The most recent project plan is presented in a 1971 Corps of Engineers' draft reanalysis report. Figure 1 is a map overlay showing the major features of the project. The plan contemplated a concrete gravity dam 110 feet high with a 315-foot crest across the Bradley River at the natural outlet of Bradley Lake, a 375,000-

kilowatt underground peaking plant, penstock, and 3.3-mile tail-race tunnel discharging near tidewater. The plan included necessary transmission facilities to deliver power to the Anchorage area. Access roads would be required across the Fox River and to the damsite and power station. Two small diversion dams would divert water from adjacent watersheds into the Bradley Lake drainage, increasing the drainage area from 54 square miles to 87.8 square miles. The reservoir would approximately double the natural lake area to 3,960 acres. The maximum water surface would be at elevation 1,168, providing 297,000 acre-feet of active storage.

The continuous power potential of the Bradley Lake Project is 47,000 kilowatts. The 1971 reanalysis studies considered alternative plans for peaking installations of 187,000, 210,000, 280,000, and 375,000 kilowatts.

3. Current Status

The 1971 reanalysis contemplates marketing Bradley Lake power in the Kenai Peninsula and Greater Anchorage market areas. The 375,000-kilowatt alternative was found the most feasible based on the power benefits from FPC load projections. A 100-year period of analysis with a discount rate of 2 1/4 percent was assumed.

At the request of the Corps of Engineers, Alaska Power Administration prepared an analysis of the marketability of the power in 1971, which concluded that the nature of the daily peak loads in

the Anchorage area is a prolonged daytime peak, making it difficult to optimize the low load factor capacity of the project. In addition, the project power would cost too much to be marketable because of prevailing repayment criteria of 5 7/8 percent interest and 50-year payout.

The status of the land involved in the project is that it is currently withdrawn for power purposes. The land was first withdrawn in 1955 by the Geological Survey through Powersite Classification 436. Later, in 1966, the land required for project construction and operation was withdrawn by the Army Corps of Engineers as described in Public Land Order 3953. Copies of the two land actions describing in detail the land withdrawn are attached as Exhibits 1 and 2.

The Bradley Lake Project has been studied extensively. The Bureau of Reclamation did an on-the-site reconnaissance in 1953, followed by a similar reconnaissance in 1954 by the Corps of Engineers. Personnel of the U. S. Geological Survey did a reconnaissance and physical mapping of the site in 1955 and published an open-file report and river sheet map in 1956. Streamflow data on Bradley River was measured by the USGS from 1957 through 1969. Additional geologic studies, drilling and seismic investigations were accomplished by the Corps in 1959 and 1969.

The study that became the basis for the 1962 project authorization was the Army Corps of Engineers' Interim Report No. 2, Cook Inlet and Tributaries, Part No. 1, Hydroelectric Power, Bradley Lake, Alaska.

The Federal Power Commission discussed two plans using Bradley Lake in the 1969 Alaska Power Survey. Subsequently, a reanalysis by the Corps in 1971 presented a revised plan based on data gathered since authorization.

Alaska Power Administration prepared the power marketing Appendix described above. The project remains viable and subject to development should a population increase occur, and a decrease in interest rate.

In addition, the project would provide a sizeable regulated water supply near tidewater.

4. Project Operation

Project operation would likely be remotely controlled with only a few personnel full-time at the powerhouse.

Power releases would be made as the demand for energy or peaking capacity occurred.

5. Transmission Lines

The transmission line to Anchorage is planned to bypass the Kenai National Moose Reserve as much as possible. Otherwise it would use the existing transportation corridor routes of the existing highways and pipeline. Precise location has not been made.

Existing 115-kilovolt transmission lines connect Anchorage and Kenai with a smaller branch to Seward. A 69-kilovolt line connects Kenai and Homer, which is about 25 miles from Bradley Lake.

6. Access Roads

An access road would be constructed from the end of the planned state highway near the head of Kachemak Bay to the underground powerplant access tunnel, and to the damsite. A spur road from the main road would lead to the tailrace tunnel outlet. Temporary roads to a glacier outwash or a river would be required for hauling construction material.

Geological Survey

BRADLEY LAKE, ALASKA

POWER SITE CLASSIFICATION NO. 436

Pursuant to authority vested in me by the act of March 3, 1879 (20 Stat. 394; 43 U. S. C. 31), and by Departmental Order No. 2333 of June 10, 1947 (43 CFR 4.623; 12 F. R. 4025), the following described land is hereby classified as power sites insofar as title thereto remains in the United States and subject to valid existing rights; and this classification shall have full force and effect under the provisions of sec. 24 of the act of June 10, 1920, as amended by sec. 211 of the act of August 26, 1935 (16 U. S. C. 818):

VICINITY OF TRIANGULATION STATION SHEEP

Latitude: 59°46'32.788".
Longitude: 160°58'13.623".

(1) All lands within ¼ mile of Bradley River from its mouth to Bradley Lake.

(2) All lands within ¼ mile of North Fork Bradley River from its confluence with Bradley River for a distance of 2 miles upstream.

(3) All lands within ¼ mile of Battle Creek from its mouth to the 1200-foot elevation pass leading to Bradley Lake.

(4) All lands adjacent to Bradley Lake which lie at an elevation of less than 1300 feet above mean sea level.

(5) All lands within ½ mile of Nuka River from its source at toe of Bradley Glacier to a point 1 mile downstream therefrom.

The area described is estimated to aggregate about 10,000 acres.

Dated: August 29, 1955.

ARTHUR A. BAKER,
Acting Director.

[F. R. Doc. 55-7177; Filed, Sept. 6, 1955; 8:45 a. m.]

Reference No. 2277

Federal Register Data

Published: 3/22/66 Vol.: 31
No.: 55 Page: 4793

PLO No.: 3953
Date PLO signed: 3/15/66

[Public Land Order 3953]

[Anchorage 060240]

ALASKA

Withdrawal for Bradley Lake Hydroelectric Project

By virtue of the authority vested in the President and pursuant to Executive Order No. 10355 of May 26, 1952 (17 F.R. 4831), it is ordered as follows:

1. Subject to valid existing rights, the following described public lands in Alaska are hereby withdrawn as indicated, and reserved under jurisdiction of the Corps of Engineers, Department of the Army, for the Bradley Lake Hydroelectric Project, as authorized by the Flood Control Act of 1962 (76 Stat. 1193):

(a) From all forms of appropriation under the public land laws, including the mining laws (Title 30 U.S.C., Ch. 2), but not from leasing under the mineral leasing laws:

SEWARD MERIDIAN (PROTRACTED)

T. 5 S., R. 8 W.,
Sec. 19;
Sec. 20, W½;
Sec. 29, NW¼;
Secs. 30 and 31.
T. 6 S., R. 8 W.,
Sec. 5, SW¼;
Sec. 6;
Sec. 7, E½ and NW¼;
Sec. 8;
Sec. 9, SW¼;
Sec. 16, W½ and SE¼;
Sec. 17;
Sec. 18, NE¼;
Sec. 20, N½;
Sec. 21, N½.
T. 4 S., R. 9 W.,
Secs. 29 to 32, incl.
T. 5 S., R. 9 W.,
Sec. 3, SE¼;
Sec. 5, E½;
Secs. 6, 7, and 8;
Sec. 9, S½;
Sec. 10;
Sec. 11, SW¼;
Sec. 13, S½;
Secs. 14 to 18, incl.;
Sec. 19, N½ and SE¼;
Sec. 20, N½ and SW¼;
Sec. 21, N½;
Sec. 22, N½ and SW¼;
Secs. 23, 24, and 25;
Sec. 26, N½ and SW¼;
Sec. 29, NW¼;
Sec. 30, NE¼;
Sec. 36, E½.
T. 4 S., R. 10 W.,
Sec. 25, area east of Sheep Creek;
Sec. 35, all south of Kachemak Bay;
Sec. 36.
T. 5 S., R. 10 W.,
Secs. 1 to 4, incl.;
Sec. 9, NE¼;
Secs. 10 to 14, incl.;
Sec. 16, N½ SE¼;
Sec. 24, N½.

The areas described aggregate approximately 10,146 acres.

(b) From all forms of appropriation under the public land laws, except that the lands shall be open to operation of the U.S. mining laws, subject to the provisions of the act of August 11, 1955 (69 Stat. 631; 30 U.S.C. 621-625), and shall be open to leasing under the mineral leasing laws:

SEWARD MERIDIAN (PROTRACTED)

T. 4 S., R. 9 W.,
Sec. 33.
T. 5 S., R. 9 W.,
Secs. 1 and 2;
Sec. 3, N½, SW¼;
Sec. 4;
Sec. 5, E½;
Sec. 9, N½;
Sec. 11, N½, SE¼;
Sec. 12;
Sec. 13, N½;
Sec. 19, SW¼;
Sec. 20, SE¼;
Sec. 21, S½;
Sec. 23, SE¼;
Sec. 26, SE¼;
Secs. 27 and 28;
Sec. 29, E½, SW¼;
Sec. 30, W½, SE¼;
Secs. 31 to 35, incl.;
Sec. 36, W½.
T. 4 S., R. 10 W.,
Sec. 25, area west of Sheep Creek.
T. 5 S., R. 10 W.,
Sec. 15, SW¼.

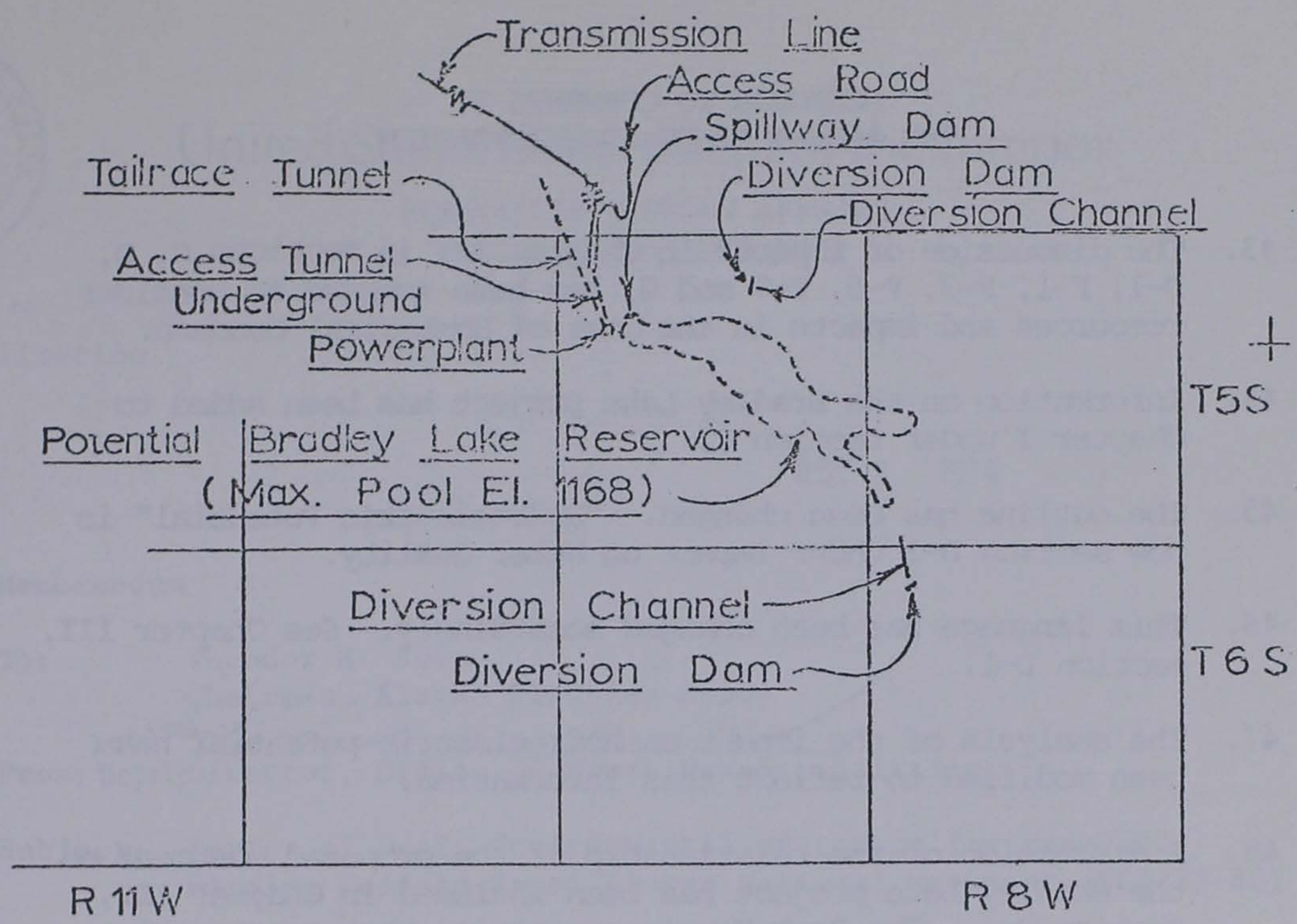
The areas described aggregate approximately 10,146 acres.

2. The withdrawal made by this order does not alter the applicability of the public land laws governing the use of the lands under lease, license, or permit, or governing the disposal of their mineral or vegetative resources other than under the mining laws, as the same apply to the lands described in subparagraph 1(a).

HARRY R. ANDERSON,
Assistant Secretary of the Interior.

MARCH 15, 1966.

[F.R. Doc. 66-2900; Filed, Mar. 21, 1966; 8:46 a.m.]



NOTE
Overlay to be used with U. S. Geological Survey 1:250,000 scale maps.

UNITED STATES
DEPARTMENT OF THE INTERIOR
ALASKA POWER ADMINISTRATION

BRADLEY LAKE PROJECT
POTENTIAL RESERVOIR
AND
POWER FACILITIES

DECEMBER 1972

RESPONSE TO COMMENTS BY
THE ALASKA POWER ADMINISTRATION

43. The discussion of impacts in Chapter III in sections C, D, D-1, F-1, F-3, F-5, F-7 and G, has been amended to consider resources and impacts in the Area of Ecological Concern.

44. Information on the Bradley Lake project has been added to Chapter I under section C.

45. The outline has been changed. "Hydroelectric Potential" is now section D-1 under Impact on Water Quality.

46. This language has been changed accordingly. See Chapter III, section D-1.

47. The analysis of the impact on hydroelectric potential has been modified to reflect this information.

48. A discussion of the relationship of the proposed monument on the Bradley Lake project has been included in Chapter III, section D-1. The Park Service maintains that construction of diversion dams and ditches on lands which could be added to the monument would create a substantial impact on the natural and unaltered character of the area. In addition, power transmission lines, unless constructed with careful consideration of the impact on the visual integrity of the landscape, could cause signficant impairment of the scenic value of the area.

United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
WASHINGTON, D.C. 20242

IN REPLY REFER TO:

Trust Facilitation

OCT 8 1974

Memorandum

To: Theodor R. Swem
Chairman, Alaska Planning Group

From: Acting Deputy Director, Office of Trust Responsibilities

Subject: Review of Draft Environmental Statement for Proposed Harding Kefield-Kenai Fiords National Monument (DES 73-86)

In response to memorandum dated December 28, 1973, this Bureau has reviewed the proposed ANCSA D-2 withdrawal environmental statement identified above with respect to its effects upon the Native Alaskans and the trust responsibilities of the Department. The following comments are provided for your consideration:

General Comments: Attached is a general statement.

Specific Comments: None.

Enclosure

ENVIRONMENTAL IMPACT STATEMENTS ANCSA D-2 WITHDRAWALS

Introduction:

The Bureau of Indian Affairs has reviewed the several proposed ANCSA D-2 withdrawals for management in the four Federal Systems - National Forest, National Park, National Wildlife Refuge, National Wild and Scenic Rivers, as it affects Native Alaskans and Bureau Program activities. This is done from the viewpoint of how the proposed land ownership and related use may affect Natives, first, as Native Americans and secondly, as citizens of the State of Alaska.

It is difficult to assess impacts of Federal land use plans before Native and State selections are known. The lands to be taken for the four systems will be excluded from selection and management by the Villages, Regions, and the State.

These impact statements are concerned primarily with natural or bio-physical environment and seldom attempt to deal comprehensively with social, economic, legal, and Federal management impacts of four Agencies (USFS, NPS, FWS, and BLM) on the Alaskan Native population. 49

Reviewed individually, the impact statements do not reflect the total impact of all such withdrawals on the Native culture, lifestyle, resources, and economy. The total environmental impact could better be evaluated if there were one statement for each system, plus a summary of the combined environmental impact of all four systems as they relate to Native-owned lands, fishing, hunting, and water rights as well as history, culture, and lifestyle. 50

Overall General Comments:

The impacts and implications of these withdrawals (28 totaling some 84 million acres) on Native-owned lands, their fishing, hunting, trapping, and other means of subsistence are not clearly defined. Neither are Native entitlements to water, timber, grazing, trapping, or access through proposed systems or to Native lands within them. Most statements do not deal with access to cemeteries, historical sites, primary residences, allotments, or impact of Federal management on adjacent or nearby Native or State lands and residents. 51

The Village and Regional Corporation managements are considering every conceivable possibility for income from their lands and funds - reindeer and other livestock, timber, stocking of fisheries, tourism, transportation, etc., as well as minerals including petroleum.

Generally Alaska resources, especially those that are renewable, are both remote from markets and widely dispersed. With higher prices world-wide, especially for foods, furs and timber products, these resources may no longer or continue to be submarginal in places where they have been previously. Volume is essential for profitable harvesting, processing, transportation, and marketing. Commercial feasibility often may be determined by the ability to combine resources from large blocks of land that may in many instances include both Native lands and adjacent or nearby lands in one or more Federal systems. The management policy and land use of a Federal system may sometimes largely determine the time and extent of resource development on Native lands in the vicinity. The importance of this situation is not reflected in most impact statements. 52

"Subsistence" for the future, needs to be clearly and precisely defined for each system. Also the role, if any, of local residents in making policy, regulations, and in enforcement. Their preference as to employment and incomes generated by each withdrawal often is not clearly indicated. How much Native involvement and self-determination and how it will be achieved in the management and use of each Federal system often is not discussed in these statements. 53

In the past Native life was supported completely with activities now termed "subsistence". Fishing, hunting, and gathering provided food, clothing, shelter, fuel, implements for home and hunting, etc. Through bartering, items suplus to needs or acquired for trade were used to obtain goods from other Natives and then later from the "outside" trader.

These activities established a culture and lifestyle dependent on nearby resources of the water and land which should be fully considered in public land ownership and management planning. This "living off the land" is still more essential for Natives and rural Alaskans than in other States.

Subsistence and commercial activities often are complementary and essential for complete use of resources. It is difficult to determine if the meat for a family of seal, walrus, beaver, etc., is more important than cash from the sale of skin, fur, ivory, or crafts made from other parts. (This distinction may be relevant to game and other resource management policy and regulations).

The change from a subsistence to a cash economy may depend on the possibility of turning former subsistence resources into products for sale. Fish formerly used to feed sled dogs may now be sold for income to buy gas for travel snowmobiles. Or, timber once harvested for housing and fuel may provide jobs in logging, processing and transportion. In some areas on or near Federal or State lands it is conceivable that berries, other plants, or animals now gathered for food, shelter, etc., in the

future could be harvested for sale. Resources once used for subsistence may be used to provide crafts, accommodations or services for tourists. Helping to provide facilities and to manage the land resources on nearby Federal systems can also provide jobs and income but will require compatible policies, goals and plans including information, education, training, recruitment and coordination with other Federal and State Programs if maximum local or Native hire is realized. 54

Local involvement in the use and management of adjacent Federal lands is vital in many areas of the State for Natives to exist and to maintain the desired parts of their culture. This is essential for fulfillment of the ANCSA and Departmental regulations and promises. It also may be essential for sound Federal land management with maximum sustained benefits from natural resources. All this will not occur without definite goals, policies, plans, commitments, and special efforts by administrators of each proposed systems of Federal lands.

The comments and statements of Native leaders generally suggest the need for more factual and comprehensive impact statements. Undoubtedly the pressure of other more eminent issues and deadlines relating to the ANCSA has limited their review and comments.

Until each respective Regional Corporation and AFN indicate their approval or the points raised above are more completely and clearly answered, we consider most of the impact statements incomplete and inadequate.

RESPONSE TO COMMENTS BY
THE BUREAU OF INDIAN AFFAIRS

49. This proposal addresses coordination with potential Native landowners in Chapter I sections A, B and C. The impacts on subsistence uses and on social and cultural life in general are examined as thoroughly as possible with the limited information and time period available. (See Chapter III section F-3; also F-1, F-4, F-5, F-6, F-7, G and H).

50. A thorough discussion of the need for an overall summary impact statement is provided in the response to question 1 of the Forest Service letter. In relation to the aggregate impact of this proposal; it is recognized that the proposed Harding Icefield-Kenai Fjords National monument would have an aggregate impact on the Kenai Peninsula region when considered in conjunction with the proposals for the Seward National Recreation area, the additions to the Chugach National Forest and the proposals for wilderness on the Kenai Moose Range and the Nellie Juan Wilderness area (in the Chugach Forest). These five proposals in addition to the existing Chugach National Forest and Kenai National Moose Range in many areas overlap, but do cover about two thirds of the lands on the Kenai Peninsula each proposal and existing area varies somewhat in the nature of its restrictions and management policies.

In the case of Harding-Kenai specifically, the Impacts sections of Chapter III: F-1, F-3, F-4, F-5, F-6, F-7 and G as well as other sections of the statement, have been revised to examine regional aspects of these impacts. The aggregate impact on land ownership patterns and availability in the region that would result from implementation of Harding-Kenai and other proposals has been discussed in section III F-1. The aggregate impacts on subsistence uses have been discussed in III, F-3; sport hunting and recreation in III, F-4; timber harvesting and the market economy in III, F-5; community social and cultural life: III, F-6; the mining industry: III, F-7; and transportation: III, G.

51. The relationship of this proposal, as well as cooperative agreements with the Native owned lands or lands withdrawn for Native selection are outlined in Chapter I sections A, B, and C. The status of Native allotments is discussed in section D of Chapter I. Access will of course be allowed to legally patented allotments.

52. The importance of cooperation and authorization to seek cooperative agreements between Native, Federal, as well as other adjacent landowners is demonstrated throughout Chapter I.

53. Subsistence activities are recognized as a traditional, dynamic, cultural activity within the general region of the proposal. Significant subsistence uses of lands proposed for inclusion in the monument or AEC are presently unknown to the NPS. It is also recognized that no definition of subsistence, as such, has been established. The Park Service will work with all concerned State agencies, communities and affected individuals in arriving at an equitable and workable understanding for a management plan for subsistence resource uses in the proposed monument.

Additional discussion of legislative and administrative proposals for subsistence management has been added to Chapter I, sections A and B. Also a discussion of cooperative efforts concerning subsistence has been added to section C of Chapter I.

54. Proposals for cooperative development and management of visitor facilities in the AEC and on the periphery of the monument have been outlined in Chapter I section B.

IN REPLY REFER TO:

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20240

JUL 22 1974

DES-73-86

Memorandum

To: Chairman, Alaska Planning Group

From: Director, Bureau of Land Management

Subject: Harding Icefield-Kenai Fjords National Monument

We have reviewed the draft environmental statement and offer the following comments:

Maps

Lack of coordinates makes it very difficult to compare the maps with other maps. 55

Description of the Proposal

P. 9, last paragraph. The AEC contains water areas, some of which, if not all, are state-owned. The natives cannot select most of these water areas. 56

This paragraph should be rewritten to reflect the need for a cooperative agreement with the state of Alaska, if the state owned waters are to be included in the proposed monument.

P. 22, item 3, Native Allotment Lands. This section seems misleading. We suggest it be rewritten as: "Native allotment lands are those lands to which individual natives are given title. ANCSA revoked the Alaska Native Allotment Act of 1906 (34 Stat 197), and precluded any native covered by the provisions of ANCSA from applying for lands under the Act of February 8, 1887 (24 Stat 389), or the Act of June 25, 1910 (36 Stat 363). Under the provisions of the 1906 act, a native could secure title of up to 160 acres (in up to four separate tracts) of land which he had substantially used and occupied." 57

"ANCSA also provided that allotment applications which were then pending before the Department of the Interior could continue to be processed. A native with an allotment application covering his primary place of residence had the option, through September 18, 1973, of continuing his claim under the allotment acts cited, or of obtaining title under subsection 14(h)(5) of the Alaska Native Claims Settlement Act, if the lands involved were located in an area available for such purpose." 57

"The BLM has now recorded and is examining and processing the native allotment applications throughout Alaska. Within the proposed Harding Icefield-Kenai Fjords National Monument, there are two recorded applications; one has gone to patent. Applications which go to patent will have the status of private land and will include the right of access."

Description of the Environment

P. 108, last sentence (concluded on p. 109). This should be rewritten to read: "The enterprise ended when the BLM served a trespass notice on the operator, who had begun and was conducting his operations during a period of time when the lands were withdrawn from public domain status by Public Land Order No. 4582. No application for a Special Land Use Permit had been filed prior to commencement of operations, nor was any filed after the trespass notice was served." 58

P. 111. The d-2 lands which revert to d-1 would carry the same restrictions as the d-2. In actuality, considering the terrain and location of the area, the environment is likely to change very little under any of the management alternatives. 59

The Environmental Impacts of the Proposed Action

P. 121, Impact on Mining, first paragraph. The mineralized areas are outside the proposal in the "area of environmental concern."

P. 121, Impact on Mining, second paragraph. The two options are not necessarily exclusive. The NPS minerals man (see p. 56, last paragraph) spent many years with Kennecott before going to NPS. He does not consider small-scale mining significant, whereas others do. It is a matter of judgment. Certainly none of the better known mining companies would be attracted to the area. According to Richter, USGS (see p. 52), small-scale mining is possible. 60

P. 122. The EIS refers to mountain goat hunting and states: "...local hunters estimate that no more than 10 are taken in the area annually." We have checked with a local guide who works in that area and he has consulted several fellow guides. They estimate the mountain goat harvest to be between 150 and 200 animals per year. 61

We suggest that the EIS should be corrected to show a hunter harvest of at least 100 animals. 61

Alternatives to the Proposed Action

P. 149, No Action Alternative. See comments, p. 111. 62

James W. Monroe

Assistant Director

RESPONSE TO COMMENT BY
THE BUREAU OF LAND MANAGEMENT

55. Coordinates have been placed on the Proposal map.

56. Such cooperative agreements are covered in paragraph (4) above the paragraph you referred to and in Chapter I, A. "Legislative Action" provision number 4.

57. The section has been rewritten. See Chapter I, D: "Background".

58. The passage has been rewritten. See Chapter II A-2: "Recreation and Tourism".

59. The technical point on land status is recognized; however, it is our assumption that no action on the proposal is most likely to result ultimately in some type of public multiple-use management for these lands.

    The section has been rewritten to correct the statement on the status of d-2 lands which revert to d-1.

60. The section on the Impact of Mining has been rewritten. The mineralogical areas are also shown on the "Minerals Map" and described in Chapter II "Economic Geology."

    The NPS assessment of mineral potential has been dropped. See Chapter III, F-7: "On Mining Industry."

61. The Alaska Department of Fish and Game reports that 9 hunters took 4 goats in the area in 1973. We are accepting their information as they are the agency responsible for management of hunting in the area. We have deleted, at their request, our reference to estimates of harvest.

62. The "No Action Alternative" section has been rewritten. See Chapter VIII section A.

OFFICE OF THE DIRECTOR

United States Department of the Interior

BUREAU OF MINES
WASHINGTON, D.C. 20240

June 6, 1974

DES 73-86

Memorandum

To: Chairman, Alaska Planning Group, Office of the Secretary

Through: Deputy Assistant Secretary--Energy and Minerals J. Wilson JUN 14 1974

From: Director, Bureau of Mines

Subject: Draft environmental statement, National Park Service, proposed Harding Icefield-Kenai Fjords National Monument, Alaska

The draft environmental statement for the proposed national monument was reviewed by our Alaska Field Operation Center, Juneau. The proposed monument would include 300,000 acres plus up to 460,000 acres to be designated from an area of ecological interest. The proposed monument would be withdrawn from appropriation and entry under the public land laws, including the mining and mineral leasing laws.

We again note that by including an area of ecological interest larger than the proposal itself, the true area proposed for withdrawal is not the 300,000 acres to be charged against the 80 million-acre limit under ANCSA, but actually could reach 760,000 acres. 63

The Bureau of Mines and the Geological Survey have not made a mineral evaluation of the area proposed for withdrawal. Because of the indications of mineralization within the area, we continue to believe that a wilderness-type mineral survey be made of the area in order for Congress to fully assess the resources involved in the proposal. Other comments, criticisms, and suggestions are: 64

Pages 52-61, Geology and Mining: Why are maps showing coal and petroleum presented but no map showing metallogenic provinces or mining claim groups? Coal and petroleum are outside the proposed monument, even outside the area of ecological concern, whereas metallic minerals with potential exist within the area. 65

Page 55, 1st paragraph, 2d sentence: ". . . Alaska gold and copper metallogenic province." Alaska has a number of metallogenic provinces which contain gold and copper. This sentence would better read ". . . area lies in a gold and copper metallogenic province." 66

Page 56, line 10: At today's gold prices, the value of Nuka Bay production would be nearly $1.3 million instead of $166,000. 67

Page 57, lines 14-17: The evaluations of the Joint Federal-State Land Use Planning Commission for Alaska, as the agency established by ANCSA for these evaluations, should be described at the beginning of the section on Mining. 68

Page 112, 2d paragraph, 2d sentence: ". . . there are no commercial ore bodies in the area . . . ." This decision cannot be reached with present data. Also, there is no indication that mining ceased because of ore reserve depletion--rather, because of economic conditions. At today's price of gold, the long idle mines could well be in commercial ore bodies. The "present indications" judgment of no commercial ore bodies in the area has no relationship to potential future development that may be foregone by the withdrawal. 69

Page 121, 1st sentence: This statement does not agree with the page 57 evaluation by the JFSLUPC which considered not only the Geological Survey opinion but those of other Federal and State agencies. 70

Page 121, Impact on Mining, 2d paragraph, 1st and 2d sentences: How are differences of opinion, as to the feasibility of profitable mining, an impact on mining? It has been established that mineral deposits occur within the study area, that mining has taken place, and that diligent prospecting could well discover additional mineral deposits. Whether or not a mineral deposit can be economically developed at the moment should not be a consideration; the long term-effects of closure to mineral development are what is important. The sentences in question should be eliminated. 71

Page 121, Impact on Mining, 3d paragraph, 3d sentence: "There are five mineral claims within . . . ." There are a great many more than five claim locations. Five claim groups may be applicable to locations on which up-to-date assessment work has been filed. If so, this should be stated. As is, the sentence in question is ~~grossly~~ in error. 72

Page 137, Mitigating Measures Include in the Proposed Action: Why dosen't the proposed research program include all natural resources? The increasing demands for minerals is outstripping most of the others. 73

Page 141, pagargrah D: This analysis reflects a complete lack of understanding of the effects of prohibiting mineral exploration and extraction. From the national point of view we are only secondarily concerned about the adverse effects of such prohibition on individual miners or mining companies. We are concerned--and the environment statement should stress this--that the materials needed to sustain our economy and consequently our people's physical well-being are being withdrawn and made unavailable without a thorough evaluation. The Nation is becoming increasingly dependent on insecure foreign sources for minerals and mineral fuels. To the extent that domestic minerals are made unavailable for use, the Nation must put more strain on its already unfavorable balance of trade. This analysis should be completely revised. 74

Page 147, 1st paragraph: We do not believe this thinking meets the intent of CEQ guidelines. Such withdrawals as these must be assumed to be in perpetuity and therefore the commitment of resources also must be assumed to be in perpetuity. In a previous environmental statement on an Alaskan proposal (Kobuk Valley National Monument, p. 215), the Park Service used wording which we believe is equally appropriate here and should be used: 75

> The proposed action would prohibit all mining and mineral entry within the monument boundaries. This will have no impact on the present day economy since no production currently takes place. However, there would probably be a substantial impact on future potential for economic developments since there appears to be a high mineral potential in the area. Since prospecting would not be allowed, there may never be a complete inventory and analysis of these resources. Therefore a full assessment of the impacts of the proposal's preclusions of resources removal would not be carried out.

In sum, based on present knowledge of mineral resource potential, this proposal will have a major impact on future mineral development in the region.

Acting Director

RESPONSE TO COMMENT BY
THE BUREAU OF MINES

63. "Areas of ecological concern" are just that, areas of interdependent relationships to the proposal area in key wildlife habitat maintenance, maintenance of visual and scenic integrity, protective buffers around key waters and wildlife populations, interrelated vegetative and wildlife use patterns where degradation of one element seriously alters the other and significant areas of cultural (archeological, historical and sociological) relationship to the proposal or an adjacent Native culture or population. It is hoped that specific cooperative agreements can be negotiated with any adjacent land managers and owners within the Area of Ecological Concern to ensure complementary protection of the values and resources of the proposal, with control and management of such lands retained by the owners and managers.

Management of the proposal as well as the Area of Ecological Concern should include a mutual working dialogue between Federal landowners and surrounding land managers. It is reasonable that if landowners in Areas of Ecological Concern are to consider managing their lands in a "manner compatible with proposal values," then in return their views should be considered within the limits of applicable laws and regulations, in the management of Federal lands.

It should be noted that agreements regarding areas of ecological concern represent only one approach to protection of Federal lands, and that the broad authority given the Secretary under 43 U.S.C. 1368 remains unaffected by the legislative proposal.

For further information on the Area of Ecological Concern see Chapter I section B.

64. In regard to the request for a research program to inventory mineral potential in this area, the monument proposal provides that prospecting, mining and the extraction of minerals or the removal of soil, sand, gravel, and rock will not be permitted, except where carried on pursuant to valid existing rights.

The National Park Service encourages and will participate in appropriate ways in the study of geological resources within proposals. Geological studies by recognized educational or scientific institutions, professional personnel of other Federal agencies, and accredited individuals will be permitted and encouraged when in consonance with the purposes of the area and the policies of the Service. Procedures which might result in damage or alteration to the resources would not be permitted.

Further discussion of the potential for mineral exploration is discussed in Chapter IV.

65. A map of metallic minerals potential and locations has been added. See "Minerals" map.

66. The sentence has been changed accordingly. See Chapter II section "Economic Geology."

67. The information has been added. See Chapter II "Economic Geology."

68. The evaluation by the Joint Federal-State Land Use Planning Commission discussed here was incorrect. The "high potential" province runs west of the proposed monument. The section has been changed accordingly. See Chapter II "Economic Geology."

69. The section has been rewritten and the sentence excluded.

70. The section on Impact on Mining has been rewritten. Also, as discussed in question F above, the JFSLUPC statement has been corrected. (See Chapter III, F-7.)

71. The differences of opinion were included in order to provide information on future mining potential for the area. Knowledge of future potential is very relevant in terms of determining the significance of the proposal's impact on mining. However, this section has been rewritten to remove any bias in these assessments. The new assessments are based primarily on USGS information.

72. This information was incorrect, we have changed it to "9 claim groups." The number and acreage in these claim groups is discussed in Chapter II "Economic Geology."

73. A statement concerning potential mineral exploration has been added to Chapter IV. (For further discussion see response 64 of this letter).

74. In making D-2 land withdrawals and the recommendations to the Congress for management of these lands, a basic dilemma was faced which is implicit in a decision involving mineralogically unexplored lands such as those in Alaska. This dilemma was the choice between possible values of developable, nonrenewable resources such as minerals, and the resource values inherent in natural and ecological systems.

In developing the final recommendations to Congress, the need to leave mineral resources available for development was given careful consideration. In the first place, some of the Systems themselves herein advanced by those proposals contain the authority and objective of mineral development. And, it should be noted that the selections already made by the State of Alaska and the priorities provided the Native Claims under ANCSA have excluded from "Four System" consideration vast areas of mineral potential already. In many cases, boundaries of proposals were redrawn to place mineral belts of prime potential outside proposals with restrictive management categories. In other cases, management options were left open to mining where identified mineral potential was sufficient to warrant such action, and where mineral extraction would not prove overly damaging to the environment. However, in order to comply with the intent of section 17(d)(2) of the Act and in order to afford adequate protection of these outstanding areas, some areas which do have possible mineral potential were recommended for protective management that would exclude mining and mineral entry. These proposals reflect a need, set forth in ANCSA as a Congressional mandate, to preserve certain outstanding natural and ecological areas of national interest apart from mineral development.

Again, in regard to the request for a research program to inventory mineral potential in these areas, this proposal provides that prospecting, mining, and the extraction of minerals or the removal of soil, sand, gravel, and rock will not be permitted, except where carried on pursuant to valid existing rights.

The National Park Service encourages and will participate in appropriate ways in the study of geological resources within proposals. Geological studies by recognized educational or scientific institutions, professional personnel of other Federal agencies, and accredited individuals will be permitted and encouraged when in consonance with the purposes of the

area and the policies of the Service. Procedures which might result in damage or alteration to the resources would not be permitted. For the above reason, Chapter V, paragraph 4 has not been rewritten.

75. The analysis of impacts on mining in Chapter III has been rewritten on the basis of new information and has considered a commitment of these resources on a perpetual basis. Thus, we have analyzed our impact on the assumption that that impact would be permanent. However, we do not agree that it is improper to cite Congress' power to reopen these areas to development. In fact, such reopening of park lands has occurred; for example, Katmai National Monument was opened for extraction of coal and pumice from 1949 to 1964.

However, further discussion of the impact of prohibiting mineral extraction has been added.

United States Department of the Interior

BUREAU OF RECLAMATION
WASHINGTON, D.C. 20240

IN REPLY REFER TO: 150
120.1

JAN 24 1974

Mr. Theodor R. Swem
Chairman
Alaska Planning Group
Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem:

This is in reference to your December 28, 1973, transmittal of the 28 draft environmental statements in regard to the Alaska Native Claims Settlement Act of 1971.

Since we have only peripheral experience in the subject matter covered by these statements and considering the fact that we have no jurisdiction in Alaska, we do not plan to review and comment on these statements.

Sincerely yours,

G. G. Stamm

Commissioner

United States Department of the Interior

GEOLOGICAL SURVEY
RESTON, VIRGINIA 22092

OFFICE OF THE DIRECTOR

DES 73-86

AUG 12 1974

Memorandum

To: Chairman, Alaska Planning Group

Through: Assistant Secretary--Energy and Minerals

From: Director, Geological Survey

Subject: Review of draft environmental statement on the Proposed Harding Icefield - Kenai Fjords National Monument

We have reviewed the subject draft environmental statement as you requested in a memorandum of December 28.

In general, rather than a clear and objective description of the environment and impacts of the proposal, the statement presents a description which appears to emphasize and advocate aspects justifying implementation of the proposal. Discussions of possible adverse effects receive less attention and tend to be described in phrases designed to de-emphasize these effects. References to sources of statements are, in many cases, incomplete, misleading, and inaccurate. 76

The impact of the proposed action on the water resources and related aspects of the environment and existing conditions seem to be adequate and almost accurate, generally.

With reference to mineral potential of the proposal area, we believe the small withdrawals along the coast (fjords) are least favorable for metallic mineral deposits. The Harding Icefield covers an area which is geologically favorable for the occurrence of gold, copper, and chromite. The withdrawal is at the intersection of two structural trends favorable for mineralization. 77

Our specific, detailed comments on these matters are attached.

Henry W. Coulter
Acting Director

Attachment

Specific Comments on

Harding Icefield - Kenai Fjords National Monument

DES 73-86

Page 5: The statement should indicate whether or not the power site withdrawals for Lost Lake and Cooper Lake are still in existence. 78

Page 19, paragraph 2, and page 58, paragraph 2: What is the basis of the statement that average yearly precipitation is 400 inches, as rainfall? A recently prepared National Weather Service map shows 400 inches of snowfall and 160 inches of precipitation to be yearly averages for some of the area. 79

Page 27: The statement, "It is within . . . the Kenai-Chugach Mountains physiographic province. This province is made up of the Chugach Mountains geosyncline," is poorly worded. A physiographic province may occupy an area that was occupied by a geosyncline during an earlier time, but cannot be made up of a geosyncline. 80

Page 36, last paragraph: What is the authority for the statement that the glaciers of the Kenai Peninsula are receding rapidly? 81

Page 47, paragraph 1: There is plenty of water as precipitation, but there may be no natural storage. 82

Page 47: What is the source of the quotation by D. H. Richter? 83

Page 47, last paragraph: The reference should be to the U. S. Geological Survey, not U. S. Coast and Geodetic Survey. 84

Page 48: The sentence, "The monument is near the axis of the Chugach Mountains' geosyncline, a very active area tectonically often exposed to tsunamis," is misleading in suggesting a relationship between the Mesozoic to early Cenozoic Chugach Mountains geosyncline and the present-day tectonic activity and tsunamis in the area. 85

Page 48, last paragraph: There is plenty of fresh water as precipitation, but storage is minimal. Also, the lakes mentioned empty into the Gulf of Alaska, not Cook Inlet. 86

Pages 52-54: The section on geology is poorly organized and as a result is confusing to the reader. The first two paragraphs summarize briefly the main rock types of the entire Kenai Peninsula. The discussions of the next four paragraphs seem to be giving additional detailed descriptions of rock exposures in or near the proposal area. However, this is not mentioned and unless the reader is familiar with the local geology and the sources from which the descriptions are quoted (without references) this is not clear. Because the descriptions are apparently taken out of context from descriptions by different authors who were describing different localities, at least one of which is not even in the proposal, the result is a confusing mixture of descriptions. There is no indication of whether or not these descriptions apply to bedrock within the proposal or if it was examined during the study. 87

Pages 54-55: Statements about the geologic investigations and mineral resource evaluations are misleading. In actuality, none of the area of the proposal is covered by modern geologic mapping, except for about 9 miles of the shoreline of Surprise Bay, mapped by Richter (1970, Geology and lode-gold deposits of the Nuka Bay area, Kenai Peninsula, Alaska: U.S. Geol. Survey Prof. Paper 624-B). Other geologic surveys made "since the turn of the century," according to the statement, were reconnaissance studies made in the early 1900's that were mainly limited to shoreline investigations. 88

The reader is led to assume that the statement, "The mineral belt in this area is considered to have moderate potential for small deposits of precious metals and copper, but low for large deposits," is a U. S. Geological Survey evaluation. There is no reference however and we do not know the source of the statement. The source should be specified. 89

Other statements on pages 55-56 are direct quotes from D. H. Richter's 1970 report on Nuka Bay. However, these are not given as quotations and are mixed in the same paragraphs with statements that are not from Richter's paper. One statement in particular, "Since World War II interest in Nuka Bay gold mining has not been revived and today the area appears to have been virtually forgotten," is in direct conflict with information on recent interest in the area described by Richter in his report. Yet this statement is followed by a sentence (without quotation marks) from Richter's report and a reference to Richter, 1970, suggesting that the statement was made by Richter. 90

Page 57: The statement, "A series of prospects extending northward along the highway from Seward and south along Resurrection Bay can be 91

largely discounted because of their long standing proximity to excellent transportation facilities and labor supply centers," leads to confusion. Does this mean that the possibility of future production from these deposits can be discounted, or that they also can be discounted as indications of the types of minerals that may occur in the less accessible areas of the proposal? The first may be true, but the latter cannot be discounted. The assertion leads one to question the basis for the statement attributed to Glenn Reed, in the preceding paragraph, that "mineral resource potential of the area proposed for monument status is comparatively meager." Because the area of the proposal is not covered by modern geologic, geochemical, or geophysical mapping, is discounting the significance of known occurrences in better known areas adjacent to the proposal the basis for the statement? Is there any evidence that undiscovered economically significant deposits of the same or related types of minerals do not exist? If so, what is the evidence? 91

Pages 109-110: The report discusses potential for recreational opportunities at great length but dismisses mining potential with a brief statement and a reference to the previous discussion of mining in the environmental section. The potential for mineral deposits has not been adequately evaluated and there is no way to predict whether mining would or would not be a significant economic consideration in the future without mineral resource assessment. These factors should be discussed. 92

Page 112: In spite of the statement on page 54 that "exploration has been insufficient to assess mineral values properly," a statement is made here that "present indications are that there are no commercial ore bodies in the area." This kind of conclusion is not valid when mineral resources have not been evaluated. 93

Page 119, last sentence: On page 128, it is stated that 2,500 visitors per day may visit the area. This implies that there will be waste disposal problems, a subject which should be addressed in the statement. 94

Page 121: The U. S. Geological Survey has not evaluated the economic possibility of profitable mining in the region surrounding and including the proposal. Richter's statement that "diligent small-scale mining may be economically possible," was written in reference to the Nuka Bay area as defined and outlined in the report quoted. It was clearly not intended to apply to the entire region surrounding and including the proposal as is inferred in the impact statement. 95

Page 145: The economic consequences of postponment of mineral resource extraction are discussed. However, the possible economic consequences of withdrawal from mining and mineral entry of an area for which adequate mineral resource assessments have not been made is not considered. The effect of withdrawal on prospecting in the area and the amount of lead time that would be needed from the time the area might be opened to mining in response to future needs until any minerals could be produced should also be discussed. 96

Page 150: The statement, "The area . . . is not well endowed with natural resources other than scenery and wildlife," is not consistent with the earlier statement (p. 54) that exploration has been insufficient to assess mineral values properly. 97

Page 241: The reference to Capps is incorrect. It should be "Capps, S. R., 1940, Geology of the Alaska Railroad region: U.S. Geological Survey Bulletin 907, 201 p."

Page 243: The reference to Richter is incorrect. The publication is Professional Paper 625-B, p. B1-B16, not Bulletin 277. 98

RESPONSE TO COMMENTS BY
THE U.S. GEOLOGICAL SURVEY

76. The impacts sections of the statement as well as the geology sections of Chapter II have been rewritten in order to rectify these deficiences as much as possible. See section F-7, Chapter III and also Chapter II "Geology" and "Economic Geology."

77. This information has been included in Chapter III under "Impacts on the Mining Industry" and Chapter II under "Economic Geology."

78. The Alaska Power Administration did not indicate in their letter that there were any active power site proposals affecting the proposal except Bradley Lake.

79. The information has been corrected.

80. This section has been rewritten and included in the "Geology" section of Chapter II.

81. This statement was based on analysis of USGS 1:250,000 scale maps of the area done during this century and of present knowledge of the area. It was found that lands shown on older maps (as recent as 1930) show areas covered with ice which are now barren rocks.

82. The information has been included under Chapter II "Geology."

83. This reference was incorrect. The source is Lemke, R.W. 1967, "Effects of the Earthquake of March 27, 1964 at Seward, Alaska. (See "References").

84. The reference has been changed accordingly - see Chapter II "Geology."

85. The passage has been rewritten - see Chapter II, "Geology."

86. The information has been included and the text changed. (See Chapter II, "Hydrology.")

87. These paragraphs have been rewritten and the section on geology reorganized in an attempt to clear up this confusion. Much of this text was offered by D. H. Richter of USGS in his original comments on Chapter II of an early draft of the EIS. (June 15, 1973). Each paragraph of descrption which was paraphrased or quoted from Richter's comments is referenced accordingly at the end of the paragraph.

88. The section on Geology has been rewritten to reflect this information.

89. The source is Clark et al 1972, "Metal Provinces of Alaska, U.S.G.S. Open File Report, 3p and 3 maps; also Alaskan Geology Branch, 1972. "The Status of Mineral Resource Information of the Major Land Withdrawals of Alaska Native Claims Settlement Act of 1971. U.S.G.S. Open File Report (See References). It has been noted in the text, Chapter II "Economic Geology" and Chapter III "Impact on Mining Industry."

90. All paragrphs quoting or paraghrasing Ricter have been referenced. The language "Since World War II.....virtually forgotten" has been removed to clear up the inconsistency. However, this language was a direct quote from Richter's 1970 report on Nuka Bay and appears on Page B1 paragraph 1 of that report.

91. This statement was intended to mean that the possibility of future production could be discounted, however, the statement has been rewritten, because although the statement could be true, it is basically speculation and should not be included. In addition, the quote has been dropped.

92. This section has been rewritten (see Chapter II section B-8, "Mining Industry .")

93. This section has been rewritten, accordingly.

94. This impact is covered in Chapter III section D "Impact on Water Quality."

95. The section has been rewritten and this language has been deleted. See Chapter III section F-7 "On Mining Industry."

96. Appropriate discussion has been included (See Chapter VI, B).

97. The statement has been deleted.

98. The references have been corrected.

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

ALASKAN REGION
632 SIXTH AVENUE
ANCHORAGE, ALASKA 99501

TELEPHONE 272-5561

JUL 12 1974

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U. S. Department of Interior
Washington, D.C. 20240

Dear Sir:

This letter is in response to the request that we review the Draft Environmental Statement pertaining to the proposed Harding Icefield - Kenai Fjords National Monument.

We wish to bring to the Planning Group's attention that in any consideration of the airspace above the public lands in question there exists a public right of transit through navigable airspace and that the authority to control the use of navigable airspace and to regulate both civil and military operations therein lie solely with the Secretary of Transportation. This exclusive responsibility and authority is statutory (49 U.S.C. 1303, 1347, and 1348).

99

While each land withdrawal for specific public purposes has its own individual characteristics, each should be viewed in relation to the composite effect of restricting the use of land in exceptionally large tracts or restricted uses that abut upon each other. In addition, there are site location circumstances that occur from time to time which require that electronic aids to air navigation be located in areas for which there is not always an acceptable alternate location. In such circumstances, we would request that every effort be made by federal agencies responsible for land management to cooperate in the public interest in the safety of airways, just as agencies are asked to cooperate with federal objectives in land management.

We appreciate the enormity of the task that faces your group. We also appreciate the opportunity afforded us to comment upon the proposal.

Sincerely,

LYLE K. BROWN
Director

RESPONSE TO COMMENTS BY
THE FEDERAL AVIATION ADMINISTRATION

99. In the case of navigable airspace the Park Service's concern is that unrestricted air traffic over certain areas of the proposal could impinge upon the natural character of the area which the proposal is designed by protect. On the other hand, we realize the need for air travel in the area and the value of navigation aids in maintaining air safety, especially in view of the large volume of air traffic in the general Anchorage-Kenai Peninsula region.

While allowing ample opportunity for safe and convenient air travel in the area, we would seek cooperative agreements with the FAA to insure preservation of the values of the monument. Further, we believe that such agreements might involve minimum overflight altitudes, traffic corridors, and designated landing zones as well as mutually acceptable installation of air safety and navigation aids.

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
412 Mohawk Building
222 S. W. Morrison Street
Portland, Oregon 97204

July 15, 1974

IN REPLY REFER TO
10-00.33

Mr. Theodor R. Swem, Chairman
Alaska Planning Group
U. S. Department of the Interior
Washington, D. C. 20240

Dear Mr. Swem:

Your December 28, 1973 letter provided copies of DEIS #73-86 to the FHWA for review and comment regarding the National Park Service's (NPS) 300,000 acre proposal, Harding Icefield-Kenai Fjords National Monument, on the south coast of the Kenai Peninsula in Alaska. We appreciate the 120-day extension for review, which now ends on July 22, 1974. In general, we consider this area to be a beneficial addition to the Nation's national park system because of its glaciers and unparalleled beauty. It will give tourists an unforgettable experience. Implementation of this NPS proposal will be beneficial to the tourist industry of Alaska and an economic aid to Seward's recovering economy.

Our comments on the statement are enclosed for your consideration in further planning and preparation of the FEIS.

Thank you for the opportunity to participate in this review. We would like to receive a copy of the FEIS when completed.

Very truly yours,

Dale E. Wilken

Dale E. Wilken, Assistant Director
Office of Environment and Design

Enclosure

FHWA REVIEW COMMENTS
ON
HARDING ICEFIELD-KENAI FJORDS NATIONAL MONUMENT
DEIS #73-86

(1) Chapter I - DESCRIPTION OF THE PROPOSAL:

(a) It would be helpful to reviewers if a brief discussion could be included in the FEIS regarding the land use planning activities under the provisions of the Alaska Native Claims Settlement Act. Specifically, we would appreciate a discussion of subsection 17(a)(1) of the Act which established the Joint Federal-State Land Use Planning Commission for Alaska (LUPC). There was no mention in Chapter I regarding LUPC's input in planning for the wise use and disposition of lands in Alaska. In addition to assisting the Federal study teams in the withdrawal identification process of areas proposed for federal ownership, LUPC was given the responsibility under subsection 17(b)(1) of the Act to identify public easements (or transportation corridors) within the lands selected by village and regional corporations. 100

The LUPC is developing statewide transportation system proposals and has received from the Alaska Railroad and Alaska Department of Highways (ADH) proposals on surface transportation and utility corridors. The LUPC held public hearings in April 1974 at various locations throughout the State to present surface transportation and utility corridor proposals, and to obtain input on native concerns regarding surface transportation. We recommend that the NPS review the LUPC proposals, the public testimony resulting therefrom, and provide further discussion in the FEIS regarding the effect of National Monument classification on surface transportation corridors recommended to serve the Kenai Peninsula. 101

(b) We noted the NPS's legislative proposal contains a provision that with the concurrence of appropriate Native corporations, the Secretary of the Interior may revise the boundary (of the proposed National Monument) to include not to exceed 460,000 acres of lands and waters identified on the Proposal Map on page three as Area of Ecological Concern. Any such lands within this Area of Ecological Concern and not selected by the Native corporations would thus become part of the national monument. We are concerned by what appears to be an effort by the Department of Interior to expand the land area under control of the NPS (and subject to NPS land use restrictions on utilization) even though the land may not initially be formally designated as part of the National Monument. This aspect of the NPS's proposal could affect surface transportation planning on the Kenai Peninsula. As noted above, the July 1973 proposed surface transportation and utility corridors were submitted by Alaska Railroad and ADH to LUPC. These proposals included surface transportation system connections to English Bay, Port Graham, Seldovia and Halibut Cove on the southeasterly side of Kachemak Bay. The affect of this Area of Ecological 102

Concern designation on the planning and implementation of transportation facilities should be thoroughly addressed in the FEIS, including the Department of Interior's position regarding applicability of Section 1653(f) of the DOT Act of 1966 to such Areas. 102

(2) Chapter II - DESCRIPTION OF THE ENVIRONMENT: On page 29, we recommend the Regional Transportation Map be revised to show the surface transportation corridors proposed to serve the Alaskan villages mentioned above along the southeasterly side of Kachemak Bay. Also, we suggest the legend for "proposed highways" be changed to "proposed surface transportation corridors", since these were joint proposals of the Alaska Railroad and the ADH in July 1973 to the LUPC.

On pages 99-100, we noted that in a 1968 survey, one of the special characteristics of Seward area communities and their people, as identified in the Comprehensive Planning Program for the Kenai Peninsula Borough, was the concern over transportation and the fact that an efficient transportation system integrated with the State transportation network was recognized as essential to the proper development of the area. However, the NPS does not discuss the on-going statewide transportation planning process on pages 110-111 under Transportation and Communication which is designed to better serve not only the Kenai Peninsula but the whole State of Alaska. We suggest the FEIS contain such a discussion. 103

(4) Chapter III - THE ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION: The discussion on pages 132-134 under IMPACT ON TRANSPORTATION should be revised to reflect the possible affects of designating the Area of Ecological Concern on proposed surface transportation corridors along the southeasterly side of Kachemak Bay. While these surface transportation proposals to serve English Bay, Port Graham, Seldovia and Halibut Cove were not part of the transportation proposals presented to the LUPC in January 1974, we feel the benefits of any proposed transportation corridor should be given due consideration by the NPS in the FEIS. 104

(5) Chapter VIII - ALTERNATIVES TO THE PROPOSED ACTION: Alternative C-1, Multiple-Use Management, would be less restrictive as an alternative management system than C-2, IMMEDIATE WILDERNESS DESIGNATION concerning surface transportation planning for the Kenai Peninsula. We, therefore, recommend no further consideration be given to Alternative C-2.

Alternatives D-1 through D-3 on pages 157-167 deal with optional boundary proposals. Alternate D-1 involves the Monument proposal of 300,000 acres including Harding Icefield, Coastal and Island Areas and excluding the Area of Ecological Concern. Alternative D-2 involves a proposed Monument of 760,000 acres including the Harding 105

Icefield and the Area of Ecological Concern. Alternative D-3 involves a proposed Monument of 284,000 acres comprising only the Harding Icefield. The only apparent conflict with surface transportation corridor proposals on the Kenai Peninsula involving Alternatives D-1 through D-3 would be with Alternate D-2. Perhaps upon further investigation and detailed planning by the NPS and other concerned transportation planning agencies, this matter can be resolved. We suggest the FEIS include a discussion of any further investigation and planning by the NPS regarding this possible conflict between surface transportation systems and the Area of Ecological Concern in the vicinity of Kachemak Bay. 105

RESPONSE TO COMMENTS BY
THE FEDERAL HIGHWAY ADMINISTRATION

100. This discussion has been added to Chapter I,C.

101. The Department of the Interior has reviewed the Land Use Planning Commission recommendations in Alaska, and public hearing testimony resulting therefrom. The Department recognizes that further information is needed to reflect Alaska's transportation and utility requirements. Public Law 93-153 directs the Secretary of the Interior to review the need for a national system of transportation and utility corridors across Federal lands. After studies are completed, recommendations for transportation corridors will be submitted to Congress. We would expect these recommendations to give full consideration to data collected by the Land Use Planning Commission

In addition the information on proposed transportation and utility corridors has been added to Chapter II, "Transportation and Communication" and to Chapter III, G: "Impact on Transportation System."

102. If the landsinvolved were not selected by the Natives they would not automatically become part of the monument. They would have to be chosen for inclusion by the Secretary of the Interior. Nevertheless discussions of the proposal's impacts on these transportation corridors has been included in Chapter III, G: "Impact on Transportation Systems."

With regard to the impacts of the AEC on transportation corridors, these would depend on the applicability of Section 4(f) of the DOT Act of 1966. Specific determination of the applicability of Section 4(f) of the DOT Act of 1966 as amended (49 USC 1653(f)) is within the authority of the Secretary of Transportation, and would be based upon the facts of record at that time, i.e. land ownership and land use.

103. The map has been so revised and the transportation plans for the region have been included in the section on "Transportation and Communication."

104. This has been done. (See question 102 above).

105. This has been done. (See question 102 above).

U.S. ENVIRONMENTAL PROTECTION AGENCY

ALASKA OPERATIONS OFFICE
Room G66, Federal Building
605 West Fourth Avenue
Anchorage, Alaska 99501

July 18, 1974

REPLY TO
ATTN OF:

Mr. Theodore R. Swem
Chairman, Alaska Planning Group
U. S. Department of the Interior
Washington, D. C. 20240

Subject: Draft Environmental Impact Statements as listed on Page 3

Dear Mr. Swem:

The Environmental Protection Agency has reviewed the subject draft environmental impact statements and does not anticipate any significant environmental impacts resulting from these proposed actions as related to EPA's areas of expertise. The major impacts will be primarily economic due to the limited use these lands will be subjected to. We assume that if these lands are reclassified or if specific developments are authorized on these lands at some future time, an environmental impact statement will be written which considers the environmental effects of the new proposed land uses and EPA would provide comments at that time.

We are concerned, however, that these lands will be managed on an individual basis rather than in association with other surrounding lands and other planning agencies. Thus, for a given region where one of these proposals is located there will be at least three planning groups -- the Federal Government, the State of Alaska and the Regional Native Corporations. We suggest that provisions be provided that will allow the implementation of regional planning which would provide for the most effective resource management. 106

These draft impact statements have been classified as Category LO-1. The classification and the date of EPA's comments will be published in the Federal Register in accordance with our responsibility to inform the public of our views on proposed Federal actions under Section 309 of the Clean Air Act.

Definitions of the categories are provided on the attachment. Our procedure is to categorize our comments on both the environmental consequences of the proposed action and the adequacy of the impact statement at the draft stage.

If you have any questions concerning our categorization procedures, please let us know.

Sincerely yours,

for Oscar E. Dickason
Director
Alaska Operations Office

DRAFT ENVIRONMENTAL IMPACT STATEMENTS

Cape Krusenstern National Monument

Mount McKinley National Park

Harding Icefield-Kenai Fjords National Monument

Katmai National Park

Gates of the Arctic National Park

Chukchi-Imuruk National Reserve

Yukon-Charley National Rivers

Lake Clark National Park

Wrangell-St. Elias National Park

Yukon Delta National Wildlife Refuge

Arctic National Wildlife Refuge

Koyukuk National Wildlife Refuge

Togiak National Wildlife Refuge

Yukon Flats National Wildlife Refuge

Iliamna National Resource Range

Noatak National Arctic Range

Fortymile National Wild River

Unalakleet National Wild River

Porcupine National Forest

Yukon-Kuskokwim National Forest

Wrangell Mountains National Forest

RESPONSE TO COMMENTS BY
THE ENVIRONMENTAL PROTECTION AGENCY
(ALASKA OFFICE)

106. Provisions have been made, both in the Legislative and Administrative proposals as outlined in Chapter I of this document, for the Secretary of the Interior to seek cooperative agreements with other federal agencies, State and local governments, and others in the region. These agreements would, in addition to facilitating sound management of the proposal, also lead to cooperation in the land use planning for the region.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

22 AUG 1974

OFFICE OF THE
ADMINISTRATOR

Mr. Theodore R. Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem:

This is intended as an addendum to EPA's comments of July 18, 1974, on the draft environmental impact statements (EIS's) on the "Alaska Native Claims Withdrawal Proposals." We are enclosing several additional comments on the individual EIS's, however, you should be aware that these additional comments do not change the earlier rating as expressed in the July 18, 1974, comment letter.

We do not feel that the cumulative impact of the withdrawals upon the Alaskan environment has been addressed by these separate statements. Accordingly, we believe that it would be appropriate for DOI to prepare an overview or summary EIS to accompany the individual final EIS's which would address these cumulative impacts. The overview statement might include a map displaying the scheme of the area withdrawals in relation to areas of prime ecological concern and to the existing National Parks and Forests in Alaska. A view such as this would facilitate the reviewers' understanding of the total area involved. It would also be useful to differentiate between the management practices and authorities at National Parks, Forests, and Refuges within the overview statement. The EIS's relating to National Forest proposals, for example. included a useful chart summarizing the current management practices under National Forest and Wildlife Refuge administration. This chart might be expanded to include National Park and Wilderness Area administration. 107 108

Comments on Withdrawals Under the Alaska Native Settlement Act Draft Environmental Impact Statements

Harding Icefield - Denai Fjords National Monument

Under the discussion of the alternative which excludes the Area of Ecological Concern from the monument, the statement is made that this "alternative would eliminate some of the controversy associated with the selection of Native Withdrawal lands." This is the only indication that a controversy exists. The final statement should explain the nature and extent of the controversy. 109

Arctic National Wildlife Refuge

The discussion of utility routes is incomplete. This EIS mentions a proposed trunk line from Prudhoe Bay to the Mackenzie River delta and proposes two alternative routes, one along the Arctic Coast, and the other southeast from Prudhoe Bay to Mackenzie Valley. Neither of these routes is marked clearly on the transportation map on page 39. A third corridor, outlined in other DOI Alaskan EIS's (Yukon Flats National Wildlife Refuge, and Beaver and Birch Creek National Wild Rivers), runs down the west edge of the proposed area, due south from Prudhoe Bay. This route was not mentioned in this EIS even though it would have less impact on the refuge.

Cape Krusenstern National Monument

This EIS mentions a tower of spruce logs with marker panels and a blinking light located within the proposal area (p. 88). On page 122, it is suggested that this tower be reconstructed for visitor use. It is noted on page 137 that the Coast Guard denies that this is an official aid to navigation. A call to Coast Guard Headquarters reveals the Cape Krusenstern Light (Pacific Coast Light List No. 227.50) appears to fit this description. Inquiry should be made of the 17th Coast Guard District Office before any action is taken to alter or remove this tower. This should also be clarified in the Final statement.

We appreciated the opportunity to review and comment on these proposals, and ask that this letter and attachment be considered part of EPA's official comments on the subject impact statements.

Sincerely yours,

Sheldon Meyers

Sheldon Meyers
Director
Office of Federal Activities

Attachment

RESPONSE TO COMMENT BY
THE ENVIRONMENTAL PROTECTION AGENCY
(WASHINGTON OFFICE)

107. In passing the Alaska Native Claims Settlement Act of 1971, Congress itself gave very clear attention to the regional, State and national effects of the Alaska land transfers necessary to provide Native claim settlement to meet the outstanding requirements of Alaskan statehood, and to provide for the continuing administration of the public lands. It directed the Secretary to withdraw lands for the Four Systems of National Parks, Forests, Wildlife Refuges and Wild and Scenic Rivers after other factors were taken into account in the planning process. And, Congress further provided for the establishment of a Joint Land Use Planning Commission and the orderly implementation of the planning process concerning areas planned and best suited for permanent reservation in Federal ownership. It called for recommendations to insure that economic growth and development was planned in an orderly and compatible way with State and national environmental objectives and the public interest in public lands, parks, forests, and wildlife refuges in Alaska, as well as economic and social well being of the Native people and other residents of Alaska. And agreement was reached with the State on the general area of the Four System proposals more specifically set forth here. These considerations and steps were examined and implemented prior to the individual development of Federal proposals with finite boundary lines and acreage limits. The need to consider cumulative impacts was recognized also during the development of the environmental impact statements on the 28 detailed proposals. The cumulative aspects of each proposal, where they could be detected with reasonable assurance of significance, are noted in the evaluations of that proposal. Appropriate analyses in the statements are developed on a regional basis for some proposals and in other cases, on a statewide or broader basis. It would be repetitive to undertake an additional EIS to the 28 already completed.

Anyone wishing to ascertain overall effect, may do so by reading the aggregate impact of all or part of the proposals that would be involved and considering them the same as the sum of the impact discussed in each of the environmental statements. The statements are being issued and are available on the basis of sets of (28) each. Where the total cumulative impact in a region or the State appears particularly significant in relationship to a given proposal, the subject statements involved are modified to include any additional impact considerations not previously described among the analyses involved. It is the considered opinion of the Department that these foregoing actions and the statements, them-

selves taken together do constitute a good faith effort at providing a fair and accurate evaluation of aggregate or cumulative impact on major regions, the State and the Nation as a whole.

It is recognized that the proposed Harding Icefield-Kenai Fjords National Monument would have an aggregate impact on the Kenai Peninsula region when considered in conjunction with the proposals for the Seward National Recreation Area, the additions to the Chugach National Forest and the proposals for wilderness on the Kenai Moose Range and the Nellie Juan Wilderness Area (in the Chugach Forest.) These five proposals in addition to the existing Chugach National Forest and Kenai National Moose Range in many areas overlap, but do cover about two thirds of the lands on the Kenai Peninsula. Each proposal and existing area varies somewhat in the nature of its restrictions and management policies.

The impact chapter (Chapter III) has been reorganized and rewritten to give additional consideration to regional impacts. In particular this has been done in the sections dealing with the impacts on "Social and Economic Characteristics." It was felt that this is the area where the greatest aggregate impacts will occur. (See Chapter III, F and G).

In addition, more information has been added to Chapter I, section C, to clarify this proposal's interrelationships with other land management projects or proposals. The cumulative impacts of these have been considered in Chapter III, section F-1.

108. The management policies proposed for this area by the NPS are outlined in Chapter I under "Administrative Active" (section B). General management policy under "multiple use" has been covered in Alternative C-1 in Chapter VIII. Similar information on wilderness management is discussed in Alternative C-5.

109. This language was inaccurate and has been removed. The general impact of the proposal on lands in the Areas of Ecological Concern has been discussed in Chapter III.

UNITED STATES OF AMERICA
GENERAL SERVICES ADMINISTRATION
WASHINGTON, DC 20405

FEB 13 1974

Mr. Theodor R. Swem
Chairman
Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20405

Dear Mr. Swem:

As requested in your December 28 letter, the General Services Administration has reviewed the draft environmental impact statements in regard to the Alaska Native Claims Settlement Act of 1971.

Our review of these draft environmental impact statements discloses no problems of concern to this agency.

Sincerely,

LARRY F. ROUSH
Deputy Administrator for
Special Projects

STATE OF ALASKA

OFFICE OF THE GOVERNOR

STATE PLANNING AND RESEARCH

WILLIAM A. EGAN, GOVERNOR

Phone 465-3512

POUCH AD—JUNEAU 99801

July 22, 1974

Mr. Theodor Swem, Chairman
Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem:

Attached nereto is the response of the State of Alaska to the 28 draft Environmental Impact Statements submitted by your office for review on January 3, 1974.

We appreciate this opportunity to comment on the draft statements, and hope that our review will be helpful to the Department of the Interior in the preparation of a comprehensive final Environmental Impact Statement relative to the proposed legislation known as The Alaska Conservation Act (S.2917), prepared and submitted by Secretary Morton.

Yours truly,

R. W. Pavitt, AIP
Director

STATE OF ALASKA

Response to the Draft Environmental Impact Statements for lands withdrawn under Section 17(d) (2) of the Alaska Native Claims Settlement Act, and proposed by the Department of the Interior for inclusion in the National Parks, Forests, Wildlife Refuge and Wild and Scenic Rivers Systems.

Juneau, Alaska
July 22, 1974

I. OVERVIEW

The comments contained in this report and the attachments thereto should be considered as the State's formal response to the Department of Interior's recommendations regarding land withdrawn pursuant to Section 17 (d) (2) of the Alaska Native Claims Settlement Act (Public Law 92-203). The comments apply to all 28 of the Draft Environmental Impact Statements and include the State's comments on seven of the proposals which were submitted on June 22, 1974.

The one overriding area of concern relating to all of the proposals is that each individual statement deals with a small area of Alaska and does not look at the impact on the State as a whole, nor even on a major region. The "major federal action" involved in the proposed implementation of Section 17 (d) (2) is the addition of over 83 million acres (130,000 square miles) of land in Alaska to the over 47 million acres already included in the National Wildlife Refuge, National Park, National Forest and Wild and Scenic River Management Systems. Although individual environmental impact statements can and should be required for individual federal actions, it is obvious that in this instance a single comprehensive environmental impact statement relating to the social, economic, physical and environmental consequences of the proposed federal action concerning 83 million acres is needed to comply with the provisions and intent of the National Environmental Policy Act. The State will demand and require that such an impact statement be prepared, as the examination of individual parts of the overall proposed action do not give a fair and accurate evaluation of the impact upon the State as a whole, and upon the nation as well. 110

The ultimate effect of the approval of the proposed actions would be to divide the State into a number of isolated enclaves having little or no relationship with each other. Such fractionalization can and will lead to serious administrative problems at federal, state and local levels, tend to break down the prevailing cooperative spirit for the solving of problems, and can only lead to serious adverse social, economic, and environmental consequences for Alaska. 111

Recognizing the imminent shortage of metals and minerals, Congress enacted the Mining and Minerals Policy Act of 1970. This Act requires an annual report to Congress from the Secretary of Interior on the state of the mineral industry both domestic and foreign, apprising the nation of domestic shortcomings. These reports have pointed out the increasing world demand and decreasing future supplies of necessary and strategic minerals. In his 1973 report to the Congress, Secretary Morton pointed out:

1. Energy and minerals are the life-blood of our industrial economy...";

2. "Development of our domestic resources is not keeping pace with our needs..."

The emphasis by the Secretary on these increasing mineral deficiencies both domestic and worldwide appears inconsistent with the creation of the proposed vast National Parks, Refuges and Wild and Scenic Rivers in Alaska's rich mineral potential areas. Many of the Draft Environmental Impact Statements have indicated that mining and mineral exploration will be one of the first activities which will be restricted or completely forbidden within the newly created management areas. In fact, the proposals of the Department of Interior contained in S.2917 actually employ language that would prohibit geological and geophysical studies to identify and evaluate the mineral content of many of these areas; even by the Department of Interior.

The State of Alaska has been described as one of the major remaining untapped storehouses of mineral wealth in the North American continent. Yet, only a very small part of the State has been geological mapped or subjected to geophysical exploration to determine the mineral potential. In nearly all of the Draft Environmental Impact Statements, a subtle argument has been presented suggesting that not knowing the mineral potential in an area is tantamount to it not having potential. This is then used to justify statements to the effect that the closure of these areas to mining and exploration will have only a slight impact on the State or the nation. This is, of course, a completely fallacious argument and must be most strenuously objected to. 112

It is the position of the State of Alaska that if long range plans are not developed now for the careful inventory of mineral resources and provision for supervised extraction of resources within the proposed withdrawals, as well as the remainder of the State, the time will eventually come when the minerals will be exploited under conditions of extreme national pressure, and with little regard to the ecology which they were proposed to protect. It is necessary that stipulations be reached to allow scientific research, inventory, and planned supervised extraction of natural resources as needed and required by the State and the nation prior to the final classification of any of these areas. 112

Within each of the 28 Draft Environmental Impact Statements there is a reference to a number of hearings which were held by the Joint State-Federal Land Use Planning Commission in regards to that particular proposal. However, the hearings held by the Land Use Planning Commission in May and June of 1973 were primarily concerned with eliciting the feelings and views of the residents of the State of Alaska on what the appropriate land use would be for the (d) (2) withdrawals. At the time of the Land Use Planning Commission hearings, the specific intentions of the federal agencies for classification of the (d) (2) were not known to the public (and probably not to the agencies themselves). One of the underlying purposes of the LUPC hearings was the possibility of the development of innovative management systems within the withdrawals which could accommodate the needs and wishes of the peoples of Alaska and of the nation as a whole. 113

Since that time the Department of Interior has distributed its proposals for classification of the (d) (2) lands, and the public has become more aware of Interior's intentions. Many people would like the opportunity to voice their opinions on the Department of Interior's controversial proposals at a public hearing. To facilitate this purpose, the Department of Interior, in all fairness, should hold public hearings on each of the specific proposals in the area to be affected, to obtain and consider public opinion in the overall environmental assessment. If this course of action is not taken, it can only be assumed that the Department of Interior is not interested in public views and does not wish to expose itself to opposing elements.

There appears to be a tendency in each proposal to propose withdrawal and classification of land areas vastly exceeding that necessary to protect the features and qualities which prompted the action. An example of this tendency is the proposed Kobuk Valley National Monument where the Department has seen fit to recommend the withdrawal of 3,000 square miles to protect 30 square miles of sand dunes. 114

The Draft Statements uniformly fail to justify the need for the classification, boundaries and size of the proposals, although most of the reports imply that controls and regulations are needed for even an expanded area which would extend beyond the boundaries of a given withdrawal to avoid significant impacts on the area withdrawn. To justify these extraterritorial areas of cooperative management, the Department of Interior has created the term "Area of Ecological Concern", although no basis can be found in Section 17 (d) (2) of the Alaska Native Claim Settlement Act authorizing such a land classification. 115

The concept of an "Area of Ecological Concern" established in conjunction with a national park or a wildlife refuge is in theory quite commendable, and represents an innovative step on the part of the Department of Interior. As has been stated many times in the (d) (2) environmental impact statements, the arbitrarily drawn straight boundary lines which encompass parks, refuges, etc. many times do not provide an effective management area for the protection of ecological features. The (d) (2) proposals indicate that in theory the Areas of Ecological Concern would be administered by cooperative agreements between the managing agency of the federal withdrawal and the adjacent landowners within the Area of Ecological Concern. This can be an effective and important management tool for the protection of these areas as long as the affected land owners are considered and treated as an equal partner in the relationship. Equal partnership, however, means that the Department must be as willing to let its neighbors know and affect what it proposes to do inside of the federal withdrawal as the neighbors in turn must be willing to comply with federal requests and restrictions. 116

A factor not adequately addressed in any of these proposals and which makes it imperative that a single draft environmental statement for the entire 83 million acres be prepared concerns the cost to the American taxpayer for administering 117

the regulations, restrictions and management systems which will be imposed if these areas are designated by Congress as additions to the "Four Systems." At the present time, all four of the management agencies in question, i.e., the National Park Service, the National Forest Service, the Bureau of Sport Fisheries and Wildlife, and the Bureau of Land Management are all understaffed and underfunded in fulfilling their responsibilities in Alaska. It is only with extreme difficulty that these agencies presently operate within the State, and it will require radically expanded staffs and funding in order to adequately administer the new areas It is incumbent upon the Department of Interior to prepare a fiscal note as a part of the Draft Environmental Impact process which adequately addresses the benefit/cost ratios of these proposals and an indication of the sources of funding for each. 117

In these times of national energy shortages, careful scrutiny should be given to the manner in which the author agencies have consistently and glibly passed over potential sources of fossil fuels, geothermal and hydroelectric energy. The Alaska Power Administration has indicated that potential hydroelectric sites occur in 20 of the proposals, potential geothermal sites in 9 of the proposals and potential petroleum reserves are in 19 of the proposals. As the Nation's requirements for fuels having low pollution characteristics become greater, and are mandated by law in the future, it is more and more important that adequate provision be given to the inventorying and development of these potential energy sites. If the potential of these areas is not adequately developed, it will become increasingly necessary to substitute other energy sources with high pollution characteristics in the very areas of the nation where improvement is most required. One of the major shortcomings in the approach to preparing these Draft Environmental Impact Statements is the failure to consider on a regional or statewide basis, the significance and importance of the untapped energy potential in these withdrawn areas. 118

Of great concern to the State of Alaska is the withdrawal of millions of acres of tide and submerged lands belonging to the State under the Submerged Lands Act and the Statehood Act and similarly, the designation of other tide lands and navigable waters as Areas of Ecological Concern. This raises the serious question of preemption of the right of the State of Alaska with respect to these lands and navigable waters, and in some instances can be considered as expropriation of State property. 119

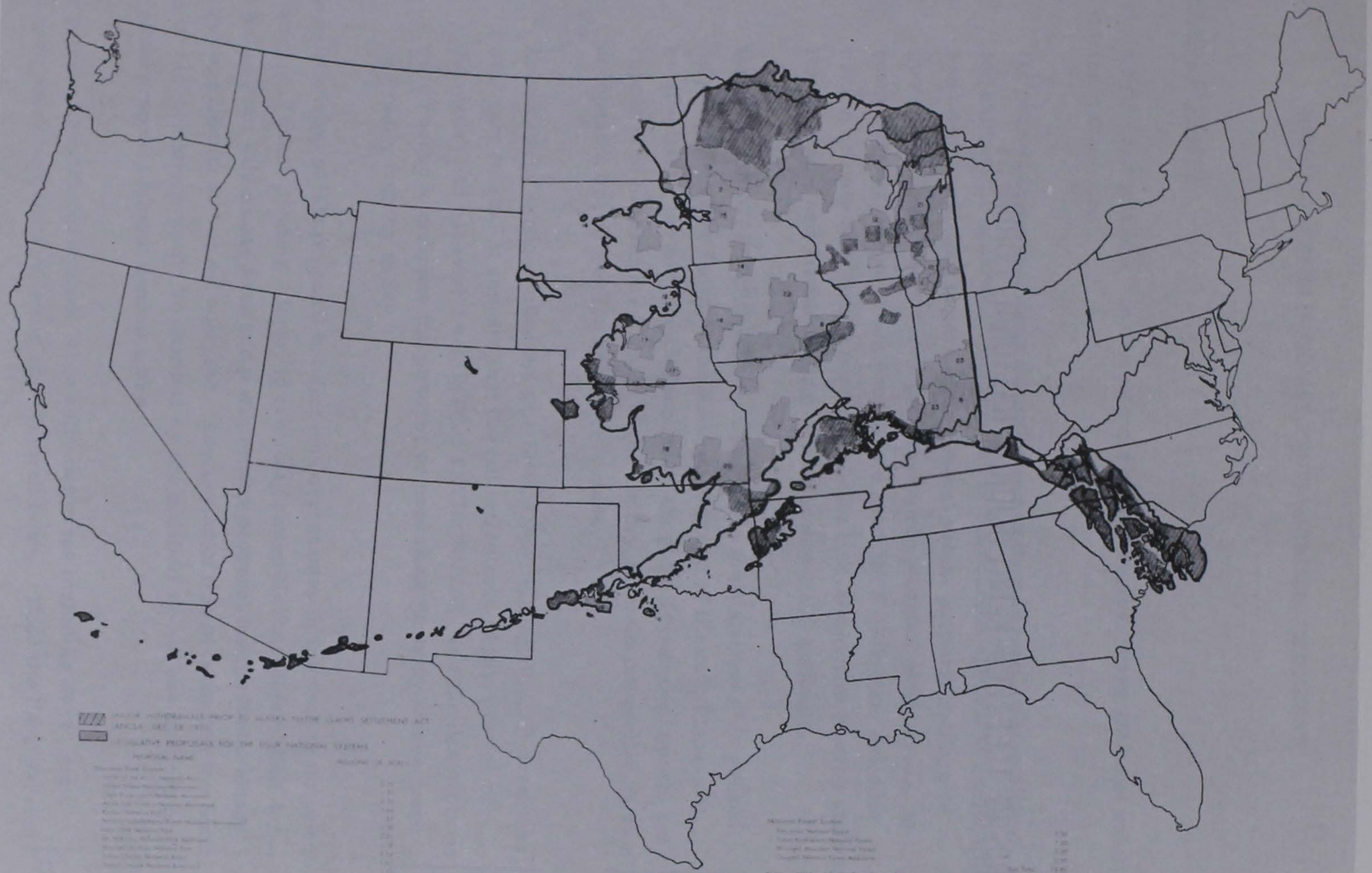
The apparent jealousies, and lack of confidence and trust among the various federal agencies is made abundantly clear in the analysis of these documents. The advocative inference that only through a particular agency's management system can the national interests in a particular proposal be truly protected does little to instill confidence in the federal management system. 120

Although it is to be expected that an individual agency would lobby within the Draft Environment Impact Statements for the establishment of its particular management system, this advocacy has unfortunately been allowed to color their analysis of information and throws serious question as to the validity of their conclusions and recommendations. The draft statements are replete with incorrect, biased and misinterpreted information. Agencies have suppressed information which disagreed with their predetermined positions, and have resorted to the use of emotional cliches and outright distortion of facts in an apparent attempt to display their environmental fervor. 121

The lack of knowledge of the agencies with respect to the subject of subsistence is appalling and appears to ignore the fact that the Native people of Alaska have survived for literally thousands of years in a hostile environment only because they practiced the type of sustained yield management that is the ultimate objective of conservation. Surely the imposition of bureacratic federal regulatory measures on this exemplary balance of man and his environment is unwarranted, unjustified and unsupported by any factual information contained in the draft statements. 122

The fold-out map following this overview is an accurate scale representation of the State of Alaska superimposed on a map of the coterminous states drawn to the same scale (1 inch = 135 miles). The proposals, as outlined in the draft statements, will dramatically affect land use, transportation, subsistence, communications, recreation and other factors that relate directly to the quality of life and the viability of Alaska as a sovereign state. It is felt that only by portraying graphically the existing federal withdrawals and their geographic relationship to the proposed additions to the "four systems" can the true impact of the size and importance of these proposals be fully understood. 123

The State of Alaska is gravely concerned that nothing in these draft statements addresses the goals and objectives of the Alaska Native Claims Settlement Act which is, after all, the vehicle by which these "National Interest Lands" are being evaluated for possible inclusion in the Four Systems. In a number of cases, the constraints that are proposed for these (d) (2) lands and the impact of those constraints on other lands in a region will cause traumatic disruption of travel, access, hunting and subsistence patterns that have existed for time immemorial. The land grant provisions within both the Alaska Statehood Act and the Alaska Native Claims Settlement Act were intended by the Congress to assist in the development of a viable economic base for the people and the government of Alaska. If the proposals for these (d) (2) lands effectively prohibit the Native peoples from beneficially enjoying the lands granted to them under the Claims Settlement Act, the will of the Congress of the United States in adopting this landmark piece of legislation will have been thwarted. 124



PROPOSED FEDERAL WITHDRAWALS
STATE OF ALASKA

HARDING ICEFIELD-KENAI FJORDS NATIONAL MONUMENT

HARDING ICEFIELD-KENAI FJORDS NATIONAL MONUMENT

General Comments

This is a fine example of a "written by a committee" report. Here are some examples of the inconsistencies:

1. On page 54 someone wrote that the "area has been incompletely explored for extractable minerals," and that "all of the sources agree that exploration has been insufficient to assess the mineral values properly." Page 56 quotes a NPS engineer, "the mineral resource potential of the area...is comparatively meager." On page 121 we read "NPS geologists consider mining activity here totally impractical; the U.S. Geological Survey estimates that "diligent small-scale mining may be economically possible." 125

2. Under EXISTING ENVIRONMENT on page 91 is the statement, "At present, no properties now listed in the National Register of Historic Places will be affected by the proposed monument." On page 125, where impacts are supposed to be described, much of the history given in the earlier section is repeated but no mention of impact is made. 126

3. Almost every section under the title ENVIRONMENTAL IMPACTS describes what now exists. It appears that the author/authors of this portion of the report had not read the EXISTING ENVIRONMENT, felt the descriptions were needed to complete the picture, or used them for body where there was really nothing to say. 127

The relationship of this proposal to other concurrent ones in the area is not adequately considered. Other pending efforts, to create a Seward National Recreation Area, the Nellie Juan Wilderness Area and a wilderness proposal for the Kenai Moose Range, are mentioned but not analyzed. Any impact of this proposal on the State and/or the local areas would be changed by the creation also of one or more of the other proposed federal control areas. 128

The proposal boundaries include large saltwater areas including bays, arms and open water between Pye Island and Chiswell Island. Does the Park Service 129

consider these waters subject to their control? Do they intend to include beaches and tidelands as part of their management responsibility? If so, the intent of the Statehood Act is being violated. 129

Park Service plans call for construction of visitor facilities in Resurrection Valley at several locations along the outer coast. Also contemplated is construction of a tramway to the Ice Field. However, the EIS is silent as to the cost of these facilities - both initial cost and annual maintenance and operation. Considering the present concern about federal expenditures, the statement should certainly address this perpetual and irretrievable commitment. The statement also failed to address the probable administrative costs of the proposed monument. 130

The discussion of alternative management systems only convinces the reader that the NPS objective is to "save" the lands from development. It is not difficult to see that multiple-use management would provide the same benefits advocated by the National Park Service without the severe adverse impacts of NPS management. NEPA compliance demands a candid look at more progressive management systems. If this is beyond NPS ability, perhaps some other agency should be requested to make an objective study of alternatives. 131

The statement refers to hearings held by the Joint Federal-State Land Use Planning Commission. It is incredible that the Department of the Interior would not hold hearings on its own recommendations. 132

The base map used throughout the EIS should be extended to include Prince William Sound. Since the environment and the cultural sites there are relevant enough to be discussed in this report, the area should be shown on the map. 133

The concept of the "Area(s) of Ecological Concern," in this and other EIS's, is of major concern to the State of Alaska. In this particular case the AEC is larger than the proposed monument. Statements such as:

> ...to insure that the Areas of Ecological Concern is managed in a manner compatible with the purposes of the monument; (page 10)
>
> ...to help Natives develop a tourist industry on their lands.... (page 132)

are hardly justification for appropriation of Native lands. Nor is the fairly standard comment (page 138 in this report):

> The NPS wishes to assist owners of contiguous lands in planning, construction and maintenance of facilities complementary to those within the park lands. Every effort will be made to encourage coordinated and cooperative development of facilities outside, but adjacent to the park to assure minimum environmental destruction within the area set aside for preservation.

What authority does NPS have to take over and manage lands outside of park boundaries? We read nothing in the Alaska Native Claims Settlement Act that gives NPS or any other federal agency the right to decide how Native lands shall be used after title is given to Native people or organizations. 134

Finally, and perhaps this should have come first, is the fact that no consideration has been given to the question of whether a need exists for a new monument. The proposal area is surrounded by state parks, a national wildlife refuge and national forest. There appears to be no benefit to be gained from designating the area as a national monument, rather than wildlife refuge or forest, except that the "image appeal" of a monument may speed development of the Harding Ice Field. The benefits of the Forest Service-Bureau of Sport Fisheries and Wildlife proposals, such as less impact on hunting and fishing, are not discussed. 135

Specific Comments

Page 5	The eastern boundary of the English Bay/Port Graham/Seldovia Native village withdrawal area should be moved eastward to the Range 12/11 West line.	136
Page 7	The report does not demonstrate that implementation of the five listed purposes would result from the proposed management or from designation as a national monument.	137
Page 27	Fishing is also recreation. The last sentence of paragraph 2 should read: "such as hunting, fishing, scenic viewing, and beachcombing."	138
Page 29 and 31	Present ferry routes shown on the map are wrong. Anchorage is not connected to Seward by ferry; in 1973 it was possible to ride a ferry from Anchorage to Seward but the trip would be via Kodiak. Now, in 1974, the ferry does not go north of Homer in Cook Inlet.	139
Page 32	This section entitled "geomorphology" should be included in "geology" of which it is a branch.	140
Page 36	(Last sentence) "It appears that the glaciers of the Kenai Peninsula are receding at a rapid rate." On what data or study is the statement based?	141
Page 47	(Paragraph 2) "Tectonic movement" does not refer to a geomorphic process, but to disturbances within the earth's crust. (Paragraph 3) To be technically correct the discussions on tectonic movement and subsidence should be separated. They are related but different phenomena.	142
Page 52 to 57	The section on geology and mining is inadequate. Because of sparse geologic data any qualified statements about mineral potential are unrealistic. This factor makes the impact statement incomplete.	143
Page 54	NPS writers do not justify their reasons for desiring to place in wilderness classification substantial acreage of potentially mineralized lands. This is surprising in light of the increasing national awareness of the need to develop new domestic sources of key minerals.	144
Page 56 and 57	The statement "that certain metalliferous lodes in the area are no longer economically attractive" should be proven or deleted.	145
Page 65	In the last paragraph, "habitat" should be changed to "ecosystem" and "Harbor seal; king, dungeness and tanner crabs; shrimp; herring; pink, chum and sockeye salmon" should be added.	146

Page 66 (Paragraph 4) Fish species present in the area of ecological concern would be the same as those found in the Resurrection River system. These are Dolly Varden; silver, red, chum and pink salmon; and a few rainbow trout. 147

Page 75 (Last paragraph) Alaska Fish and Game personnel counted one ram in 1968 and five rams in 1972 in the Sheep-Katchemak creeks area during aerial surveys. 148

Page 76 (Paragraph 3) Delete "probably" from the first sentence. The second sentence is inaccurate; in the summer months, goats frequent high alpine meadows where they graze on grasses, sedges and low shrubs. In winter, they migrate to lower elevations and spend a considerable amount of time at or below timberline. On clear, mild days goats move up to snow-free slopes to feed, returning again to timberline late in the day. 149

(Paragraph 4) There are no records of wolf occurrence in the study area.

Page 77 (Paragraph 1) There are a few brown bears along the southwest side of Resurrection River and the east side of Katchemak Bay north of China Poot Bay. Black bears are found throughout the study area, in addition to the concentrations along fish streams. It is doubtful that brown bear occur throughout the area. 150

Page 78 (Paragraph 2) White-tailed ptarmigan are not rare. They are abundant within their habitat limitations. There is only one species of spruce grouse; there are three sub-species of which one occurs in the area, the Valdez spruce grouse. 151

(Paragraph 3) Change "Outer Fishing District" to "Outer District of the Cook Inlet Commercial Fisheries Management Area." 152

Page 79 The commercial salmon catch by species is given for the outer district which is a much larger area than the area of ecological concern. Because this is included, a summary of Resurrection Bay salmon sport catch may also be of interest. 153

Resurrection Bay Salmon Sport Harvest, 1961-1972

Year	Silver Salmon	Pink Salmon	King Salmon	Total
1961	5,050	140	100	5,290
1962	14,480	1,310	190	15,980
1963	7,290	380	260	7,910
1964	2,970	840	130	3,940
1965	4,020	310	230	4,560
1966	9,590	1,700	240	11,530
1967	17,380	460	70	17,910
1968	22,560	1,870	380	24,810
1969	15,040	450	600	16,090
1970	14,870	3,750	660	19,280
1971	20,600	750	2,390	23,740
1972	15,240	1,460	1,640	18,340
Total	149,090	13,400	6,890	169,380
Mean	12,424	1,117	574	14,115
Percent	88.0	7.9	4.1	100.0

Source: Alaska Department of Fish and Game, Division of Sport Fish

Page 108	(Paragraph 2) The 30,000 man-days of recreational fishing is for silver salmon effort only. Total recreational effort in salt water is estimated at 40,000 man-days by the Alaska Department of Fish and Game. This error is repeated several times in the report. (Paragraph 3) Statement of the number of hunters utilizing the area is inaccurate. Department of Fish and Game records show that only 9 goat hunters hunted the area in 1973; but success was high, at 44.4 percent. Quotes from unnamed "knowledgeable sources" have no place in this proposal. Pye Islands do not have goats, so goat hunting is not so popular there.	154
Page 109	Caines Head State Recreation Area on Resurrection Bay is omitted. There is also no mention of the Seward National Recreation Area Bill (S.829) which was introduced by Senator Ted Stevens and relates to the Harding Ice Field portion of this proposal.	155
Page 111 and 112	A series of speculations are made regarding the probable future of this area if the proposal is not enacted. The statements are unsupported. The NPS contention that developments described would not occur if the proposal is not implemented is invalid. Civic and other groups in the area have been promoting a tramway to the edge of the Harding Ice Field for a number of years; the NPS master plan merely mirrors this earlier work.	156
Page 113	(Paragraph 1) What is the NPS justification for eliminating hunting which is the primary use of the area? Is it that the Park Service condones killing fish but not warmblooded animals?	157
Page 113	(Paragraph 3) How were the figures of 150,000 visits and 225,000 visitor use days per year derived? The estimates seem improbable when compared to the Resurrection Bay fishery, the largest in the state, which has only increased from 6,000 to 30,130 man days in a 12-year period.	158
Page 114	(Paragraph 3) Here is an admission that the area <u>might</u> not be disturbed for a long time. (Disturbed apparently meaning upset of the present de facto wilderness character.) The author seems to be aware that his proposal is not needed at this time if ever. If this addition to the National Parks System is desirable, it has not been proved here.	159
Page 114 and 115	(Paragraph 4) Black bear, wolf and dall sheep are NOT scarce. Black bears are abundant. Wolves are not known to occur in the area but may be present. Dall sheep do not occur in the area. See also page 122.	160
Page 121	On what data did NPS geologists evaluate mining activity within the area as "totally impractical?" Is their expertise greater than U.S.G.S. which said it may be "economically possible?"	161

Page 122 (Paragraph 2) See note for Page 114. The statement that black bears are scarce must be for effect, to justify elimination of hunting. 162

Page 122 (Paragraph 5) Absurd! Goats are among the easiest of animals to census, making it easy to monitor changes and effects of hunting. 163

Page 125 Impact on Cultural Resources? The section says nothing about impact. Page 91, under History, does. Statement should be added here: "The proposal has no direct impact on sites listed in the National Register of Historic Places or on other historic or archaeological sites listed in the statewide inventory." 164

Page 126 Paragraph 1 ignores the fact that historical or archaeological investigation is not dependent upon Park Service control. 165

(Paragraph 2) Sport fish enhancement work is currently not contemplated by the ADF&G in the proposed monument borders. The area of ecological concern does include Delight, Desire and other lakes in the Nuka Bay area which provide excellent Dolly Varden and salmon angling. These remote waters will become increasingly important in the future with expansion of recreational fishing. If NPS denies float plane access to this area sport angling will be essentially eliminated. 166

NPS promises to increase recreational use of the area, but proposes to eliminate the only recreational use the area now receives, hunting.

Page 128 to 131 The impact of increased water travel on commercial fishing is not dealt with. Also the impact on Seward and other communities is not realistically explored. 167

Page 130 Five thousand acres of merchantable timber within the proposed monument are not expected to "have a significant effect on the regional or city economy."? This judgment is premature. The alternative sources of timber on the Kenai peninsula are shrinking due to proposals for a Seward National Recreation, increased competing resource demands (recreation), the proposed Nellie Juan Wilderness Area, and a wilderness proposal for the Kenai Moose Range. 168

Page 131 (Paragraph 2) It is not true that increase in demand for recreation-connected services and goods in the proposal area is a logical effect of this proposal. The City of Seward and its Chamber of Commerce has long been aware of the recreation potential of the area. They only lack investment capital. NPS has not shown that its management would be superior to that of any other appropriate agency or organization. 169

Page 132 The Park Service proposes to help Natives develop a tourist industry through transportation and overnight facilities on their lands. Did they ask the Natives? Such developments might occur sooner and provide greater benefits to Natives and others under some other type of management system. The EIS should evaluate alternatives, not just advocate the NPS proposal. 170

Page 132 (Paragraph 5) Automobile travel time between Anchorage and Seward is given as "less than two and one-half hours." The combination of speed limits and normal traffic conditions make this impossible. And conditions would certainly not improve with double the amount of traffic. 171

No mention is made of the impact of small settlements, industries and individuals already established along the route nor of the impact this increased ground transportation would have on the abutting Chugach Forest. 172

(Paragraph 6) The text says "Seward also has an airstrip suitable for small aircraft..." The airport is actually suitable for, and has accommodated, heavy commercial aircraft. 173

Virtually no mention of the extensive general aviation network is made anywhere in the report, ignoring the fact that many planes criss-cross the area and circle it on nearly all sides.

Page 134 The report states "If commercial air service becomes profitable, airport improvement will be necessary." Commercial air service available for Seward is already profitable. The authors may have confused "commercial" air service with "scheduled service by a CAB certificated carrier." What type of airport improvements will be necessary are not mentioned and, hence, cannot be evaluated in the transportation impact. 174

Page 132 to 134 The discussion of transportation impact is largely limited to predictions of increases in traffic on the Anchorage-Seward Highway and to the necessity of developing local transportation facilities in the Seward area. Actually, traffic between Seward and Anchorage is expected to increase regardless of NPS actions. However, the Park Service ignores the effect of its proposal upon the possibility of a highway up the Resurrection Valley. Such a highway has long been advocated by Seward and other cities on the Kenai Peninsula. If Resurrection River is the northeastern boundary of the proposal area, such a highway would probably have to remain north of the river. This would add an unknown but substantial amount of money to its construction cost. 175

The EIS should project the estimated number of visitors and travelers that would be using transportation and related facilities in the proposed area. Otherwise, impact on the facilities cannot be measured. Based on present information, particularly regarding passenger service on the Alaska Railroad, there may be a problem of crowding and overtaxing the existing highway and marine transportation systems, to the detriment of residents at other areas along these routes. Alternatives, such as reconstruction and expansion of highways and increased service on marine routes, may have substantial impacts on capital and operating budgets of the State, local government, and private transportation firms.

No mention is made of impact on the small boat harbor facilities in Resurrection Bay or elsewhere; similarly, no reference has been made to the need for improved navigational facilities and rescue stations as may be necessary to meet minimum safety requirements promulgated by the Coast Guard. 175

Past actions, some in territorial days, gave the State title to rights-of-way for a number of surface transportation routes within the boundaries of the proposed monument. State and Territorial legislatures also granted to Alaska a right-of-way on most protracted section lines within the proposal area. These rights-of-way cannot be extinguished by the Federal Government and will continue to exist even if the proposal is implemented. Election to use these rights-of-way for road construction would be at the sole discretion of the State. 176

Page 135 and 136 — A proclivity to draw conclusions based on unfounded supposition is evident in the discussion of expected impacts on the City of Seward. Some factors are ignored, such as social and economic impacts, particularly related to police and fire protection, waste disposal, etc. They are dismissed with the comment on page 136 that "The extent of this impact, however, depends upon the Seward residents' temperaments and willingness to outmigrate." 177

Page 137 — Research efforts to mitigate "hazardous animal-human interactions" is an admirable goal. However, a recent article by Dr. Frank Craighead in the Smithsonian magazine strongly criticizes NPS for its suppression of his grizzly bear research in Glacier and Yellowstone parks.

Page 138 — (Paragraph 3) "The NPS wishes to assist owners of contiguous lands in planning, construction and maintenance of facilities complimentary to those within the park lands...to assure minimum environmental destruction within the area set aside for preservation." Whose land is this? 178

Page 196 — Canachites Canadensis, Hudsonion Spruce Grouse is not found south of the north slope of the Chugach Mountains. 179

Page 207 — There are no records of wolves in the area of concern; however, wolves may be occasional visitors or may be present in small numbers. Brown bears are not known to inhabit any other part of the area. 180

Page 223 — Lepus othus, the tundra hare, does not occur in the area. Neither do reindeer nor barren ground caribou. 181

Page 224 Add an appendix for fresh water fishes as follows:

Common name	Scientific name
Dolly Varden	Salvelinus malma
Rainbow-steelhead trout	Salmo gairdneri
Red salmon	Oncorhynchus nerka
Silver salmon	Oncorhynchus kisutch
Chum salmon	Oncorhynchus keta
Pink salmon	Oncorhynchus gorbuscha
Threespine stickleback	Gasterosteus aculeatus
Prickly sculpin	Cottus asper
Coastrange sculpin	Cottus aleuticus
Slimy sculpin	Cottus cognatus

182

* * * * *

RESPONSE TO COMMENTS BY
THE STATE OF ALASKA

110. In passing the Alaska Native Claims Settlement Act of 1971, Congress itself gave very clear attention to the regional, State and national effects of the Alska land transfers necessary to provide Native claim settlement, to meet the outstanding requirements of Alaskan statehood, and to provide for the continuing administration of the public lands. It directed the Secretary to withdraw lands for the Four Systems of National Parks, Forest, Wildlife Refuges and Wild and Scenic Rivers after other factors were taken into account in the planning process. And, Congress further provided for the establishment of a Joint Land Use Planning Commission and the orderly implementation of the planning process concerning areas planned and best suited for permanent reservation in Federal ownership. It called for recommendations to insure that economic growth and development was planned in an orderly and compatible way with State and national environmental objectives and the public interest in public lands, parks, forests, and wildlife refuges in Alaska, as well as economic and social well being of the Native people and other residents of Alaska. Agreement was reached with the State on the general area of the Four System proposals more specifically set forth here. These considerations and steps were examined and implemented prior to the individual development of Federal proposals with finite boundary lines and acreage limits. The need to consider cumulative impacts was recognized also during the development of the environmental impact statements on the 28 detailed proposals. The cumulative aspects of each proposal, where they could be detected with reasonable assurance of significance, are noted in the evaluations of that proposal. Appropriate analyses in the statements are developed on a regional basis for some proposals and in other cases, on a statewide or broader basis. It would be repetitive to undertake an additional EIS to the 28 already completed.

Anyone wishing to ascertain overall effect, may do so by reading the aggregate impact of all or part of the proposals that would be involved and considering them the same as the sum of the impact discussed in each of the environmental statements. The statements are being issued and are available on the basis of sets of (28) each. Where the total cumulative impact in a region or the State appears particularly significant in relationship to a given proposal, the subject statements involved are modified to include any additional impact considerations not previously described among the analyses involved. It is the considered opinion of the Department that these foregoing actions and the statements themselves taken together do constitute a good faith effort at

providing a fair and accurate evaluation of aggregate or cumulative impact on major regions, the State and the National as a whole.

It is recognized that the proposed Harding Icefield-Kenai Fjords National Monument would have an aggregate impact on the Kenai Peninsula region when considered in conjunction with the proposals for the Seward National Recreation Area, the additions to the Chugach National Forest and the proposals for wilderness on the Kenai Moose Range and the Nellie Juan Wilderness Area (in the Chugach Forest). These five proposals in addition to the existing Chugach National Forest and Kenai National Moose Range in many areas overlap, but do cover about two thirds or the lands on the Kenai Peninsula. Each proposal and existing area varies somewhat in the nature of its restrictions and management policies.

In the case of Harding-Kenai specifically, the impacts sections of Chapter III: F-1, F-3, F-4, F-5, F-6, F-7 and G, as well as other sections of the statement have been revised to examine regional aspects of these impacts. The aggregate impact on land ownership patterns and availability in the region that would result from implementation of Harding-Henai and the other proposals has been discussed in section III, F-1. The aggregate impacts on subsistence uses have been discussed in III, F-3; sport hunting and recreation in III, F-4; timber harvesting and the market economy in III, F-5; community social and cultural life: III, F-6; the mining industry: III, F-7; and transportation in III, G.

Further discussion on this subject is given in question 1 of the Forest Service Comment.

111. We do not believe that the 28 proposals would divide the State into isolated enclaves having little or no relationship with each other. The proposals were prepared within a cooperative planning effort, and cooperative management and planning with Federal, State, and local agencies and individuals is indicated throughout the statement. Also, regional relationships with other Federal proposals are analyzed in aggregate under specific topics in Chapter III as discussed in response 110, above.

112. In making d-2 land withdrawals and the recommendations to Congress for management of these lands, a basic delemma was faced which is implicit in a decision involving lands which have not been explored for minerals or petroleum such as those in Alaska. This dilemma was the choice between possible values of developable, non-renvewable resources such as minerals and the resources values inherent in natural and ecological systems.

In developing the final recommendations to Congress, the need to leave mineral and petroleum resources available for development was given careful consideration. In the first place, some of the systems themselves herein advanced by these proposals contain

the authority and objective of mineral development. It should be noted that the selections already made by the State of Alaska and the priorities provided the Native claims under ANCSA have excluded from "four system" consideration vast areas of mineral and petroleum potential. In many cases boundaries of proposals were redrawn to place areas of prime mineral or petroleum potential outside proposals with restrictive management categories. In other cases, management options were left open to entry where identified mineral or petroleum potential was sufficient to warrant such action and where extraction would not prove overly damaging to the environment. However, in order to comply with the intent of section 17(d)(2) of the act and in order to afford adequate protection of these outstanding areas, some areas which do have possible mineral or petroleum potential were recommended for portective management that would exclude entry. These proposals reflect a need, set forth in NACSA as a Congressional mandate, to preserve certain outstanding natural and ecological areas of national interest apart from mineral or petroleum development.

In regard to the request for a research program to inventory resource potential in these areas, this proposal provides that prospecting, mining and the extraction of minerals or the removal of soil, sand, gravel and rock will not be permitted, except where carried on pursuant to valide existing rights.

The NPS encourages and will participate in appropriate ways in the study of geological resources within the proposals. Geological studies by recognized educational or scientific institutions, professional personnel of other Federal agencies, and accredited individuals will be permitted and encouraged when in consonance with the purposes of the area and the policies of the Service. Procedures which might result in damage or alteration to the resources would not be permitted.

113. The value of public input and consultation with local residents and others in planning the new proposals is recognized. Some contacts were made with local representatives and organizations during the limited study period designated by Congress. However, the contacts were solely to obtain information and in a few cases to seek reaction to possible alternatives for use of the land involved in absence of any specific proposal. Since final descisions were not made within the Department of the Interior until November 1973 concerning the specific park, wildlife refuge and scenic and wild rivers proposals, there was no way to go to the public for comment on the proposals until the draft environmental statements and plans released in December. The Forest Service, in the Department of Agriculture, which was involved in studying possible additonal national forests, did present specific proposals to the public in a series of meetings that tood place in the areas of concern.

Information gathered during the studies has been augmented with comments from transcripts of the Federal-State Land Use Planning Commission public hearings on use of the 17(d)(2) withdrawal lands. The Federal agencies also had representatives at the public hearings to identify and take note of special problems requiring consideration. Comments received as a result of the public review of the draft environmental statements have also been considered in development of the final environmental statements.

114. We do not believe that the Harding-Kenai proposal recommends withdrawal of lands exceeding that necessary to protect the features and qualities of the nationally significant resources. In fact, an Area of Ecological Concern has been proposed along with the monument itself, because its lands and resources are recognized as being interrelated to the features and qualities of the proposed monument. This Area of Ecological Concern has been proposed in order to assure, to the degree possible, the protection of interrelated resources through cooperative management.

115. The environmental statement should not be a justification for the proposal; it is an analysis of the impacts of the proposed area concerned. It also presents an analysis of the alternatives considered during the planning process and their impacts, in addition to prudent and viable alternatives brought up in the review process. The statements were developed in accordance with NEPA requirements and CEQ guidelines and in our opinion make a good faith effort to consider and display all relevant and important impacts, even on alternatives that were sometimes environmentally more advantageous than some proposals. Items raised in review have been substantially changed to remove any significant justificatory tone noted to us in the review process. We do not consider these statements to be proposal justifications, but to be our best effort with limited information and time to present the possible future environmental impacts that could reasonably be expected to result from the proposed changes in land status and management.

116. "Areas of Ecological Concern" are just that, areas of interdependent relationships to the proposal area in terms of wildlife habitat maintenance, maintenance of visual and scenic integrity, protective buffers around key waters and wildlife populations, interrelated vegetative and wildlife use patterns where degradation of one element could seriously alter the other, and significant areas of cultural (archeological, historical and sociological) relationship to the proposal or an adjacent Native culture or population. It is hoped that specific cooperative agreements can be negotiated with any adjacent land managers and owners within the "Areas of Ecological Concern" to insure complementary protection of the values and resources of the proposal, with control and management of such lands retained by the owners and managers.

Management of the proposals as well as the Areas of Ecological Concern should include a mutual working dialogure between Federal landowners and surrounding land managers. It is reasonable that if landowners in Areas of Ecological Concern are to consider managing their lands in a "manner compatible with proposal values," then in return their views should be considered within the limits of applicable laws and regulations, in the management of Federal lands.

It should be noted that agreements regarding Areas of Ecological Concern represent only one approach to protection of Federal lands, and that the broad authority given the Secretary under 43 U.S.C.; 1363 remains unaffected by the legislative proposal.

117. A similar question was raised by the Department of Commerce, and you may wish to refer to response 15 for an in-depth discussion of the issue of cost-benefit analysis. We do not believe that a cost-benefit analysis is appropriate to the proposals.

118. For a thorough discussion of the mineralogical considerations involved in the d-2 proposals, see the response to question 112 of this letter. Specifically, the Harding-Kenai statement clearly addresses the impact of the proposal on potential hydro-projects in Chapter III, Section D-1. None of the comments, including the Alaska Power Administration, have identified any potential for geothermal or petroleum development in the proposal area. Chapter III, F-7 does now address the impacts on regional mining potential.

119. We do not anticipate conflict with the State of Alaska authorities over submerged lands on the coastal areas recommended for addition. However, enactment of this proposal will result in the transfer to some authorities and jurisdictional responsibilities to the Congressionally designated Federal manageing agency.

Under the legislative proposal, lands contained within the proposal boundary which lie above mean high tide are considered to be under Federal jurisdiction. The legislative proposal does not adjust any Federal-State jurisdictional responsibilities, nor does it amend, by implication, the Submerged Lands Act. Further discussion of submerged lands jurisdiction is included in Chapter I, section C.

120. Chapter I-VII of the document are an analysis of the NPS management proposal. Alternative management systems are discussed in Chapter VIII, A and C. These sections have been rewritten to remove any bias toward one management system. The statement is not, as has been mentioned before, intended to advocate or justify the proposal. (See response to question 115 of this letter for full discussion).

121. As stated in the response above, the statement is an analysis of the NPS management proposal and is not intended as a document for lobby purposes. Inadvertantly incorrect, biased, or misinterpreted information has been corrected in this Final Statement in response to deficiencies brought forth by the review process. The statement has been edited to remove any tone of bias, and information in the Statement is based mostly on published sources and comments received.

122. The lack of adequate information on subsistence in this statement is acknowledged. The NPS reaffirms its intent to conduct studies to and identify subsistence users and levels of use and to arrive at an equitable and workable management plan for subsistence and resource uses in the proposal area.

This is discussed in Chapter I, B and C and Chapter III, F-3. At present, it is thought that subsistence uses of the proposal area are few, if any. (See Chapter II, section B).

123. A reproduction of this map has been included with this comment.

124. We believe that the proposals represent the goals and objectives of Section 17(d)(2) of ANCSA whereby Contress mandated the agencies to undertake the 4 systems studies and make recommendations for inclusion of up to 80 million acres of lands in national systems. They are not designed to prohibit Native use of their own selected lands or to prevent development of a viable economic base for Alaska.

125. The variety of statements concerning mineral potential was included to indicate the differences and range of opinion on the mineral potential in the area. However, some have been proven to be incorrect and have been deleted. In addition, the Geology and Mining sections in which these statements were included have been revised and reorganized. (See Chapter II, section A-2 "Geology", A-3 "Economic Geology", A-4 "Hydrology", and B-8 "Mining Industry". Also, Chapter III, section F-1.

126. Impacts discussion has been added under Chapter III, section H.

127. The brief descriptions of the existing resources were included in each section of Chapter III for the convenience of the reader. They are designed to give a quick review of the facts before impacts are discussed so that the reader will not have to read or reread all the factual details in Chapter II unless he so desires. Much of Chapter III has been rewritten and reorganized in order to improve the impacts discussion; however, brief factual descriptions have been left in where it was felt they are useful.

128. Further discussion of these areas has been added to the "Interrelationships" section of Chapter I, section C.

129. Under the legislative proposal, lands contained within the monument boundary which lie above high tide are considered to be under Federal jurisdiction. The legislative proposal does not adjust any Federal-State jurisdictional responsibilities, nor does it amend, by implication, the Submerged Lands Act or the Statehood Act. Thus submerged offshore lands, beaches below mean high tide, and other tidelands would not be included in NPS jurisdiction by enactment of the present monument proposal.

130. All developments called for in the master plans set forth in these proposals are conceptual in nature. They are subject to change during congressional review and further development after enactment of the proposal. They are intended as guidelines for consideration of proposal development and not as unchangeable rules for future development. Therefore, this proposal has not included specific cost estimates for these development proposals. Should Congress take action on this proposal, it is assumed that cost estimates would be taken into consideration and appropriations for administration and development approved by Congress.

131. The discussion of "multiple use management" and "no action" alternatives has been rewritten to correct any bias and to reflect comments by multiple use agencies. (See letters from U.S. Forest Service and Bureau of Land Management.) However while it is true that similar development of recreational resources in the area could occur under private as well as Federal management, we believe that there are potential differences in predictable development patterns which can be discussed at this time. These differences (essentially between potential NPS and non-NPS development) are primarily ones of degree.

First, one can surmise that essentially the same recreational development plan would be followed by most of the potential future managers of the area: local groups or governments, the State, the NPS, or other Federal agencies. Second, it is difficult to predict the differences in future visitation to the area if it were included in a national recreation area, a private development, the proposed monument, etc. However, based on experience at Mt. McKinley National Park and with parks and recreation areas in the lower 48 States, it can be speculated that visitation to other than a National Park or Monument would grow less rapidly, thus visitation related impacts, both beneficial and detrimental, would occur to a lesser degree. An NRA, or other development, might receive less publicity in the lower 48 or within Alaska itself, than would a monument, and the resultant lower visitation would lessen the impacts of recreational development.

132. The value of public input and consultation with local residents and others in planning the new proposals is recognized. Some contacts were made with local representatives and organizations during the limited study period designated by Congress. However, the contacts were solely to obtain information and in a few cases to seek reaction to possible alternatives for use of the land involved in absence of any specific proposal. Since final decisions were not made within the Department of the Interior until November 1973 concerning the specific Park, Wildlife Refuge and Wild and Scenic River proposals, there was no way to go to the public for comment on the proposals until the draft environmental impact statements and plans were released in December.

Information gathered during the studies has been augmented with comments from transcripts of the Joint Federal-State Land Use Planning Commission public hearings on use of the 17(d)(2) withdrawal lands. The Federal agencies also had representatives at the public hearings to identify and take note of special problems requiring consideration. Comments received as a result of the public review of the draft environmental impact statements have, of course, also been considered in development of the final environmental impact statements.

Hearings on these proposals, which are now before Congress, will be held during the period designated for legislative review. The Department will participate in those hearings held by Congress and anticipates that the public will be given ample opportunity to express their opinions. The Department expects to obtain considerable input from the public by this method and therefore is not at this time planning to hold its own set of hearings.

133. The Prince William Sound area was excluded from the base map as a matter of expediency. Inclusion of this area on the base would have resulted in the proposal being shown at a much smaller scale than it is presently, with a resulting loss of detailed information on the map. However, the Prince William Sound area is shown on the Regional Transportation map and on the Geographic Features map.

134. We assume that in referring to the NPS proposal to "take over and manage lands outside of park boundaries," you are commenting primarily on the proposal Area of Ecological Concern.

"Areas of ecological concern" are just that, areas of interdependent relationships to the proposal area in key wildlife habitat maintenance, maintenance of visual and scenic integrity, protective buffers around key waters and wildlife populations, interrelated vegetative and wildlife use patterns where degradation of one element seriously alters the other and significant areas of cultural (archeological, historical and sociological) relationship to the proposal or an adjacent Native culture or population. It is hoped that specific cooperative agreements can be negotiated with any adjacent land managers and owners to ensure complementary protection of the values and resources of the proposal, with control and management of such lands retained by the owners and managers.

Management of the proposal as well as the Area of Ecological Concern should include a mutual working dialogue between Federal landowners and surrounding land managers. It is reasonable that if landowners in Areas of Ecological Concern are to consider managing their lands in a "manner compatible with proposal values," then in return their views should be considered within the limits of applicable laws and regulations, in the management of Federal lands.

It should be noted that agreements regarding Areas of Ecological Concern represent only one approach to protection of Federal lands, and that the broad authority given the Secretary under 43 U.S.C 1363 remains unaffected by the legislative proposal.

The NPS is not attempting to "take over" Native lands nor to direct how they will be used. When referring to developments outside the monument, the NPS is assuming that many of these developments would be owned and operated by private interests operating as concessioners or independently. It is hoped that the NPS could be useful to those private, non-concession operators by participating in planning and coordination of area recreational development. Any lands outside the proposed monument or AEC where the NPS felt it needed to put in some monument-related, federally owned development would be purchased for that purpose and any single parcel would not exceed 80 acres.

135. The environmental statement should not be a justification for the proposal; it is an analysis of the impacts of the proposed management and land use classification on the environment of the area concerned. It is also an analysis of the alternatives considered during the planning process and their impacts, in addition to prudent and viable alternatives brought up in the review process. These statements were developed in accordance with NEPA requirements and CEQ guidelines and in our opinion make a good faith effort to consider and display all relevant and important impacts, even on alternatives that were sometimes environmentally more advantageous than some proposals. Items raised in review have been substantially changed to remove any significant justificatory tone noted to us in the review process. We do not consider these statements to be proposal justifications, but to be our last effort with limited information and time to present the possible future environmental impacts that could reasonably be expected to result from the proposed changes in land status and management.

In regard to the impacts of management proposals which would serve as alternatives to the monument, these are discussed in the alternatives considered in Chapter VIII.

136. The Land Status map has been changed to reflect the latest definitive land status information provided by the Bureau of Land Management. We are aware that the status of many townships remains uncertain and open to litigation. As it is impossible to include all last minute changes and to reflect as yet uncertain status on the map; August 31, 1974, was used as the final date for update of land status information.

137. We do not believe that it would be appropriate in this environmental statement to include this type of reasoning. In order to demonstrate that implementation of the proposal's purposes would result from the proposed management plan, the statement would have to, in effect, "justify" the proposal. As noted in the response to question 135 above, the Department does not feel that such justification is appropriate in an environmental statement.

138. The sentence has been changed accordingly. (See Chapter II section A).

139. The Transportation Map has been corrected to reflect this updated information. (See Regional Transportation map).

140. The two sections have been reorganized and rewritten. The discussion of geomorphic features and processes has been included in the Geology section. (See Chapter II section A-2; "Geology").

141. This information was based on U.S.G.S 1:250,000 scale maps which show areas covered with ice as late as 1930 which are now no longer covered.

142. The discussion of tectonic movement has been revised; however, this section was meant to indicate that tectonic movement during the 1964 earthquake has resulted in surface subsidence in some areas. (See Chapter II section A-2 "Geology").

143. These sections have been revised, based primarily on new input from U.S.G.S and the Bureau of Mines. (See Chapter II section A-2; "Geology", A-3; "Economic Geology", and B-8; "Mining Industry").

144. To do so would involve justificatory discussions within an EIS. See response to question 135 of this letter for further discussion.

145. It has been deleted. (See Chapter II section A-3; "Economic Geology").

146. This information has been added (See Chapter II section A-7: "Major Ecosystems").

147. This information has been added (See Chapter II section A-8: "Wildlife").

148. Information has been added (See Chapter II section A-8; "Wildlife").

149. These paragraphs have been changed to reflect this information (See Chapter II section A-8: "Wildlife").

150. This information has been added (See Chapter II section A-8: "Wildlife").

151. The discussion of Ptarmigan has been changed to reflect this information (See Chapter II section A-8: "Wildlife").

152. The reference to the name of the district has been changed accordingly (See Chapter II section A-8: "Wildlife").

153. This table has been added to section B-7: "Recreation and Tourism", of Chapter II. (See Table VIII.)

154. This estimate of man-days of recreational fishing has been corrected accordingly (See Chapter II section B-7, and Chapter III section F-4 and F-5).

(Para 3). This information has been corrected (See Chapter III section F-4, and Chapter II section B-7: "Recreation and Tourism").

155. Information on these areas has been included in Chapter II section B-7: "Recreation and Tourism" and Chapter I, section C.

156. This section has been revised. In addition, further information on non-NPS development potential for the area has been included in Chapter I section C and in Chapter VIII, sections A and C.

While it is true that similar development of recreational resources in the area could occur under private as well as Federal management, the Park Service maintains that there are potential differences in predictable development patterns which can be discussed at this time. These differences (essentially between potential NPS and non-NPS development) are primarily ones of degree.

First, one can surmise that essentially the same recreational development plan would be followed by most of the potential future managers of the area: local groups or governments, the State, the NPS, or other Federal agencies. Second, it is difficult to predict the differences in future visitation to the area if it were included in a national recreation area, a private development, the proposed monument, etc. However, based on experience at Mt. McKinley Park and with parks and recreation areas in the lower 48 states, it can be speculated that visitation to other than a National Park or Monument would grow less rapidly, thus visitation-related impacts, both beneficial and detrimental, would occur to a lesser degree. An NRA, or other development, might receive less publicity in the lower 48 states or within Alaska itself, than would a monument, and the resultant lower visitation would lessen the impacts of recreational development.

157. (See response to question 135 of this letter.) An explanation of basic NPS, Fish and Wildlife Management policy has been included in Appendix I. In addition, fish and wildlife management policy as it related directly to the NPS 17 (d)(2) proposals has been included in Chapter I, section C. Note that although the proposal for a Harding Icefield-Kenai Fjords National Monument would not allow sport hunting in the proposed monument, subsistence hunting would be allowed under the provisions outlined in Chapter I.

158. Visitor projections are the product of our planner's best efforts considering many factors, including trends in outdoor recreation, population in the age groups most commonly participating in wildlands-oriented activities, public awareness of the proposal, current estimates of numbers of visitors to the area and region, preliminary carrying capacity estimates of the proposal area.

Obviously, many factors which will influence the numbers of people who may wish to visit the region and the proposal area are largely unpredictable. This is true even with areas such as the Kenai Peninsula which are presently accessible by road and have already received considerable recreational use. Visitor demand levels will be subject to change stemming from such factors as the final formulation of statewide transportation studies and corridors, facilities and services within and adjacent to the proposal boundaries and other locations in the region, national and State trends in leisure time and personal income, general national and State economic conditions, energy policies and changing costs of travel. The rate of development of adjacent areas and the region as a whole will influence visitor projections as will any regional economic and recreational planning efforts.

Studies are being initiated to refine preliminary carrying capacity estimates and short-term anticipated visitor demand levels. These estimates will include consideration of social and cultural factors, as well as biological factors.

The preliminary estimates of visitation to the Harding-Kenai area which were given in the draft environmental statement, were based primarily on projected levels of tourism to the State as a whole and also upon visitation at Mt. McKinley Park which experienced fivefold increase (40,000 to approximately 200,000) in visitation in the 4 years since the completion of the Anchorage-Fairbanks highway. It was felt that the Harding-Kenai area under national monument designation would experience a similar increase in visitation due to its relative ease of access and its proximity to Anchorage. However, with recent developments in the energy crisis, it can be assumed that such visitation increases would depend to a greater degree on available mass transit and would develop over a longer period of time.

159. See response to question 135 of this letter for a detailed discussion of justification of the proposal in an environmental statement.

Nevertheless, the need for a national park or monument is dependent on the quality of the natural and historical resources of the area. Congress has articulated a national policy of preserving the outstanding examples of the country's natural and historical resources for the benefit and enjoyment of the people. (USDI, NPS, 1971). Congress has recognized this policy through the provisions of Section 17(d)(2) of ANCSA.

160. The information on black bear and wolves has been included (See Chapter III section A). However, as noted in Chapter II section A-8, NPS personnel have sighted Dall Sheep on the Icefield and on Nunataks in the proposal area during the summer months. Therefore, Dall sheep are noted in Chapter III as part of the fauna found in the proposal.

161. This section has been rewritten to reflect a more accurate assessment of mining potential based primarily on USGS comments and impacts discussion (See Chapter III section F-7: "On Mining Industry").

162. The assessment of the abundance of black bear has been changed to reflect the corrected information you provided. At the time the draft statement was written it was our information that black bear were scarce in the proposal area. This information was included because it was believed to be correct. It was definitely not included "for effect". (See Chapter III section A.)

163. The reference to goat censusing has been deleted (See Chapter III, section F-7: "On Sport Hunting, Fishing, and other Recreational Uses").

164. A discussion of these impacts has been added to this section (See Chapter III section H: "Impact on Archeologic and Historic Resources"). The suggested language has been added.

165. It is recognized that historical and archeological studies of a responsible nature can presently be initiated without the aid of the Park Service. Any such studies undertaken by interested parties could occur if there were no monument proposal. Authorized studies by professionals would be allowed if the monument were established. The impact discussion on "Archeologic and Historic Resources" (See Chapter III section H) is intended to indicate that the proposal would encourage this type of study and would undertake to inventory the resources in the proposed monument and AEC. Pursuant to the Antiquities Act of 1906 and subsequent mandates, notably the Historic Sites Act of 1935, the National Historic Preservation Act of 1966 and Executive Order 11593 and to the administrative policies for historical areas, the NPS will employ its staff of professional historians, historical architects, and archeologists in locating, evaluating, researching, protecting, and interpreting the cultural sites under its jurisdiction and affected by this proposal. As the chief custodian of the Nation's historical areas since 1916, the NPS has developed a high degree of professional competency for management of such areas.

166. The section concerning impact on recreational uses has been rewritten and reorganized. (See Chapter III, section F-4: "On Sport Hunting, Fishing, and other Recreational Uses"). The information on Delight and Desire lakes has been included.

In reference to the point made concerning float plane access in the monument and AEC, it is quite possible that float plane access to various parts of Nuka Bay and the surrounding freshwater lakes would be permitted on a controlled basis. The conceptual development plan does call for a possible float plane and boat terminus at Pilot Harbor in Beauty Bay, which shares a common entrance with Nuka Bay.

167. The impact of increased boat traffic on the commercial fishery is discussed under Chapter III, section A: "Impact on Wildlife"; section D: "Impact on Water Quality"; and section F-5: "On the Market Economy". The discussion of impacts on the City of Seward has been rewritten and reorganized to make it more comprehensive (See Chapter III section F-4: "On the Market Economy"; F-6 "On Community Social and Cultural Life").

168. The impact of the proposal on the timber industry in the area is discussed in Chapter III section F-5: "On the Market Economy." In reference to the 5,000 acres of timber in the area, much of this is contained in the AEC, in small stands along the coast which are not considered viable for commercial lumbering. Nevertheless, if these stands are selected by the Natives then they could be harvested for commercial, or more likely, for local use. Of the Resurrection Valley stand, only part is contained in the proposed monument boundaries. The rest is in the Chugach National Forest.

It is recognized that removal from potential production of any amount of merchantable timber in a region reduces the overall regional potential for timber harvest. However, the Forest Service has determined (as is stated in the impacts discussion in section F-5) that "standard logging methods are not desirable on stands of white spruce in the Resurrection River Valley, within and adjacent to the northeast boundary of the proposed monument"...They agree that adequate supplies of merchantable timber appear to be available in the region on lands outside the proposed munument boundaries. This judgement was made with full consideration of the other federal proposals in the region.

169. We are unclear as to whether this comment is intended to mean that implementation of the proposal would result in no increased recreational demand whatsoever, or whether it would result in no increased demand over and above that which would normally occur.

In response to the first interpretation, refer to question 158 as responded to in this letter. Projected visitation to the monument within a five to ten year period, or possibly longer, is estimated to be 150,000 visitors annually for a total of 225,000 visitor use days. This will certainly create increased demand for recreational goods and services.

In response to the second interpretation, refer to question 131 or 156 as responded to in this letter and also Chapter VIII section A. While it is true that similar development of recreational resources in the area could occur under private as well as Federal management, the Park Service maintains that there are potential differences in predictable development patterns which can be discussed at this time. These differences (essentially between potential NPS and non-NPS development) are primarily ones of degree.

First, one can surmise that essentially the same recreational development plan would be followed by most of the potential future managers of the area: local groups or governments, the State, the NPS, or other Federal agencies. Second, it is difficult to predict the differences in future visitation to the area if it were included
292 in a national reacreation area, a private development, the proposed monument, etc. However, based on experience at Mt. McKinley

National Park and parks and recreation areas in the lower 48 States, it can be speculated that visitation to other than a National Park or Monument would grow less rapidly, thus visitation related impacts, both beneficial and detrimental, would occur to a lesser degree. An NRA, or other development, might receive less publicity in the lower 48, or within Alaska itself, than would a monument and the resultant lower visitation would lessen the impacts of recreational development

170. Time restrictions and last minute changes in land status prior to the December 18th recommendations did not permit the NPS to consult fully with the Natives of Port Graham and English Bay. However, joint planning efforts, as outlined in Chapter I, would be undertaken during any future development planning.

In regard to your point that this development might occur sooner under another management system, we refer to the discussion contained in the response to the previous question (169 of this letter). Alternative management concepts are analyzed in Chapter VIII, sections A and C. We repeat that these sections are not intended to justify our proposal.

171. This time estimate has been revised. (See Chapter III section G.)

172. Small settlements, industries, and service oriented businesses along the highway would receive increased demand for goods and services in a manner similar to that which would be experienced at Seward. Accessible reaches of the Chugach Forest along the highway would also receive increased use and visitor-related impacts. (See Chapter III, F-5 and G.)

173. This information has been included in Chapter III, G. and Chapter II, A-1 and B-9.

174. The information on commercial air scheduling has been corrected and further discussion of impacts on airport facilities has been included in Chapter III, G.

175. Proposed transportation and utility corridors in the region, both in the Resurrection River Valley and the south side of Kachemak Bay, have been discussed in Chapter II, B-9 and Chapter III, G.

Discussion of numbers of visitors and related impacts on the market industries of the area is discussed in Chapter III, F-5. These visitor use levels will also apply to the transportation industry and facilities in the area. Impact on the small boat harbor is discussed in III, F-4.

176. All rights-of-way for roads and trails will be dealt with on an individual basis, considering the facts and circumstances of each particular case.

If the Harding-Kenai proposal is implemented, any road construction outside valid existing rights-of-way and within the monument boundary would require a review and a determination under Section 4(f) of the DOT Act of 1966 as amended (49USC 1653(f)). This would be in addition to environmental impact statements as required by NEPA. These studies would be to assure bona fide need for and no reasonable and prudent alternatives to the use of monument lands for the road.

Specific determination of the applicability on lands in the AEC or near the monument of Section 4(f) of the DOT Act of 1966 as amended (49 USC 1653(f)) is within the authority of the Secretary of Transportation, and would be based upon the facts of record at that time, i.e. land ownership and land use.

177. The impact on the city of Seward has been entirely rewritten. It is now contained in section F-5, F-6, and G of Chapter III. The impact on the waste disposal system is covered in section D of Chapter III.

178. The land around the monument and Native lands in the AEC would, of course, be managed by their owners. The NPS would expect that planning for development of facilities outside the monument would involve mutually beneficial, voluntary, and reciprocal cooperation.

179. The appendix has been corrected. (See Appendix A).

180. This information has been corrected. (See Appendix A).

181. This has been corrected. (See Appensix D).

182. The appendix has been added. (See Appendix F).

Federal-State
Land Use Planning Commission
For Alaska

733 W. FOURTH AVENUE, SUITE 400
ANCHORAGE, ALASKA 99501

July 3, 1974

Mr. Theodore R. Swem, Chairman
Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Ted:

In accordance with the Commission's letter of May 28, 1974, to Secretary Morton, I am enclosing copies of our technical comments on your draft Environmental Impact Statements for the following proposed areas:

Arctic, N.W.R.
Chukchi-Imuruk, N.W.
Gates of the Arctic, N.P.
Katmai, N.P.
Lake Clark, N.P.
Noatak, N.E.R.
Togiak, N.W.R.
Wrangell Mountains, N.F.
Yukon-Charley, N.R.
Yukon Flats, N.W.R.
Cape Krusenstern, N.M.
Fortymile, N.W.S.R.
Harding Icefields-Kenai Fiords
Iliamna, N.R.R.
Koyukuk, N.W.R.
Mt. McKinley, N.P.
Porcupine, N.F.
Unalakleet, N.W.R.
Wrangell-St. Elias, N.P.
Yukon Delta, N.W.R.
Yukon-Kuskokwim, N.F.

Sincerely yours,

T. G. Bingham
Executive Director

TGB:vsc

Enclosure

Technical Adequacy Review of Proposed

Draft Environmental Impact Statement

Completed Only For Chapter II Description and
Chapter III Environmental Impact of Proposed Action

Proposed Harding Icefield-Kenai Fiords

Prepared by

Resource Planning Team, FSLUPC

May 1974

Proposed Harding Icefield-Kenai Fiords

Chapter I Description of the Proposal

Page 1 Legislative Action

Acreage Discrepancy

Comment: The summary indicates the proposed area contains 300,000 acres plus an area of ecological concern of 460,000 acres or a total of 760,000. Page 31 states the two areas together contain 748,000 acres. 183

Chapter II Description of the Environment

Page 63 Climate of the Region

"At Seward, on the western edge of the study area, . . ." 184

Comment: Should read "eastern edge".

Page 95-110 The People

Comment: The better part of 15 pages discusses only Seward. 185

RESPONSE TO COMMENTS BY
THE JOINT FEDERAL-STATE LAND USE
PLANNING COMMISSION FOR
ALASKA

183. The summary has been changed to reflect accurate acreage figures. The proposal contains approximately 305,000 acres and the Area of Ecological Concern approximately 453,000 acres.

184. The statement has been changed accordingly.

185. The description of "The People" in the area concentrates on Seward because it is the only population center in the immediate vicinity of the proposal and it is where we expect most of the impacts of the proposal will take place.

Nevertheless, general information on Port Graham and English Bay, as well as other villages in the region, has been included.

These communities are not near enough to become directly involved with visitor movements around the proposed monuments, nor does the NPS know of any major use of the proposal area which is presently undertaken by these village residents. Thus the proposal is not expected to have any substantial direct impacts on these communities. The major involvement of Port Graham and English Bay will be through the lands that they are entitled to select in the proposed Area of Ecological Concern Potential impacts in this area involving the people of these villages have been covered in Chapter III.

FAIRBANKS NORTH STAR BOROUGH

Box 1267, Fairbanks, Alaska 99707

January 21, 1974

Mr. Theodor R. Swem, Chairman
Alaska Planning Group
U. S. Department of the Interior
Washington, D. C. 20240

Dear Mr. Swem:

In response to your letter of December 28, 1973, regarding the Draft Environmental Statement (ANCSA) of 1971 (35 Stat. 688) d-2 lands proposed by the Secretary for inclusion in the National Wildlife Refuge, National Park, National Forest, or Scenic River System; our comments are:

The listed parks, monuments, refuges, forests and ranges all merit a high level of protection; while bearing in mind the fact that certain transportation corridors are essential to the unity and economy of the state, as designated in the various inputs to the Joint Federal-State Land Use Planning Commission. 186

The specific area proposals list unavoidable adverse effects, including bans on mining and costly relocation of right-of-way corridors. These should be qualified in the context of state-wide effect and compared with benefits. Where the cost-benefit analysis of restrictive measures appears to be negative, solutions should be sought for achieving compatibility between nature and a reasonable level of commerce. 187

Very truly yours,

John A. Carlson

JOHN A. CARLSON
Borough Mayor

TAG:JAC:nic

cc: Planning and Zoning

RESPONSE TO COMMENTS BY
THE FAIRBANKS NORTH STAR BOROUGH

186. The recommendations of the Joint-Federal Land Use Planning Commission as well as the economic needs of the State were taken into consideration by the Secretary in making his recommendations on all of the D-2 lands. In addition, information gathered during the studies was augmented with information from the Federal-State Land Use Planning Commission public bearings on use of the 17(d) (2) withdrawal lands. The NPS had representatives at the public hearings to identify and take note of special problems requiring consideration. Comments received as a result of the public review of the draft environmental statement have also been considered in development of this final statement. Recognition of the Commission's recommendations is discussed in Chapter I,C. Impacts of the proposal on proposed transportation and utility corridors is discussed in Chapter III.G.

187. In passing the Alaska Native Claims Settlement Act of 1971, Congress itself gave very clear attention to the regional, state and national effects of the Alaska land transfers necessary to provide Native claim settlement, to meet the outstanding requirements of Alaskan statehood, and to provide or the continuing administration of the public lands. It directed the Secretary to withdraw lands for the Four Systems of National Parks, Forests, Wildlife Refuges and Wild and Scenic Rivers after other factors were taken into account in the planning process. Congress further provided for the establishment of a Joint Land Use Planning Commission and the orderly implementation of the planning process concerning areas planned and best suited for permanent reservation in Federal ownership. It called for recommendations to insure that economic growth and development was planned in an orderly and compatible way with State and national environmental objectives and the public interest in public lands, parks, forest, and wildlife refuges in Alaska, as well as economic and social well being of the Native people and other residents of Alaska. Agreement was reached with the State on the general area of the Four System proposals more specifically set forth in the 28 Environmental Impact Statements. These considerations and steps were examined and implemented prior to the individual development of Federal proposals with finite boundary lines and acreage limits. The need to consider cumulative impacts was recognized also during the development of the environmental impact statements on the 28 detailed proposals. The cumulative aspects of each proposal, where they could be detected with reasonable assurance of significance, are noted in the evaluations of that proposal. Appropriate analyses in the statements are developed on a regional basis for some proposals and in other cases, on a broader basis.

It is recognized that the proposed Harding Icefield-Kenai Fjords National monument would have an aggregate impact on the Kenai Peninsula region, and to a certain degree on the State, when considered in conjunction with other federal proposals and existing units in the region. Each proposal and existing area varies somewhat in the nature of its restrictions and management policies.

In the case of Harding-Kenai specifically, the impacts sections of Chapter III; F-1, F-3, F-4, F-5, F-6, F-7 and G, as well as other sections of the statement, have been revised to examine retional aspects of these impacts. The aggregate impact on land ownership patterns and availability in the region that would result from implementation of Harding-Kenai and the other proposals has been discussed in Chapter III, F-1. The aggregate impacts on subsistence uses have been discussed in III, F-3; sport hunting and recreation in III, F-4; timber harvesting and market economy in III, F-5; on community social and cultural life in III, F-6; on the mining industry in III, F-7; and on transportation in III,G.

In relation to your request for cost-benefit analysis of the proposals; by directing the Secretary of the Interior to withdraw up to 80 million acres of land as units of the four national systems, Congress recognized the desirability of providing environmental protection and management for some of the natural resources in Alaska under recognized and existing national management systems--systems with a spectrum of different objectives and emphases in their management, not all economically oriented or subject to the quantification of cost-benefit analysis techniques.

This does not mean that Congress failed to consider environmental costs and environmental benefits or even economic costs and economic gains, for it clearly did recognize and consider them in the review and planning procedures established in the Act and in the differing objectives set to be met by the Act's implementation. Nor does it mean that the Department of the Interior failed to consider economic or environmental benefits and costs in the planning process of developing these proposals in response to the Congressional mandate. It is true the environmental statement itself does not contain a quantitative and traditional cost-benefit ratio of the type referred to in the above comment, for very good reasons; but it is not correct, that the planning process did not consider economic as well as environmental implications in advancing the proposals.

This proposal, and the alternative considered, attempt to identify as completely as possible, with the available information, the identity and scope, trand or tendency, and size or relative significance of any significant environmental costs or environmental benefits inherent

in the particular action or alternative. Where risks and uncertainties are involved, they too are noted. The nature of the actions themselves and the frequent lack of data involved in the different subject areas does not always lend this treatment to quantitative presentation, but it is undertaken qualitatively so that objective description is provided to the reader and comparison by the reader is made possible.

It should be noted that the Department of the Interior does not habitually prepare economic cost-benefit analyses of land and recreation resource actions, land transfers, and land classification actions. This is the case for the economic and technical reason that many aspects of such actions deal with the economic concept of "public goods." Public goods not being traded in the market place frequently deal with aesthetic and other intangible values of the environment not subject to readily agreed upon or rigorously disciplined systems of market place evaluation and quantification. Further, the incomplete evaluative nature of the economic cost-benefit ratio as a decision tool has been widely recognized even where it is used.

The economic aspects and impacts of this proposal are examined in Chapter II,B and Chapter III, F and G. Some of the economic aspects of alternative proposals are examined in Chapter VIII.

KENAI PENINSULA BOROUGH
Box 850 Phone 262-4441
SOLDOTNA ALASKA 99669

March 1, 1974

STAN THOMPSON
MAYOR

Secretary of the Interior Rogers C. B. Morton
Secretary of Agriculture Earl Butz
Honorable Ted Stevens
Honorable Mike Gravel
Honorable Don Young
Honorable Henry Jackson, Chm. Interior & Insular Affairs, Senate
Honorable James A. Haley, Chm. Interior & Insular Affairs, House
Regional Forester C. A. Yates
Curt McVee, State Director of BLM
Raymond W. Estess, State-Federal Coordinator, Office of Governor
Theodor R. Swem, Chm., Alaska Planning Group, U.S. Dept.Int.

Gentlemen:

Day by day, action by action, it seems that we draw closer and closer to that point in time when Alaskans, to economically survive, must, individually or collectively:

1. Defy bureaucratic edict in hopes of a fair hearing when taken into the feceral courts, or

2. Turn to the courts directly for resolutions to conflicts created by federal proposals for land and resource uses in Alaska.

Within our offices, we have valuable information, primarily based on proven facts, which should be utilized in determining the future use of lands and resources within the borough. Viewed from Washington, D.C., and compared to the national needs, our local needs seem to dwindle into insignificance. Unfortunately, the national needs - i.e., our total resource and energy problem in America today - are simply the sum of all the little local counterparts. If the weight of the federal bureaucracy continues to ride roughshod over the little local effort such as our borough's, or simply ignores it because of its diminutive size only by improper comparisons, then there is little hope for timely solution to our resource and energy crisis. 188

303 We continue to believe that compromise is always preferable to confrontation on these matters. However, it takes two, or more, entities with some degree of willingness to arrive at satisfactory compromises when conflicts arise. 189

We have attempted to properly identify the subjects and areas of current, or potential conflict for resource and land uses within the Kenai Peninsula Borough under federal proposals for management of Public Lands.

It is our intent to follow through on each of our stated positions regarding the many proposals. This will not be done by simply entering our paperwork into the volumes fed to the various government paper mills. We continue to appraise our borough assembly and our state offices, and the people they represent, of the future as well as immediate effects, should many of the proposals become effective. We believe the reactions of our local citizens and their representatives are typical of what the American people in general would exhibit if and when they are given the facts.

These local reactions will be forwarded to you as timely as they are forthcoming.

Sincerely,

Stanley F. Thompson

Stanley F. Thompson
Borough Mayor

Incl. Res. 74-15

SFT:jb

KENAI PENINSULA BOROUGH
Box 850 Phone 262-4441
SOLDOTNA, ALASKA 99669

STAN THOMPSON
MAYOR

March 19, 1974

Mr. Theodor R. Swem, Chairman
Alaska Planning Gourp
U. S. Dept. of Interior
Washington, D. C.

Re: Kenai Peninsula Borough Boundaries and
Public Lands in Alaska

Dear Sir:

The enclosed photograph and Borough Resolutions 74-10, 74-15 and 74-16 are submitted for your review and thoughtful consideration.

If the current voracious appetite for devouring the Federal Public Lands and creating perpetual single use domains for the many departments of the Federal government, is satisfied completely within our borough there will be very little land left for people.

As our borough, our state and our nation expand in population and the attendant need for resources, how will we provide for them? What provisions are being made for transportation corridors, resource utilization, future ports, future cities, and the well being of man in general?

Please note on the accompanying data sheet the minor percentage of the borough that is left as people land. Also note how Cook Inlet is effectively closed off as an access to the Alaskan Peninsula and other parts of the state. The areas of "ecological concern" are actually the exterior boundaries of the proposed specific withdrawals.

If you have any questions about the details of our concern, please contact us. 190

Very truly yours,

Stan Thompson

Stanley F. Thompson
Borough Mayor

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Incl. Res. 74-15

SFT:jb

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Box 850 Phone 262-4441
SOLDOTNA, ALASKA 99669

STAN THOMPSON
MAYOR

March 19, 1974

Mr. Theodor R. Swem, Chairman
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U. S. Dept. of Interior
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If you have any questions about the details of our concern, please contact us. 190

Very truly yours,

Stan Thompson

Stanley F. Thompson
Borough Mayor

Introduced by: Hulm
Date: February 19, 1974

KENAI PENINSULA BOROUGH

RESOLUTION 74-10

A RESOLUTION REGARDING THE HARDING ICEFIELD/KENAI FJORDS NATIONAL MONUMENT PROPOSAL

WHEREAS, the intent of Congress was clearly expressed in committee reports for the Alaska Statehood Act, and

WHEREAS, the stated intent of the Statehood Act set in motion a process of land selection which would place Alaska in control of its future as a state, and

WHEREAS, the land selection rights granted to Alaska by the Statehood Act are rights belonging to all present and future citizens of Alaska and the nation, and

WHEREAS, these land rights are increasingly ignored or denied by actions of the federal government acting through the Departments of Interior and Agriculture, and

WHEREAS, many of the Department of Interior's proposals for D-2 and D-1 lands violate the intent of congress expressed in the Statehood Act by abrogating the state's right to freely select, or even influence the management of the lands necessary to its future well being, and | 191

WHEREAS, the Kenai Peninsula Borough, by statute enjoys a land selection right equal to 10% of the states land within borough boundaries, and

WHEREAS, the Kenai Peninsula Borough was established by state statute and charged with the responsibility for land use planning within its boundaries, and

WHEREAS over 70% of the Kenai Peninsula Borough will be government owned and managed under a single use concept as opposed to the multiple use -- sustained yield concept, and | 192

WHEREAS, history repeatedly proves that rights can only be exercised continuously by those who have the courage to defend them, and

WHEREAS Governor Egan has publicly stated that the state may go to the courts to resolve this question of land rights under the Statehood Act, and

WHEREAS the Harding Icefield/Kenai Fjords National Monument proposal, along with numerous wilderness proposals within the borough violates these land rights as well as precluding the use of common sense and other practical tools, such as the Multiple Use -- Sustained Yield concept, in land use planning in the interests of Alaska and the nation. 193

NOW THEREFORE, BE IT RESOLVED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH:

1. To vigorously support both publicly and privately, the governor's stated intent to defend the land rights given to the people through the Alaska Statehood Act. 194

2. To share directly, and proportionally, with the state any and all costs of litigation involved in protecting these land selection rights within the Kenai Peninsula Borough.

Copies of this resolution shall be transmitted to the Honorable William A. Egan, Governor of Alaska; Members of the Alaska legislature; Ted Bingham, Executive Director, Land Use Planning Commission; Joe Josephson, state designee to the Land Use Planning Commission; Secretary of the Interior Rogers C. B. Morton; Secretary of Agriculture Earl Butz; Theodor R. Swem, Chairman, Alaska Planning Group, U.S. Dept. of Interior; Senator Henry Jackson, Chairman, U.S. Senate Interior Insular Affairs Committee; Rep. James A. Haley, Chairman, House Interior Insular Affairs Committee; Alaska Senators Ted Stevens and Mike Gravel, and Alaska Representative Don Young.

ADOPTED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH THIS 19th DAY OF February, 1974.

Assembly President

ATTEST:

Borough Clerk

KENAI PENINSULA - EASTERN COOK INLET

Kenai National Moose Range - Federal	2,700	
Chugach National Forest - Federal	1,900	
Unappropriated - Public Domain	1,870	
State & Private Ownership	2,230	
		8,700 square miles
		5,568,000 acres

KENAI PENINSULA - WESTERN COOK INLET

Katmai National Monument - Federal	250	
McNeil River State Game Sanctuary - State	130	
Tuxedni National Wildlife Range - Federal	10	
Iliamna-Cook Inlet Segregation - Federal	3,900	
Moquawki Indian Reservation - Federal	40	
Unappropriated - Public Domain	1,960	
State & Private Ownership	1,530	
		7,820 square miles
		5,004,800 acres

Land Areas
(approximate only)

TOTAL LAND AREA 16,520 square miles
10,572,800 acres

KENAI PENINSULA BOROUGH

EXISTING & PROPOSED FEDERAL WITHDRAWALS	ACREAGES WITHIN KENAI PENINSULA BOROUGH EXISTING	PROPOSED ADDITIONS
Kenai National Moose Range	1,750,000	
d2-30 Kenai South (Proposed)		61,600
Chugach National Forest	1,400,000	
Nellie Juan (Proposed)		270,000
Harding Ice Field-Kenai Fjords National Monument (Proposed)	None-?	
		300,000 (approx.)
Iliamna National Resource Range (Proposed)	None-?	
		115,200 (approx.)
Lake Clark Proposed National Park (2,400,000 acres total)	None-?	
		1,889,280
	Area of Ecological Concern-	737,280
Proposed Katmai National Park (4,600,000 acres total)	92,160 (approx.)	414,720
Chisik Island Bird Refuge		

COMBINED AREA OF ECOLOGICAL CONCERN BETWEEN KATMAI AND ILIAMNA PROPOSALS - 691,200

AREA OF ECOLOGICAL CONCERN ADJACENT TO HARDING ICE FIELD-KENAI FJORDS - 368,640 (approx.)

STATE WITHDRAWALS

McNeil River State Game Sanctuary	69,120 (approx.)
Kachemak Bay State Park & Wilderness	299,520 (approx.)

TOTAL-FEDERAL PROPOSALS - 5,792,080 approximate

TOTAL-FEDERAL AREAS OF ECOLOGICAL CONCERN - 1,797,120 approximate

7,589,200 ÷ 10,572,800 = 71.8% OF THE KENAI PENINSULA BOROUGH

RESPONSE TO LETTERS FROM THE
KENAI PENINSULA BOROUGH

188,190,191. The value of public input and consultation with local residents and others in planning the new proposals is recognized. Some contacts were made with local representatives and organizations during the limited study period designated by Congress. However, the contacts were solely to obtain information and in a few cases to seek reaction to possible alternatives for use of the land involved in absence of any specific proposal. Since final decisions were not made within the Department of the Interior until November 1973 concerning the specific Park, Forest, Wildlife Refuge and Scenic and Wild Rivers proposals there was no way to go to the public for comment on the proposals until the Draft Environmental Impact Statements and plans were released in December.

Information gathered during the studies has been augmented with comments from transcripts of the Joint-Federal State Land Use Planning Commission public hearings on use of the 17(d) (2) withdrawal lands. The Federal agencies also had representatives at the public hearings to identify and take note of special problems requiring considerations. Comments received as a result of the public review of the Draft Environmental Impacts Statements have also been considered in development of the Final Environmental Impact Statements.

189. The National Park Service will be in further contact with the Kenai Peninsula Borough as planning intensifies to work with them as cooperatively as possible in developing coordinated regional land use planning.

192,193. Although the Harding-Kenai proposal would add significantly to the lands under primary use management in the Kenai Peninsula Borough. March of the other federally owned land in the area currently allows multiple-use management of the area. The Chugach Forest, plus its college Fjord addition are in multiple-use management. Also, hunting and mineral leasing are permitted in the Kenai Moose Range.

194. As noted in 189 above, the NPS will cooperate as much as possible with the Kenai Peninsula Borough to share information and coordinate future planning for the proposed monument and the region.

Introduced: 2 / 25 / 74

IN THE SEWARD CITY COUNCIL BY B. C. HULM

RESOLUTION NO. 899

A resolution opposing the Harding Ice Field/Kenai Fjords National Monument Proposal (DES No. 73-86)

BE IT RESOLVED BY THE SEWARD CITY COUNCIL:

WHEREAS, the National Park Service' proposal recognizes that the Harding Ice Field/Kenai Fjords area has not been completely explored for it's mineral potential (USGS Richter says "moderate potential for small deposits" - Land Use Planning Commission states "high potential") yet the National Park Service' proposal concludes the area's mineral resource is meager and not feasible for development; and 195

WHEREAS, the National Park Service' proposal infers that mining is unlikely and unfeasible, timber harvest is not feasible and hunting is minimal, yet their report concludes that Multiple Use Management would likely create significant disruption of resources and eccosystems. The case does not support their conclusion; and 196

WHEREAS, $27,000 in Gold was taken in 1973 from a mining operation within "the area of ecological concern" along the Kenai Peninsula's Southern littoral, where an investment of $230,000 has been made in this operation in 197

recent years; and

WHEREAS, the National Park Service' proposal states: "of all the vegetation cover in the Harding Ice Field/Kenai Fjords area, only one-half of 1% is suitable for timber harvest (1500 acres), the Park Service would prohibit the cutting of timber and other uses (?) which may lead to massive destruction of plant life in the monument." If one-half of 1% or 1500 acres of timber were cut under Multiple Use Management, this could not be considered "massive destruction" of plant life in a 300,000 acre area; and

WHEREAS, contrary to the National Park Service' proposal, common knowledge dictates and it is axiomatic that biological productivity of an area does not lend itself to permanent perpetuation because of the enactment of legislation establishing a national monument. Biological productivity is dependent on such factors as habitat, predation, disease and perhaps hunting pressure on a particular species; and

WHEREAS, the Seward City Council and the Citizens of the Seward area support the concept of a Seward National Recreation Area for the Harding Ice Field/Kenai Fjords area because of the unique terrian characteristics which lend themselves to year-round boating activity, professional, amateur and cross-country skiing, and other unlimited snow-oriented recreational events; and

WHEREAS, Seward has been officially designated by the State of Alaska as the 'Fun Capital of Alaska' because of our outstanding surrounding

sea and land characteristics so suitable for recreational purposes, which have and will continue - given a chance - to enhance Seward's and the Kenai Peninsula Borough's economic future; and

WHEREAS, officials of the National Park Service DID NOT officially contact the Seward City Council, Seward's Advisory Planning Commission, the Kenai Peninsula Borough Administration, Kenai Peninsula Borough Planning Commission, or the Kenai Peninsula Borough Assembly, to determine our input for the best use of the Harding Ice Field/Kenai Fjords area. 199

NOW THEREFORE, BE IT RESOLVED that it is the will of this Seward City Council that we oppose the Harding Ice Field/Kenai Fjords National Monument proposal by the National Park Service because we support the Multiple Use Management philosophy for this area.

COPIES of this resolution shall be transmitted to the Honorable Richard M. Nixon, President of the United States; the Honorable Earl Butz, Secretary of Agriculture; the Honorable Rogers C. B. Morton, Secretary of the Interior; the Honorable Mike Mansfield, Senate Majority Leader; the Honorable Carl Albert, Speaker of the House of Representatives; Chairman of the U. S. Senate and U. S. House Interior and Insular Affairs Committees; the Honorable Mike Gravel; the Honorable Ted Stevens; Honorable Don Young, Alaska's Congressional Delegation; the Honorable William A. Egan, Governor of Alaska; all members of the Alaska Legislature; Mr. Ted Bingham, Executive Director of the Land Use Planning Commission; Mr. Joe Josephson, State designee to the Land Use Planning Commission, and Mr. Theodor R. Swem, Chairman, Alaska

6 6 Planning Group, U. S. Department of the Interior.

ADOPTED BY THE SEWARD CITY COUNCIL THIS 25th DAY OF February 1974

ATTEST

Seward City Clerk

MAYOR OF SEWARD

195. The assessment of mineral potential in the region and the proposal itself has been revised to include a more balanced and up to date assessment of resources. Further, the sections in Chapter II or "Geology" and "Economic Geology" have been rewritten to reflect this assessment. Also the section on Impact on Mining Industry in Chapter III has been entirely rewritten, and, we hope, reflects an accurate of the potential minerals-related impact of the proposal.

196. Statements referring to possible disruption of the natural resources in the proposal area referred in general to localized critical ecosystem disruption. It is true that on an area-wide basis, the potential for disruption of large areas of the natural environment from such uses as mining and lumbering is relatively low as most of the proposed monument is covered with barren rock and ice. However, where timber stands do occur, mostly on steep slopes, destruction of vegetation would be significant. Further, it is conceivable that mining could occur on a fairly large scale in the area, if significant deposits of economically developable ore were discovered. With new technological developments such mining could even occur near the perimeter of the Icefield, and although it now seems unlikely, this could involve significant destruction of the natural values of the area.

197. This information has been included in Chapter II "Economic Geology" and Chapter III, F-7: "On Mining Industry".

198. The reference to massive destruction applies to the effect on an ecosystem in a localized area. The one half of one percent figure applies to the entire study area, i.e. the monument and AEC, and thus the acreage involved is roughly 5,000 acres, not 1,500. (See response 196 above for further discussion.)

199. The value of public input and consultation with local residents and others in planning the new proposals is recognized. Some contacts were made with local representatives and organizations during the limited study period designated by Congress. However, the contacts were solely to obtain information and in a few cases to seek reaction to possible alternatives for use of the land involved in absence of any specific proposal. Since final decisions were not made within the Department of the Interior until November 1973 concerning the specific Park, Forest, Wildlife Refuge and Scenic and Wild Rivers proposals there was no way to go to the public for comment on the proposals until the Draft Environmental Impact Statements and plans were released in December. The Forest Service, in the Department of Agriculture, which was involved in studying possible additional national forests did present specific proposals to the public in a series of meetings that took place in the areas of concern.

Information gathered during the studies has been augmented with comments from transcripts of the Joint-Federal State Land Use Planning Commission public hearings on use of the 17 (d) (2) withdrawal lands. The Federal agencies also had representatives at the public hearings to identify and take note of special problems requiring consideration. Comments received as a result of the public review of the Draft Environmental Impacts Statements have also been considered in development of the Final Environmental Impact Statements.

During the ongoing planning process for this proposal, the NPS will be consulting with the Seward City Council as well as other local government's as much as possible to exchange information and ideas and also to coordinate planning efforts for the region. Such cooperative planning intent has been outlined in Chapter I sections A and B.

Refer to: 360
Attn: Ralph A. Johnson

COOK INLET
CIRI
REGION, INC.

January 28, 1974

Mr. Albert G. Henson
Project Leader
National Park Service
Alaska Task Force Office
524 W. Sixth Avenue, Room 201
Anchorage, Alaska 99501

Dear Mr. Henson:

Thank you for the Park Service Master Plans for Lake Clark, Harding Icefield, and Mt. McKinley forwarded in your letter of January 17, 1974.

As you are aware, Cook Inlet Region, Inc. is involved in litigation with the Department of Interior regarding lands adjacent to and within these Master Plans. We contend that some of these lands should be made available for Cook Inlet Native selection. We herewith request that further planning and public input regarding these lands be held in abeyance until our lawsuit is resolved, since public misconceptions about the availability of these lands for park development tend to damage Cook Inlet Region, Inc., and thus aggravate our already serious deficiency withdrawal problems.

Sincerely,

COOK INLET REGION, INC.

by _____
President

cc:
Secretary of the Interior
Senator Stevens
Senator Gravel
Rep. Young
Senator Jackson
Rep. Meeds

519 D STREET • ANCHORAGE, ALASKA • PHONE 274-7575

John Colberg, Jr.
Chairman of the Board

Ralph A. Johnson
President

Refer: 713

COOK INLET
CIRI
REGION, INC.

July 17, 1974

Mr. Theodor R. Swem
Alaska Planning Group
U. S. Department of the Interior
Washington, D. C. 20240

Dear Mr. Swem:

Re: Environmental Impact Statements

Cook Inlet Region, Inc. would like to comment on the draft environmental impact statements in general, and the Lake Clark National Park proposal in particular.

Although the statements represent considerable work (and certainly an impressive volume) they also seem to be full of factual errors and incomplete data. 200

Regarding the Lake Clark proposal, we feel that it is improper to consider this proposal until acceptable deficiency withdrawals without (d)(2) override in the Lake Clark area have been made for Native selections.

Sincerely,

COOK INLET REGION, INC.

Larry M. Oskolkoff
Land Manager

cc: AFN
11 Regions

LMO:vc

2636 SPENARD ROAD • ANCHORAGE, ALASKA 99503 • PHONE 274-8638

RESPONSE TO COMMENTS BY
COOK INLET REGION INC.

200. The draft statement for Harding Kenai proposal has been rewritten to a considerable degree, especially in Chapters II, III, and VIII, to reflect comments from the public, to correct factual errors and to round out the data available.

Telephone (907) 452-4755

Doyon, Limited

527 Third Avenue
Fairbanks, Alaska 99701

June 12, 1974

Mr. Theodor R. Swem
Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem:

Environmental Impact Statements

Doyon, Limited has reviewed in some depth all of the draft environmental impact statements relating to the so-called (d) (2) "Four Systems" land withdrawals in our region. This letter is our response to your request for comments by interested and effected parties.

Each of the draft statements reflects considerable study and analysis by the prospective managers. Certainly the over-all goals and objectives cannot be criticized; unfortunately, however, the proposed methods of determining and implementing what is "good" for Alaska (and the nation) ranges from the ludicrous to the sublime. Conceptually we can support a number of the proposals but would strongly object to the enactment of others. To endorse any at this time would tend to dilute our strongest criticism of the statements as they now exist.

We have pending the result of an 83 million acre land grab. Intentionally or otherwise, each of the "Four Systems" was encouraged to compete for and justify, in any way they could, why they should be allowed to manage a given area. Bureaucratic objectivity is questionable regardless of the stated goals and objectives. Assuming the areas are to be administered as proposed, over 200 million acres of the nation's most valued lands, as well as a high percentage of Alaska's Coastal areas, will be withdrawn and placed under varying restrictions, of which the total effect has not yet been considered. We view the proposals as a first step toward needed land use planning; it seems prudent, however, to now consider the overall impact (social and economic) to the state and the nation

201

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as a whole. The combined impact of the proposals is a necessity not to be overlooked. 203

At this stage, Doyon, Limited can endorse only the need for an overall rational and coherent land use plan which will preserve and protect without frustrating reasonable development expectations. Please let the record indicate that we are using this letter as a vehicle to indicate that we feel another step should be incorporated prior to Congressional action on the proposals. There is now a need for another environmental impact statement, one that will encompass all twenty-eight proposals and their effect upon the state and the nation as a whole.

We appreciate the opportunity to respond.

Sincerely yours,

Sam Kito

Sam Kito, Jr.
Executive Director

SK/mm

RESPONSE TO COMMENTS BY
DOYON LTD.

201. By directing the Secretary of the Interior to withdraw up to 80 million acres of land as units of the four national systems, Congress recognized the desirability of providing environmental protection and management for some of the natural resources in Alaska under recognized and existing national management systems--systems with a spectrum of different objectives and emphases in their management.

During the process of developing these recommendations, each of the "four system" agencies, as well as the BLM, worked closely together in the Alaska Planning Group in order to develop coordinated and well planned proposals for individual regions, the State as a whole, and the Nation. However, conflicts are inevitable in this type of planning effort, and in such cases the Secretary made his final recommendations while considering all points of view and weighing all factors involved in the particular area.

All of the proposals call for continued cooperation in developing regional and statewide land use plans, as well as individual development plans for each area. Such cooperation would be sought not only among the federal agencies, but also with the Native organizations, the State and local governments, and interested area residents.

202. We are assuming that your reference to the withdrawals of over 200 million acres is intended to refer to the acreage in the proposed Areas of Ecological Concern as well as that in the proposals themselves.

"Areas of Ecological Concern" are just that, areas of interdependent relationships to the proposal area in terms of wildlife habitat maintenance, maintenance of visual and scenic integrity, protective buffers around key waters and wildlife populations, interrelated vegetative and wildlife use patterns where degradation of one element could seriously alter the other, and significant areas of cultural (archeological, historical and sociological) relationship to the proposal or an adjacent Native culture or population. It is hoped that specific cooperative agreements can be negotiated with any adjacent land managers and owners within the "Areas of Ecological Concern" to insure complementary protection of the values and resources of the proposal, with control and management of such lands retained by the owners and managers. The AEC's are not an attempt to remove valid land management rights from the Natives or other groups.

Management of the proposals as well as the Areas of Ecological Concern should include a mutual working dialogue between Federal landowners and surrounding land managers. It is reasonable that if landowners in Areas of Ecological Concern are to consider managing their lands in a "manner compatible with proposal values", then in return their views should be considered within the limits of applicable laws and regulations, in the management of Federal lands.

It should be noted that agreements regarding Areas of Ecological Concern represent only one approach to protection of Federal lands, and that the broad authority given the Secretary under 43 U.S.C.;1363 remains unaffected by the legislative proposal.

203. In passing the Alaska Native Claims Settlement Act of 1971, Congress itself gave very clear attention to the regional, State and national effects of the Alaska land transfers necessary to provide Native claim settlement, to meet the outstanding requirements of Alaskan statehood, and to provide for the continuing administration of the public lands. It directed the Secretary to withdraw lands for the Four Systems of National Parks, Forests, Wildlife Refuges and Wild and Scenic Rivers after other factors were taken into account in the planning process. And Congress further provided for the establishment of a Joint Land Use Planning Commission and the orderly implementation of the planning process concerning areas planned and best suited for permanent reservation in Federal ownership. It called for recommendations to insure that economic growth and development was planned in an orderly and compatible way with State and national environmental objectives and the public interest in public lands, parks, forest, and wildlife refuges in Alaska, as well as economic and social well being of the Native people and other residents of Alaska. Agreement was reached with the State on the general area of the Four System proposals more specifically set forth in the 28 Environmental Impact Statements. These considerations and steps were examined and implemented prior to the individual development of Federal proposals with finite boundary lines and acreage limits. The need to consider cumulative impacts was recognized also during the development of the environmental impact statements on the 28 detailed proposals. The cumulative aspects of each proposal, where they could be detected with reasonable assurance of significance, are noted in the evaluations of that proposal. Appropriate analyses in the statements are developed on a regional basis for some proposals and in other cases, on statewide or a broader basis. It would be repetitive to undertake an additional EIS to the 28 already completed.

Anyone wishing to ascertain overall effect, may do so by reading the aggregate impact of all or part of the proposals that would be involved and considering them the same as the sum of the impacts discussed in each of the environmental statements. The statements

are being issued and are abailable on the basis of sets of (28) each. Where the total cumulative impact in a region or the State appears particularly significant in relationship to a given proposal, the subject statements involved are modified to include any additional impact considerations not previously described among the analyses involved. It is the considered opinion of the Department that these foregoing actions and the statements themselves taken together do constitute a good faith effort at providing a fair and accurate evaluation of aggregate or cumulative impact on major regions, the State and the Nation as a whole.

It is recognized that the proposed Harding Icefield Kenai Fjords National monument would have an aggregate impact on the Kenai Peninsula region when considered in conjunction with the proposals for the Seward National Recreation Area, the additions to the Chugach National Forest and the proposals for wilderness on the Kenai Moose Range and the Nellie Juan Wilderness Area (in the Chugach Forest). These five proposals, in addition to the existing Chugach National Forest and Kenai National Moose Range, in many areas overlap, but do cover about two thirds of the lands on the Kenai Peninsula. Each proposal and existing area varies somewhat in the nature of its restrictions and management policies.

In the case of Harding-Kenai specifically, the impacts sections of Chapter III; F-1, F-3, F-4, F-5, F-6, F-7, and G, as well as other sections of the statement, have been revised to examine regional aspects of these impacts. The aggregate impact on land ownership patterns and availability in the region that would result from implementation of Harding-Kenai and the other proposals has been discussed in section III, F-1. The aggregate impacts on subsistence uses have been discussed in III, F-3; sport hunting and recreation in III, F-4; timber harvesting and market economy in III, F-5; community social and cultural life in III, F-6; the mining industry in III, F-7; and transportation in III, G.

Port Graham, Corporation
Land Selection Committee
Port Graham, Via
Homer, Alaska -99603-
7 March 74

Mr. Theodar R. Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington D.C. -20240-

Dear Mr. Swem

We, The Port Graham Corporation Land Selection Committee strongly oppose the Harding Ice Field Kenai Fjords National Monument due to the fact that it takes away the land from our Village and Regionial Deficency Lands. 204

Sincerely yours,

Roger Wallin
Roger Wallin Pres.

Ephim H. Moonin
Ephim H. Moonin Sec.

Committee Members

Walter R. Meganack SR
Walter R. Meganack Sr.

Dick Anahonak
Dick Anahonak

Tim Malchoff
Tim Malchoff

Carl D. Mumchuck
Carl D. Mumchuck

Marvin Hormen
Marvin Hormen

Mickey Moonin
Mickey Moonin

Lloyd Tanape
Lloyd Tanape

Ben Meganack
Ben Meganack

Alex Moonin
Alex Moonin

Walter Meganack Jr.

cc: Port Graham Village Corp.
Cecil Barnes, PRESIDENT
CHUGACH NATIVE REGION, INC.

RESPONSE TO COMMENTS BY
THE LAND SELECTION COMMITTEE, PORT GRAHAM, CORPORATION

204. All Native Village and Regional Deficiency lands which are included in the proposal are contained in the Area of Ecological Concern. All those lands are available for Native selection. Only those lands in the AEC which were not selected by the Natives could then be included in the monument, unless the Natives chose to include some of their own lands.

"Areas of Ecological Concern" are just that, areas of interdependent relationshps to the proposal area in terms of wildlife habitat maintenance, mantenance of visual and scenic integrity, protective buffers around key waters and wildlife populations, interrelated vegetative and wildlife use patterns where degradation of one element could seriously alter the other, and significant areas of cultural (archeological, historical and sociological) relationship to the proposal or an adjacent Native culture or population. It is hoped that specific cooperative agreements can be negotiated with any adjacent land managers and owners within the "Areas of Ecological Concern" to insure complementary protection of the values and resources of the proposal, with control and management of such lands retained by the owners and managers.

Management of the proposeals as well as the Areas of Ecological Concern should include a mutual working dialogue between Federal landowners and surrounding land managers. It is reasonable that if landowners in Areas of Ecological Concern are to consider managing their lands in a "manner compatible with proposal values", then in return their views should be considered within the limits of applicable laws and regulations, in che management of Federal lands.

It should be noted that agreements regarding Areas of Ecological Concern represent only one approach to protection of Federal lands, and that the broad authority given the Secretary under 43 U.S.C.; 1368 remains unaffected by the legislative proposal.

The Alaska Center for the Environment
913 West Sixth Avenue
Anchorage, Alaska 99501

July 21, 1974

Mr. Ted Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem:

Enclosed please find our comments on the second set of draft environment impact statements for proposed d-2 land designations in Alaska.

Included are comments on Iliamna, Unalakleet River, Fortymile River, Togiak Refuge, Koyukuk Refuge, Harding Icefield/ Kenai Fiords, Yukon Flats Refuge/Porcupine National Forest, Katmai National Park, additions to Mt. McKinley National Park

We thank you very much for the opportunity to make comment on the statements and sincerely hope that some of our suggestions will be implemented.

Very truly yours,

Vicky J. Frankfourth
/Alaska Center for the Environment

Enclosures

ALASKA CENTER FOR THE ENVIRONMENT

COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT

FOR THE

HARDING ICEFIELD - KENAI FJORDS NATIONAL MONUMENT

Title page, attached erratum: Why was the joint National Park Service-Fish and Wildlife Service jurisdiction dropped in favor of sole NPS jurisdiction? The proposal for joint NPS-Native cooperative agreement needs more definition. 205 206

Pages 1-7: With respect to the waters in the proposal:

(a) What is the extent of these waters? 207

(b) What is the nature of the jurisdiction the National Park Service will have over these waters?

(c) What is the relationship of that jurisdiction to the state-owned tide and submerged lands?

(d) In the event of conflict between NPS and state objectives in these waters, how will the conflict be resolved?

(e) What are the environmental impacts of including these waters? Of excluding them?

Page 5: The map is labeled "Land status prior to December 18, 1973." What is the land status after December 18, 1973? Native village withdrawals shown are inaccurate. English Bay, Port Gualum, and Seldovia should be shifted further east. 208

Page 8: #3 weakens the proposal. For example, commercial kelping could affect natural processes, as could over-fishing of species used by seal, se lion, otter, etc. Se lion have a major ground on Chriswell Islands.

Page 13: Ferry to Valdez/Cordova from Seward not mentioned or 209

indicated.

Page 18: More needed on Caines Head State Recreation Area, 7.5
miles south of Seward. Master plan of State Division of Parks
includes Visitor Center. "NPS-Forest Service Visitor Center"
in Seward needs clarification. Also on page 18, a trail from 210
Kodi Bay State and Wilderness Park and Caines Head is probably
not feasible due to rugged terrain.

Pages 19-25: A summary of changes in land status is also
necessary for a complete understanding of the "background" of
the current proposal. This summary should include, with maps
for each, the land status:

(a) as of December 18, 1971

(b) following the January 1972 selections by the Egan
administration

(c) as a result of Secretary Morton's March 1972 d-2 and 211
d-1 withdrawals

(d) following any changes in Native deficiency withdrawals

(e) in September 1972, upon settlement of the suit brought
by the Egan administration against the federal government

(f) after Secretary Morton's final recommendations to Congress
on December 18, 1973

(g) in the legislation referred to on page 17 placing much
of the proposal in the Wildlife Refuge System.

Pages 19, 36: "So rare are such vast areas of ice that
Harding Icefield has been suggested for recognition in NPS's 212
National Register of Natural Landmarks"(p. 19). "The Harding,
Sargent, and Bagley Icefields are entirely in the United States,

and the Juneau Icefield lies in Alaska and Canada" (p. 36). It should be noted in the final E.I.S. that the Sargent Icefield is already partly covered by the Nellie Juan Wilderness Study Area, and the Forest Service proposes to add the rest of the icefield to the Chugach National Forest; possibly it will go into the wilderness study area too. In its Wrangell-St. Elias National Park proposal, the Interior Department recommended the entire Bagley Icefield for national park status. But Harding Icefield is slated for a tramway and mechanized tours--what environmental degradation might these uses give rise to? 212 213

What percent of the Harding Icefield-Kenai Fjords is ice and barren rock? 214

Page 29: There is also a proposed highway around Kachemak Bay to Seldovia. The Department of Highways plan should be added to the map and discussed, as it will closely approach the boundary of this proposal. 215

Page 49: "Earthquake Damage" map is poorly labeled. Natural phenomena does not "damage"; it "alters". Climate section, particularly "Winds", needs more information, as it affects boat/plane access. 216

Page 69: There are probably no wolves or wolverines on the outer islands. 217

Page 88: Add Koniag to first sentence. 218

Page 89: Paragraph three. Unixkugmiut were replaced by Tangena over most of their territory. 219

Page 104: Seward Fisheries Inc. is now the largest processor of halibut on the West Coast.

Page 107: Seward small boat harbor has 750 ships. Nearly all are for pleasure craft

Page 126: What would the impact on this proposal be of a passenger rail service to Seward on weekends? How would it affect the recreational potential? 220

Pages 127-128: What does the phrase "well over half" the monument mean? 60%? 75%? 90%? 221

Pages 159 ff, alternative boundary proposals: At least two obvious alternatives are overlooked. First, the proposed Kenai Fjords National Ecological Reserve of S. 2918 of January 30, 1974; a map and a summary of the provisions of this alternative proposal should be included in the final E.I.S., and its impact briefly discussed. 222 A second alternative boundary would be the exclusion of the Harding Icefield, with the coastal and island areas being placed in the proposed Coastal National Wildlife Refuge. Lands within the area of ecological concern not selected by Native corporations could be added to the refuge immediately after Native selections were completed, or after further study and a recommendation to Congress by the Interior Department. 223

Generally, the boundary is poor. The fractured lines will create management problems. In general, we recommend the area as a National Monument with exclusive NPS management, but subject to close cooperation with BSFW. Also, the Department of Commerce, which has a close connection with marine mammals and their products, will be concerned from the marine mammal standpoint.

205. An environmental statement does not require documentation of the study process prior to its release for public review nor should it attempt to justify why the proposal has arrived at its present form.

These statements were developed in accordance with NEPA requirements and CEQ Guidelines and in our opinion make a good faith effort to consider and display all relevant and important impacts, even on alternatives that were sometimes environmentally more advantageous than some proposals. Items raised in review have been substantially changed to remove any significant justificatory tone noted to us in the review process. We do not consider these statements to be proposal justifications, but to be our best effort with limited information and time to present the possible future environmental impacts that could reasonably be expected to result from the proposed changes in land status and management.

Although this proposal would be part of the National Park System only, it nevertheless remains proposed for joint management under the National Park Service and Fish and Wildlife Service.

206. At this time, no definitive joint agreements have been worked out. However, further discussion of potential cooperation between the NPS and the Natives has been added to Chapter I, A, B, and C, as well as appropriate parts of Chapter II and Chapter III.

207. There are approximately 147,000 acres of offshore waters within the proposed monument boundaries and approximately 311,000 acres of offshore waters within the proposed AEC boundaries.

Enactment of this proposal will result in the transfer of some authorities and jurisdictional responsibilities to the congressionally designated Federal managing agency.

Under the legislative proposal, lands contained within the proposal boundary which lie above mean high tide are considered to be under Federal jurisdiction. The legislative proposal does not adjust any Federal-State jurisdictional responsibilities, nor does it amend, by implication, the Submerged Lands Act.

The impacts of the proposal on the various resources in these waters are covered in Chapter III, sections A, D, and F4.

208. See the response to question 136 of the State's letter.

209. The information has been included (see Regional Transportation map) and Chapter II, B-9.

210. More information on nearby proposals and areas has been included in ChapterI, section C. In regard to the potential trail access of the area, the National Park Service will study all feasible alternatives and comply with NEPA before initiating any development.

211. An environmental impact statement does not require documentation of the study process, including chronology of changes that were made in a proposal prior to its release for public review. This statement reflects the land status that was correct at the time it was prepared for printing. Such information is available upon request from the Bureau of Land Management and is a matter of public record through the Public Land Orders issued and the "Base E" land status maps developed by the Bureau of Land Management.

212. The information on the icefields has been included in Chapter II, A-2.

213. These impacts are discussed in Chapter III, section C.

214. Approximately 80 percent of the lands proposed for inclusion in the monument can be described as ice or barren rock.

215. This information has been included in the Transportation map.

If implemented, the proposed highway would border on the northwest corner of the proposed AEC. See Chapter III, G, for further discussion.

216. "Earthquake Damage" is the accepted geological term. The "Climate" section of Chapter II has been amended (see Chapter II, A-5).

217. The map was not meant to indicate that wolves or wolverines occur on the outer islands. It is designed to indicate the general range of these mammals and not specific occurrence. (See also question 160 of the State's letter.)

218. We cannot determine where you intend the reference to Koniag to be added.

219. Information included in appropriate sections. (See Chapter II, B-1, B-4, and B-7)

220. One could speculate that the establishment of this proposal and a related large increase in the volume of visitation to the area could increase passenger train service demand to the point where seasonal passenger service would be reinstated.

Regular train service, especially year-round, would greatly enhance the potential for travel to the area and on recreational development of it.

221. This statement was left general by design. Rather than estimate a percentage of the monument which would be managed for wilderness character, the passage directs the reader to the Land Classification map. It is felt that this will give the reader a better idea of the extent of primitive lands than would an oversimplified percentage figure.

222. This alternative has been mapped and discussed. (See Chapter VIII, section D-4.)

223. This alternative is covered by our Alternative C-3. If the lands in the AEC and the coastal areas were excluded from the monument, as in Alternative D-3, they could then be considered by Congress for inclusion in the Coastal Refuges proposal. (This could occur even though the Icefield remained a monument.) Also, if Congress took no action on the Harding-Kenai proposal, it could still include coastal lands in the Coastal Refuges proposal.

In addition, the inclusion of these lands in the proposed Coastal Refuges has also been considered in the EIS on that proposal. (See Chapter VIII of Final Environmental Statement on Alaska Coastal National Wildlife Refuges.)

TANANA - YUKON CHAPTER

Alaska Conservation Society

Box 80071
College, Alaska 99701

July 22, 1974

Theodor R. Swem, Chairman
Alaska Planning Group
U.S. Department of the Interior
Washington, D. C. 20240

Dear Mr. Swem:

The Tanana-Yukon Chapter of the Alaska Conservation Society appreciates the opportunity to comment on the draft Environmental Impact Statements for the proposals on the D-2 lands in Alaska. Copies of our comments on the proposals listed below are attached.

Yukon Flats National Wildlife Refuge
Yukon-Kuskokwim National Forest
Yukon Delta National Wildlife Refuge
Porcupine National Forest
Mt. McKinley Park Extensions
Alaska Coastal National Wildlife Refuge
Cape Krusenstern National Monument
Arctic National Wildlife Range Extensions
Noatak National Arctic Park
Katmai National Park
Additions to Chugach National Forest
Harding-Icefield-Kenai Fjords National Monument
Yukon-Charley National River
Gates of the Arctic

Sincerely,

TANANA-YUKON CHAPTER, ACS

Tina Stonorov

Tina Stonorov for
Richard H. Bishop
President

For the Tanana-Yukon Chapter, Alaska Conservation Society
By Larry Mayo July 1974

Technical errors abound in this proposal and environmental impact statement. The approach is that the Harding Icefield is a remnant ice cube left over after the Pleistocene Icesheet melted away. As such, it should be treated with museum curiosity. Baloney! 224

Visitor use to the Icefield is proposed via Exit Glacier near Seward. A visitor center would be built and skiers, hikers and snow machiners will embark upon their icefield journeys from there. Exit Glacier is highly crevassed, and the sudden onset and long duration of whiteout conditions there will mean that essentially no public safety or participation could result. It is doomed as a costly failure.

A group of novices from Tennessee threw this one together haphazardly. Its a glaciological absurdity and their concepts bear only little relationship to the real country west of Seward.

RESPONSE TO COMMENTS BY
TANANA-YUKON CHAPTER OF THE ALASKA CONSERVATION SOCIETY

224. The document has been rewritten where comments pointed out factual errors, bias, or omissions. In addition, any pertinent information which became available to the National Park Service after completion of the draft statement was included in the final document when possible.

ALASKA GEOLOGICAL SOCIETY
P. O. BOX 1288
ANCHORAGE, ALASKA 99501

June 24, 1974

Mr. Theodor R. Swem
Chairman-Alaska Planning Group
U. S. Department of Interior
Washington, D.C. 20240

The Alaska Geological Society, affiliated with the American Association of Petroleum Geologists, recognizes its obligation to speak and act on environmental problems. The responsibilities of the earth scientist as stated in the AAPG Environmental Policy include:

1) Maintenance of a quality environment,

2) Provision of man's material needs by planning and supervising the extraction of mineral resources, and

3) Participation in the conservation and wise use of resources.

In this context the Society respectfully submits the following general comments for your consideration concerning the Draft Environmental Impact Statements prepared for lands withdrawn for classification pursuant to Section 17 (d) (2) of the Alaska Native Claims Settlement Act. We also plan to submit additional comments on individual draft statements under separate cover.

GENERAL COMMENTS

Certain problems are apparent in all of the draft EIS's. The major problems are:

1) The geologic descriptions provided are inadequate. In each case the descriptions merely emphasize the lack of basic resource data available for the proposed withdrawal areas. For example, the statement prepared for proposed additions to the Chugach National Forest does not even mention the word "Geology". Nine sentences purport to describe the "Minerals, Oil and Gas" of an area comprising 672 thousand acres. 225

2) The impact statements do not meet the same high standards of scientific research required of industry by Federal agencies. A typical example is the statement for the proposed Selawik National Wildlife Refuge. In the description of the environment, an unreferenced list of mineral occurrences" in certain areas of the Kotzebue Sound Region" highlights the geological section on page 76. The bedrock of the region is undescribed, as are the geologic structure, seismicity and groundwater potential. 226

3) The impact statements seem designed to justify the proposed actions rather than to analyze objectively the far-reaching implications of each proposal. The reasoning under "Impact on Mining and Mineral Entry" of the proposed Kobuk Valley National Monument is revealing: 227

"Since prospecting would not be allowed, there may never be a complete inventory and analysis of these (mineral) resources. Therefore a full assessment of the impacts of the proposal's preclusions of resource removal would not be carried out." (from page 215; emphasis added.) 228

4) Many of the statements dismiss the impact of banning mineral exploration and production as minimal because of the supposed low potential or relatively small area of the proposed withdrawal. Such reasoning ignores a fundamental characteristic of mineral deposits: their limited areal extent. The cumulative effect of all withdrawals is also ignored. 229

The Selawik proposal again is representative:

"However, in our judgment it is doubtful that foregoing the extraction of the deposits would have more than minimal impact on the industry or on the industry or on the total need of the nation since the potential is believed to be low within the refuge and not sufficient to affect the nation's supply and demand for the resource." (from page 171; emphasis added).

These comments cover a virtually unexplored area of 1.4 million acres adjacent to another (Kobuk) proposed withdrawal of 1,850,000 acres.

RECOMMENDATIONS

Before large tracts of land are closed to mineral entry, the U.S.G.S. should pass judgment that ore deposits or petroleum fields are not likely to be present. In order to make this judgment, the U.S.G.S. should supervise detailed geological, geochemical, and geophysical exploration by its own personnel, other State and Federal agencies, and private industry. Withdrawals accomplsihed without this judgment will be subject to great pressures for future exploration and development when commodity shortages intensify. It will be easier to maintain park and refuge integrity if the U.S.G.S. can prove that further exploration would be either fruitless or economically infeasible. 230

When the d (2) proposals are given further consideration, additional studies should more carefully refer to existing geological literature. Most important is the series of resource evaluations now being conducted by the Alaska State Division of Geological and Geophysical Survey. If existing literature is not fully utilized, the impact statements could easily become the objects of protracted litigation. 231

We appreciate this opportunity to comment on behalf of the membership of the Alaska Geological Society.

Yours very truly,

Thomas Wilson,
President

T. Wilson / RLM

By: Robert L. McCollom
Environmental Committee Chairman

RLM:cw

RESPONSE TO COMMENTS BY
THE ALASKA GEOLOGICAL SOCIETY

225. The mineral and geologic descriptions in Harding-Kenai have been rewritten to reflect considerable amounts of new information provided in the comments, especially those from the U.S. Geological Survey and the Bureau of Mines. In addition, the consideration of mineralogical impacts from the proposal has been completely rewritten to present a more accurate assessment of their significance. (See, for further information, Chapter II, A-2, A-3, B-8, and Chapter III, F-7. Also, note the new "Minerals" map.)

226. The shortness of the time limitations which were imposed on these studies often led to inadvertent errors or omissions in the draft documents. Every effort has been made to improve the quality of factual data in the final statements.

227. These statements were developed in accordance with NEPA requirements and CEQ Guidelines and in our opinion make a good faith effort to consider and display all relevant and important impacts, even on alternatives that were sometimes environmentally more advantageous than some proposals. Items raised in review have been substantially changed to remove any significant justificatory tone noted to us in the review process. We do not consider these statements to be proposal justifications but to be our best effort with limited information and time to present the possible future environmental impacts that could reasonably be expected to result from the proposed changes in land status and management.

228. In regard to the subject of a research program to inventory mineral potential in these areas, the park proposals provide that prospecting, mining, and the extraction of minerals or the removal of soil, sand, gravel, and rock will not be permitted, except where carried on pursuant to valid existing rights.

The National Park Service encourages and will participate in appropriate ways in the study of geological resources within proposals. Geological studies by recognized educational or scientific institutions, professional personnel of other Federal agencies, and accredited individuals will be permitted and encouraged when in consonance with the purposes of the area and the policies of the Service. Procedures which might result in damage or alteration to the resources would not be permitted.

In making d-2 land withdrawals and the recommendations to the Congress for management of these lands, a basic dilemma was faced which is implicit in a decision involving mineralogically unexplored lands such as those in Alaska. This dilemma was the choice between possible values of developable, nonrenewable resources such as minerals, and the resource values inherent in natural and ecological systems.

In developing the final recommendations to Congress, the need to leave mineral resources available for development was given careful consideration. In the first place, some of the systems themselves herein advanced by these proposals contain the authority and objective of mineral development. It should be noted that the selections already made by the State of Alaska and the priorities provided the Native claims under ANCSA have excluded from "Four Systems" consideration vast areas of mineral potential already. In many cases, boundaries of proposals were redrawn to place mineral belts of prime potential outside proposals with restrictive management categories. In other cases, management options were left open to mining where identified mineral potential was sufficient to warrant such action, and where mineral extraction would not prove overly damaging to the environment. However, in order to comply with the intent of section 17(d)(2) of the Act and in order to afford adequate protection of these outstanding natural areas, some areas which do have possible mineral potential were recommended for protective management that would exclude mining and mineral entry. These proposals reflect a need, set forth in ANCSA as a congressional mandate, to preserve certain outstanding natural and ecological areas of national interest apart from mineral development.

229. The section on the "Impact on the Mining Industry" (Chapter III, F-7) has been rewritten to reflect mineral potential in unexplored areas as well as those which have been prospected. The type of reasoning you refer to has, we believe, been removed. The aggregate impact of the Harding-Kenai proposal in conjunction with other Federal areas in the region has also been discussed in Chapter III, F-7, and other sections. For a thorough discussion of aggregate impact analysis in the environmental statements, see the response to question 14 of the Department of Commerce letter.

230. For the response, refer to the discussion of mineralogical exploration that would be permitted in this proposal which is given in the response to question 228 of this letter.

231. Refer to question 226 of this letter.

ALASKA WILDLIFE FEDERATION
AND SPORTSMEN'S COUNCIL, INC.
1700 GLACIER AVENUE, JUNEAU, ALASKA 99801

March 15, 1974

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
National Park Service
Department of Interior
Washington, D. C.

Dear Mr. Swem:

Re: Harding Icefield
Kenai Fjords

We prefer to delay our final recommendation on the above subject until legislation is proposed. We do not believe the document supports the concept of the area involved, that of national significance. We are also concerned about conflicts with the recommendations of the Federal-State Planning Commission and the denial of state and native selection. 232

We do recommend that the Pye and Chiswell Islands and the lower Harris and Aialik peninsulas be established as part of the coastal National Wildlife Refuge. 233

Sincerely,

Bud Boddy

A. W. "Bud" Boddy, Executive Director
Alaska Wildlife Federation and Sportsmen's Council

cc: National Wildlife Federation
Council members

RESPONSE TO COMMENTS FROM THE
ALASKA WILDLIFE FEDERATION

232. The proposal would not "deny" any State or Native land selection rights. There are no State withdrawals within the monument or AEC. The only Native withdrawal lands involved in the proposal are contained in the Area of Ecological Concern. All those lands are available for Native selection. Only those lands in the AEC which were not selected by the Natives could be included in the monument unless the Natives chose to include some of their own lands.

Further, during the planning process for this proposal, the Secretary took careful consideration of the JFSLUPC recommendations before making his final recommendations to Congress. Provisions for future cooperation and coordination with the JFSLUPC are provided in Chapter I,C.

233. This alternative is considered in Chapter VIII, C, "Alternative Management Systems." The Harding-Kenai proposal, itself provides that these areas be under Joint NPS-FWS management (See Chapter I).

THE
NATIONAL
FEDERATION
OF

BUSINESS AND PROFESSIONAL WOMEN'S CLUBS, INC.
of the United States of America

2012 MASSACHUSETTS AVENUE, N. W.
WASHINGTON, D. C., 20036
293-1100

February 8, 1974

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, D. C. 20240

Dear Mr. Swem:

I have recieved your letter requesting The National Federation of Business and Professional Women's Clubs, Inc. to submit recommendations on the Draft Environmental Statements of the Alaska Native Claims Settlement Act (ANCSA) of 1971 (35 Stat. 688). Our organization is involved with many legislative matters, however this is not an item on the current platform. Therefore we can not take a position for or againist the statement pertaining to the Alaska Native Claim Settlement Act.

Thank you for giving us an opportunity to recieve the material.

Sincerely,

Lucille Shriver

(Mrs.) Lucille Shriver
Director

LS:dmm

THE CONSERVATION FOUNDATION

1717 Massachusetts Avenue NW Washington DC 20036 • (202) 265-8882 Cable: CONSERVIT

January 22, 1974

Mr. Theodor R. Swem
Chairman
Alaska Planning Group
U.S. Department of the Interior
Washington, D. C. 20240

Dear Mr. Swem:

I wish to acknowledge your letter of December 28, 1973, and its transmittal of draft environmental impact statements on 28 Department of the Interior proposals under Section 17(d)(2) of the Alaska Native Claims Settlement Act. The Conservation Foundation has a long background of interest in, and studies concerning, Alaska and we are following closely the tremendously significant proposals for the creation of new National Park, Wildlife Refuge, National Forest and Wild and Scenic River areas there. We appreciate your forwarding the impact statement to us.

As Mr. Atkeson has explained to you, we ourselves expect to undertake a one-year study of the management issues involved in Congress' final designation of the D-2 areas. Rather than make isolated comments on the impact statements on the basis of the information available to us now, we propose to prepare a systematic report on these management issues that will take account not only of the impact statements but also the forthcoming recommendations of the Federal-State Land Use Planning Commission and our own field survey of selected D-2 areas in Alaska. We will keep you advised of the progress of our study and hope to work in close cooperation with both the Department and the Land Use Planning Commission.

I would like at this time, however, to compliment your Alaska Planning Group on the excellent work in the impact statements. Our preliminary review indicates that they are

both thorough and useful. In particular we wish to compliment the exposition of alternatives on the various areas and the very clear identification of "areas of ecological concern" extending beyond the boundaries of the particular D-2 area proposals. These aspects assure that the public and the Congress will have available to them the type of impact and policy analysis intended by the National Environmental Policy Act.

One observer has already identified the Alaskan D-2 area designations as having as great long term significance for the Nation as the original adoption of the National Park concept at Yellowstone 100 years ago. We concur in this view of the importance of your work and will hope to play a helpful role on our part in clarifying the issues involved in the ultimate decisions to be made by the Congress.

Sincerely,

William K. Reilly

William K. Reilly
President

cc: The Honorable Rogers C. B. Morton
The Honorable John C. Whitaker

EXXON COMPANY, U.S.A.
POST OFFICE BOX 120 · DENVER, COLORADO 80201

EXPLORATION DEPARTMENT
WESTERN DIVISION

CRANDALL D. JONES
MANAGER

June 4, 1974

Re: Draft Environmental Statements
"Four Systems" Lands
State of Alaska

Mr. Theodore R. Swem
Chairman, Alaska Planning Group
United States Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem:

Pursuant to the "Notice of Availability of Draft Environmental Statements" which was published in the Federal Register, 38 FR 35508, December 28, 1973, as amended by "Notice of Extension of the Review Period" which was published in the Federal Register, 39 FR 7817 February 28, 1974, Exxon Company, U.S.A. makes comments as follows:

We have examined the twenty-eight Draft Environmental Statements and it appears to us that the statements accurately assess the impact of the planned uses on these lands. We feel, however, that since the proposed plans would have the effect of closing to entry approximately 64 million acres under the public land laws, including the mineral leasing laws, the alternative to this (i.e., allow mineral leasing) should be given more consideration in these statements. 234

While there may be time in the future for public expression on the desirability of the legislative proposals, it is our opinion that once the Environmental Statements are finalized it becomes extremely unlikely that the plans will then be amended to provide for mineral leasing of any lands within the withdrawn areas. 235

Millions of acres of Alaska lands have been unavailable for oil and gas exploration for several years due to the Native claims. Now that the time for Native selection of lands is near, pursuant to the Alaska Native Claims Settlement Act, it seems to us that now is also the time for the Secretary of the Interior to seriously consider an orderly opening of public domain lands to mineral leasing as opposed to permanently withdrawing these lands from oil and gas exploration. While much of the land, proposed to be withdrawn from mineral leasing under the "Four Systems" plans, does not presently appear to have an oil and gas potential, future information may considerably alter this. The critical shortage

of oil and gas in the U.S.A. is, in our opinion, a strong reason for the Secretary of the Interior to carefully consider the oil and gas potential of these lands prior to placing them in classifications which would permanently withdraw them from oil and gas exploration.

We shall sincerely appreciate your consideration of our above comments.

Very truly yours,

CDJ:mws

RESPONSE TO COMMENTS FROM
EXXON COMPANY, USA

234. The minerals and geology sections of this statement have been rewritten to reflect a more accurate view of mineral potential in the area. The proposal's impacts on the Mining Industry are discussed in Chapter III F-7, including aggregate impacts of this and other federal proposals on mining in the region.

235. The Department had originally intended to produce final EIS's with these legislative proposals even though the CEQ Guidelines offer the option of using drafts in cases like this. However, it soon became obvious that we could not accomplish this within the severe time frame allowed, i.e. before the December 18, 1973 date specified by the Act. Nevertheless, final statements will be completed and sent to Congress and the Native organizations for consideration in the actions which have yet to be taken. Submission of a draft with new legislation does not shut off the opportunity for full public review and disclosure of those review results. In the ANCSA case, particularly, those results will be before the Congress in the Final Environmental Statements and it will undoubtedly be some time before Congress can act due to the time allowed for the village and regional corporation selections. Final Environmental Statements will be available considerably before that time. The opportunity for input to the decision process, as in all legislation, remains completely open to the public throughout the legislative process yet to come. Congressional Hearings will most likely be held and public comment sought.

FAIRBANKS ENVIRONMENTAL CENTER
Box 1796
Fairbanks, Alaska 99707
(907)-452-3312

James E. Kowalsky, *Director*

July 22, 1974

Mr. Theodorel Swem
Chairman
Alaska Planning Group
National Park Service
US Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem,

Enclosed are the comments on seventeen (17) Draft Environmental Impact Statements for Secretary Morton's recommendations for the National Interest Lands withdrawn for study purposes in Alaska under Section 17 d-2 of the Alaska Native Claims Settlement Act of 1971.

Our comments are made after review of the Draft Statements by members of our center, other members of the community, and other citizens from other areas in Alaska. Among the reviewers are people personally familar with the areas under study and some who live near them in several cases. Others are professional biologists of various specialities, geologists and others from among the science community.

Our comments on these remaining seventeen (17) Drafts are submitted jointly with the Friends of the Earth whose Alaska Field Representative has assisted in coordination of the reviews and drafting of the comments. The comments are generally a review of the technical adequacy of each impact statement. In many instances certain questions are asked about the adequacy of data in attempts to get the full story on how certain proposal decisions were made.

The Fairbanks Environmental Center is happy to take part in this process of citizen participation in what we feel is one of Alaska's, and the nation's, greatest land planning opportunities. We hope that our comments will be helpful, and that our questions will be fully answered.

Sincerely,

Barbara M. Tabbert
Barbara Tabbert
President
FAIRBANKS ENVIRONMENTAL CENTER, Inc.

FRIENDS OF THE EARTH

DAVID BROWER, *President*

BOX 1796, FAIRBANKS, ALASKA 99707

(907) 452-3312

JIM KOWALSKY, *Alaska Representative*

July 22, 1974

Mr. Ted Swem
Chairman, Alaska Planning Group
National Park Service
US Department of the Interior
Washington, D.C. 20240

Re: Comments on remaining d-2 statements

Dear Mr. Swem,

I am very pleased to enclose the comments on the remaining seventeen (17) Draft Environmental Impact Statements. They are submitted jointly for these seventeen (17) only by Friends of the Earth and the Fairbanks Environmental Center.

The comments represent the personal reviews of the Drafts and separate comments of Alaskans from many walks of life and from many areas of Alaska. These people range from professional scientists and resource managers to students, to FOE members of all walks of life. I am personally pleased that the NEPA process allows Alaskan citizens and others the chance to take part in this process.

In addition to the comments as they appear in each set, Friends of the Earth makes these additional remarks.

The areas below are hereby proposed by Friends of the Earth, Inc. to be placed into the United Nations World Heritage, an international program conceived at the recent UN Stockhom Conference on the Human Environment. Further information on the United Nations World Heritage may be obtained from David R. Brower, Chairman Friends of the Earth International, 529 Commercial, San Fransisco, California 94111.

The areas we propose are: as follows (certain of these are within S.2918):

<u>National Parks and Monuments</u>

Gates of the Arctic (or Nunamuit substitute)
Yukon-Charley Rivers
Cape Krusenstern
Wrangells
Lake Clark
Aniakchak Calder-
Mount McKinley

Nat'l Parks and Monuments con't

Katmai

Ecological Reserves

Noatak
Chukchi-Imuruk
Kenai Fiords

National Wildlife Refuges

Alaska Peninsula National Brown Bear Range
Yukon Delta National Wildlife Range
Koyukuk National Wildlife Range
Coastal
Yukon Flats National Wildlife Range
Iliamna National Wildlife Range
Togiak National Wildlife Range
Arctic National Wildlife Range

FOE will propose certain wild rivers for the World Heritage at a later date.

Sincerely,

Jim Kowalsky

Jim Kowalsky
Alaska Representative
FRIENDS OF THE EARTH, Inc.

c:c David R. Brower
Enclosures

The above-mentioned organizations support the creation of this National Monument as described in the Draft Environmental Impact Statement, with the following additions, corrections and clarifications:

Title page, erratum- Why was the joint N.P.S.-F.W.S. jurisduction modified in favor of sole N.P.S. jurisdiction? 236

Page 2- Who will determine and how will it be determined that subsistence uses of renewable resources in the monument "are no longer necessary to human survival"? 237

Pages 1-7- With respect to waters included in the proposal,

a) What are the boundaries of these waters?
b) What kind of jurisdiction will N.P.S. have over these waters?
c) In the event of conflicts between N.P.S. and state goals in these waters, how will conflicts be resolved?
d) What are the environmental impacts of including these waters or of excluding them from the monument?

238

Page 5, map- What is the land status <u>after</u> December 18, 1973? What environmental relationships exists between the monument and adjacent lands? How will the monument, once developed as proposed, impact these adjacent lands? 239

Page 9- How were the boundaries of the Area of Ecological Concern determined? The resources within this area need to be discussed and analyzed as to monument impact upon them. 240

Pages 19-25- A summary of changes in land status is also necessary for a complete understanding of the "background" of the current proposal. This summary should include, with 241

maps for each, land status:

a) as of December 18, 1971;
b) following the January 1972 selections by the Egan administration;
c) as a result of Secretary Morton's March 1972 d-2 and d-1 withdrawals;
d) following any changes in Native deficiency withdrawals; 241
e) in September 1972, upon settlement of the suit brought by the Egan administration against the federal government;
f) after Secretary Morton's final recommendations to Congress on December 18, 1973;
g) in the legislation referred to on page 17 placing much of the proposal in the Wildlife Refuge System.

Page 125- There has been almost no archaeological research done in the proposal area. There is no assurance the "N.P.S. would undertake studies to identify all cultural sites, especially archaeological remains of the Unixkugmiut" (p. 126). A definition timetable covering proper archaeological survey and evaluation needs inclusion in the Final E.I.S. 242

Page 131- When will Native subsistence use be studied, and the monument's impact upon it be determined? 243

Page 132- "N.P.S. proposes to help Native development of a tourist industry...on their lands."

"Benifits from the anticipated increase in tourism thus may accrue to the Natives and perhaps lessen the need for subsistence uses by converting part of the Native economy to a cash base." 244

Has it been found how the Natives feel about abandoning more of their subsistence culture for participation in a cash culture? Should not N.P.S. inform the Natives of the many detriments accompanying the development of a tourist

industry- the by-products of that industry- and the conversion to a cash based economy? 244

Page 133- A tramway or any mechanized access to the top of the icefield should be prohibited, as should track vehicle traffic on the icefield. It should remain accessible by hiking. Inaccessibility is one of the monument's prime values as a wilderness monument, and it should remain inaccessible to mechanized traffic. 245

A map depicting possible trails within and beyond the monument should accompany the Final E.I.S. Any trails should be carefully and frugally laid out. 246

Pages 159, ff- The Kenai Fjords National Ecological Reserve of S. 2918 (January 30, 1974) should be included in the alternatives section of the Final E.I.S. It should be mapped, described and its impact analyzed. 247

236. An environmental statement does not require documentation of the study process prior to its release for public review nor should it attempt to justify why the proposal has arrived at its present form.

These statements were developed in accordance with NEPA requirements and CEQ guidelines and in our opinion make a good faith effort to consider and display all relevant and important impacts, even on alternatives that were sometimes environmentally more advantageous than some proposals. Items raised in review have been substantially changed to remove any significant justificatory tone noted to us in the review process. We do not consider these statements to be proposal justifications, but to be our best effort with limited information and time to present the possible future environmental impacts that could reasonably be expected to result from the proposed changes in land status and management.

Although this proposal would be part of the National Park System only, it nevertheless remains proposed for joint management under NPS and FWS.

237. The subsistence use policy has been reworded as follows:

Except as may otherwise be prohibited by Federal or State law, existing traditional subsistence uses of renewable resources will be permitted until it is determined by the Secretary that utilization of these resources is neither economically or physically necessary to maintaim human life nor necessary to provide opportunities for the survival of Alaskan cultures centering on subsistence as a way of life.

If it is demonstrated that continued subsistence uses may result in a progressive reduction of animal or plant resources which could lead to long range alternations of ecosystems, the managing agency, following consultation with the Alaska Department of Fish and Game, communities and affected individuals, shall have the authority to restrict subsistence activities in part or all of the monument.

The determination of what restrictions, if any, will be placed on subsistence uses of monument lands will be made by the Department with fully sought cooperation of concerned State agencies, communities, and affected individuals. (Note Chapter I, B, paragraph 6)

238. There are approximately 147,000 acres of offshore waters within the proposed monument boundary and approximately 311,000 acres of offshore waters within the proposed AEC boundaries.

Enactment of this proposal will result in the transfer of some authorities and jurisdictional responsibilities to the Congressionally designated Federal managing agency.

Under the legislative proposal, lands contained within the proposal boundary which lie above mean high tide are considered to be under Federal jurisdiction. The legislative proposal does not adjust any Federal-State jurisdictional responsibilities, nor does it amend, by implication, the Submerged Lands Act.

The impacts of the proposal on the various resources in these waters are covered in Chapter III, sections A, D, F-4.

239. See response to question 136 of the State's letter.

The relationship of the monument to surrounding lands is discussed in Chapter I, C and in Chapter II. The impacts on nearby lands are covered in Chapter III.

240. "Areas of Ecological Concern" are just that, areas of interdependent relationships to the proposal area in terms of wildlife habitat maintenance, maintenance of visual and scenic integrity, protective buffers around key waters and wildlife populations, interrelated vegetative and wildlife use patterns where degradation of one element could seriously alter the other, and significant areas of cultural (archeological, historical and sociological) relationship to the proposal or an adjacent Native culture or population. The boundaries were drawn to protect the above kinds of values.

It is hoped that specific cooperative agreements can be negotiated with any adjacent land managers and owners within the "Areas of Ecological Concern" to insure complementary protection of the values and resources of the proposal, with control and management of such lands retained by the owners and managers.

Management of the proposals as well as the Areas of Ecological Concern should include a mutual working dialogue between Federal landowners and surrounding land managers. It is reasonable that if landowners in Areas of Ecological Concern are to consider managing their lands in a "manner compatible with proposal values", then in return their views should be considered within the limits of applicable laws and regulations, in the management of Federal lands.

It should be noted that agreements regarding Areas of Ecological Concern represent only one approach to protection of Federal lands, and that the broad authority given the Secretary under 43 U.S.C.; 1363 remains unaffected by the legislative proposal.

241. An environmental impact statement does not require documentation of the study process, including chronology of changes that were made in a proposal prior to its release for public review. This statement reflects the land status at the time it was prepared for printing. Such information is available upon request from the BLM and is a matter of public record through the Public Land Orders issued and the "Base E" land status maps developed by the BLM.

242. The proposals for archeological research in the area are set forth in Chapter I, A and B. Since the master plan is still tentative, no specific timetable has yet been set for such research. Nevertheless, authorized studies by professionals would be allowed or possibly initiated by the NPS if the monument were established. The impact discussion on "Archeologic and Historic Resources" (See Chapter III section H) is intended to indicate that the proposal would encourage this type of study and would undertake to inventory the resources in the proposed monument and AEC.

Pursuant to the Antiquities Act of 1906, and subsequent mandates, notably the Historic Sites Act of 1935, the National Historic Preservation Act of 1966 and Executive Order 11593 and to the administrative policies for historical areas, the NPS will employ its staff of professional historians, historical architects, and archeologists in locating, evaluating, researching, protecting, and interpreting the cultural sites under its jurisdiction and affected by this proposal. As the chief custodian of the Nation's historical areas since 1916, the NPS has developed a high degree of professional competency for management of such areas.

243. The proposal for the conduct of cooperative subsistence studies, as set out in Chapter I, B, paragraph 6, has not yet been given a timetable, however, the impact of the monument on subsistence use in the area is analyzed in Chapter III, F-3.

244. The value of public input and consultation with local residents and others in planning the new proposals is recognized. Some contacts were made with local representatives and organizations during the limited study period designated by Congress. However, the contacts were solely to obtain information and in a few cases to seek reaction to possible alternatives for use of the land involved in absence of any specific proposal. Since final decisions were not made within the Department of the Interior until November 1973 concerning the specific Park, Forest, Wildlife Refuge and Scenic and Wild Rivers proposals there was no way to go to the public for comment on the proposals until the Draft Environmental Impact Statements and plans were released in December.

Information gathered during the studies has been augmented with comments from transcripts of the Joint Federal State Land Use Planning Commission public hearings on use of the 17 (d) (2) withdrawal lands. The Federal agencies also had representatives at the public hearings to identify and take note of special problems requiring consideration. Comments received as a result of the public review of the Draft Environmental Impacts Statements have also been considered in development of the Final Environmental Impact Statements.

In reference to Native development of a tourist industry, it is the NPS's intention to seek cooperative agreements with Native groups as mandated in Chapter I's legislative and administrative proposals. Such cooperative agreements would, of course, be on a strictly voluntary basis with Native landowners. In regard to a cash versus a subsistence economy for Natives in the area, we do not feel that providing opportunities for seasonal cash jobs or businesses is necessarily incompatible with our stated objective of preserving subsistence cultural heritage or providing the opportunity for ongoing subsistence pursuits in the area.

245. The alternative of no mechanical access to the Icefield and its attendant impacts are discussed in Chapter VIII, B. Nevertheless, even with potential mechanical access, the conceptual master plan calls for preservation of most of the monument as "primitive" or "outstanding natural" areas (See Land Classification map).

246. As the master plan is still conceptual at this stage, no definite routes for trails have been laid out. Future trail studies would involve cooperative examination of alternatives with adjacent landowners and implementation of trail construction would first require environmental assessment in accordance with NEPA.

247. The Ecological Reserve is analyzed as a boundary alternative in Chapter VIII, D-4.

MMISSIONERS:
MARTIN K. ERIKSEN
PRINCE RUPERT, B.C.
NEILS M. EVENS
PETERSBURG, AK.
WILLIAM S. GILBERT
BAINBRIDGE ISLAND, WA.
FRANCIS W. MILLERD
VANCOUVER, B.C.
ROBERT W. SCHONING
WASHINGTON, D.C.
WILLIAM M. SPRULES
OTTAWA, ONT.

50th Anniversary
1923 - 1973

INTERNATIONAL PACIFIC HALIBUT COMMISSION

ESTABLISHED BY A CONVENTION BETWEEN CANADA
AND THE UNITED STATES OF AMERICA

BERNARD E. SKUD
DIRECTOR OF INVESTIGATIONS
AND COMMISSION SECRETARY

OFFICE AND LABORATORY
ROOM 250
OCEANOGRAPHY TEACHING BLDG.
UNIVERSITY OF WASHINGTON
SEATTLE, WASH. 98105

MAILING ADDRESS
P.O. BOX 9
UNIVERSITY STATION
SEATTLE, WASHINGTON 98105
TELEPHONE ME. 4-1838

8 January 1974

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem:

This will acknowledge receipt of the Environmental Statements in regard to the ANCSA and Wildlife refuges. I am uncertain whether your plans effect halibut fishing in the areas concerned. If the refuge regulations do not effect commercial halibut fishing, we can accept the draft report. If the plans will effect this fishery, we will have to know what specific rules or regulations are intended. 248

Sincerely yours,

Bernard E. Skud

Bernard E. Skud
Director of Investigations

RESPONSE TO COMMENTS BY
INTERNATIONAL PACIFIC HALIBUT COMMISSION

248. Halibut are taken in the waters off the south coast of the Kenai Peninsula and these would involve waters inside proposed monument and ABC boundaries. The Port of Seward, itself ranks as third in the Nation as a port for Halibut processing. Seward Fisheries One is now the largest processor of halibut on the West Coast.

Commercial fishing in the offshore waters in the monument and AEC would not be prohibited by the proposal. Possible impacts on the fishery from increased competition from sport fishing or disruption from boat travel is discussed in Chapter III F-4, F-5. However, this proposal is not considered to have any significant effect on commercial halibut fishing.

INTERNATIONAL PACIFIC SALMON FISHERIES COMMISSION

THOR TOLLEFSON, CHAIRMAN
RM. 115, GENERAL ADMINISTRATION BUILDING
OLYMPIA, WASHINGTON

W. R. HOURSTON, VICE-CHAIRMAN
DEPARTMENT OF THE ENVIRONMENT
VANCOUVER, B.C.

RICHARD NELSON
BOX 2204
VANCOUVER, B.C.

DONALD R. JOHNSON
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
SEATTLE, WASHINGTON

RODERICK HAIG-BROWN
2250 CAMPBELL RIVER ROAD
CAMPBELL RIVER, B.C.

DE WITT GILBERT
2852-44TH AVENUE WEST
SEATTLE, WASHINGTON

ESTABLISHED BY CONVENTION
BETWEEN CANADA
AND THE UNITED STATES
FOR THE PROTECTION
PRESERVATION AND EXTENSION OF THE
SOCKEYE AND PINK SALMON FISHERIES
OF THE FRASER RIVER SYSTEM

A. C. COOPER
DIRECTOR

OFFICE AND LABORATORY
P. O. BOX 30
NEW WESTMINSTER, B.C. V3L 4X9

TELEPHONE
521-3771

January 7, 1974

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Sir:

We wish to acknowledge your letter of December 28 and enclosed Draft Environmental Statements in regard to the Alaska Native Claims Settlement Act.

We do not believe it is within the authority of this Commission to offer comment on these particular environmental issues.

Yours very truly,

INTERNATIONAL PACIFIC SALMON
FISHERIES COMMISSION

A.C. Cooper

A.C. Cooper
Director

national association of counties
1735 new york avenue, n.w., washington, d.c. 20006 (202) 785-9577

January 15, 1974

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U. S. Department of Interior
Washington, D. C. 20240

Dear Mr. Swem:

This is in response to your letter dated December 28, 1973 concerning the Draft Environmental Statements in regard to the Alaska Native Claims Settlement Act (ANCSA) of 1971.

We have looked over the draft and appreciate being given the opportunity to comment on it. However, we do not have enough information on the issue or the staff capacity to make a comment on the proposal. At the same time, however, it should not be assumed that our organization agrees with the draft just because we have not submitted a comment on it.

Although we will not be making comments on these drafts, we would like to continue to receive these proposals for our information. Thank you for your interest in NACo's ideas on this matter.

Sincerely,

Carol Shaskan

Carol Shaskan
Legislative Research Assistant

National Society of Professional Engineers

2029 K STREET, N.W., WASHINGTON, D.C., 20006

(202) 331-7020

OFFICE OF THE
EXECUTIVE DIRECTOR

March 13, 1974

Mr. Theodor R. Swem, Chairman
Alaska Planning Group
U. S. Department of Interior
Washington, D. C. 20240

Dear Mr. Swem:

The National Society of Professional Engineers is pleased to submit the attached comments on the Draft Environmental Statements with regard to the Alaska Native Claims Settlement Act of 1971. These were prepared in consultation with our affiliated state society, the Alaska Society of Professional Engineers.

We appreciate being given the opportunity to review these statements.

Very truly yours,

Paul H. Robbins

Paul H. Robbins, P.E.
Executive Director

PHR:jr
Enclosure

cc - Donald R. Dent, P.E., President,
Alaska Society of Professional Engineers
Robert L. Reitinger, P.E., President, NSPE

COMMENTS ON ALASKA
LAND RECOMMENDATIONS E.I.S. REPORTS

The National Society of Professional Engineers recognizes that our natural resources are a priceless, yet exhaustible, heritage; that the practice of sound conservation should always be the National policy; and that many of this country's natural resources have been and are being exploited and wasted because of political or economic short sightedness in their development.

Since many of these resources are both finite and irreplaceable, we believe that their conservation and development require a high degree of engineering competence in cooperation with other professional skills necessary to a sound conservation program.

It is with these premises that members of the Alaska Society of Professional Engineers reviewed the draft environmental impact statements prepared by the Alaska Planning Group.

Subjects of principal concern and which are primarily in the engineers area of expertise are; (1) transportation planning and development; (2) mineral use and development; and (3) balanced land use planning. Before commenting on specific impact statements we believe some general statements on the total proposal package should be made.

For example:

1. Either by design or accident the entire northern portion of Alaska (except for the trans-Alaska oil pipeline corridor) may be blocked from land access if all recommended areas are placed in management systems which basically oppose development of land transportation. While land transportation may prove unnecessary in future decades the subjective decision to presently prohibit or grossly restrict it in view of the gas, oil, and other mineral potential (e.g. Kobuk, Brooks Range, Naval Petroleum Reserve 4, etc.) does not appear to be in the national interest, particularly in view of recent shortages. Review of the impact statements indicate that the information developed for the statements has been gathered and interpreted by agency personnel operating from a viewpoint (except for Forest Service proposals) which basically opposes resource utilization or development. 249

2. Most of the proposals indicate that development of any facility or any utilization of resources will require further detailed analysis and most likely a separate environmental statement. We recommend that this concern be extended to include a complete economic and resource analysis of values foregone by placement of particular recommended areas into particular systems. 250

3. The attempt to introduce innovative ideas in various management systems is refreshing, although as proposed it is confusing and administratively questionable. In terms of mineral development in National Parks and Wildlife Refuges, for example, assurance must be given that adequate access, with feasible environmental constraints, may be developed and proposals will be given an objective analysis by administrative personnel. 251

4. The areas of ecological concern appear to add 80-90 million acres to the proposed 84 million acres with little apparent justification other than agency desire to manage more land. Further explanation and justification is needed to establish credibility for objective land use planning. 252

While the above comments are general concerns, we request that final impact statements address the following specifics:

Chukchi-Imuruk National Reserve - Report indicates (p. 270) that severity of climate, distance from population center, and location preclude extensive development or use of area even if not included in National Park or Wildlife Refuge. An analysis should be made objectively setting forth that climate, remoteness and inaccessibility limit tourism and recreational values and compare this with other resource uses which will be foregone.

Beaver Creek Wild River - The logic in this statement does not appear objective. Comments on page 21 recognize that life styles are changing towards a cash economy which will require rural development, yet the proposal is biased against transportation development, mineral exploration and timber harvesting and states that these necessary uses might be foreclosed (p. 68).

Kobuk Valley National Monument - Precluding hydroelectric development (p.211) and land transportation (p. 219) without a complete study and objective analysis is neither sound land use planning or in the National interest. This is especially true when the same basic philosophy is extended throughout 34 million acres of adjacent and/or nearby lands. We believe it is in the National interest to work out a more objective compromise between preservation and wise use of resource.

Stated bias against transportation development (p. 216) precludes any rational analysis of future need unjustifiably. The stated intent of the Nana Native Region to select Onion Portage appears to negate this report's most important justification thus--the withdrawal of 1.85 million acres possessing high copper, asbestos, jade and other minerals is questionable in view of mineral shortages.

Noatak National Arctic Range - Justification for the subjective time limit (20 years) prohibiting any mineral development or transportation development in a area with high mineral potential (p. 197) and geographically located in an area containing two proposed primary transportation routes (p. 191) is needed. With the energy and mineral crisis presently confronting us, placing this 7.6 million acres which is either contiguous to or nearby an additional 11.8 million acres preserved for the same purposes should be further justified. We recommend that prior to placing this area in the Refuge System an interdisciplinary team should make a detailed, objective cost-benefit analysis.

Gates of The Arctic National Park - The errata sheet states that wilderness designation is not certain; however the 278 page analysis is based on immediate wilderness designation for most of the area. Since the original Gates of The Arctic proposal (HR 1127) was for 4.1 million acres and this proposal encompasses 8.4 million acres, the objectivity and rational analysis of the proposal is questioned. We agree that there are areas of

tremendous scenic splendor in the Brooks Range which should be placed in a National Park. However, mineral values in particular should be quantified before a decision on this area is made especially since the report (p. 51) states that metallic mineral resources have not been evaluated. The report should also mention that approval of this proposal in conjunction with the Noatak, Kobuk, Selawik and Yukon Flats proposals would preclude rational development for almost all of Northern Alaska.

Yukon Charley National Rivers - This 2.3 million acre proposal contains highly mineralized areas (p. 195), a proposed major land transportation route (p. 201), and two major hydroelectric proposals (p. 193). The report recognizes (p. 202-203) that substantial increase in demand for transportation facilities will result if the proposal is implemented. For example, the report conveys the need for both conservation and use of resources (multiple use) and proposes that mining in certain areas be permitted, sport hunting with certain qualifications be permitted, etc. This rationale leads to the conclusion that the area should be placed in a multiple use system rather than be made a unit of the National Park System.

Togiak National Wildlife Refuge - From a systematic land use planning viewpoint the facts presented do little to support the conclusion. For example, it is recommended that this 2.8 million acres be withdrawn from mineral development, (p. 58 states that the area is within a major hard metal province) and future land transportation be restricted (p. 120). The justification for this action is the need for wildlife protection. However, the statistics in the wildlife section appear low in comparison with other areas (i.e. 32 ducks/sq. mi. in this proposal compared with 60 ducks/sq. mi. in the proposed Chukchi-Imuruk National Wildlands Park and 99 ducks/sq. mi. in the Yukon Flats Refuge proposal). The lowland (waterfowl) habitat is only a small portion of the whole area. For other game: caribou (non-existant p. 73), few moose (p. 74), few black bear, east of proposal (p. 74), grizzly (less than 100). We suggest that a complete inter-disciplinary economic analysis and inventory of mineral resources be completed on this area before congressional action.

Lake Clark National Park - The U.S.G.S., Bureau of Mines and Federal-State Land Use Planning Commission have all stated that the Lake Clark area has very high mineral (copper specifically) potential yet this report does not consider these assessments and prohibits mineral development, hydroelectric development and places major restrictions on future land access in an area which is critical (geographically) to future development on the entire Alaska Peninsula-Bristol Bay Area. We recommend an inter-disciplinary team prepare a complete resource (including mineral) and economic analysis on this area prior to congressional action.

National Forest Proposals - Since these proposals will be managed for multiple use we believe adequate analysis of future uses, developments, and protection can be made as the occasion arises. Our major concern in these proposals is that the recommendations for Wild and Scenic River classification appear to be made with a minimum of information. Further analysis should be made. Immediate classification, especially for wild rivers appears inconsistant with the agency's stated multiple use approach to planning.

RESPONSE TO COMMENTS FROM THE
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

249. The statement has been rewritten to remove any anti-resource development bias that was detected, and to incorporate the information provided by comments from the resource development-oriented agencies such as USGS, Bureau of Mines, Forest Service, Bureau of Land Management, etc.

250. Any specific developments or substantive actions taken as part of the implementation of the proposal, should it be enacted, would undergo studies and assesments in accordance with the requirements of NEPA. Of course, every attempt will be made to ensure that any Environmental Impact Statements developed during this process would also comply with NEPA. Nevertheless, in reference to your request for complete economic and resource analysis, the Department feels that these considerations have not been overlooked in the planning that has taken place to date.

By directing the Secretary of the Interior to withdraw up to 80 million acres of land as units of the Four National Systems, Congress recognized the desirability of providing environmental protection and management for some of the natural resources in Alaska under recognized and existing national management systems. Systems with a spectrum of differing objectives and emphasis in their management, not all economically oriented or subject to the quantification of cost-benefit analyses techniques.

This doesn't mean that Congress failed to consider environmental costs and environmental benefits or even economic costs and economic gains, for they clearly did recognize and consider them in the review and planning procedures established in the Act, and in the differing objectives set to be met by the Act's implementation. Nor does it mean that the Department of the Interior failed to consider economic or environmental benefits and costs in the planning process of developing these proposals in response to Congress' mandate. It is true that the environmental statement itself does not contain a quantitative and traditional Benefit/Cost ratio of the type referred to in the above comment, for

very good reasons; but it is not correct, as implied, that the planning process did not consider economic as well as environmental implications in advancing the proposals.

Thus the Department's planning and decision process is consistent with the Calvert Cliffs decision which indicated that NEPA requires that "...the particular economic and technical benefits of planned action must be assessed and then weighed against environmental cost..." Calvert Cliff's Coordinative Comm'n, Inc., V. United States Atomic Energy Comm'n, 449 F. 2d 1109, 1123 (D.C. Cir. 1971).

Moreover the Department has complied with that section of the CEQ Guidelines which state "in each case the analysis should be sufficiently detailed to reveal the agency's comparative evaluation of the environmental (emphasis supplied) benefits, costs and risks of the proposed action and each reasonable alternative." CEQ Guidelines, August 1973 FTC Vol. 38 No. 147. This portrayal of the environmental benefits, risks and costs is undertaken in these statements, even if not in quantified form.

Each proposal and alternative attempts to identify as completely as possible, with the available information, the identify and scope, trend or tendancy, and size or relative significance of any significant environmental cost or environmental benefits inherent in the particular action or alternative. Where risks and uncertainties are involved, they too are noted. The nature of the actions themselves and the frequent lack of the data involved in the different subject areas does not always lend this treatment to quantitative presentation, but is undertaken qualitatively, so that objective description is provided the reader, and comparison by him is made possible.

It should be noted that the Department of the Interior does not habitually prepare economic cost/benefit analyses of land and recreation resource actions, lands transfers and land classification actions. This is the case for the

economic and technical renson that many aspects of such actions deal with the economic concept of "public goods". Public goods not being traded in the market place frequently deal with aesthetic and other intangible values of the environment not subject to readily agreed upon or rigorously disciplined systems of market place evaluation and quantification. Further, the incomplete evaluative nature of the economic benefit/cost ratio as a decision tool has been widely recognized even where it is used.

251. The Harding-Kenai proposal would allow no new mineral entry within the monument. Valid, existing calims or patents would be allowed reasonable access as required by law.

252. "Areas of Ecological Concern" are just that, areas of interdependent relationships to the proposal area in terms of wildlife habitat maintenance, maintenance of visual and scenic integrity, protective buffers around key waters and wildlife populations, interrelated vegetative and wildlife use patterns where degradation of one element could seriously alter the other, and significant areas of cultural (archeological, historical and sociological) relationship to the proposal or an adjacent Native culture or population. It is hoped that specific cooperative agreements can be negotiated with any adjacent land managers and owners within the "Areas of Ecological Concern" to insure complementary protection of the values and resources of the proposal, with control and management of such lands retained by the owners and managers.

Management of the proposals as well as the Areas of Ecological Concern should include a mutual working dialogue between Federal landowners and surrounding land managers. It is reasonable that if landowners in Areas of Ecological Concern are to consider managing their lands in a "manner compatible with proposal values", then in return their views should be considered within the limits of applicable laws and regulations, in the management of Federal lands.

It should be noted that agreements regarding Areas of Ecological Concern represent only one approach to protection of Federal lands, and that the broad authority given the Secretary under 43 U.S.C. 1363 remains unaffected by the legislative proposal.

National Wildlife Federation

1412 16TH ST., N.W., WASHINGTON, D.C. 20036

Phone: 202-483-1550

July 22, 1974

Theodor R. Swem, Chairman
Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem:

Reference is made to your letter of December 28, 1973 transmitting the Draft Environmental Impact Statement (EIS) on that part of the Alaska Native Claims Settlement Act (ANCSA) pertaining to disposition of previously-identified "17(d)(2) lands".

The National Wildlife Federation plans to comment in brief on the remaining twenty-one separate proposals for additions to existing components or establishing new units of the four national systems - wildlife refuges, parks, forests and wild and scenic rivers. The brevity of our present addressal of the proposals should not be interpreted as a lack of interest in this important action. It simply means that the Federation believes it will be afforded ample opportunity to thoroughly review each of the proposals, if it elects to do so, as they come before the Congress in public hearings during the next several years.

Before commenting on the specific proposals we would like to make some general observations and recommendations relative to many of the proposals made pursuant to paragraph 17(d)(2) of ANCSA. We note that sport hunting is to be permitted in some, but not all, elements of the National Park System. Though, in our judgment that approach signifies an enlightened move for the National Park Service (NPS), it still implies inconsistent scientific management of Alaska's bountiful wildlife resources with cropping-through hunting-used as a management tool in certain areas only.

As an organization dedicated to encouraging the management of all natural resources - especially the renewable ones such as wildlife - the Federation is firmly opposed to any plan which could limit or restrict sound wildlife management activities. We believe that professional resource managers should be given the widest possible latitude and be permitted the greatest practicable flexibility in the decisions and actions taken to enhance Alaska's wildlife resources. Therefore, the Federation recommends that scientific management of wildlife resources be implemented in all Alaskan areas intended for inclusion in the National Park System and that all decisions regarding the management tools to employ in this regard be left up to the professional managers.

We also note that subsistency hunting by the Alaskan natives will be permitted on all lands included within the proposals. While we are not opposed to subsistence uses of these lands, for we recognize the need for such uses by native villagers, we strongly urge those overseeing the individual areas to employ subsistence hunting in such a manner that it becomes a tool in the scientific management of wildlife resources.

In the interest of brevity, the Federation wishes to go on record as endorsing, in principle, the inclusion of all rivers in the Wild and Scenic Rivers System which have not been set up as separate proposals. The remainder of our comments in this letter will pertain to individual proposals.

Yukon Flats National Wildlife Refuge:

Our prime concern is for the abundant fish and wildlife resources in this area, which includes an extremely important waterfowl nesting habitat for birds from all four flyways of the North American continent. As a result of the extreme importance of this area to migratory waterfowl it is essential that this region be protected from commercial activity and environmental pollution. While the National Wildlife Federation supports this proposal in principle, we believe that insufficient waterfowl nesting areas have been included in the refuge. In our opinion the refuge should be expanded to include the remaining 0.9 million acres of wetland along the Yukon and Porcupine Rivers, which are presently included in the proposed Porcupine National Forest. The wetlands consist of flat alluvial bottomlands with low terraces crossed by meandering streams and dotted with ponds and lakes providing ideal waterfowl nesting areas. The soils are mainly deep, poorly drained silty loess and alluvium (Histic Pergelic Cryaquepts), very poorly drained fibrous peat (Pergelic Cryists) and deep, well drained loess and silty or sandy well drained loams (Typic Cryorthents). The first two soils, which predominate in the region, are easily eroded causing siltation and pollution of the streams and ponds threatening the waterfowl nesting habitat. Therefore, we believe the wetlands should be excluded from any potential commercial development. Additionally, we feel that portions of the Sheenjak River drainage, should be included in the proposed refuge to insure adequate protection of the wetlands watershed.

Porcupine National Forest:

The Federation is primarily concerned with the abundant wildlife resources located in the area. We believe that a special effort must be made in this instance to preserve and protect sensitive wildlife habitat from possibly adverse commercial development. As the proposal now stands it is unacceptable to the Federation. While we are not opposed to the establishment of a national forest, per se, we feel that the inclusion of 0.9 million acres of the Yukon and Porcupine Flats is unwise. These lowlands constitute approximately one-third of the Yukon Flats area and contribute a significant portion of the total production of waterfowl of the Flats. This area provides waterfowl nesting areas for birds from all four flyways of the North American continent. Furthermore, the soils of this area consist of Histic Pergelic Cryaquepts, Pergelic Cryists and Typic Cryothents. The first two, which predominate in the area, are especially vulnerable to erosion which could lead to serious siltation and pollution of the rivers and ponds. Stream siltation could result in widespread destruction of waterfowl nesting habitat at the point of disturbance and downstream. Furthermore, it would be virtually impossible to prevent serious damage to, or destruction of, waterfowl nesting areas in the face of oil and gas extraction.

Wrangell Mountains-St. Elias National Park and Wrangell Mountains National Forest:

The Federation supports these two proposals in principle, recognizing the economic importance of the extractable minerals located in the proposed national forest. However,

we have serious reservations about potential adverse impacts on fish and wildlife resources from improper mineral exploration and extraction. It is essential that the U.S. Forest Service (USFS) and the National Park Service (NPS) develop a high degree of cooperation in administering the zones of complementary management to insure that the superior quality of water and wildlife resources is maintained. The Federation recommends that the national park be expanded to include 2.8 million acres of the Yakutat-Alsek coast area which comprises one of the major wildlife concentration areas along the Pacific coast for both upland and wetland species. The area also contains the primary population of glacier bear, a rare (and perhaps endangered) species. This area is presently surrounded by three proposed or existing parks, therefore its commercial development would have significant adverse impact on all three parks. The Federation would also view with favor the inclusion of 0.9 million acres of the Copper River Delta and 1.0 million acres of the Western Wrangell Mountains in the park. The Copper River Delta contains outstanding wildlife areas including breeding grounds for the trumpeter swan, the dusky Canada goose, and the Aleutian tern as well as sizable populations of brown bear, goats, and moose. Inclusion of the Western Wrangell Mountains in the park would protect critical caribou calving grounds.

Noatak National Arctic Range:

The Federation supports, in principle, the establishment of a twenty year moratorium on development in the Noatak drainage to conduct scientific studies in an undisturbed arctic ecosystem. But we feel that the present proposal is inadequate because it would divide an ecosystem into three parts. This would seriously hinder optimum scientific studies which demand an intact ecosystem in its entirety. Therefore, we believe that the proposal must be expanded to include the entire Noatak drainage which consists of an additional 1.1 million acres in the lower Noatak River Flats and Delta and 730,000 acres of the Upper Noatak watershed (currently in the proposed Gates of the Arctic National Park). The lower Noatak Flats and Delta contains wetlands which provide habitat for a great variety of waterfowl and shorebirds. The addition of this area would insure the preservation of the habitat and would allow for the study of the wetlands in relation to the rest of the ecosystem. The Federation believes that the whole ecosystem to be studied must be managed as one unit.

Iliamna National Resource Range:

Our principle concern is for the fish and wildlife resources located within the area. This proposal encompasses a very productive faunal area with a reported 135 different species of birds including the endangered peregrine falcon. Also, Lake Iliamna contains the only known population of fresh water seals in the United States. But the most important renewable resource in the area is the salmon fisheries containing as it does the largest commercial producer of salmon in the world. The Federation feels that any proposal which includes these abundant and varied fish and wildlife resources must give full and equitable consideration to commercial fisheries while properly managing the vast populations of birds and their habitat as well as protecting the fresh water seals. Also, we believe that any mineral exploration and/or extraction should be done only under the most strict environmental controls to insure the continuation of fish and wildlife, perhaps the area's most significant resource. In this regard, we must express our disappointment with the draft EIS which, in our judgment, did not adequately evaluate the adverse impacts of mineral development

on wildlife, water and vegetation. The draft EIS did not even discuss the impact of mineral exploitation on the soils of the area. Instead the statement discussed all the impacts in generalizations too broad for valid evaluation or interpretation. For example, on pages 132-3 it is stated that, "Some uses, such as roads and mining areas, will set back or keep out vegetation growth for as long as the use persists and for a number of years after the use ceases" (emphasis added). The Statement goes on to explain that since only a minor percentage of the total area will be affected, the overall impact on vegetation will not be significant. Yet these scars will be present for years and an accumulation of such "minor disturbances" could have a major impact on fish and wildlife due to loss of habitat and water pollution caused by the erosion of exposed soils. In view of the inadequacies of the draft EIS the Federation feels that a more comprehensive EIS on this proposal should be prepared before any mineral exploration or extraction begins.

Koyukuk National Wildlife Refuge:

The Federation supports this proposal in principle because of the abundant wildlife resources in the area including migratory waterfowl, moose, brown/grizzly bear, and caribou. Moreover, we feel that consideration should be given to expanding the refuge to acquire additional acreage within the Area of Ecological Concern (AEC) of the Koyukuk unit. This additional land consists of a lowland floodplain which supports approximately fifty percent of the waterfowl population of the Koyukuk Valley.

Arctic National Wildlife Refuge:

The Federation supports this proposal in principle with the understanding that the Fish and Wildlife Service (FWS) will obtain full cooperation from the Bureau of Land Management (BLM) in managing the proposed utility corridor to insure that normal caribou migration is not disrupted by a pipeline. The proposal area provides habitat for a great variety of birds including the endangered arctic peregrine falcon. Moose, dall sheep, brown/grizzly bear, and the winter range of the Porcupine caribou herd are found in this area. The Federation favors expanding the proposal to include 2.1 million acres of public interest land within the AEC. The inclusion of this land would further protect the migration routes of Alaska's largest caribou herd.

Yukon-Charley National Rivers:

The Federation supports the proposal in principle. However, we feel that any development in the area should be done in a manner that will not significantly affect fish and wildlife resources, especially the nesting grounds of the endangered peregrine falcon which are found along the bluffs of the Yukon River. Scientific management of fish and wildlife resources within the area should emphasize enhancing the habitat of the peregrine falcon. Additionally, the Federation believes the proposal should be broadened to include the entire area in which the partially gray fannin color phase of the dall sheep occurs since this is its only known location in the United States.

Harding Icefield-Kenai Fjords National Monument:

The Federation supports this proposal in principle. However, we would like to express our disappointment about the abandonment of plans to include that portion consisting

of the Pye and Chisweil Islands and the Lower Harris and Aialik Peninsulas in a proposed national wildlife refuge. We urge the NPS to give these areas careful consideration in regards to managing their wildlife resources, which include marine mammals and seabird colonies. 253

Gates of the Arctic National Park:

The Federation supports this proposal in principle which would allow for preservation of wildlife habitat. As we explained in our comments on the Noatak National Arctic Range, we feel that the headwaters of the Noatak River should be under the Noatak proposal.

Togiak National Wildlife Refuge:

The Federation supports this proposal in principle. The large variety and abundance of wildlife in the area easily justifies the creation of a national wildlife refuge to insure the continued viability of this renewable resource. Consideration should be given to modifying the proposal to align the seaward boundary of the proposed refuge more closely with the areas of seabird foraging.

Yukon Delta National Wildlife Refuge:

Our prime concern is for the abundant fish and wildlife resources found within this area. In keeping with the goal of establishing scientific wildlife management programs in wildlife populations, the Federation endorses this proposal in principle.

Chukchi-Imuruk National Reserve:

The Federation supports this proposal in principle with the understanding that the concepts of wildlife management described in the draft EIS will not be altered. We agree that this area contains significant cultural and archeological features which justify its inclusion in the National Park System.

Yukon-Kuskokwim National Forest:

The Federation agrees in principle with the basic proposal described in the draft EIS. We encourage the USFS to use a variety of habitat management tools to insure that the quality of the wildlife resources in the area is not diminished by other aspects of a multiple-use management program.

Cape Krusenstern National Monument:

Our prime concern is for the welfare of the fish and wildlife resources in the proposal. Hence, the Federation can support in principle the proposal to establish a national monument to preserve the outstanding cultural features of the area provided that the fish and wildlife resources are properly managed.

Katmai National Park:

The Federation recognizes the need to provide sanctuary for brown bears and to provide

protection for the natural spawning areas of the sockeye salmon. Therefore, we can agree in principle with the proposal to establish a national park to preserve this area for future generations.

Lake Clark National Park:

The Federation can support in principle this proposal as it is described in the draft EIS. We especially endorse the provision to allow sport hunting in certain sections of the park.

Mount McKinley National Park:

The Federation supports the proposed additions to Mount McKinley National Park. The additions will provide outstanding recreational opportunities, easily accessible to Alaskans by highway and railroad from Fairbanks and Anchorage.

Unalakleet National Wild River:

The Federation supports the proposal in principle. Administration as a wild river will provide remarkable outdoor recreation while preserving the primitive character of the river.

Fortymile National Wild and Scenic River:

The Federation supports this proposal in principle. Its accessibility from the Alaska Highway should encourage people traveling to Alaska from the lower forty-eight states to visit and enjoy the numerous outdoor recreation opportunities provided by this proposal.

We thank you for this opportunity to express our views.

Sincerely,

Thomas L. Kimball

THOMAS L. KIMBALL
Executive Vice President

cc: Secretary of the Interior
Secretary of Agriculture
Chairman, Senate Interior and Insular Affairs Committee
Chairman, House Interior and Insular Affairs Committee
NWF Officers and Staff
A. W. "Bud" Boddy

RESPONSE TO COMMENTS BY
THE NATIONAL WILDLIFE FEDERATION

253. These islands and peninsulas, under the present proposal, would still be under joint management by NPS and FWS. However they would no longer be contained in the Fish and Wildlife's Coastal Refuges proposal. Nevertheless inclusion of these areas in Coastal Refuges is still considered in Chapter VIII,C.

The Nature Conservancy

1800 North Kent Street, Arlington, Virginia 22209
(703) 524-3151

March 18, 1974

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem:

Please expand the NEPA process to preserve Alaskan Lands to include the preservation of biological diversity.

I am enclosing an excellent statement of this vital concept written by Professor E. O. Wilson for lay readers of the Harvard Magazine.

It is imperative that we have the humility to preserve natural areas for their own sake and not necessarily for our use, convenience and profit.

Alaska is our last chance to demonstrate that we have learned from the environmental disaster perpetrated in the name of growth, progress, boundless frontiers, infinite energy, etc.

Please let's develop a true stewardship ethic on behalf of our last remaining wilderness natural area. Let's value it for what it is and not what some think it should be made to be.

Sincerely,

Orville M. Tice

Orville M. Tice
Director of Development

OMT/lt
Enc

The conservation of life

We are a long way from understanding all the economic, health, and aesthetic advantages of species diversity. Like latter-day Noahs, we had better work to insure the variety of earth's creatures.

by Edward O. Wilson

In a world of shrinking faith and uncertain trumpets, very few moral precepts are any longer accepted as absolute. We can nevertheless hope that one of them will be the ethic of organic diversity, which goes like this: Man must conduct himself in such a way that he adds as little as possible to the extinction rate of species on earth. Wherever he can, without seriously threatening his own welfare, he should actively reduce the extinction rate, thereby increasing the number of species that can survive in equilibrium on the globe.

Of course there have to be exceptions to this dictum. If the genus *Plasmodium* disappeared from the face of the earth, and took with it all of the agony it causes human beings and wildlife species, few people would mourn. The genus includes the parasites that cause malaria, and we are not likely to delay its extinction. In general, however, we will do well to recognize that man is the steward of the world's natural resources, the self-appointed but still profoundly ignorant steward; that the living part of the environment is still mostly unknown to him; and that he has therefore scarcely begun to conceive of the possible benefits that the world's organisms will ultimately bring in economic welfare, health, and aesthetic pleasure.

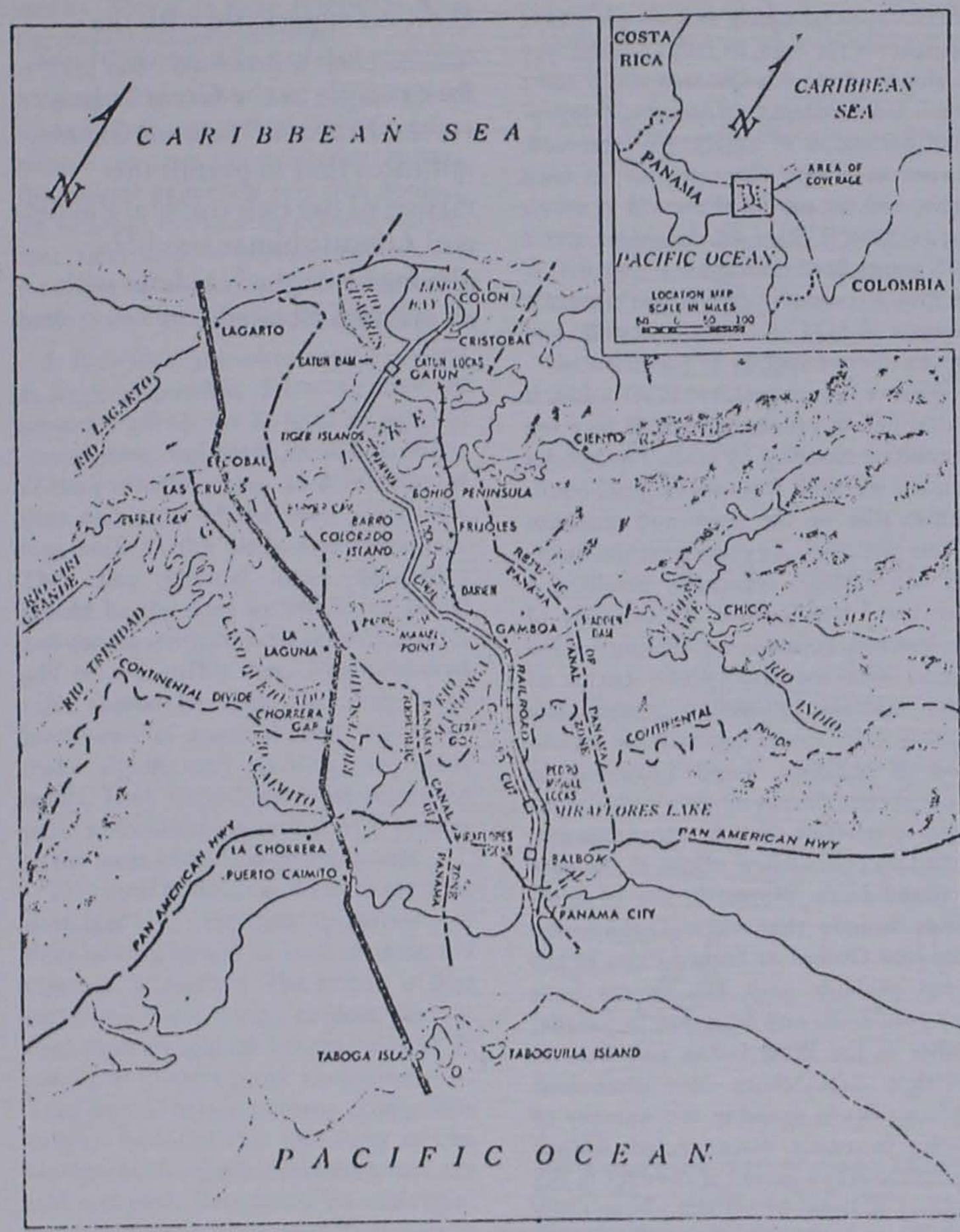
To sense the depth of man's ignorance in these matters, consider that biologists do not even know to the nearest order of magnitude how many species exist. Ten years ago the popularly accepted figure for animals was the British ecologist C. B. Williams's estimate of three million, based on extrapolations of species-abundance curves. Now some authors use the figure ten million, an order-of-magnitude conjecture advanced in the manner of physics. The reason for the upward revision is twofold. First, habitats previously thought to be barren or sparsely populated, such as the deep sea floor, have been found to contain a rich variety of organisms. Whole faunas, such as the marine annelids, abyssyal benthos, and many insect taxa, are still in the earliest stages of Linnaean exploration. Second, we have discovered that a great many species exist that are very hard to distinguish, that large complexes of poorly defined sibling species are common even in the better known animal and plant groups.

All this lack of information must be balanced by an equal amount of caution. Our best strategy is a holding operation, by which diversity is preserved through any reasonable means until systematics, ecology, and evolutionary theory work their way up from the Stone Age toward some degree of mastery of the essential subject matter.

As an example of the worst thing that biologists might let slip by them, consider the possibility that the animal and plant life of the Atlantic and Pacific could be mingled by migration through a new Panamanian sea-level canal proposed for construction in the 1980's. The present Panama Canal is based on a series of fresh-water locks, which, by lucky circumstance, have prevented the free migration of organisms from the Atlantic to the Pacific.

Three to five million years ago the emergence of the Panama Isthmus cut the straits that connected the Pacific Ocean and Caribbean Sea, isolating the marine populations on either side. The existing ecological differences between the inshore habitats are substantial. The Atlantic coast has moderate tides, sandy beaches, mangrove swamps, and rich coral reefs. The Pacific side is characterized by strong tides, more silty water, periodic upwellings of cold nutrient-rich water, rocky shores created by extensive lava flows, and limited, depauperate coral reefs. Accelerated no doubt by such differences in the physical environment, evolution has proceeded mostly to the species level and beyond. Of the roughly 20,000 species of marine animals and plants that occur on both sides of the Panama Isthmus, perhaps no more than 10 percent are held in common. In the extreme case of the

Edward O. Wilson (opposite) is professor of zoology and curator in entomology at the Museum of Comparative Zoology at Harvard. His chief interests are biogeography and species diversity, and the social behavior of insects, particularly ants. He is the author, with R. H. MacArthur, of The Theory of Island Biogeography *(1967), the original work on that subject, and of* The Insect Societies *(1971). An enthusiastic teacher, he gives Harvard's elementary biology course, as well as a seminar for graduate students on the feasibility of a general science of sociobiology.*



The present Panama Canal consists of a series of locks, which isolate the marine populations of the Pacific Ocean and the Caribbean Sea. A new Panamanian sea-level canal, proposed for construction in the 1980's, by allowing the migration of animals and plants between the two oceans, might cause widespread species extinction. The new canal's route, recommended by the Atlantic-Pacific Interoceanic Canal Study Commission in its special report to the President, is shown here as the heavy black line running ten miles to the west of the existing canal.

fishes and mollusks, fewer than 1 percent are held in common. What would happen if free exchange of these faunas were permitted through a sea-level canal? On this point biologists have fallen into total disagreement. The following diverse opinions have been expressed in various articles, seminars, and government hearings during the past eight years:

1. There would be only a limited exchange of species, mostly from the Pacific to the Atlantic. Life in the two oceans would not be seriously disturbed.

2. The Atlantic marine biota—the ecological entity made up of all the region's animal and plant life—is richer in species and hence possesses superior competitive ability. If allowed to invade through a sea-level canal, it would cause widespread extinction in the Pacific biota. The combined extinction rates of the Pacific and Atlantic elements might reach 5,000 species.

3. The argument in 2 is based on the postulate that the greater the number of species, the greater their individual competitive ability. An alternate hypothesis, which cannot be excluded on the basis of existing knowledge, is that the greater fluctuation of the Pacific inshore environment induces the evolution of a higher proportion of opportunistic species, capable of wedging their way into existing biotas, especially within areas disturbed to some extent by man's activities. If this model is correct, and the conjecture in 2 is wrong, the flow of organisms would be predominantly from the Pacific to the Atlantic. In either case, the total impact on the two oceans cannot be predicted.

4. An exchange of biotas would be generally unpredictable and dangerous. Species could extinguish each other by excessive amounts of competition or loss of fitness through uncontrolled hybridization.

In fact, biogeographers—scientists engaged in the biological study of the geographical distribution of plants and animals—have neither the theory nor the previous experience to predict the outcome of an unimpeded exchange of faunas across a sea-level Panamanian canal. This incapacity has become increasingly clear to concerned scientists who have tried to evaluate the evidence dispassionately. Nevertheless, a strongly cautious approach seems mandatory. It is necessitated not just by the very real possibility of widespread species extinction. The introduction of only one wrong species, such as the yellow bellied sea snake from the eastern Pacific into the

Atlantic Ocean, could inflict enough economic or ecological damage to justify the attempt to prevent any migration at all.

Previous experience with the careless mixing of aquatic biotas, for example in the Great Lakes via the Erie and Welland Canals, indicates that to permit the mixing of the rich tropical Pacific and Atlantic biotas would be playing ecological roulette with all cylinders loaded. Moreover, a unique biogeographic experiment of global proportions would thereby have been performed, without adequate preparation. The natural setting for the experiment took millions of years to develop and cannot be repeated. Biology should be fully prepared before allowing it to proceed even piecemeal. For these reasons two groups of biologists—a University of Miami team supported by the Battelle Memorial Institute, and the Committee of Ecological Research for the Interoceanic Canal (CERIC) of the National Academy of Sciences—have independently recommended that some kind of biological barrier be constructed across the canal before it is opened. The barrier can take any one or a combination of several forms: bubble curtains, ultrasonic screens, intrusions of heated or fresh water, and others. The details will be a straightforward exercise in engineering, infinitely simpler than the one biologists and the rest of humanity would face if the mixing is allowed to proceed.

Biogeographers cannot predict the outcome of mixing the Pacific and Atlantic biotas, except to say that it would be dangerous, because such a prediction requires a solution to one of the most complex problems they can ever conceivably face. Similarly, molecular biologists cannot say how the tissues of man and other higher organisms develop, and behavioral biologists are unable to explain conscious thought, because these problems are also the Mount Everests of their respective disciplines. Like the rest of biology, however, biogeography is far from helpless when dealing with smaller, better circumscribed units.

A quantitative theory called island biogeography can be very helpful to us in our efforts to encourage organic diversity in the world. The most straightforward application of the theory is in the design of natural preserves. Natural habitats have always been fragmented into island-like enclaves. With certain exceptions, such as the arctic tundra, man has intensified this process, reducing the fragments in size and increasing their degree of isolation. The number of species belonging to a single group, such as birds, ants, or flowering plants, that will exist in equilibrium on a given island is a function of the area and the degree of isolation of the island. When the distance to the principal source area is held constant, whether that area is a continent, a set of islands, or just a similar habitat nearby, the number of species (S) increases approximately as a simple power function of the area, as follows: $\log S = a + z \log A$, where A is the area and a and z are fitted constants. When the independent parameter of isolation is increased, a rises at a rate characteristic of each taxon and the part of the world in which the relation is observed. In most cases z falls somewhere between 0.2 and 0.4. A very rough rule of thumb is that a tenfold increase in area results in a doubling of the number of species at equilibrium.

When a nature preserve is set aside, it is destined to become an island in a sea of habitats modified by man. The species number will shift from its original equilibrium due to the area and distance effects just cited. As years pass the diversity will decline, eventually reaching a new, lower steady state. An estimate of the loss can be made by comparing the reserve with the area-species curves of older systems, providing appropriate systems exist under comparable conditions of isolation. Jared Diamond of U.C.L.A. has developed an elegant technique to estimate the relaxation rate and secondary equilibrium values in the case of island birds. He made use of land-bridge islands that were disconnected from New Guinea at known times in the recent geologic past. His results have been confirmed and extended in parallel studies in the West Indies and Central America. Researchers have discovered that significant drops in the number of species in newly disconnected islands take place over a period of decades in the smallest islands, which are comparable in area to small natural reserves on continents, and during centuries for islands comparable in size to our largest national parks. Barro Colorado Island in Panama provides an alarming example of the high potential decrement rate on small islands. B.C.I. is actually a forested hilltop that was surrounded by water fifty to sixty years ago when Lake Gatun was formed in connection with the construction of the Panama Canal. It has been a nature preserve almost since the time of its isolation. Inserting the area of the island (6.5 mi.^{2}) and its known period of

Previous experience with the careless mixing of aquatic biotas, for example in the Great Lakes via the Erie and Welland Canals, indicates that to permit the mixing of the rich tropical Pacific and Atlantic biotas would be playing ecological roulette with all cylinders loaded.

isolation into an extinction model based on the West Indian studies. John Terborgh of Princeton University estimated that the number of resident bird species should have declined from the original 205 observed to a current fauna of 188 species, a loss of sixteen or seventeen species. This is in close agreement with the decline actually observed.

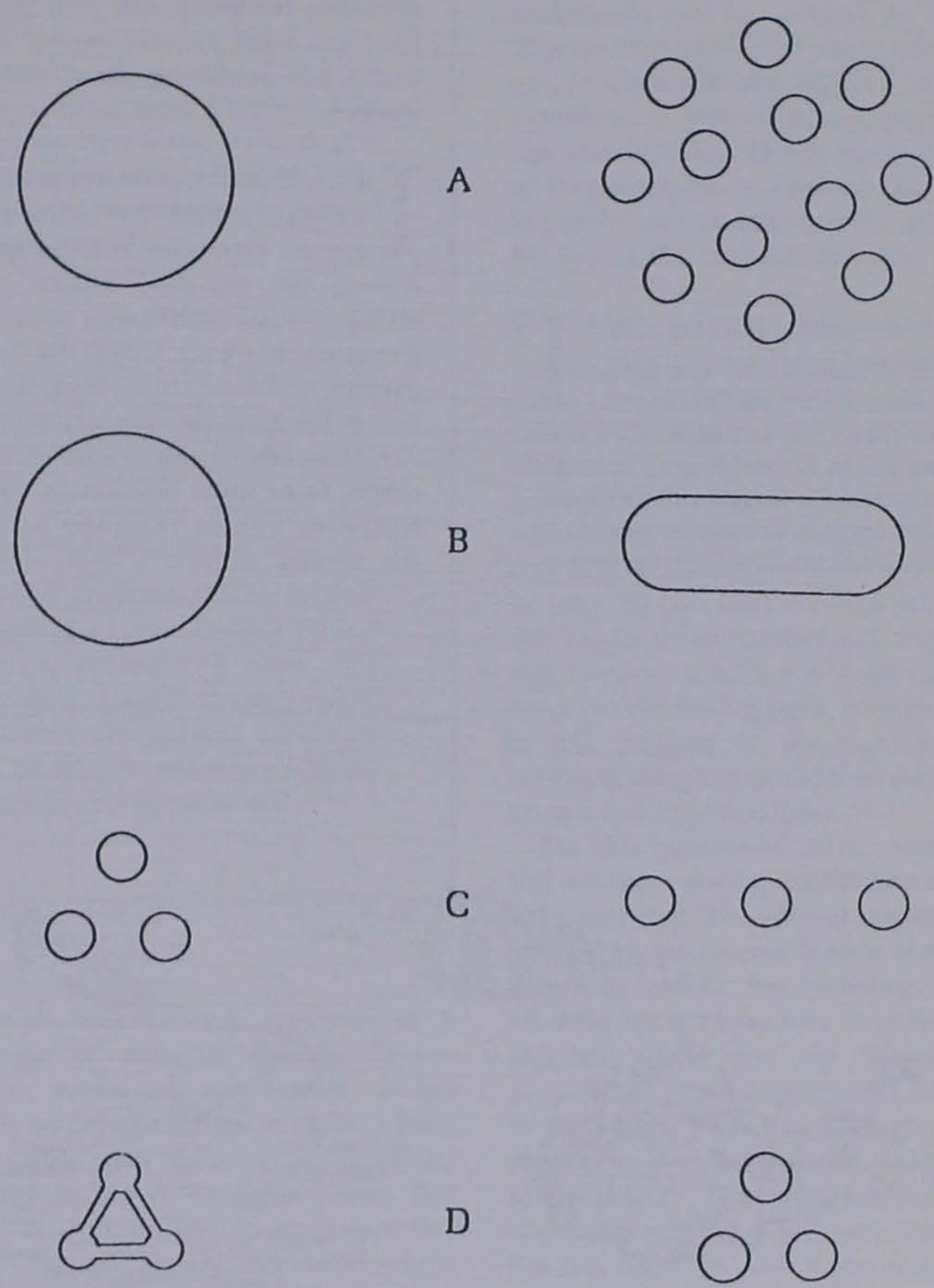
The new information from island biogeography shows that planners and managers of national parks and other natural preserves will be prudent to take the natural extinction rate into account (in addition to the man-induced extinction rate) and to choose appropriate measures to minimize it. The following basic procedures should be included:

1. Individual preserves must be made as large as possible. Since the areas of preserves will always be fixed by political compromise, estimates should be made of the extinction rates, as a function of time and area, of the most vulnerable taxa such as the birds and mammals. Then the minimal areas demanded should be the ones at which the initial and consequently highest extinction rates will be reasonably low. The projected rates should be such that only large increments of reserved land will lower them significantly further. In other words, land acquisition must reach the point of diminishing return with respect to the most extinction-prone groups.

2. Unique habitats and biotas are best contained in multiple preserves,and these isolates should be located as closely together as possible. The reason is that extinction has a strong random component. Species seldom become extinct in every part of their range simultaneously. They tend to persist because ecologically suitable localities that lose them can be recolonized from other localities that are still occupied. Reciprocal intercolonization of preserves can proceed indefinitely through time and, if aided by deliberate transplantations, might extend the life of species well beyond what it would be under natural circumstances.

3. Because biogeographers have discovered that peninsulas have fewer species than central portions of continents, preserves of a fixed area should be as round in shape and continuous as possible. (This principle and those embodied in the first two recommendations are illustrated in the diagram at right.)

4. Extinction models should not be



The geometrical rules of design of natural preserves, based on current biogeographic theory. The designs on the left result in each case in lower spontaneous extinction rates than the complementary ones on the right. Both the left and the right figures have the same total area and represent preserves in a homogeneous environment. A: a continuous preserve is better than a fragmented one, due to the distance and area effects. B: a round design is best, due to the peninsula effect. C: clumped fragments are better than those arranged linearly, due to the distance effect. D: if the preserve must be divided, extinction will be lower when the fragments can be connected by corridors of natural habitat, no matter how thin the corridors. Another principle, not incorporated in this figure, is that whatever the design of a given preserve, its extinction rate can be greatly lowered if similar ones are located nearby.

restricted to the most conspicuous or vulnerable organisms but should eventually be developed for all taxa. Those displaying the highest degrees of endemicity and vulnerability (the two phenomena are generally correlated) deserve first attention. No group, not even the humblest and most obscure among invertebrates and microorganisms, should be ignored.

It is within the power of science not merely to hold down the rate of species extinction but to reverse it. Among the principal aspects of the ecology of communities now under intensive study is what's called the "species packing problem." In essence, the problem is the identification of those traits that allow certain sets of species, but not others, to be fitted together in the same ecosystem without markedly increasing the species extinction rate. In other words, how tightly can species be packed? During colonization by undisturbed biotas, congenial sets of species are gradually assembled by chance alone, raising the steady-state species number to what has been called the assortative equilibrium. Theoretically, assortative equilibria can be planned that exceed any occurring in nature. Species might even be drawn from different parts of the world—not willy-nilly, as in the careless importations of the past, but after careful ecological analysis has identified them as candidates for insertion into new faunas. Some of the first and most important introductions would surely be "orphan species," those on the brink of extinction in their native range but capable of being fitted into certain alien communities elsewhere. I do not suggest that the state of the art is advanced enough for us to proceed with planned biotic mixing, only that species packing is one of the techniques of applied biogeography that seems likely to become practicable within the next several decades on the basis of current and projected research.

We can create wholly new biological communities where little existed before. An artificial reef in California's Santa Monica Bay, although composed of the humblest materials dumped onto the muddy bottom, greatly increased the diversity of marine life in the area.

Optimism is further justified by the favorable outcome of a few biotic mixtures that have already occurred haphazardly, indicating a degree of flexibility on the part of species that will provide biogeographers with some margin for error. The Kaingaroa Forest of New Zealand, for example, contains 250,000 acres of exotic conifers, including *Pinus radiata*, *P. ponderosa*, *P. contorta*, and *Pseudotsuga taxifolia* from North America, and *Pinus nigra* from southern Europe. Introduced native birds mingle with endemic New Zealand species in this synthetic environment. Ecological differentiation is well marked; no two species have the same feeding habit, and the insectivorous birds exploit all of the major feeding niches except that of woodpeckers. The really surprising fact, however, is that some of the native species are now as abundant in the Kaingaroa Forest as in almost any native forest, and some are more abundant than in most of the remainder of their range. Furthermore, the invertebrate fauna of the forest consists mostly of native species.

Two circumstances are special in the case of the birds. First, the number of species is still small, largely because the New Zealand fauna was poorly developed to start with, and the mixed community has probably not yet met many of the difficulties in packing that would be routine in large continental faunas. Second, forest birds are differentiated to a large degree by foliage height and profile rather than by the species of trees in which they live. Certain kinds of insects that feed on only one or a few kinds of plants, particularly those specializing on hardwoods, would in most instances find it impossible to penetrate the Kaingaroa conifers. Yet the lesson is clear: what works in part by accident can be brought closer to perfection through design.

Ultimately, design might also include the artificial selection of strains, or even the creation of new species, for the purposes of biotic enrichment. If theory and experiment indicate that an orphaned species cannot be fitted into any existing communities, strains might be selected

A reading list on biological diversity and its preservation

The following books and articles are suggested by Edward Wilson for a more extended introduction to the basic principles of ecology, especially those that relate to conservation and the preservation of diversity.

Books

Edward O. Wilson *et al.*, *Life on Earth*, Sinauer Associates, Stamford, Conn., 1973. This elementary biology textbook contains most of the fundamental ideas of modern ecology and biogeography and can serve as a stepping stone to all but the most technical reports on these subjects.

Robert H. MacArthur, *Geographical Ecology: Patterns in the Distribution of Species*, Harper and Row, New York, 1972. A somewhat advanced but definitive textbook that explains the current status of the theory of species diversity.

David W. Ehrenfeld, *Biological Conservation*, Holt, Rinehart, and Winston, New York, 1970. A provocative and clearly written introduction to the practical aspects of the subject.

Articles

W. I. Aron and S. H. Smith, "Ship canals and aquatic ecosystems," Science, Volume 174, pages 13-20, 1971. A balanced review of the perils of mixing animals and plants from different oceans.

Jared M. Diamond, "Distributional ecology of New Guinea birds," Science, Volume 179, pages 759-769, 1973. Describes the method by which the natural extinction rate on islands and other isolated preserves can be estimated.

within captive populations of that species and eventually inserted into one or more existing communities. I do not seriously suggest that such a procedure will be followed in the foreseeable future for any but a very few of the organisms most valued by man. Furthermore, the genetic molding of communities is a technology that cannot be seriously contemplated until the inchoate discipline of population ecology has moved closer to a full solution of the species packing problem.

Many of the earth's major habitats are biological deserts: the open sea, the ice caps, some of the trace-element barrens, and the real deserts, the extremes of which are virtually lifeless. Quite by coincidence, technology is at this moment driving toward two major goals that could transform these areas; an unlimited or at least vastly greater source of energy, and, as one of the principal benefits of the first, the cheap desalinization of sea water. With the achievement of these goals, men will move increasingly onto the land deserts, carrying communities of organisms with them. One may hope that we will not be satisfied with limiting ourselves to a baggage of domestic animals, houseplants, pests, and commensals. It lies easily within our power to create wholly new parks and reserves where nothing existed before in historical times. But what will go into these *de novo* communities? Thought about this subject sharpens one's vision of the future of applied biogeography.

In fact, the deliberate creation of new biological communities has already begun. Large areas of desert-like barrens in Australia have been transformed into agricultural land by the simple addition of zinc, copper, and molybdenum, "trace" elements required for life that were previously present in abnormally low quantities. Marine biologists have discovered that artificial reefs, with rich complements of reef organisms, can be created just by dumping concrete rubble, abandoned automobiles, used automobile tires, and similar inert refuse onto the mud or sand floors of shallow marine waters. Successful experiments of this nature have been conducted off the shores of Florida and California.

What these efforts engender are in effect habitat islands, the biotas of which grow and equilibrate according to the same laws of biogeography governing wholly natural islands. The communities are not likely to be as diverse as those that have evolved for millions of years in the natural islands, yet the process of enrichment can be speeded by the deliberate importation of compatible species to reach new and higher assortative equilibria, to create intricate, fascinating new communities. This is another aspect of biogeographic technology that ongoing basic research might render practicable during the next few decades.

The greatest misfortune that awaits the human intellect is to be no longer faced with something commensurate with its capacity for wonder. If the golden age of science really ends, and research shrinks to a few remote and arcane frontiers accessible only to specialists, the wonder will indeed be gone. By that time even the pre-scientific myths that sustained our ancestors, and intrigue us still, would have largely evaporated—having been accounted for in full, perhaps by the right kind of neurophysiological analysis of the limbic system and hypothalamus.

But this exhaustion of the wonderful will not occur during the lifetime of anyone now living. The ultimate complexity, offering an unexplored terrain of virtually infinite extent, lies in biology. Even after the cell has been torn down and put together again, and the labyrinthine mysteries of tissue development followed to their ends, there lie ahead the much more extensive challenges of ecology and biogeography. The full exploration of organic diversity is a prospect that suits the biocentric human brain, especially those emotive centers that evolved to make us superior hunters and agriculturists. The same instincts that motivate the bird watcher, the butterfly collector, and the backyard gardener can indefinitely sustain the scientifically curious segment of a more sophisticated human population in the pursuits of ecology and biogeography.

The most interesting part of the universe is right here. We have a biotic planet, and the chances of finding another one within scores of light years are remote indeed. A biotic planet, with millions of species on it, is an infinitely more interesting puzzle than any number of lifeless planets. And the possibilities of ecosystems manipulation confront us with mysteries that only generations more of study and creative work can solve. □

NORTHWESTERN UNIVERSITY
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PUBLIC LANDS PROJECT

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TELEPHONE (312) 492-3559

Mr. Theodor Swem
Chairman, Alaska Planning Group
U.S. Department of Interior
Washington, D.C. 20240

21 June 1974
In re: Harding Icefield-Kenai
Fjords National Monument - DEIS

Dear Mr. Swem:

We have reviewed the DEIS on the Harding Icefield-Kenai Fjords National Monument and have some comments to offer.

(1) The DEIS discusses subsistence hunting by natives, but subsistence hunting is never defined. You do discuss subsistence hunting and being involved in a cash economy as alternate ways of life in the villages (p. 132). We think you ought to indicate clearly that subsistence hunting can mean that natives can hunt for their table (as opposed to market hunting), even if also receiving cash income. Moreover, to the extent that native traditions allow hunters to provide meat for other non-hunting natives, that activity is also defined as subsistence hunting. We think that, to the extent it is consistent with other goals of the monument, that it should not only be permissible for natives to engage in subsistence hunting, but it ought to be a monument policy to promote and maintain subsistence hunting, and so the NPS should engage in the necessary wildlife management activities to help insure a continuance of native hunting. Habitat manipulation, etc. may seem particularly appropriate in the A.E.C. 254

(2) We are quite concerned that the DEIS fails to consider adequately the social impact and consequences of the dramatic increase in visitation. Because of closeness to Anchorage and decent transportation, you anticipate quite heavy recreational use of the national monument; that may cause quite an impact on adjoining communities. But such upsets are largely unexamined and unplanned for:

a) On pages 118 and 119 of the DEIS, you discuss present water quality in and around Seward. "There are no known, significant sources of pollution other than the fish plant and timber mill in Seward, and these do not create substantial water pollution problems. The Seward sewage system has a treatment plant. It is understood to be inadequate for the possible expansion, but can be improved and enlarged." 255

We think this needs more discussion and planning. We think the fact that the sewage system "can be improved and enlarged" is not enough to insure that it will be improved and enlarged to maintain the high quality of the water. Because, in large measure, the increased treatment needs are created as a product of this federal activity, the NPS should and must work closely with local officials, federal EPA, etc. to insure adequate and timely funding of the necessary sewage treatment facilities. There is no disucssion of whether or not the increased population pressures, etc. on the villages of Port Graham and English Bay will create a need

for sewage treatment facilities, and, if so, how it will be provided. 255

b) While you discuss, in a very limited way, the impact of increased recreational use on the existing economy, particularly of the native villages, there is virtually no consideration of the social consequances of the development of this magnet park. But it is quite clear that the numbers of urban people who will flow into the area, combined with some new types of occupational opportunities (tourist and/or Monument related), and increased transportation/ communication links between remote villages and urban centers such as Anchorage, are all likely to have a profound effect upon traditional social and cultural life. Because (1) there is considerable scholarly work concerning the impact of urbanization and urban influences upon traditional village life such as will occur here, and because (2) there are various tested and untested ways to ameliorate some of the inevitable social disruptions which will occur, we think it is absolutely incumbent upon the NPS to consider this, in much detail, in the EIS review process. 256

(3) We think you ought to increase the Monument commitment to native cultures and traditions, and also archeological work. We ask you to create job hiring preferences for natives; also tailor the work tasks so that they do not interfere with village traditions and obligations. On pages 125 and 126 you reveal intentions to identify and evaluate all cultural sites -- especially archeological remains of the Unixkugmet Eskimo. We encourage you to investigate such sites and materials, and feature native cultures and traditions among the major interpretative goals of the National Monument. 257

Thank you for considering our comments. Would you please send us a copy of the FEIS, when prepared.

Sincerely,

Raymond Felton

Ray Felton

Andrew Barkin

Andrew Barkin

RF, AB:hh

254. The subsistence policy for the proposal has been changed, and now reads as follows: Except as may be otherwise prohibited by Federal or State law, existing traditional subsistence uses of renewable resources will be permitted until it is determined by the Secretary that utilization of these resources is neither economically or physically necessary to maintain human life nor necessary to provide opportunities for the survival of Alaskan cultures centering on subsistence as a way of life.

If it is demonstrated that continued subsistence uses may result in a progressive reduction of animal or plant resources whoch could lead to long range alternations of ecosystems, the managing agency, following consultation with the Alaska Department of Fish and Game, communities, and affected individuals, shall have the authority to restrict subsistence activities in part or all of the monument.

Chapter I,B also proposes: "That cooperation be sought with all concerned State agencies, communities, and affected individuals, in arriving at an equitable and workable management plan for subsistence resource uses in the proposal area, including indepth study of subsistence lifestyles and resource uses." Further information on subsistence is contained in Chapter I, C.

We realize that subsistence hunting and fishing can coexist with seasonal wage employment and that villagers often hunt to provide for more than one family in their village. This would be reflected in the process of working out an equitable and workable management plan for subsistence resource uses in the proposal area."

255. The impact discussion on the City of Seward and other communities has been reorganized and rewritten. (See Chapter III, sections F-1 through F-7 and G.)

With reference to the sewage system at Seward, recent information has indicated that there is no existing treatment plant, but that a study to consider one is under way. The specific impacts on water quality of potential monument-related developments is discussed in Chapter III, D-1.

We are not making specific proposals for improvements or additions to sewage systems at this time because none of the development proposals are finalized. During the ongoing planning process for the monument, studies which will include water quality considerations will be undertaken for any specific development proposals. Each such proposal will undergo an environmental assessment and all studies will be made in accordance with The National Environmental Policy Act.

In addition, both the legislative and administrative proposals (See Chapter I, A and B) provide for cooperative planning and management between the NPS and local, State, Native, Federal agencies, and other groups. This type of coordinated planning would certainly apply to support facilities, such as waste disposal facilities, for monument-related development.

256. The specific impacts on the community social and cultural life have been reanalized and are discussed in Chapter III, F-6. Other community-related impacts are discussed in the other parts of section III, F and also III, G. As is stated in those sections, it is felt that the great majority of monument visitation will accrue to the city of Seward rather than the villages of English Bay and Port Graham. Most of the impacts related to the Natives will probably occur on Native-selected lands in the AEC rather than the villages themselves. Nevertheless, as has been discussed above, the Park Service would cooperate with local governments and representatives to coordinate development planning so that the negative effects of increased visitation are ameliorated as much as possible, and that possible benefits are fully recognized.

257. For changes in monument policy toward subsistence see response 254 above and Chapter I sections A, B and C. Specifically, purpose number four of the legislative proposal reads as follows: "To foster Native participation in, and benefit from, the provision of facilities for visitor use."

In reference to archeological and cultural resources: Chapter I, B calls for "Research to locate, identify, and evaluate historical, archeological, architectural, and cultural resources. These resources will be preserved where possible, and they will be interpreted for the public where feasible. Provisions of the National Historic Preservation Act and other applicable statutes will be observed. Compliance with these statutes will call for consultation with the Advisory Council on Historic Preservation and the Alaska State Historic Preservation Officer."

Further information on archeologic and cultural resources is contained in Chapter II, B-1 and III, H.

Saguaro Ecology Club
6250 82nd Street
Scottsdale, Arizona
85253

Please reply to:
4725 N. 70th St.
Scottsdale, Az. 85251

June 3, 1974

Theodor R. Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington D.C. 20240

Dear Sir:

The Saguaro Ecology Club supports the establishment of Harding Ice Field - Kenai Fiords National Monument. However, the draft Environmental Impact Statement did not consider the following:

1) The possibility of including native-selected lands in the park with the native's permission. 258

2) Eliminating conflicts with the natives by selecting deficiency withdrawals outside their corporation boundaries. 259

3) The alternative of designating the area a National Park and adding Nat'l Forest lands east of Seward. 260

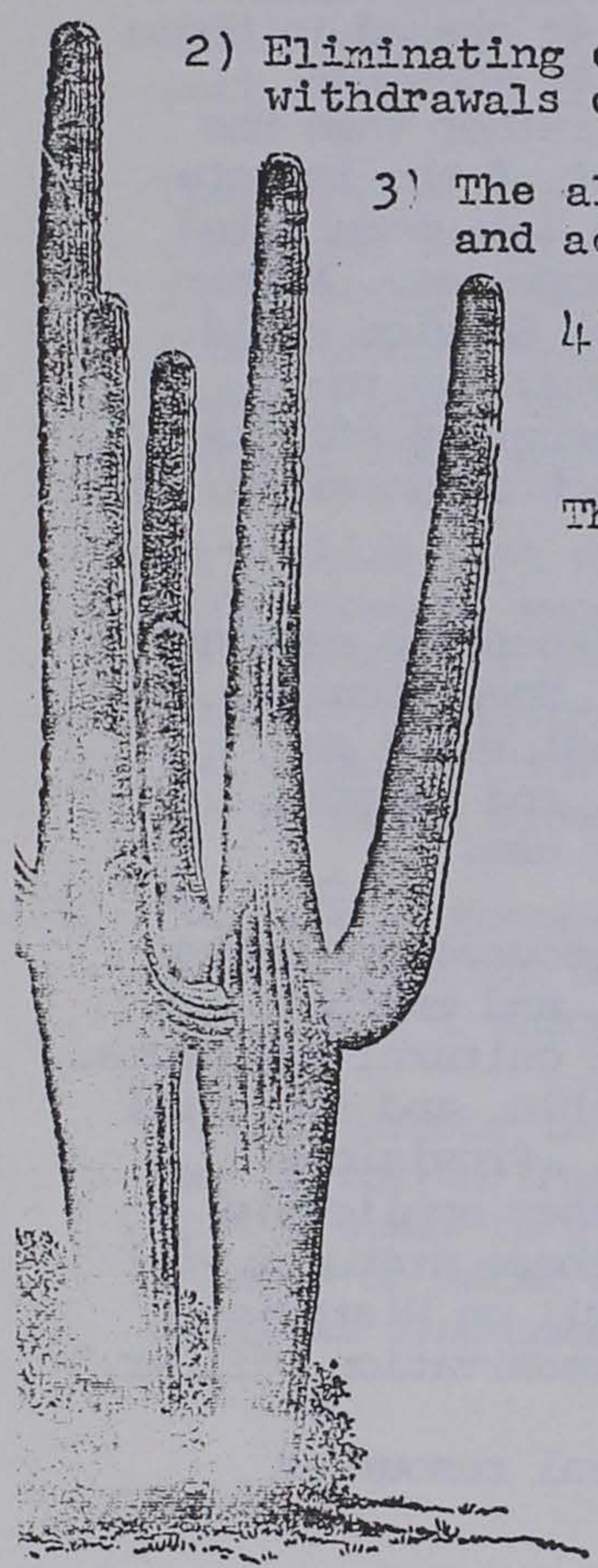
4) The inescapable problems of dual management, which has usually proved to be a spectacular failure. 261

Thank you for receiving our comments.

Sincerely,

Tom Wright

Tom Wright



RESPONSES TO COMMENTS BY THE
SAGUARO ECOLOGY CLUB

Note: This comment was identical in content to those received from the following organizations:

Bryan Outdoor Resources Group
Ecology Center of Southern California
Friends of the Earth, Arizona Branch
Western Wilderness Association
The Wilderness Society

The comments from these 5 organizations are not printed since they have an identical content to this letter. Thus this response will apply to all 5 other letters, and they will have no individual responses printed.

258. The legislative proposal in Chapter I,A, takes into account the possibility of including lands donated by Native landowners.

It reads in part: "...that the Secretary may revise the boundary of the monument to include not to exceed 453,000 acres of lands and waters depicted on the Proposal map as "Areas of Ecological Concern" which are not selected by Native corporations under provisions of the Alaska Native Claims Settlement Act. Within the boundaries of the monument as established in legislation or as such boundaries may be revised, the Secretary is authorized to acquire lands, waters, and interests therein by donation (emphasis added), purchase, or exchange, except that property owned by the State of Alaska or any political subdivision thereof may be acquired only by donation or exchange, and property owned by any Native fillage or corporation may be acquired only with the concurrence of such owner.

259. Under the terms of the Alaska Native Claims Settlement Act, lands withdrawn for Native selection must be of a "like-kind" to that presently occupied by the Natives and must be reasonably accessible to them. In view of the existing land withdrawal patterns in the region, it was felt that the deficiency lands along the south coast would meet the terms of the Act and that no other reasonable alternatives were available in the area.

260. The decision to make Harding Icefield-Kenai Fjords a National Monument rather than a Park was based primarily on the criteria for parklands as set forth in NPS Administrative Policies.

Because the area was not given park status it does not mean that it would receive any less protection as a monument. Both would be legislatively established and both would carry the same legal management restrictions and stipulations.

Harding-Kenai was made a monument mostly because of the fact that, by Alaskan standards it fit the requirements of scope, space, and diversity that were deemed compatible for designation as a monument.

The alternative of including National Forest lands or other lands from existing, federal management units is not being considered because these lands are presently unavailable for selection and are not covered by the section 17 withdrawals as mandated by ANCSA.

261. The lead agency in the management of this proposal would be the National Park Service. Joint management would apply to the coastal units of the monument and would primarily concern wild-life management. It is felt that the goals of both agencies are consistent with regard to these resources and that the area will benefit from the joint application of the different types of expertise available from the two agencies.

Seward, Alaska.
June I9, I974.

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

From.
Seward Chamber of Commerce
Seward, Alaska.

Dear Mr SWEM:

This report or proposal will address itself to the Federal proposal relating to the Harding Icefield-Kenai Fjords National monument area.

The Proposal as submitted can not be considered a factual one as it relates to the city of Seward, for instance the report indicates that Seward is still an important link for shipping into the interior, this has not been the case since the I964 earthquake, its citizens still being plagued by rumors of the eventual closing down of the Alaska railroad from Seward to Portage. 262

At present the Seward Dock hosts a few log ships a year shipping cattle to Japan, in addition perhaps two or three ships a year hauling scrap iron to Taiwan, when the Cook inlet ice becomes a problem a few barges may come into Seward for unloading rather than face the hazards of the ice in Cook Inlet. 263

Residents of Seward do not consider their winters severe as the average winter temperature in the area is approximately I8 above, heavy snows may occur some years but the city itself has not been isolated because of snowfall depth, slides of snow may from time to time close the highway betueen Portage and Anchorage for a matter of hours only. 264

The city of Seward is unique in as much as all of its citizens injoy a central Sewer and water system, although a study is under way to consider a Sewage Treatment plant it has not been finalized and the study continues. 265

Commercial Fishing must be considered as a mainstay of the community, at present more than a hundred fishing vessels work from the Seward area bringing in Halibut, Crabs of several species as well as Salmon, scallop and Herring, the Port of Seward ranks third in the Nation as a port for Halibut Processing. 266

The Lumber mill in Seward is presently processing about eight million board feet of lumber instead of the four million feet indicated in the proposal. 267

The skill Center for Adult Vocational Training employs approximately (50) teachers and Administrators instead of the (25) indicated in the proposal. 268

The Seward Small Boat Harbor is recognized as being one of the finest in the State with an everincreasing number of boats requesting moorage, an addition this summer will complete the Harbors expansion possibilities and studies are under way to locate a new area for future needs. 269

The proposal indicates there has been no mining in the Nuka Bay area since world war two,however we do know that more than two hundred and fifty thousand dollars has been spent there in the last five years, the value of the Gold recovered is not known at this time. 270

The Proposal Boundary includes the drainage of the Ressurrection River which is a known major spawning stream for Silver and Pink Salmon, any future need to re-habilitate the stream could be illegal if it were under Park Status. 271

Seward Citizens have never invisioned the Harding Icefield being developed into a major Wintertime Ski-Area, we do however feel it offers summer time ski-ing over a large area which should be of interest to the many skiers who now seek summer snow in Chile and Peru, the area is unique in this respect and could offer several choices of recreation to family groups with diversified interests. 272

The following is a list of what the Harding Icefield could offer;
GLACIER SKI*ING, SNOWMOBILE TOURS, SIMULATED POLAR CAMPS for overnight or longer visits.
Over the Snow Vehicle Scenic Tours;and Summer racing Camps.
394 Mountaineering and Outward Bound Camps.
It should be recognized that one Third of the skiers in the United States reside in the States of Washington. Oregon

and California, modern transportation would enable these people to be Ski-ing in a few hours after leaving their homes.

The large population of the Pacific Coast States coupled with a growing amount of recreational time would seem to indicate that the Harding Icefield could and should be developed into a Major Summer time Recreation Area. 272

Exception can be taken in regards to the statement on Page three which says that if this proposal is not enacted and if the Area goes under the Multiple Use Concept that Developement might be years away, we disagree with this since it is well known that the National Parks Service has never been noted for its haste in developing any area regardless of its usé, Park Service developement in Alaska has not been noted for its speed in satisifying the Public. 273

On page I26 your proposal indicates great harm to the area if a largepart of the icefield is assigned recreational status, on the contrary we feel that by permitting recreation over a larger area it will greatly lessen the possibilities of any harmful effects. 274

The Map on Page 2 shows the area to be set aside for Recreation and we feel that were this to be accepted it would offer nothing more than a turn around point for the visitor, to favor this limited area seems totally unrealistic and would be quickly proven so by an enraged public. 275

The Concerns being expressed in your Proposal relating to impact on the Landscape seems to be an extreme one, the ground rules being established for this proposal and the State of Alaska are so restrictive and binding that Conceivably we shall bear Witness to our State being Fenced in with NO-Tresspass Signs being the dominant feature, the State and its proud citizens will of neccessity continue to be Wards of the Goverment because of our inability to manage and Harvest our Natural Resources. 276

Respectfully Submitted

Seward Chamber of Commerce.

James Woern - Pres.

RESPONSE TO COMMENTS BY
THE SEWARD CHAMBER OF COMMERCE

Note: Many of the comments in this letter referred to the Conceptual Master Plan which was published with the Draft Environmental Statement. As these comments are all applicable to the environmental statement as well as the master plan, they have been responded to in the final Environmental Statement.

262. Much of the material on the city of Seward has been corrected and updated. (See Chapter II, sections B-2 through B-9; also Chapter III, sections D, F-5, F-6, F-7, and G). The description of Seward's importance in the regional transportation system has been corrected to reflect the significance of the earthquake. (See Chapter II, B-2). Also, additional information on the transportation network is contained in Chapter II, B-4 and II, B-9.

263. This information has been added to Chapter II, B-9.

264. The text has been changed to reflect this information. (See Chapter II, B-2 and A-5).

265. This information has been included in Chapter, B-2 and also in Chapter III, D.

266. The importance of commercial fishing in the Seward economy was recognized in Chapter III, section F-5: "On the Market Economy" which reads inpart:

"In the present Seward economy, commercial fishing, the largest industry, and timber production, the second largest, together employ 50 percent of the city's work force. The waters in the vicinity of the proposed monument are part of the Outer District of the Cook Inlet Fisheries Management Area. The Outer District accounts for about one eighth of the total Cook Inlet fish catch. Salmon, King crab, herring, halibut, and scallops are harvested. There are canneries at Seward, English Bay and Port Graham."

Further, your information on commercial fishing has been added to Chapter II, B-4 and A-8.

267. The information on the production of the lumber mill has been corrected. (See Chapter II, B-4).

268. The figure for employment at the Skill Center has been corrected. (See Chapter II, B-5).

269. This information has been included in the statement. (See Chapter II, B-7 and Chapter III, G).

270. Information on the recent mining activity in Nuka Bay has been included in Chapter II, A-3 and B-8, as well as Chapter III, F-8. The value of gold recovered in 1973 was $27,000. (Information taken from the Seward City Council letter).

271. Although the Resurrection River is not entirely within the monument boundaries, some of its western tributaries are. Any rehabilitative work on the salmon spawning runs which required physical alteration of the natural environment within monument boundaries would not necessarily be prohibited, but any such proposals would be considered individually , on a case by case basis.

272. The proposal for the Harding Icefield-Kenai Fjords National Monument fully recognizes the recreational potential of the Icefield. One of the five purposes of the legislative proposal, as outlined in Chapter I is "to provide for on optimum of high quality, highly accessible visitor use opportunities, provided that those uses are compatible with the preservation of natural systems."

Further, the administrative proposal outlines a conceptual master plan which suggests types of development very similar to those in your letter:

"An interpretive program to reach the visitor whether he is on the icefield, at a lodge, on a boat, in a plane, or on a hiking trail. Interpretation will concentrate on the marine, coastal, mountain and icefield environments; on geological and geomorphic processes; and on historical and cultural aspects, especially relating to Seward and to Native groups, both past and present. Superb scenery with abundant marine life provides a rare setting for such interpretation. Harding Icefield offers the visitor types of experience available in few places in the world. The icefield also may offer opportunities for snowmobile tours, cross-country skiing, snowshoeing, and camping. Wilderness camping, hiking and mountain climbing, though limited by weather conditions, would be appropriate over most of the monument. The coastal area would offer boating and fishing." (See Chapter I for further detail).

Although we agree that most of the recreational use of the area would take place in the summer, we also feel that some types of year-round recreation are possible.

The Park Service is very interested in the ideas and studies which the Chamber of Commerce and other organizations have developed with regard to the recreational potential of the area. During the ongoing planning process for the monument, and as studies for specific developments are carried out, the Park Service will seek cooperation with agencies, local governments, organizations such as the Chamber of Commerce, and other interested parties to ensure the implementation of well thought out and well coordinated land use planning.

273. As this statement is not on page 3 of either the Master Plan or the EIS we assume that this comment refers to the language contained in Chapter II, C of the draft environmental statement: "Probable Future of the Environment Without this Proposal". The "Probable Future" section in the Final Environmental Statement has been rewritten to reflect the consideration that similar recreational development could occur under non-NPS management of the area. (See Chapter II, C; also Chapter VIII A and C).

274. The portion of the Icefield classified in the Conceptual Master Plan as class II, or "general outdoor recreation area", has been identified as the area where any visitor use development or intensive visitor use might take place. Similar areas of potential recreational development have been suggested for parts of the coastal area. Nevertheless, the rest of the Icefield, as well as areas along the coast would be open to recreational activities which were considered compatible with the preservation of natural values on those lands. These might include, ski touring, backpacking, climbing, wilderness camping, snowshoeing, etc.

It should be stressed at this time that all the management and development proposals for the monument are conceptual in nature. They are intended as general guidelines for future management of the area, and no specific development plans have been finalized. Further, more detailed studies would be carried out to develop specific proposals, and these, as has been outlined in Chapter I, would involve consultation during the planning process with local, State, Native, and Federal agencies, as well as other organizations and interested parties.

275. As has been discussed in the response to question 274 above, recreation would not necessarily be limited to class II lands suggested in the Conceptual Master Plan, as shown on the Land Classification map. Recreational uses compatible with preservation of natural values could also occur on other lands in the monument.

276. By directing the Secretary of the Interior to withdraw up to 80 million acres of land as units of the Four National Systems, Congress recognized the desirability of providing environmental protection and management for some of the natural resources in Alaska under recognized and existing national management systems--systems with a spectrum of differing objectives and emphasis in their management.

The Harding-Kenai proposal is not intended to eliminate human use of the area. As has been stated above (response 272), recreational use is one of the five purposes of the proposal: "to provide for an optimum of high quality, highly accessible visitor use opportunities, provided that they are compatible with the preservation of natural systems."

We hope it is evident that we want the public to be able to enjoy the area, in addition to preserving its natural beauty.

by Ansel Adams in *This is the American Earth*

SIERRA CLUB

Mills Tower, San Francisco 94104

July 18, 1974

Mr. Theodore Swem
Chairman, Alaska Planning Group
Department of the Interior
Interior Building
Washington, D.C. 20240

Dear Mr. Swem:

Enclosed with this letter are the comments of the Sierra Club on the draft EIS's of the Department of the Interior on the following proposals in the State of Alaska:

Gates of the Arctic National Park
Cape Krusenstern National Park
Katmai National Park
Harding Icefield-Kenai Fjords National Monument
Lake Clark National Park
Mt. McKinley National Park (extensions)
Wrangell-St. Elias National Park and
Wrangell Mountains National Forest
Yukon-Charley National Rivers
Fortymile National Wild and Scenic Rivers
Chukchi-Imuruk National Reserve
Yukon Flats National Wildlife Refuge and
Porcupine National Forest
Arctic National Wildlife Refuge
Yukon-Kuskokwim National Forest
Koyukuk National Wildlife Refuge
Yukon Delta National Wildlife Refuge
Noatak National Arctic Range
Iliamna National Resource Range
Togiak National Refuge

The Club would appreciate inclusion of these comments in the Record.

Sincerely,

Edgar Wayburn

Edgar Wayburn, M.D.
Chairman, Alaska Task Force

HARDING ICEFIELD-KENAI FJORDS NATIONAL MONUMENT

Title page, attached erratum: why was the joint National Park Service-Fish and Wildlife Service jurisdiction dropped in favor of sole NPS jurisdiction? 277

Pages 1-7. With respect to the waters included in the proposal,

a) What is the extent of these waters?

b) What is the nature of the jurisdiction the NPS will have over these waters? 278

c) What is the relationship of that jurisdiction to the state-owned tide and submerged lands?

d) In the event of conflict between NPS and state objectives in these waters, how will the conflict be resolved?

e) What are the environmental impacts of including these waters? of excluding them?

Page 5. The map is labeled "Land status prior to December 18, 1973." What is the land status after December 18, 1973? 279

Pages 19-25. A summary of changes in land status is also necessary for a complete understanding of the "background" of the current proposal. This summary should include, with maps for each, land status:

a) as of December 18, 1971;

b) following the January 1972 selections by the Egan administration; 280

c) as a result of Secretary Morton's March 1972 d-2 and d-1 withdrawals;

d) following any changes in Native deficiency withdrawals;

e) in September 1972, upon settlement of the suit brought by the Egan administration against the federal government;

f) after Secretary Morton's final recommendations to Congress on December 18, 1973; 280

g) in the legislation referred to on page 17 placing much of the proposal in the Wildlife Refuge System.

Pages 19, 36. "So rare are such vast areas of ice that Harding Icefield has been suggested for recognition in (the) NPS's National Register of Natural Landmarks" (p. 19). "The Harding, Sargent, (25 miles west of Harding), and Bagley Icefields are entirely in the United States, and the Juneau Icefield lies in Alaska and Canada" (p. 36). It should be noted in the final E.I.S. that the Sargent Icefield is already partly 281 covered by the Nellie Juan Wilderness Study Area, and the Forest Service proposes to add the rest of the icefield to the Chugach National Forest; probably it will go into the wilderness study area too. In its Wrangell-St. Elias National Park proposal, the Interior Department has gravely recommended the entire Bagley Icefield for national park status--millions of acres of it--although the enthusiasm it shows for preserving the Bagley is somewhat greater than it expresses for protecting the Harding Icefield, which it slates for a tramway and mechanized 282 tours.

What percent of the Harding Icefield-Kenai Fjords is 283 ice and barren rock?

Pages 127-8. What does the phrase "well over half" (of 284 the monument) mean--75%? 90%?

Pages 159 ff, alternative boundary proposals. At least two obvious alternatives are overlooked. First, the proposed Kenai 285 Fiords National Ecological Reserve of S. 2918 of January 30, 1974:

a map and a summary of the provisions of this alternative proposal should be included in the final E.I.S., and its impact briefly discussed. A second alternative boundary would be the exclusion of the Harding Icefield, with the coastal and island areas being placed in the proposed Coastal National Wildlife Refuge. Lands within the area of ecological concern not selected by Native corporations could be added to the refuge immediately after Native selections were completed, or after further study and a recommendation to Congress by the Interior Department.

285

286

277. An environmental statement does not require documentation of the study process prior to its release for public review, nor should it attempt to justify why the proposal has arrived at its present from.

These statements were developed in accordance with NEPA requirements and CEQ guidelines and in our opinion made a good faith effort to consider and display all relevant and important impacts, even on alternatives that were sometimes environmentally more advantageious than some proposals. Items raised in review have been substantially changed to remove any significant justificatory tone noted to us in the review process. We do not consider these statements to be proposal justifications, but to be our best effort with limited information and time to present the possible future environmental impacts that could reasonably be expected to result from the proposed changes in land status and management.

Although this proposal would be part of the National Park System only, it nevertheless remains proposed for joint management under NPS and FWS.

278. There are approximately 147,000 acres of offshore waters within the proposed monument boundaries and approximately 311,000 acres of offshore waters within the proposed AEC boundaries.

Enactment of this proposal will result in the transfer of some authorities and jurisdictional responsibilities to the Congressionally designated Federal managing agency.

Under the legislative proposal, lands contained within the proposal boundary which lie above mean high tide are considered to be under Federal jurisdiction. The legislative proposal does not adjust any Federal-State jurisdictional responsibilities, nor does it amend, by implication, the Submerged Lands Act.

The impacts of the proposal on the various resources in these waters are covered in Chapter III, Section A, D, and F-A

279. See response to question 136 of the State's letter.

280. An environmental impact statement does not require documentation of the study process, including chronology of changes that were made in a proposal prior to its release for public review. This statement reflects the land status that was correct at the time it was prepared for printing.

Information of the kind you request is available upon request from the BLM and is a matter of public record through the Public Land Orders issued and the "Base E" land status maps developed by the BLM.

281. The information on the other icefields has been included in Chapter II, A-2.

282. These impacts are discussed in Chapter III, section C.

283. Approximately 80 percent of the lands proposed for inclusion in the monument can be described as ice or barren rock.

284. This statement was left general by design. Rather than estimate a percentage of the monument which would be managed for wilderness character, the passage directs the reader to the Land Classification map. It is felt that this will give the reader a better idea of the extent of primitive lands than would an oversimplified percentage figure.

285. This alternative has been mapped and discussed. (See Chapter VIII, section D-4).

286. This alternative is covered by our alternative C-3. If the lands in the AEC and the coastal areas were excluded from the monument, as in Alternative D-3, they could then be considered by Congress for inclusion in the Coastal Refuges proposal. (This could occur even though the Icefield remained a monument.) Also, if Congress took no action on the Harding Denai proposal, it could still include coastal lands in the Coastal Refuges proposal.

In addition, the inclusion of these lands in the proposed Coastal Refuges has also been considered in the EIS on that proposal. (See Chapter VIII of the Final Environmental Statement for the Alaska Coastal National Wildlife Refuges)

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JUNEAU CHAPTER
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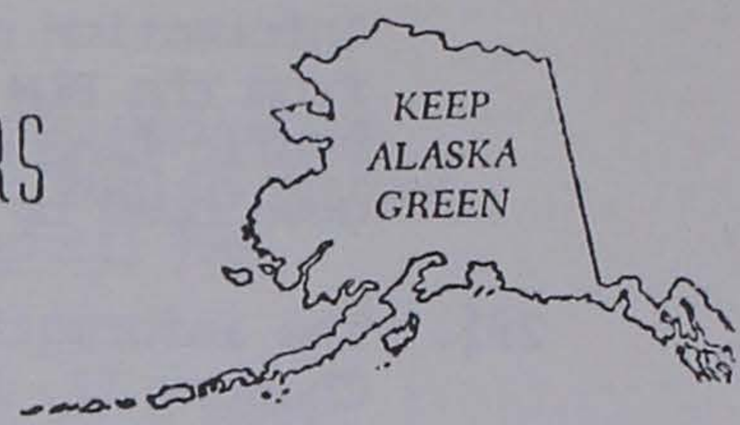
SOCIETY OF AMERICAN FORESTERS

Alaska Section
333 Madison
Ketchikan, Alaska 99901



June 13, 1974

Mr. Theodor R. Swem, Chairman
Alaska Planning Group
U. S. Department of Interior
Washington, D. C. 20240

Dear Mr. Swem:

The Alaska Section of the Society of American Foresters, representing more than 150 forestry professionals throughout the State of Alaska, is keenly aware of the many important contributions that forest resources can make to the material, social, and spiritual well-being of the nation and the State of Alaska. These contributions are determined in large measure by the objectives, policies, and means of the forest landowners, whether the landowner is the public, shareholders of a corporation, or individuals. The Alaska Section of the Society is especially interested in the Draft Environmental Statements on the Secretary's Proposals for land withdrawals under the Alaska Native Claims Settlement Act of 1971, since basic objectives and policies for much forest land owned by the public is proposed. These objectives and policies will have substantial effect on the quality, quantity, and variety of outputs provided by forest land managed under the proposed withdrawals and will play a key role in guiding prescriptions by forestry professionals of practices necessary to achieve such goals and objectives.

Forest lands normally provide the largest net sum benefits to society when managed for multiple use. Multiple use is a strategy of deliberate land management for two or more purposes which utilizes, without impairment, the capabilities of the land to meet different demands simultaneously. Uses of forest lands should be skillfully coordinated unless there is demonstrable need for exclusive use. Establishing priorities of land use is valuable procedure in the multiple-use management of forest lands, especially where land-use conflicts may occur. Land use priorities should be based on the objectives and needs of the landowner, reviewed periodically and, where necessary, changed to reflect changing conditions of resources and changing needs of people.

The Section finds that many of the proposals for these land withdrawals eliminate large areas of forest lands from multiple use management by inclusion in proposed parks, monuments, and refuges, unnecessarily eliminate mining, one of the traditional multiple uses where adequate safeguards could be included in legislation, and preclude access to and through withdrawals which would deny the most productive use of adjacent State, Federal, Native, and private lands.

:OOK INLET CHAPTER
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SOCIETY OF AMERICAN FORESTERS

Alaska Section

With the above thoughts in mind, the Alaska Section of the Society of American Foresters requests that this general statement be included as part of the comments on each proposal.

I have enclosed specific comments which should become a part of the review of individual proposals.

Sincerely,

Magnus E. Chelstad

MAGNUS E. CHELSTAD
Chairman

Enclosure

COOK INLET CHAPTER
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SOCIETY OF AMERICAN FORESTERS

Alaska Section

Specific Comments:

1. There is little attention paid in any of the Statements to Alaska's contribution to National or world-wide supply of natural resources. What will be the division of resources between Federal, State, and Private if all of these proposals are implemented? This impact on the social and economic environment has not been adequately considered. 287

2. Except in rare or unique situations, management for less than all of the values of forest and related environments is not wise use and is contrary to good conservation practice. We fully recognize the opportunities for outstanding National Parks and Refuges in many places in Alaska. At the same time, creation of units in the National Park System and National Wildlife Refuge Systems in lands best suited management for a combination of uses is a questionable pursuit. Pheraps one of the reasons multiple use management is not considered in a better light is because of the inadequate and often totally erroneous descriptions given in some of the alternative sections. Multiple use, practiced by professionals of various disciplines, does not result in serious environmental degradation. Better representation of multiple use and its impacts should be given, particularly in the Aniakchak Caldera, Mt. McKinley, Katmai, Kobuk, Gates of the Arctic, Chukchi-Imuruk, Yukon Delta, Alaska Coastal, Togiak, and Iliamna proposals. 288

3. The Yukon-Charley National Riverway proposal does not recognize nor give proper weight to the variety of resources available. At the same time, the historic and cultural values, while important, seem to be exaggerated. Timber and agriculture resources are not accurately portrayed. Timber volumes, according to U. S. Forest Service, is near one billion bd. feet. The Soil Conservation Service reports areas of real crop land and grazing potential.

The development of hydropower is not properly discussed. The effect of the proposal on mineral extraction does not indicate the full extent of restriction and probable result under National Park administration. The opportunity to develop wildlife habitat might be restricted and this lost opportunity is not discussed.

4. The Lake Clark proposal does not adequately portray the diversity of resources of this area. Only the scenic values are adequately described. Sport hunting and other wildlife values, mineral potential and timber potential are underplayed. Current timber surveys by USFS and BLM indicate 74 million cubic feet of forest resources in the area. The emphasis on the importance of the proposal in protection of water quality by preventing mining and road building does not square with Federal and State water quality control laws applicable to all jurisdictions, and fails to relate the already high turbidity and sedimentation of the glacier-fed rivers and streams.

5. The volume of timber in the Koyukuk proposal is not known precisely. Consideration of this resource should be related to the entire region rather than to the proposal area. Sustained yield of timber resources relies on policies which maintain the largest inventory to permit rotations throughout a broad region. Withdrawal of availability puts additional pressures on other areas and could well mean the difference between an economic and environmentally sound program in the total region. This area should be managed under authorities to manage and utilize the renewable resources with proper safeguards for wildlife values.

6. The Yukon Flats region contains one of the most significant stands of interior forest. It is a major habitat for nesting waterfowl. It is a known oil and gas province of promise. As discussed in the Koyukuk proposal, the long-term effects on the total Alaskan environment can be affected by the amount of resources available for utilization. In the Yukon Flats proposal, waterfowl protection and utilization of wood products need not be mutually exclusive. Authorities should be included and considered which will foster the conservation of wood fiber resource in concert with all other sources of wood in the upper Yukon Valley in all ownerships. Although the harvesting of timber is permissable on refuges, it is not an active program. Good land management should provide for wide use of all resources compatible with the area's primary values.

7. The proposal to place the extensive Fortymile River system into a Federal reserve system without also including its total watershed in a reserve system does not seem logical. The Wild and Scenic proposal should provide for protection and management of all of the watershed under authorities as permanent as the River itself.

8. The Porcupine National Forest proposal states as major management emphasis "development of . . . measures which will lead to sustained yield forest management on this unit and adjacent ownerships". This is an admirable goal, but no details are given on how this may be achieved. In fact, in view of statements made in the Yukon Flats National Wildlife Refuge proposal, it seems unlikely this goal can be achieved.

9. The Yukon Kuskokwim National Forest proposal brings a long-range conservation philosophy to a region which might not otherwise enjoy an overriding objective of environmental quality. Although seen as decades away, integrated management of this area for its various resources should serve as a stabilizing influence for regional development. We are pleased the Secretary has recognized that large areas of lands with combinations of resources are of national interest as well as areas with dominant scenic or wildlife features.

10. Major management emphasis for the Wrangell Mountains National Forest proposal omits any mention of forest management. Protection and maintenance of scenic forests through advanced forestry measures may be one of the more important actions to augment the recreation resources of the area. Also, the contributions of timber from the Upper Tanana Valley within the proposal will help alleviate pressures to overcut timber on State and Private lands elsewhere. We should hope that the practice of forestry will continue on this National Forest proposal.

RESPONSE TO COMMENTS BY
SOCIETY OF AMERICAN FORESTERS, ALASKA SECTION

287. The purpose of the environmental statement is to analyze the impact of the proposal. It is not the intent of the statement to evaluate the world-wide supply of or allocation of resources. Two other comments have been raised which are closely related to your comment. You may wish to review response 1 to a question raised by the Forest Service concerning cumulative impacts of the 28 proposals and response 15 to the Department of Commerce concerning cost-benefit analysis.

288. We recognize the deviciencies in definition and analysis in the "Multiple-use Alternative" discussions in the Draft Environmental Statement. A revised discussion of this alternative is included in Chapter VIII, C.

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SOCIETY OF AMERICAN FORESTERS

Alaska Section
Juneau Chapter
P.O. Box 1305
Juneau, Alaska 99801

May 28, 1974

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U.S. Department of Interior
Washington, D.C.

Subj: Env. Impact St.
Secretarial Proposals
for Land Withdrawals

Dear Mr. Swem:

Members of the Juneau Chapter of the Society of American Foresters, being knowledgeable in the field of land management and Alaska in general, have reviewed the subject proposal. Following thorough discussion, the Chapter on April 22 resolved as follows:

WHEREAS many of the environmental statements for Alaska land withdrawals: (1) eliminate large areas of forest lands from multiple use management by inclusion in proposed parks, monuments and refuges, (2) unnecessarily eliminate mining, one of the traditional multiple uses where adequate safeguards could be included in legislation, (3) disregard results of hearings held by the Joint Federal-State Land Use Planning Commission which preceded release of the Department of Interior's proposals for parks, monuments and refuges, thus denying this Society from public input, (4) preclude access to and through withdrawals and thus deny the best use of adjacent State, Federal, Native and private lands for their most productive use. 289

NOW THEREFORE BE IT RESOLVED that the Juneau Chapter of the Society of American Foresters urges the Secretary of the Department of Interior to reassess and amend the proposals and the environmental statements to provide for the above mentioned deficiencies.

We request that the above statement be added to all proposals.

Adopted May 22, 1974.

Very truly yours,

Joseph Zylinski

JOSEPH ZYLINSKI
Chairman, Juneau Chapter

RESPONSES TO COMMENTS BY
SOCIETY OF AMERICAN FORESTERS, (JUNEAU CHAPTER)

289. The forested lands involved with this proposal total about 5,000 acres. Removal of this amount of timber from potential development is not considered to constitute significant impact on the regional timber supply. (See Chapter III, F-5 for further discussion of timber)

With regard to mining; in making d-2 land withdrawals and the recommendations to the Congress for management of these lands, a basic diliemma was faced which is implicit in a decision involving mineralogically unexplored lands such as those in Alaska. This dilemma was the choice between possible values of developable, nonrenewable resources such as minerals, and the resource values inherent in natural and ecological systems.

In developing the final recommendations to Congress, the need to leave mineral resources available for development was given careful consideration. In the first place, some of the Systems themselves herein advanced by these proposals contain the authority and objective of mineral development. And, it should be noted that the selections already made by the State of Alaska and the priorities provided the Native Claims under ANCSA have excluded from "Four System" consideration vast areas of mineral potential already. In many cases, boundaries of proposals were redrawn to place mineral belts of prime potential outside proposals with restrictive management categories. In other cases, management options were left open to mining where identified mineral potential was sufficient to warrant such action, and where mineral extraction would not prove overly damaging to the environment. However, in order to comply with the intent of section 17(d)(2) of the Act and in order to afford adequate protection of of these outstanding natural areas, some areas which do have possible mineral potential were recommended for protective management that would exclude mining and mineral entry. These proposals reflect a need, set forth in ANCSA as a Congressional mandate, to preserve certain outstanding natural and ecological areas of national interest apart from mineral development.

In addition, the recommendations of the Joint Federal-State

Land Use Planning Commission were given careful consideration by the Secretary in making is recommendations to Congress for the management of the d-2 lands.

Information gathered during our studies has been augmented with comments from transcripts of the Joint Federal-State Land Use Planning Commission public hearings on use of the 17(d)(2) withdrawal lands. The Federal agencies also had representatives at the public hearings to identify and take note of special problems requiring considerations. Comments received as a result have also been considered in development of the Final Environmental Impact Statements.

In regard to your point or access, see Chapter III, G for a discussion of this proposal's impacts on transportation and communication in the area.

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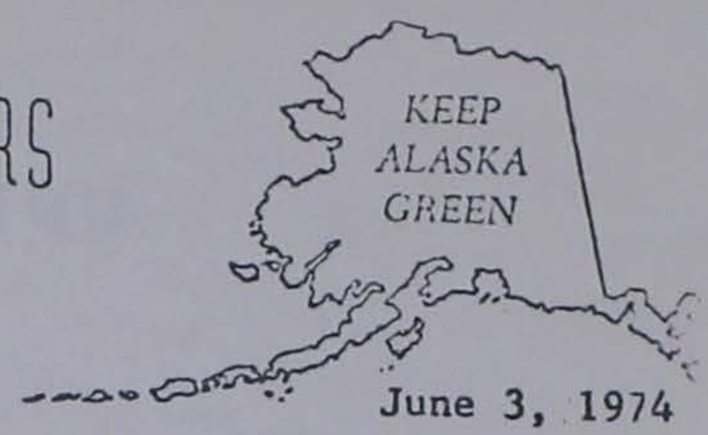
SOCIETY OF AMERICAN FORESTERS

Alaska Section
Sitka Chapter
P.O. Box 850
Sitka, Alaska 99835



June 3, 1974

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U.S. Department of Interior
Washington, D. C.

Dear Mr. Swem:

Members of the Sitka Chapter of the Society of American Foresters would like to add their support to the resolution you recently received from the Juneau Chapter of the Society of American Foresters.

We urge the Secretary of the Department of Interior to reassess and amend the proposals and the environmental statements to provide for the deficiencies mentioned in their resolution.

A copy of their resolution is attached for your information.

Sincerely yours,

Alan J. Aitken

Alan J. Aitken
Chairman, Sitka Chapter

UNIVERSITY OF ALASKA
FAIRBANKS, ALASKA 99701

January 11, 1974

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U. S. Department of the Interior
Washington, D. C. 20240

Dear Mr. Swem:

Thank you for including us in the distribution of draft environmental statements under the Alaska Native Claims Settlement Act. We are extremely interested in the activities of your group and the actions relating to d-2 areas, and we look forward to receipt of further reports and related information.

The institute cannot, of course, take a position as to whether an environmental statement does or does not adequately examine the issues. However, as individuals, our staff will certainly provide what assistance we can. The extent to which this will be done depends primarily on the interests, knowledge, and time of individual staff members. Subject to these constraints, we will do what we can to review the draft statements and provide technical comments, primarily in the area of socioeconomic impacts. It would, by the way, be useful to know exactly how deep and extensive an analysis is required, and if you have any appropriate guidelines, we would greatly appreciate receiving them.

I can give you two general comments at this time, and these are strictly personal. First, the draft analyses of socioeconomic impacts that I have looked at seem rather vague and weak. Second, and this is extremely important, the impact statements essentially view each proposal in isolation from other proposals, and from other major land actions in the region, including state and Native selections. It is doubtful that a piecemeal approach can provide the basis for evaluating total impacts, either in terms of regional, statewide, or national perspectives. I make these comments now, as they apply to the total set of proposals and will not be reflected in individual statement reviews.

In any case, we will do what we can to provide you with useful comments. We have, of course, provided much information and individual assistance to agencies working on the statements. This we are continuing to do, and if we can be of any service to your group beyond the reviews, please let us know.

Best wishes.

Sincerely,

Victor Fischer, Director
Institute of Social, Economic
and Government Research

VF:jd

NSTITUTE OF ARCTIC BIOLOGY

UNIVERSITY OF ALASKA
FAIRBANKS, ALASKA 99701

February 15, 1974

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem:

Biologists on our staff favor caution in development of access to areas of Alaska that are still largely in their natural state. We have no special expertise in the general economical or social uses of the proposed areas of withdrawal. Individuals in our staff are aquainted through biological studies with the animal and plant life and people of many of the areas proposed for withdrawal. Our future program will involve studies of the animals, plants and people of Alaska. In hese we will be joined, as in the past, by colleagues of national and international institutions for research and with associates in state and federal agencies concerned with management of natural resources. Through the knowledge of its resident staff the Institute of Arctic Biology has become a center through which national and international scientists carry out studies of the Alaskan biological environment.

We note with interest a proposal that facilitation of better scientific information is regarded of importance in the statements on impact of the withdrawals. The statements prepared by Interior outline rather well the known aspects of biological information in the several areas proposed for withdrawal. These statements also indicate that information about the several biological environments is still insufficient for management and by no means shows the full value for public interest and use of the animals and plants in the diverse environments. For Alaska and the nation it is important to intensify studies of life in Alaska, which contains a vast store of still unknown biology applicable to practical and theoretical developments as well as being of exciting interest for popular education.

We presume, although it is not expressly stated, that the very knowledgeable personnel of the Alaska Department of Fish and Game have been consulted with regard to the impact statements. It would be desirable to utilize their knowledge, experience and devoted interest as residents in effective manner in a combination of federal and state planning and management. That bureaucratic procedures have made these combinations difficult to implement should be no obstacle to devising a reasonable cooperation.

In fact, very vociferous and realistic objections to large federal withdrawals in Alaska will come from the possibly adverse impact upon the state's government by sequestrations under non-resident management. Unless concord with the people and government of the State of Alaska is carefully prepared, hearings on the proposed withdrawals are sure to be disturbed by arguments in which federal bureaus, state government and citizen organizations appear as adversaries. They should, of course, appear as collaborators in fact and principle.

UNIVERSITY OF ALASKA
INSTITUTE OF ARCTIC BIOLOGY

The biologists of this Institute will carefully observe the deliberations on the impact statements. Individuals among us who have special scientific knowledge of the life in an area proposed for withdrawal will offer their opinions as individual scientific testimony where appropriate. The Institute of Arctic Biology is ready to serve the Department of the Interior in fact-finding studies if such studies should be requested from the University of Alaska.

Sincerely yours,

Laurence Irving

LAURENCE IRVING
Advisory Scientific Director
& Professor of Zoophysiology

LI:hw

GERALD GANOPOLE
CONSULTANT-CERTIFIED PROFESSIONAL GEOLOGIST
BOX 4-1261
ANCHORAGE, ALASKA 99509
907 - 277-0124

March 8, 1974

Mr. Theodor Swem
Chairman, Alaska Plan Group
U.S. Department of the Interior
Washington, D.C. 20240

Re: EIS-Alaska Public Domain
Lands - 28 Units.

Dear Mr. Swem:

I have had occasion to review some of the proposed National Parks and Monuments statements and I was shocked to note the erosion of National Park principles into the political expediency of allowing hunting in the proposed Parks and Monuments.

At present, the only readily accessible area in Alaska in which any wildlife can be seen by the casual visitor or city dweller, is McKinley National Park. Most of the proposed scenic areas will endure long after man has passed...no matter what protected or unprotected status you may designate. But even controlled hunting in these areas will reduce many wildlife species to a rarity - - seen only by aerial spotting and ultimately through the high powered scope of a rifle.

In many of the areas, I would hold the wildlife values are at least equal to or higher than the scenic values and I respectfully request that no hunting be allowed in any of the Parks or Monuments. 290

Further, I have never quite understood the logic in operating even the present wildlife and game refuges in Alaska as breeding areas for the sole benefit of a relatively few hunters and guides. Individuals interested in killing animals should vie with each other for the few remaining animals to be found outside of the restricted areas and all wildlife and game refuges should become refuges...as their name implies.

Limited subsistance hunting by indigenous inhabitants should, of course, be permitted but even this should be very closely controlled. 291

Thank you for the opportunity to offer my comments for your land-use planning.

Very truly yours,

Gerald Ganopole

Gerald Ganopole

GG/sc

RESPONSE TO COMMENTS BY
GERALD GANOPOLE

290. Sport hunting would not be allowed in the Harding Icefield Kenai Fjords National Monument.

291. Subsistence use of the area would be allowed. For specific provisions concerning subsistence see Chapter I A, B, and C.

CLEMSON UNIVERSITY
CLEMSON, SOUTH CAROLINA 29631

COLLEGE OF FOREST AND
RECREATION RESOURCES

DEPARTMENT OF RECREATION
AND PARK ADMINISTRATION

May 27, 1974

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U. S. Department of the Interior
19th and C Sts., N. W.
Washington, D. C. 20240

Dear Mr. Swem:

In response to your letter of December 28, 1973, enclosed are comments on the twenty-eight draft Environmental Statements concerning those lands involved with the Alaska Native Claims Settlement Act.

These comments have been prepared by my graduate class in Comprehensive Recreation Resource Planning. They have been limited to responses to the draft environmental statements and the studies of alternatives. Of course they are also limited in the fact that none of the respondents have visited the areas under study.

Nonetheless, these remarks are transmitted to you in the hope that they will be of some assistance in your final deliberations.

Thank you for the opportunity to study the proposals. I look forward to receiving any reactions you may have to the enclosed comments.

Sincerely yours,

H. Jesse Grove

H. Jesse Grove
Associate Professor

R.P.A. 704

To- Jesse H. Grove

RE- Implications of the Proposed Harding Icefield-Kenai Fjords National Monument

From- Bradley Cary

page 117 para. 2

1. What was meant by the term park facilities? A definition of park facilities was needed to understand the paragraph. 292

page 118 para. 2

2. Is a tramway really needed in this proposed national monument in Alaska? The construction of a tramway, and its use can only have a negative affect upon the lands of the monument. 293

page 131 para. 4

3. The extent of subsistence in this area by the natives was not known. Someone should do a study to determine the degree of use by the natives on the land in this area for subsistence purposes. 294

page 15 para. 2

4. Why do the major developments in the park have to be served by a mass transit system? An emphasis on the mass transit system could eventually(in a short time) jeopardize the existence of the monument. 295

page 18 para. 5

5. Several private citizens use, own, or claim lands and waters within the proposed boundary. Since their exact location was unknown, a study should be conducted to determine the exact location, size, and the number of all private claims within the proposed boundaries of the monument. 296

page 153
para. 1

6. An alternative to allow or even encourage individual private (or rental) snowmachine use of the area would be disastrous. Snowmobiles would not be compatible with the environment, especially within the fragile nature of Alaska's boundary of the proposed national monument. 297

RESPONSE TO COMMENT FROM
JESSE H. GROVE OF CLEMSON UNIVERSITY (BRADLEY CARY)

292. "Park facilities" are those developments: trails, campsites, transportation, visitor centers, etc. Which would be installed in order to provide recreational, interpretive, and management facilities for the monument.

They are described in Chapter I, B and in Chapters II and III.

293. The tramway has been proposed in the Conceptual Master Plan as a possible means of access to the Icefield. It is not a finalized proposal at this time as the master plan developments are all conceptual in nature. After establishment of the proposed monument, all development plans would undergo further, detailed study and environmental assessment in accordance with NEPA.

The possible impacts of the tramway on the landscape are examined in III, B and C.

294. Chapter I, B, paragraph 6 outlines the proposal's plans for study of subsistence uses in the area. It reads, "that cooperation be sought with all concerned and affected individuals in arriving at an equitable and workable management plan for subsistence resource uses in the proposal area, including in-depth study of subsistence lifestyles and resource uses.

295. We believe that convenient access to the monument (which is already available by road, train and plane) is essential for the optimun visitor use and enjoyment of the monument. One of the purposes of this monument, as set forth in the legislative proposal in Chapter I, A is "To provide for an optimun of high quality, highly accessible visitor use opportunities, provided that those uses are compatible with the preservation of natural systems."

Visitor use and access would be planned and controlled to protect the natural values of the area. Visitor transportation systems would certainly not jeopardize the existence of the monument.

296. Private inholdings are listed in Chapter I, D and shown on the Real Estate and Claims map.

297. The impacts of this alternative are discussed in Chapter VIII, B. The proposal itself demonstrates the potential for limited use of over-the-snow vehicles on the Icefield.

June 6, 1974

207 N.W. 'D' St.
Bentonville, Ark.
72712

Chairman
Alaska Planning Group
U.S. Department of the Interior
Washington, D,C. 20240

Dear Sir:

I understand that your Group is currently studying some twenty-eight projects involving the inclusion of Federally-owned lands in the National Park, Wildlife Refuge, Forest and Wild and Scenic River Systems.

I would like to support the maximum protection of the natural environment in the areas under study. Perhaps I'll never put my canoe into any of the streams or hike through any of the hills, but I will be a happier man, knowing we have had the wisdom to protect and preserve them.

Yours,

Steve L. Marquess

Steve L. Marquess

PURDUE UNIVERSITY
DEPARTMENT OF AGRONOMY
LIFE SCIENCE BUILDING
WEST LAFAYETTE, INDIANA 47907

February 26, 1974

Mr. Theodore R. Siven, Chairman
Alaska Planning Group
U. S. Department of Interior
Washington, D. C. 20240

Dear Mr. Siven:

I have been asked to contact you on behalf of the Institute of Agricultural Sciences, University of Alaska, Palmer, Alaska. First, I should mention that I have been a consulting scientist in climatology at the Palmer Research Center, but I do not have any other contacts or interests in Alaska.

In reading the climate and soils descriptions in the proposed D-2 withdrawals I find this information to be so general as to be in error, particularly in meso and micro scale -- a necessary scale consideration for agricultural potential. Most potential agricultural areas in Alaska require a favorable deviation in meso-micro scale in climatic matters, soils, and topographic features. The land description of the proposed areas in the D-2 withdrawals by the Department of Interior disregards the favorable areas with agricultural potentials. 298

Decisions made in this fashion are likely to be very shortsighted because at some point in the future agricultural development is very likely to take place without prior research and in the absence of seientifically based plans so necessary to properly guide such development in the sub-arctic.

My work in Alaska has been confined to climate as related to the potential development of agriculture in this sub-arctic region. I have been concerned with delineating such areas in Alaska. I am attaching a reprint of two papers which represent a portion of my work in Alaska. I can provide three technical bulletins published by the Institute of Agricultural Sciences dealing with climatic data in potential agricultural areas. Perhaps these publications will interest you and your committee.

In my work, I have tried to address myself to basic, as well as practical considerations in developing a proper sub-arctic agriculture in a few of the most favorable areas in the state. Such development should be preceded by several years of careful survey and experimentation, in my view. Such an approach would be very different that in the past where too often agricultural development has been attempted by transferring mid-latitude agronomic practices to a sub-arctic region. And, I might add, too often the same can be said for much of the other living practices among the wite population now living there. But, these shortcomings of the past should not serve as a

model for all future attempts to develop a sustaining sub-arctic agriculture in the very restricted potential areas of the state.

I will be glad to appear before your committee for further questioning.

Sincerely yours,

James E. Newman
Professor of Agronomy,
Bioclimatology

JEN:er

Encl.

cc: Institute of Agricultural Sciences
University of Alaska

RESPONSE TO COMMENTS BY
JAMES E. NEWMAN

298. A soils discussion has been added to Chapter II. (See section A-10) In addition, some revisions have been made in the "Climate" section of Chapter II where additional information was provided in the comments.

1190 Payne Drive
Los Altos, CA 94022
June 16, 1974

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U.S. Department of the Interior
Washingtin, D.C. 20240

Dear Sir:

Enclosed are comments on 12 of the Draft Environmental Impact Statements on Alaskan lands.

Yours very truly,

J. Robert Noon

J. Robert Noon

Aniakchak Caldera National Monument

Is this not worthy of National Park status? Why not make it one?

On p 22 it is indicated that hunting would be permitted, in agreement with the State. The proposal mentions thatin the north peninsula the large animals (moose and bear) are hunted outand commercial hunting activities are progressing southward; the availability of trophy animals will depend on close management before they are depleted. No game management or game sanctuary proposal is included. The dependence of brown bears on the salmon runs would seem to leave them especially vulnerable unless positive action is taken to limit hunting pressure such that the animals can hold their own or increase.

Chukchi Imuruk National Wildlands

The proposal lists areas of ecological concern virtually on all sides: watershed areas, wetlands,cliffbird colonies, waterfowk habitat, palentological resources, prehistory and history sites, spectacular mountains, and archeological sites. A substantial amount of this land is available for Native withdrawal. Rather than merely saying that such lands not withdrawn should be considered for additions to the Wildlands, let it be automatic that any not withdrawn be included. Further, include the southern watershed rather than depending on the divided authority and risk of undesirable development associated with BLM management. It would seem highly desirable to have the ecological unit as complete as possible.

Gates of the Arctic National Park

The Wilderness Society says that this proposal no longer applies. I suggest that it be reinstated and expanded. With respect to areas of ecological concern let any not selected by a Native corporation be automatically included as with the Onion Portage in Kobuk Valley NM.

Harding Icefield Kenai Fjords NM

Page 17 lists BLM as present administrator, and proposals for BSFW, Forest Service, and and National Wildlife Refuge System operation. In view of the difficulties with multiple management, I suggest that there be single-orginization management excluding the BLM, or as second choice well defined areas of individual organization management excluding the BLM. 299

One of the possible alternates mentioned is essentially unrestricted use of snowmobiles (p 153) which would destroy the primitive character of the area. I suggest that no serious consideration be given this alternative, and that snowmobiles be highly restricted, if permitted at all. This would seeem to be necessary to retain the option of a wilderness classification. 300

Kobuk Valley National Monument

Two areas of ecological concern are delineated, and part of one, Onion Portage, would be included (p 2) if not selected by a Native corporation. The proposal states (p 20) Other AEC lands not so selected "... should be added to the proposed area." Why not make their addition also automatic if not selected? And why not make it a National Park?

Lake Clark National Park

On p 14 the option is included of the Secretarysubmitting a report to Congress including a recommendation as to whether lands in the area of ecological concern should, if not selected by a Native corporation, be added to the park. Why not make such addition automatic?

What effect will hunting have? How much will it tend to increase? What steps would be required to maintain wildlife levels? How would hunting be limited?

Noatak National Ecological Range

The assignment to the BLM of an ecological range, which to retain its value must have the minimum possible exploitation, is difficult to understand. Cannot it be assigned to the BSFW alone, for example? It would seem highly desirable to avoid dual management problems as well as minimize exploitation. Let mining be prohibited in this area, at least for the forseeable future.

Minimizing the incursion of humans would also seem necessary if the barren-ground grizzlies are to survive there. Pg. 223, quoting Cowan, states "No effective techniques have been derived for controlling the illegal use of (aircraft) in hunting and killing of bears." So from this standpoint also access of men and aircraft should be minimized. Contacts of grizzlies with man's food supplies would also likely result in killings of grizzlies (p 230).

Togiak National Wildlife Refuge

Rather than leaving it optional, let land not claimed by Natives in the area of ecological concern to the north or not claimed by the state be automatically included in the wildlife refuge. This would be primarily for ecological protection, but might help increase the size of the refuge.

A note at the front of the proposalindicates that mineral removal (presumably from ex d1 land) must be compatible with the purpose of the refuge and under strict controls. There seems to be too little information on the extent and impact of mining, and the phrase "compatible with the purpose of the refuge" could stand some elaboration.

Yukon - Charley National Rivers

It is proposed that mining be permitted along the Yukon under legislation saying in part (p 2) "if (the Secretary) finds that such disposition would not have significant adverse effects on the administration of the recreational areas." "Administration" seems a narrow concept as a criterion; nothing is said about ecological effects. Surely more should be saidabout the impact of mining and how it could be controlled, or whether it should, as a, alternate, be prohibited.

Yukon Flats National Wildlife Refuge

A crucial ecosystem has been divided in the proposal between this and the Porcupine National forest. The ecosystem should be considered as a whole. It is crucial to North America's waterfowl, and the effects of the exploitation (mining, logging, etc/ are not treated in anything like the depth that this important area demands.

Porcupine National Forest See immediately above.

Yukon Delta National Wildlife Refuge

This is another important waterfowl refuge. Non-selected Native withdrawal lands should be included automatically. The critical aspects of land exploitation and ownership on the waterfowl need thorough treatment.

RESPONSES TO COMMENTS BY
J. ROBERT NOON

299. This proposal does not call for BLM management. The BLM is the present administrator of the area, but if the proposal were enacted then the monument would come under Park Service management. You are apparently confused with respect to the proposal for Forest Service operation. This is another proposal in the area and is not part of the monument.

The monument proposal does call for joint management with the Fish and Wildlife Service. The lead agency in the management of this proposal would be the National Park Service. Joint management would apply to the coastal units of the monument and would primarily concern wildlife management. It is felt that the goals of both agencies are consistent with regard to these resources and that the area will benefit from the joint application of the different types of expertise available from the two agencies.

300. The potential for snowmobile use, or use of other types of over-the-snow vehicles on the Icefield is discussed in Chapter I, B and also mentioned throughout Chapters II and III. The impacts of unrestricted use of snowmobiles is discussed in Chapter VIII,B immediately after discussion of that alternative.

Your concern over the potential foreclosure of options for wilderness designation is understandable, but the management objectives for the proposal do not preempt wilderness options; they further the intent of the Wilderness Act.

Decisions regarding management policies, including development and public use, must be within the guidelines of the basic legislation of the managing agency and the authorizing legislation for the particular area. A wilderness study and proposal would be made within the context of these management policies.

The studies of the d-2 lands which were carried out during the two-year period designated by Congress identified the resources at hand, and although not specifically directed towards wilderness designation, the wilderness values of the area were given consideration. These values were tentatively identified in the environmental impact statement. (See Class IV and V lands on the Land Classification map.)

The legislative proposal does not forclose further wilderness designation by Congress. Also, any developments to be considered would require an environmental assessment or statement, which would include a further look at the impact of development on wilderness values.

Nome, Alaska 99762
Box 451

March 20, 1974

Theodor R. Swem, Chairman
Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem

Attached is a copy of a letter, the original of which I sent to Senator Ted Stevens with copies to those listed in the letter, which expresses my views toward the 28 proposals for d(2) lands in Alaska. I have only reviewed four of the proposals to date, but the general patterns for implementation and the material contained in these four, appeared to have the same goal: single purpose uses of the lands with restrictions or elimination of development activities, recreational enjoyment and subsistence pursuits. I would like to express my opposition to the proposals as they are now written and, if time permitted, would have made specific comments on each of the draft environmental impact statements.

Respectfully,

John A. Pierce

Nome, Alaska 99762
Box 451

March 8, 1974

The Honorable Ted Stevens
United States Senate
317 Senate Office Building
Washington, D. C. 20510

Dear Senator Stevens:

In the past, Alaskans have witnessed many incidences of the "outsiders" imposing their wills on the people of this great State. Some of these impositions were consistent with the desires of Alaskans--others were contrary. Some were beneficial, while others were detrimental. As an Alaskan who enjoys our State's outdoor resources and who would like to see the State develop for self-sufficiency, I have a deep interest in present and proposed future events and developments in our State.

I have been following developments and progress under the provisions of the Alaska Native Claims Settlement Act since its implementation in December of 1971. Recently, the Secretary of the Interior submitted his recommendations to Congress concerning proposals for d(2) lands. There were 28 draft environmental impact statements prepared which outlined boundaries for lands at various locations to be included in the four national systems of parks, forests, refuges and wild and scenic rivers. The proposals also contained recommendations as to the types of land uses that would be permitted within the individual proposal boundaries. The Land Use Planning Commission (LUPC) submitted its recommendations for land uses to the Secretary prior to his transmittal for Congressional review. The LUPC, in most cases, recommended multiple uses of the d(2) lands involved. The multiple use recommendations would provide for the preservation of fish, wildlife and other natural resources, but would still permit the development of mineral and other resources in potential areas which would greatly benefit the State. The Secretary disregarded the recommendations of the LUPC and asked Congress to approve plans for single purpose uses of the lands. I feel, as many other Alaskans I have talked to, that the Secretary's actions, if approved, would be contrary to the wills of the majority of the people of this State and would greatly deprive Alaskans of the right to develop their own state and their own lives.

As a sport and subsistence hunter and fisherman, and a member of the National Rifle Association, I view the proposals with great caution in regard to possible future controls on fish and wildlife resources should the proposals be approved. As a member of the National Wildlife Federation and a conservationist,

I recognize the need for protection and preservation of our natural resources. Restrictions on the harvest of fish and game resources, based on field observations and counts, are a necessity when species populations are endangered. In the recent past, Alaskans witnessed the passing of the Marine Mammal Act. This Act was a prime example of the imposition of "outsiders'" wills on the people of this state. Not only was the Act contrary to most Alaskans' opinions, but its implementation illustrated a complete disregard of the Alaska Department of Fish and Game's field observations and management integrity.

I would like to express my opposition to the Secretary's recommendations to Congress regarding single uses of the lands and the restrictions implied in the proposals regarding recreational and subsistence pursuits, unless the latter is necessitated as a result of the depletion of fish and game populations beyond the point of sustained harvest. Development of mineral potential, much needed overland transportation systems and the enjoyment of recreational pursuits by hunters, fishermen and outdoor enthusiasts would all be discouraged or eliminated if the d(2) proposals are adopted as they are now written.

I hope you will support my opposition to these needless restrictions. Alaska can preserve some of its natural resources and develop others in harmony with the environment by sensible and careful planning and management without restricting the enjoyment of life or degrading the quality of the environment significantly.

Sincerely,

John A. Pierog

John A. Pierog

Copies to:
Senator Mike Gravel
Rep. Don Young
Gov. William Egan
Senator Willie Hensley
Rep. Chuck Degnan
Natl. Rifle Assn.
Natl. Wildlife Federation
Alaska Magazine

17262 Breda Lane
Huntington Beach, California 92649
May 15, 1974

Theodor R. Swem, Chairman
Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr.. Swem:

A friend of mine showed me the February 1974 Wilderness Report and the report sent out by the Wilderness Society to people writing for "Alaska Alternatives". I am enclosing these two brochures and request:

(1) That they be included with my letter as a comment on each of the 28 environmental statements.

(2) That you include my concern that this highly-financed, highly-organized, special interest campaign be recognized for what it is.

(3) That unoriginal characters with no special knowledge of Alaska being led by the nose through some letter-writing campaign be given the inattention they deserve.

On the basis of my last request, I offer no "Alaska Alternatives". I suspect the Secretary of the Interior knows a lot more about the situation than I do.

Sincerely yours,

H. H. Soderberg

JOHN R. SWANSON
P. O. Box 922
Berkeley, California 94701

June 29, 1979.

Chairman
Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Chairman:

Please accept my Comments, as follows, concerning the Proposal: Harding Icefield - Kenai Fjords National Monument in the State of Alaska.

I approve of such proposal as the area does contain outstanding scenic, wildlife and wilderness resources certainly worthy of National Monument status.

I do urge, however, that this area be afforded National Park status, instead, insofar as such area contains features of definite National Park caliber 301

and that such area be expanded to include the area of Ecological Concern, remaining portions of the Kenai Peninsula southward of this original proposal, that still contain scenic, wildlife and wilderness resources, portions of the Kenai National Moose Range still of National Park quality and include lands East of this proposal to and including portions of Prince William Sound. 302

To total an outstanding complex of out door resources of certain National importance, a truly important National Park

I substantially support, then, a Harding Icefield - Kenai Fjords National Park of some 3,950,000 acres.

This only a portion of this Proposal relates to the provisions of the Alaska Native Claims Settlement Act.

The other proposed areas are now National lands that should be transferred via separate Federal legislation.

It is essential that complete Watersheds be included and preserved in any such Proposal. Also, Ecosystems, including Habitats certainly critical Habitats be included and Preserved on a permanent basis.

Nearly all of this Proposal should be classified as Wilderness as it contains outstanding wilderness qualities and with the accepted provision that no commercial exploitation of any kind be permitted in this proposal. 303

Sincerely,

John R. Swanson.

RESPONSE TO COMMENTS BY
JOHN R. SWANSON

301. The decision to make Harding Icefield-Kenai Fjords a National Monument rather than a Park was based primarily on the criteria for parklands as set forth in NPS Administrative Policies.

Because the area was not given park status it does not mean that it would receive any less protection as a monument. Both would be legislatively established and both would carry the same legal management restrictions and stipulations.

Harding-Kenai was made a monument mostly because of the fact that, by Alaskan standards it fit the requirements of scope, space, and diversity that were deemed compatible for designation as a monument.

302. The alternative of including National Forest lands or other lands from existing, federal management units is not being considered because these lands are presently unavailable for selection and are not covered by the section 17 withdrawals as mandated by ANCSA. This also applies to State selected lands in the region, as well as any lands which may be selected by the Natives. Only in the AEC itself, could any lands which are not selected by the Natives then be included in the monument.

We recognize that your proposal would make an outstanding national park. However, as you have pointed out, the creation of such a park would require separate legislative action and as it is not covered by the section 17 mandates of ANCSA, it is not considered as a viable alternative for this proposal.

303. The wilderness qualities of this area are discussed in Chapters I, II and III (See especially Land Classification map and III, F-2). Also, the alternative of immediate wilderness designation is considered in Chapter VIII, C. (See also the response to question 314 of the Billy C. Wallace letter for a further discussion of Wilderness designation.)

Thomas L. Taggart
P. O. Box 331
Seward, Alaska, 99664
June 10th, 1974

Theodore R. Swem, Chairman
Alaska Planning Group
United States Department of the Interior
Washington, D.C. 20240

Dear Sir:

I am writing in response to the proposed National Monument for the area of Seward, Alaska (Harding Icefield-Kenai Fjords).

I will admit that I have not found time to read the entire proposal of 12/73 released by the Department, and am not entirely informed of the Department of Interior's intentions for this beautiful portion of Alaska. I can only assume that the intentions are honorable, respectful of the land and the wildlife which have every right to remain as undisturbed by humans as possible.

However, I find extremely disturbing and appalling suggestions contained in the proposal which are unfathomable to me....suggestions of building a tramway unto the icefield, and snowmobile routes over the icefield for the conveyance of large groups of tourists there. This magnificent icefield, this vast silence which has known practically no human intruders throughout history is to be invaded by motorized vehicles and their resultant aftermath? Whose interests do you purport to be serving?....You who suggest such violations of the natural laws. Do you actually have any inkling of what the wilderness is? Do you feel any responsibility towards the ideal of preserving this wilderness intact? It is not enough to want to make this area accessible to the general public (most of whom could care less). There is a higher calling....the land must be preserved for itself. It is its own entity. It must be protected from the masses of the human race until the masses are mature enough to realize what they have in such wilderness areas. 304

This land is now accessible to those few hardy souls who are truly interested in visiting it. The icefield can be traversed, boats and planes can be chartered to visit the southcoast of the Kenai Peninsula. For the people who really want to get out there, it is possible. And that is why the area is still in it's primitive state....simply because of limited access. I don't mean limited access as designated by the federal government, but access dictated by nature, by God, whatever term you may wish to use. 305

So by protecting this ecosystem under the auspices of the National Park System you will in fact begin the slow but sure destruction of it by bringing unto it a great number of human beings who simply are not morally educated to the point that they can tarry here without leaving their mark.

The land here is fine, the wildlife is abundant. Truly, a bald eagle flew overhead less than an hour ago, and I live only one and one-half miles from Seward. This is as it should be, and can only remain this way as long as the human population does not exceed its boundaries. By encouraging people to come here to this wilderness, however honorable your intentions may be, you will be defeating what I hope is the true purpose of your actions, which is the preservation of the wilderness from overuse and abuse.

Sincerely,

Thomas L. Taggart

RESPONSE TO COMMENTS BY
THOMAS L. TAGGART, JUNE 10th, 1974

304. As is stated in Chapter I, section A, the first purpose of the Harding Icefield-Kenai Fjords National Monument proposal is "to preserve natural systems and features of the area, and to protect them from degradation through uncontrolled developments or exploration." Yet the proposal is also designed to provide for "an optimum of high quality, highly accessible visitor use opportunities, provided that those uses are compatible with the preservation of natural systems."

In order to meet these purposes, the Conceptual Master Plan proposes land management guidlines which are set forth in Chapter I, B and on the Land Classification map. Access up Exit glacier (possibley by tramway) and multiple-passenger snow vehicle tours have been proposed at this time as possible forms of recreational development for the area. These proposals are conceptual in nature and would receive further detailed study during the ongoing planning process for the monument. Such studies, again as has been stated in Chapter I, B, would involve consultation with local, Native, State, and Federal agencies, as well as other organizations and interested parties.

As is shown on the Land Classification map, the above types of recreational facilities, which would probably receive the majority of the visitor use of the area, would be located on specific areas designated as Class II "general outdoor recreation areas." Most other visitor use developments would be located just outside or on the periphery of the monument. Thus the large majority of the area would remain in "primitive" or "outstanding natural area" categories and would be kept essentially in their natural state.

Further, within three years after establishment of the monument, a study will be made and a report will be submitted by the Secretary of the Interior concerning the qualifications of any area within the monument for inclusion in the National Wilderness Preservation System.

305. The type of wilderness recreation you discuss here will certainly be available to anyone wishing the enjoy the natural environment of this area. As is outlined in the above response, a large majority of the monument is currently proposed in the Conceptual Master Plan as "primitive" or "Outstanding Natural" areas. (See Land Classification map).

Only those uses that are compatible with the preservation of these natural values would be allowed on land in these classifications. These might include, wilderness camping, hiking, snowshoeing, ski touring, climbing, etc.

Thomas L. Taggart
Postal Box 331
Seward, Alaska, 99664
July 21st, 1974

Theodore R. Swem, Chairman
Alaska Planning Group
United States Department of the Interior
Washington, D.C. 20240

Dear Sir:

Since my first letter to you (6/10/74) concerning the Harding Icefield/Kenai Fjords National Monument Proposal, I have taken time to read the entire Draft Enviromental Impact Statement and have also exchanged correspondence with governmental and private conservation organizations concerning this matter. I feel that it is of the utmost urgency that I set forth my views and observations on this proposal concerning the land near which I live and the air of which I breathe.

Let me state that I am first and foremost in sympathy with conservation measures and those people who put them forth. It is a noble cause, a cause which gives one vigor and hope for the perpetuation of life upon this planet. With this vigor and sense of expectant affirmation of the life-force which dwells within me, I undertook to read the contents of this proposal as set forth by the Department of the Interior. I did not expect perfection, only affirmation of the principles which more often than not have allowed me to feel proud of being an American citizen.

Disdainfully, this affirmation of beliefs was withheld from me as my consciousness stumbled through the lengthy proposal for our beloved Kenai Peninsula which all true Alaskans (particularly Sewardites) hold dear to their hearts. The inconsistencies and contradictions were of such great magnitude and frequency that I can scarcely dare to guess who did the field work for the proposal. I believe that I could document perhaps thirty (30) gross errors and misrepresentations (excluding typographical errors) in this proposal, but I'm sure that my point can be made by bringing to light only a few which will allow this letter to be much less lengthy than it could be. 306

Re: On page 131, paragraph 4, it is stated that the subsistence use of the Natives of English Bay and Port Graham, "if any, is unknown but the Natives possibly do hunt in this area and may use fish and shellfish for subsistence." As nebulous as this statement is, it would lead one to believe that no field work was done by the government to determine the lifestyles of these people, which, if true, in incongruous considering how highly accessible these villages are. Concerning the same issue (subsistence use), it is often stated throughout the proposal that subsistence use will not be affected by establishment of the monument, re: pg 7, lines 14-17; pg 8, par 3 & 5; pg 131 & 132. This is in direct contradiction to pg 2, lines 4-9, which reserves the right of the NPS to restrict subsistence uses whenever it deems such action is necessary. Does the white man truly speak with a forked tongue? 307

Concerning the economy and transportation situation of Seward it is stated on pg 95, par 2 that Seward is an important link connecting Anchorage and interior Alaska with southeast Alaska and the lower 48 states. This statement is absolutely false; the local ferry system does not even serve Anchorage or southeast Alaska, the airport has only private traffic, scarcely is even a freight train seen in Seward. Seward, in effect, is a dead end. Page 114, par 3 states that the lands in question could possibly by destroyed "through the future development of an area whose economy is rapidly expanding." Although some of Alaska is experiencing economic growth due to the pipeline this is hardly the case here. The fisheries are the major industry and they are experiencing very hard times (note the enclosed article from this week's local paper). The tourist industry is also off due to the general slow economic pace of the rest of the nation. Only the local lumber mill is in a healthy situation at present. 308 309

Furthermore, it is stated by the NPS geologists (121, par 2) that mining activity here is "totally impractical." If this is so, in combination with the fact that the supply of merchantable timber is "extremely limited" (pg124, lines 8-9), and the land is also without oil or coal (pg 121, par 2), then just how could the area be spoiled or exploited? Let me tell you how....it could very well be exploited by the influx of an unusually large group of tourists....let's say about 150,000 per year within 5 or 10 years of enactment of this proposed legislation (pg113, par 3). 310

It is suggested that the impact on wildlife and fisheries would be light (pg 114-116), the reasoning given is that the legislation would eliminate the already light hunting which goes on in the area. Did any of you people ever consider what the addition of 150,000 humans per year would do to the habits of these animals? Even if only 10% of this number ventures into the actual wilderness it will have a tremendous adverse impact. Truly, the game would no longer be hunted, but if the animals themselves could have the choice of their present predicament or the one proposed for them by the NPS, there can be no doubt they would prefer to take their chances with an occasional hunter. 311

Concerning the impact statement on the city of Seward (pg 135-136), it is wrongly stated that "the effects of crowds on an everyday basis are harder to assess than the impact of occasional large crowds" such as Seward is used to. This is not even a logical consideration, all we have to do is take a look at sociological statistics for any large city to assess what rewards are reaped from daily overcrowding. This may be an oversimplification on my part but, like most people here, I like where I live and don't want to see it drastically changed by unthinking bureaucrats who live 5000 miles from here. 312

As mentioned in my previous correspondence, this area is very much accessible at present to anyone who wants to get out there. There are currently scheduled boat tours down the coast and planes can be chartered for the Icefield trip. And of course, walking is a very acceptable way of getting to know the wilderness. 313

In light of the above statements and many more which lack of time does not allow me to catalog if I am to get this letter mailed by the July 22nd deadline, I must advise that if the proposed monument does become a reality it should be managed under Alternative C-2, -IMMEDIATE WILDERNESS DESIGNATION OF THE ENTIRE AREA. If this proposal is not enacted then I would hope the area could become part of the NATIONAL WILDERNESS PRESERVATION SYSTEM as mentioned on page 112. As far as I can discern these are the only two alternatives which the area has if it is to remain as it has for eons past.

Sincerly,

Thomas L. Taggart

Thomas L. Taggart

SEWARD
LOG

1974 * Seward, Alaska 99664 * Price: 15 Cents

FOREIGN FISHING TAKES TOLL HURTS SEWARD INDUSTRY TOO

The de-escalation of activity at the plant will result in a 50% reduction in man hours according to Bardarson. Once the winter months are reached the usual products to be processed will bring the plant back to about what the usual winter activity is.

The shortage of halibut is not a local problem--but part of the broader one refelcting on the entire industry. The International Pacific Halibut Commission says that halibut landings through June 28 were 8.4 million pounds or 34% of the 1974 catch limit of 25 million pounds. The 1974 season opened on the 17th of May, seven days later than 1973. Last year the catch for the same number of fishing days (43) was over 12 million pounds. The rate of catch per boat is the same as

"Very poor", is the way Fisheries Manager Linne' Bardarson describes the outlook for the remainder of the halibut season. He adds that production thus far has been about half of that last year.

"We don't expect more than a couple million pounds total halibut production this season", Bardarson says. Few fish in the Gulf of Alaska traditional fishing grounds is given as the primary reason the fishing is poor. Bardarson says what fish are being found are near the shore, instead. Almost all the large Canadian halibut boats have headed back home and are converting to tuna or salmon fishing. Large American boats have followed suit, including many local vessels which are gearing up for salmon. "The only bright aspect of this is that the small vessels are doing relatively well", Bardarson states.

A bleak future for the halibut industry is seen by the SFI manager. "As long as the heavy foreign fishing continues in the Gulf halibut will continue to diminish", he says. "At SFI we are looking to alternative sources of production--primarily in bottom fish. In fact our future seems at this point to be tied to development of a healthy bottom fishery".

Bardarson sees the next 4½ months as a transition period in which the plant begins to change over. He says the reduction plant, which will handle bottom fish, hopefully will process some bottom fish before the end of July. The reduction plant will be the largest and most modern in the business.

Meanwhile the plant has been buying salmon from the Yukon and Tanana River, which is being trucked from Manley Hot Springs. Other salmon sources for SFI are Prince William Sound, Cook Inlet, Kodiak and Chignik where the plant has tenders at work.

306. During the writing of the Final Environmental Statement, every effort possible was made to correct inconsistencies, factual errors, or any biased analyses which were found or which were pointed up by the comments on the draft statement.

307. The subsistence use policy for the proposal has been rewritten and now reads:

Except as may be otherwise prohibited by Federal or State law, existing traditional subsistence uses of renewable resources will be permitted until it is determined by the Secretary that utilization of these resources is neither economically or physically necessary to maintain human life nor necessary to provide opportunities for the survival of Alaskan cultures centering on subsistence as a way of life.

If it is demonstrated that continued subsistence uses may result in a progressive reduction of animal or plant resources which could lead to long range alternations of ecosystems, the managing agency, following consultation with the Alaska Department of Fish and Game, communities and affected individuals, shall have the authority to restrict subsistence activities in part or all of the monument.

Chapter I,B also proposes "that cooperation be sought with all concerned State agencies, communities and affected individuals in arriving at an equitable and workable management plan for subsistence resource uses in the proposal area, including indepth study of subsistence lifestyles and resource uses." Further information on subsistence guidelines is contained in Chapter I, C.

The information on subsistence use of the area is based on consultation with and studies conducted by secondary sources who are considered reliable, including Alaska Department of Fish and Game records and personnel. As is noted above, further cooperative studies could be conducted during the ongoing planning process for the monument.

The analysis of the proposal's impact on subsistence use of the area has been rewritten (See Chapter III, F-3). Our conclusion that the impact of the proposal on subsistence use would be negligable is based on the fact that subsistence harvests in the area are thought to be light, and are concentrated mainly on marine resources. The proposal would not prohibit

fishing in the offshore waters, nor would it prohibit subsistence uses on the land. Restrictions on subsistence use would be installed only after consultation with Alaska Department of Fish and Game, communities and affected individuals, and if it was demonstrated that continued subsistence uses might result in a progressive reduction of animal or plant resources which would lead to long range alterations of ecosystems. In view of the light subsistence use the area presently receives and the potential for future use, such an eventuality is considered highly unlikely.

Further, increases in sightseeing, pleasure boating or other visitor activities in the monument area are not expected to interfere with subsistence activities. However, if such conflicts did arise in the future, visitor uses would be prohibited or periodically curtailed where and when necessary, to reduce such conflicts.

308. The description of Seward's importance in the regional transportation system has been corrected to reflect the significance of the earthquake. (See Chapter II, B-2) Also, additional information on the transportation network has been included in Chapter II, B-4 and I, B-9.

309. Your points on the fishing and tourist industry are recognized. However, the Kenai Peninsula is considered to have undergone substantial economic expansion in the last decade, much of it in conjunction with the growth of Anchorage. Further, the potential for growth in the next 5 to 10 years is considered good for economic sectors such as tourism. (See Chapter III, sections B-3 through B-9 and Chapter III, sections F-4 through G for detailed discussion of economic considerations).

310. The assessment of mining potential for the area has been rewritten based on updated information and comments received (See Chapter II, A-3, B-8, and III, F-7). Possible impacts of exploitation could result from mining operations along the coast or on or near the periphery of the icefield. Cutting of timber for local use could lead to major localized impacts on the landscape in areas where timber stands do occur (in Resurrection Valley and along the coast). In addition as discussed in response 304 above--related to your earlier letter, visitor use under this proposal would be planned and controlled to preserve the natural values of the area. Uncontrolled or unplanned recreational development could result in significant degradation of natural values over a large area of the

icefield. (See Chapter III for further discussion of impacts, and Chapter VIII, A for discussion of impacts under no action on this proposal.)

311. Refer to response 304 above for discussion of controls and visitor use planning. As most of the monument is proposed to be kept in its natural state with only wilderness-type visitor use allowed, we do not feel that the number of people expected to engage in backcountry recreation would create a substantial disturbance for the local wildlife. Compatibility of wildlife and visitor use has already been demonstrated in parks such as McKinley. However, some conflict between wildlife use patterns and visitation can be expected. The impact of this is discussed in Chapter III, A.

312. The Impact discussion for the city of Seward has been reorganized and rewritten. (See Chapter III, specifically section F-6.)

313. Refer for response to question 305 of your earlier letter.

915 Will Rogers Drive
Stillwater, Oklahoma 74074
April 12, 1974

Mr. Theodor R. Swem
Chairman, Alaska Planning Group
U. S. Department of the Interior
Washington, D. C. 20240

Dear Mr. Swem:

This letter is in response to Secretary of the Interior Morton's recommendations and proposed legislation to establish limits of the National Park, National Wildlife Refuge, Wild and Scenic Rivers and National Forest Systems on the Federally-owned lands of Alaska. The Draft Environmental Impact Statements which were submitted by the Secretary have many deficiencies which should be corrected before the final impact statements are submitted.

The impact statements seem to have the following general shortcomings which I recommend be reconsidered and corrected as appropriate.

Discussion of the alternative of a wilderness designation in most proposals is generalized. Each statement should discuss and consider a specific wilderness proposal. 314

The alternative of not permitting mining or oil and gas leasing in National Wildlife Refuge System areas was not discussed. 315

Interior proposes to name some National Park System areas national monuments. Because of their high scenic beauty and great natural values, all such areas should be named national parks. 316

Interior proposes to name all wildlife system areas as "National Wildlife Refuges." Since their wilderness condition is necessary to wildlife, however, they should be designated "wildlands" or "wildlife ranges." They are not merely sanctuaries, but have other values as well.

No areas proposed for "multiple use" should be permitted to stand as the Secretary has submitted them.

The following comments are submitted for each specific impact statement which has been made, and it is requested that the final statements adequately discuss the omissions as indicated:

1. Mount McKinley National Park Additions.

This is one of the better Interior Department proposals. Its additions do much to correct boundary inadequacies existing since the park was established in 1917. The environmental statement does not analyze: 1. The significant impacts on the park proposal that have resulted from the 1972 giveaway of critical lands on the south to the State of Alaska, or whether such lands should be included in the park. 2. The problems or impacts of omitting Chelatna Lake from the park.

2. Katmai National Park.

The environmental statement recognizes that the entire Katmai brown bear population is not protected as the proposal erroneously claims—because the critical Battle Lake and Alagnak River watersheds are left out of the proposal. But the statement does not adequately discuss: 1. Long term impacts on the park or wildlife values which would result from this omission. 2. The impacts of expanding Brooks Camp, which already suffers from bear-human conflict.

3. Aniakchak Caldera National Monument.

The environmental statement does not discuss: 1. the impacts of an agreement with the State that leaves this park system unit open to hunting. 2. The impacts of hunting on the area's critical bear populations, now over-hunted. 3. The impacts of extensive private inholdings through native ownership within the monument. 4. The alternative of establishing an urgently needed brown bear wildlife refuge adjacent to the monument.

4. Harding Ice Field-Kenai Fjords National Monument.

This is a basically sound proposal, but the statement does not discuss: 1. Whether the inclusion of native-selected lands (with the natives' consent) within the monument boundaries should be allowed. 317
2. The alternative of establishing a major national park to include national forest lands to the east of Seward to Prince William Sound. 318
3. The alternative of eliminating the conflict with natives by identifying deficiency withdrawals outside their corporation boundaries. 319
4. Problems inherent in "dual (two agency) administration" of the area, a practice which has never proven satisfactory. 320

5. Cape Krusenstern National Monument.

This is a good proposal to protect significant archeological areas. The environmental statement, however, does not adequately discuss the alternatives of including additional lands to the north and east—if not selected by the natives—in the proposal.

6. Kobuk Valley National Monument.

The environmental statement does not discuss the alternatives of including those essential native-withdrawn lands within the monument if not selected by the natives. The Interior Department pursued this imaginative approach for such lands within the Onion Portage Archeological District, and this concept should be expanded to protect other critical natural areas as well.

7. Lake Clark National Park.

The environmental statement does not adequately discuss: 1. The impacts on Cook Inlet natives, who have considerable interest in the area. 2. Associated impacts upon the park of "dual withdrawal" lands, should they be selected by the natives' corporation. 3. The alternative of a land swap with the State for the Wood-Tikchik area. 4. The alternative of withdrawing lands for the Cook Inlet natives outside their regional corporation. 5. The impacts of allowing hunting within the park.

8. Wrangell-St. Elias National Park and Wrangell Mountain National Forest.

This is the worst of the Interior proposals. It amounts to an outright giveaway of much of the greatest potential park lands in the nation to commodity exploitation under "multiple-use" management practices of the Forest Service. These environmental statements completely divorce treatment of the park and forest proposals, thereby preventing any comprehensive analysis of the impacts of the overall decision. The impacts of inevitable, extensive mining on the park values in these areas are not adequately discussed. The long term impacts of extensive roads and associated developments the Forest Service encourages is not discussed. There is not even enough detailed environmental assessment to properly evaluate whether the reduced park proposal is even a viable management unit. The alternatives of adding lands to the park are not adequately discussed regarding their environmental impacts and, more important, their impacts on the long term viability of a superb national park proposal. The impacts of hunters are not discussed. The relationship between the Interior Department's forest proposals and the State of Alaska's plans for the Copper River and Chitina-McCarthy roads (opposed by conservationists) is not discussed. Nor are the impacts of these Forest Service-supported highways on park values and on the decision-making process considered.

9. Gates of the Arctic National Park.

The environmental statement discusses an imaginative proposal which merited serious consideration, the establishment of a National Wilderness Park, and a cooperative National Wildlands with the north slope natives. However, last minute decision-making by the Office of Management and Budget threw out this good proposal, substituting a traditional approach that does not address the area's needs and problems. *This environmental impact statement is totally inadequate since it considers a different proposal than that actually submitted!* Thus there is inadequate treatment of the alternatives, which should have been considered. Such alternatives would create a truly great national park, including: 1. Adding state lands to the south. 2. Adding portions of Naval Petroleum Reserve No. 4 (PET 4) to the north. 3. Creating a great National Wilderness Park. 4. Creating a cooperative wildlands area with the north slope natives, to include some of their lands jointly.

10. Yukon-Charley National Rivers.

This is an essentially sound proposal, but the environmental statement does not analyze: 1. The impacts of the area's being *the only national park area proposed to allow mining within its boundaries* 2. The long term impacts upon park values of visitation such mining would bring within the Yukon portion. 3. The impacts of recreation and allowing mining along the Yukon on the need to protect critical wildlife populations like the peregrine falcon.

11. Chukchi-Imuruk National Reserve.

The statement mentions that an area outside the proposal would be managed for watershed protection by the BLM, but does not discuss the impacts of such a proposal on the area's watershed values critical for waterfowl. Nor is there adequate discussion of alternatives to the proposal, and there is no discussion of problems inherent in "dual administration."

12. Alaska Coastal National Wildlife Refuges.

Alternatives not discussed in this essentially good proposal are: 1. Including additional coastal and offshore areas—many should be in the proposal. 2. Closing the wildlife refuges open to mineral leasing. 3. Including surrounding waters and submerged lands essential to protect complete island ecosystems and their unique wildlife populations.

13. Arctic National Wildlife Refuge.

The impact statement does not adequately discuss: 1. Alternatives of greatly expanding this proposal to the west and south. 2. Cooperative international wildlife refuge opportunities with Canada. 3. Impacts of leaving the area open to mineral leasing. 4. The relation of this proposal to the potential gas line corridors under consideration by the Interior Department. These corridors should be given serious consideration in this statement.

14. Iliamna National Resource Range.

The long term impacts of dedicating this area to multiple use management are not explored in the statement. Joint administration with BLM is an unacceptable management method for the critical salmon and bear resources present here. In addition, the statement does not discuss: 1. Conflicts between oil development and hard rock mining and the wildlife resources. 2. The long term impacts and relationships between the proposal and the native people who use this area heavily. 3. The alternative of adding the Wood-Tikchik area to the proposal.

15. Koyukuk National Wildlife Refuge.

The statement fails to discuss: 1. The giveaway of half of the proposal to the BLM and Forest Service. 2. The impacts of the "potential for mining" on the wildlife. 3. The alternatives of adding critical areas to the two units of the refuge and establishing additional units.

16. Noatak National Arctic Range.

This proposal is also a giveaway to the BLM and its commodity exploitation advocates. The area should be established as either a national park or national wildlife refuge, alternatives not adequately discussed in the statement. The statement does not properly explain BLM's role in the proposal and the impacts of its involvement on the resources. Long term impacts of not recommending permanent protection for the area are ignored, along with alternatives for providing permanent protection for the Arctic caribou herd's calving area.

17. Selawik National Wildlife Refuge.

The statement does not adequately discuss: 1. The severe impacts of allowing mining in the area. 2. The alternatives of automatically including additional critical habitat areas if the natives do not select them. 3. Impacts on and the relationship with the local natives.

18. Togiak National Wildlife Refuge.

The statement does not adequately discuss or analyze: 1. The additions of substantial lands to the north and the east, regarding their impacts upon the proposal and the ecosystem as a whole. 2. The impacts of leaving the area susceptible to mining. The statement lacks sufficiently detailed explanation of the ecosystem to properly evaluate either the impacts of the proposal or its potential *for long term wildlife protection.*

19. Yukon Delta National Wildlife Refuge.

Imaginative serious alternatives were not discussed in the statement: 1. The inclusion of all non-selected native withdrawn lands and the potential for cooperative agreement with the native corporations to protect wildlife values on lands they will actually own. 2. The critical impacts of oil or mineral development within the refuge. 3. The overall relationship between and impacts of this proposal on the natives, and vice versa. [The relationship between waterfowl and the land ownership pattern in this area is extremely critical. The statement in no way adequately depicts the present situation or the area's needs in relation to both native people and wildlife.]

20. Yukon Flats National Wildlife Refuge and Porcupine National Forest.

This Yukon Flats/Porcupine proposal is second only to the Wrangells proposal as a demonstration of poor decision-making lacking proper consideration of the ecosystem planning concept. Here again, the Interior Department has divided discussion of one magnificent ecosystem into two separate environmental statements to avoid a true analysis of the actual impact of the Administration proposals. The impacts of the mining, logging and other resource exploitation encouraged by the Forest Service in North America's most important waterfowl area are not seriously discussed. Failing to discuss the complete ecosystem—which transcends political decisions—the environmental statements are seriously inadequate analyses of both impacts and alternatives. *All of the Yukon Flats area should be a National Wildlife Refuge System unit.*

21. Chugach National Forest.

The environmental impact statement contains little demonstration of need for this addition to the Chugach National Forest. The impacts of multiple use management and of adding the area to the forest by public land order are not adequately discussed. No indication of how the lands would be used—or the impacts of such uses is stated. An alternative of adding the lands by means of legislation, and legislatively establishing the entire Chugach, is not discussed.

22. Yukon-Kuskokwim National Forest.

The statement does not discuss or consider: 1. The impacts on wildlife, especially those populations that move between the proposed forest and Mount McKinley National Park. 2. The alternatives of proposing strong wildlife protection provisions. 3. The overall and long range impacts of the forest on McKinley Park. 4. The impacts of resource extraction within the Nowitna Scenic River watershed. Since only 14 percent of the proposed forest contains potential commercial forest lands, the Forest Service has not adequately demonstrated any real need to establish a national forest here.

23. Beaver Creek and Birch Creek

Serious alternatives to both proposals—not considered—should be thoroughly analyzed, alternatives that would protect the rivers' entire watersheds. For example, since they flow into the Yukon Flats area, adding them to the Yukon Flats National Wildlife Refuge should be considered. The impacts of BLM multiple use management—including mining—within the watersheds of both proposals are not adequately discussed.

24. Fortymile.

This is basically a good proposal, but alternatives not analyzed include: 1. Designating more of the river system as wild and scenic. 2. Considering the river system—with its superb scenic and recreational resources—for addition to and management as part of the National Park System, rather than within the BLM. In addition, the impacts of allowing access for mining and the impacts of that mining within the river's watershed should be thoroughly discussed.

25. Unalakleet.

Alternatives should be considered that would: 1. Protect the entire river through cooperative agreement with the natives, who may gain ownership of the headwaters. 2. Automatically include the entire river in the system, if it is not selected by the natives. 3. Protect the entire Unalakleet watershed.

Sincerely yours,

Billy C. Wallace

Billy C. Wallace, PE

314. The wilderness proposal for Harding Kenai is stated in Chapter I as follows: "that within 3 years after establishment of the monument a study will be made and a report will be submitted by the Secretary of the Interior concerning the qualifications of any area within the monument for inclusion in the National Wilderness Preservation System. Any wilderness designation will be accomplished by legislation and in accordance with procedures stipulated by subsections 3(c) and 3(d) of the Wilderness Act."

Your concern over the potential foreclosure of options for wilderness designation is understandable, but the management objectives for this proposal does not preempt wilderness options; they further the intent of the Wilderness Act.

Decisions regarding management policies, including development and public use, must be within the guidelines of the basic legislation of the managing agency and the authorizing legislation for the particular area. If the proposal was implemented, a wilderness study and proposal would be made within the context of these management policies.

The studies of the d-2 lands which were carried out during the two-year period designated by Congress identified the resources at hand, and although not specifically directed towards wilderness designation, the wilderness values of the area were given consideration. These values were tentatively identified in the environmental impact statements. These values are demonstrated in Chapter I, II, and III. (See specifically Land Classification map; also III, F-2.)

The legislative proposal does not foreclose further wilderness designation by Congress. Also, any developments to be considered would require an environmental assessment or statement, which would include a further look at the impact of the development on wilderness values.

Further, the alternative of immediate wilderness designation is examined in Chapter VIII, C.

315. Neither oil or gas leasing, nor mining would be permitted in the monument.

316. The decision to make Harding Icefield-Kenai Fjords a National Monument rather than a Park was based primarily on the criteria for parklands as set forth in NPS Administrative Policies.

Because the area was not given park status it does not mean that it would receive any less protection than the monument. Both would

be legislatively established and both would carry the same legal management restrictions and stipulations.

Harding-Kenai was made a monument mostly because of the fact that, by Alaskan standards it fit the requirements of scope, space, and diversity that are deemed compatible for designation as a monument.

317. The proposal for the AEC in Chapter I,B, takes into account the possibility of including lands donated by Native landowners. It reads in sort: "...that the Secretary may revise the boundary of the monument to include not to exceed 453,000 acres of lands and waters depicted on the Proposal map as "Area of Ecological Concern" which are not selected by Native corporations under provisions of the Alaska Native Claims Settlement Act. Within the boundaries of the monument as established in legislation or as such boundaries may be revised, the Secretary is authorized to acquire lands, waters, and interests therein by donation (emphasis added), purchase, or exchange, except that property owned by the State of Alaska or any political subdivision thereof may be acquired only by donation or exchange, and property owned by any Native village or corporation may be acquired only with the concurrence of such owner.

318. The alternative of including National Forest lands or other lands from existing, federal management units is not being considered because these lands are presently unavailable for selection and are not covered by the section 17 withdrawals as mandated by ANCSA.

319. Under the terms of the Alaska Native Claims Settlement Act, lands withdrawn for Native selection must be of a "like-kind" to that presently occupied by the Natives and must be reasonably accessible to them. In view of the existing land withdrawal patterns in the region, it was felt that the deficiency lands along the south coast would meet the terms of the Act and that no other reasonable alternatives were available in the area.

320. The lead agency in the management of this proposal would be the National Park Service. Joint management would apply to the coastal units of the minument and would primarily concern wildlife management. It is felt that the goals of both agencies are consistent with regard to these resources and that the area will benefit from the joint application of the different types of expertise available from the two agencies.

Note: These comments from Billy C. Wallace represent 106 other comments which were received from individuals and which were identical in content to Mr. Wallace's comments. These other letters have not been published nor have they been responded to individually, but the responses to Mr. Wallace's letter should be considered as applying to all these letters.

ALASKA'S FEDERAL LANDS

To: Mr Theodore R. Swem
Chairman, Alaska Planning Group
Department of the Interior
Washington, D.C. 20240

by:

David Williamson
314 West Barrett
Seattle Washington 98119

RESPONSE TO THIS PROPOSAL → 321

SUMMARY OF PLAN

1. Disposal to State of all unretained Federal lands allowing for Native selectio
2. Retained Federal lands divided into "Four Systems" plus Defense lands and Other (miscellaneous) Federal Lands. Lands that are retained for a set purpose.
3. Assignment of Federal land unit to appropriate agency with basis mission and power to best develope and care for assets of given units on an indefinite time period.
4. Division of all lands with in retained Federal land status into two functional classifications:

   Natural Areas – Unit to be managed by Federal agency to protect natural features, biota and other miscellaneous while prohibiting timber cutting, mining and other forms of commercial res. resource developement.

   Resource Developement Areas – Unit to be managed not only for any public recreational use if allowed, but also for limited resource developement as the agency in charge will allow. Timber and mineral resource developement are allowed.
5. Granting to State the power to dispose of any lands it gets from the Federa Government as it see fit while encouraging cooperation on any necessary regional planning that involves any Federal Unit and adjacent State lands in matters of homesteading, wild life movements and habitats, and public recreation.
6. Establishment of expanded Lake Clark NP, Kenai Fiords NM, Mt McKinley NP, Gates of the Arctic NP, and Katmai NP as major recreational-wilderness type Parks of NPS, Aniakchak Crater NM as an isolated natural area of NPS. Cape Krusenstern to be a national archeological area of NPS. Remainder of NP System in Alaska set as limited resource developement area of NPS. Native subsistence needs allowed in all units if they can't be met elsewhere and for as long as the need either exists or can be kept at acceptable leve
7. Expansion of National Wildlife Refuges into areas of critical wildlife habitat throughout Alaska as embodied in proposed new Refuges. Only Arctic NWR will be a natural area Remainder of refuges managed for wildlife along with secondary natural resource developement in lieu of wild life habitat improvement ~~and mining~~. Noatak NWR will have 20 year moratorium but full mineral surveys will continue with staking of claims after moratorium along with any roads determined at future study and Congress Acts.
8. Inclusion of National Forest System to incorporate critical timber land areas as new national forests, the addition of isolated BLM lands adjacent to existing Chugach, North Tongass, and South Tongass NF to round out USFS watershed protection and lower all Federal land management costs. Most high country in Wrangell-Chugach region given to NPS since it is best to give NPS high country to manage and USFS watershed timberland to police.
9. Federal and State Wild Rivers Systems plus Cooperative Management Zones (Federal, State, and Native) at Mt McKinley, Gates of the Arctic, and Illiamna Lake basin,

NATURAL AREAS

	Acres
National Park System	23,206,000
1) Aniakchak Crater NM	486,000
* 2) Katmai NP	4,720,000
* 3) Lake Clark NP	3,850,000
* 4) Kenai Fiords NM	550,000
* 5) Mt. McKinley NP	5,120,000
** 6) Gates of the Arctic NP	8,130,000
7) Cape Krusenstern NM	350,000
National Forest System	2,394,000
1) South Tongass NF	
a) Granite Fiords Wilderness	590,000
b) King Salmon Capes Islands Wilderness	120,000
2) North Tongass NF	
a) Tracy Arm	980,000
3) Chugach NF	
a) Nellie Juan Wilderness	704,000
National Wildlife Refuge System	12,920,000
1) Arctic NWR	12,920,000
TOTAL	38,520,000

* First priority establishment recommended for these new National Parks
* First priority establishment for additions to existing National Parks
(+) First priority establishment National Forest (new)
(-) First priority establishment National Wildlife Refuge

RESOURCES DEVELOPEMENT AREAS

	Acres
National Park System	19,613,000
1) Glacier Bay NM (or NP)	2,846,000
2) Charley National River Park	2,230,000
3) Wrangell-St. Elias NP	12,587,000
* 4) Kobuk Valley NM	1,950,000
National Forest System*1	36,464,840
(+) 1) North Tongass NF	10,720,000
2) South Tongass NF	5,150,000
(+) 3) Chugach NF	4,900,000
(+) 4) Yukon-Kuskokwim NF	7,271,000
5) Wrangell Mountain NF	1,923,840
(+) 6) Porcupine NF	5,500,000
National Wildlife Refuge System	36,374,019
1) Aleutian Islands NWR	1,500,000
(-) 2) Barren Islands ~~NWR~~	10,000
3) Bering Sea NWR	4,860
(-) 4) Kenai NWR	1,650,000
5) Chukchi Sea NWR	24,815
6) Chukchi-Imuruk NWR	2,408,320
(-) 7) Noatak NWR	7,250,000
(-) 8) Selawik NWR	1,420,000
(-) 9) Togiak NWR	2,650,000
10) Koyukuk NWR	5,350,000
(-) 11) Yukon Delta NWR	6,550,000
(-) 12) Yukon Flats NWR	3,500,000
13) Hazy Islands NWR	42
14) St. Lazaria NWR	62
15) Forrester Island NWR	2,800
(-) 16) Shumagin Islands NWR	62,800
17) Kodiak NWR	1,790,000
18) Iliamna NRR	2,200,320
National Wild and Scenic Rivers System*2	725,000
1) Forty Mile River	275,000
2) Other Wild and Scenic Rivers	450,000

*1 = Net NF acres following State, Native and private exclusions. Includes Wilderness Areas.

David Williamson
314 West Barrett
Seattle Washington 98119
July , 1974

FEDERAL LANDS IN ALASKA

Gentlemen:

The recent Alaska study proposals underscore the need for state wide land use and resource management planning, while satisfying the following important items to a major degree!

A) State Land Selections ---------- 103,000,000 acres
B) State Tidelands ---------- 45,000,000 acres
C) Statehood Grants ---------- 800,000 acres
D) Alaska Native Claims ---------- 40,000,000 acres

The specific locations of these major claims on Alaska's 365,481,000 acres of land and water along with individual private and native land applications will have great bearing on Alaska's future economic and political development as well as on future land use conflicts with land uses presently contemplated for the scattered tracts being studied for inclusion into the national park system, the national forest system, the national wild rivers system, and the national wildlife refuge system. Since many of the State and private claims being asked for occur on the very lands being proposed for reservation by the Federal agencies involved in the above mentioned systems, there will be no way of coming up with a plan that will avoid "stepping on someones toes. Some form of defining functions and relegating them to various State Federal and other miscellaneous agencies will have to done here. Any Federal land that is not retained under Federal ownership under the "four reserve system" or under present day withdrawls as national parks, national forests, wildlife refuges, Department of Defense lands, and Bureau of Land Management reserved lands; should be granted to the State for disposition. Settlement areas in the future will have to be identified and set up even before the expanding road system reaches them.

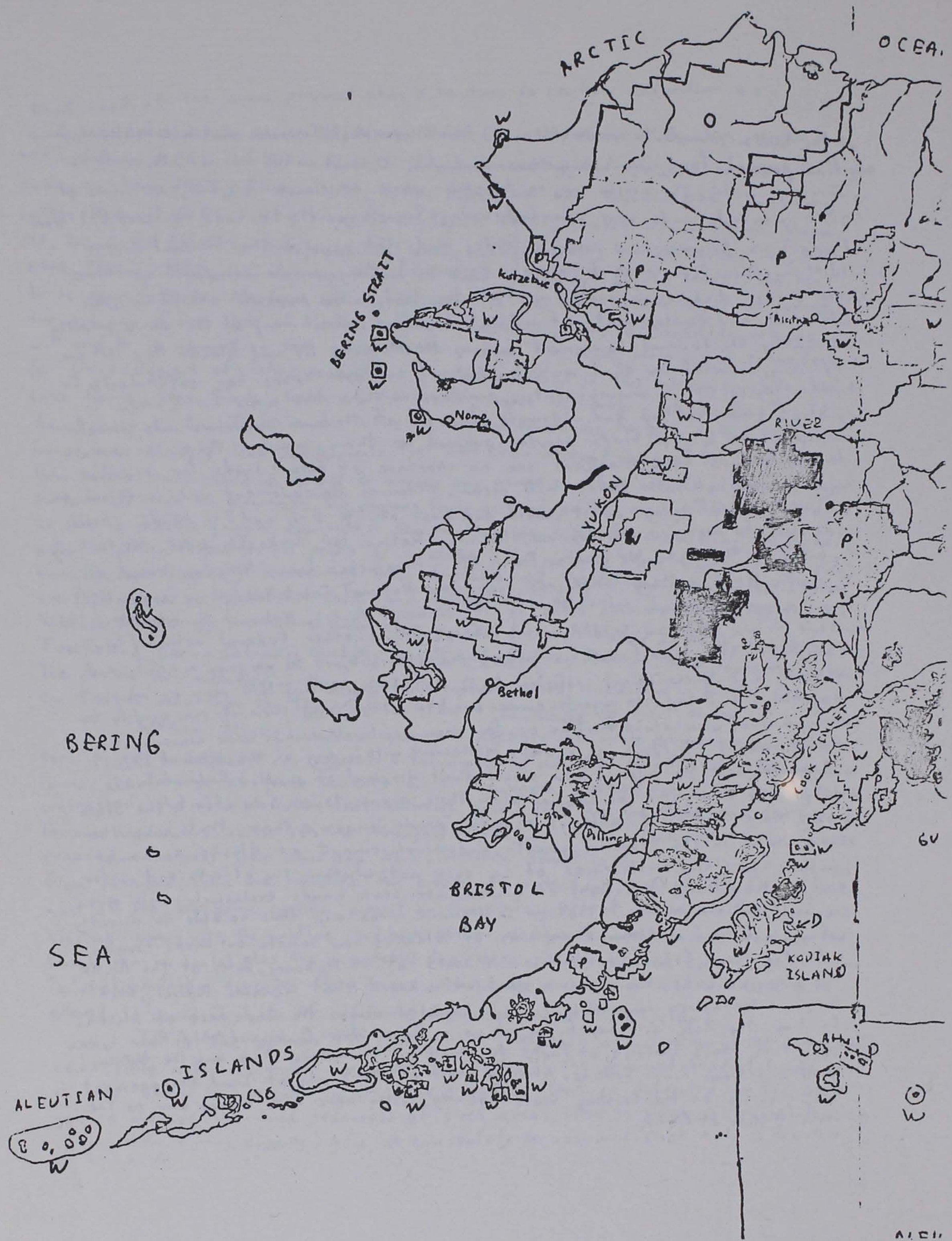
In terms of management, each Federal agency should exercise a greater degree of flexibility and relaxation of stringent regulations that characterize their role in the other states of the Union. On one

hand most of the areas proposed should be open to certain activities as hunting (such as in Lake Clark NP, Wrangell - St. Elias NP, Kobuk Valley NM, Arctic NWR, Illiamna NRR, and Yukon Flats NWR), timber cutting (as specified to such cases as Kenai NWR, Illiamna NRR, Yukon Flats NWR and Koyukuk NWR) and mining (within Wrangell - St Elias NP, Kenai NWR, Togiak NWR, Chukchi - Imuruk NWR, Chugach NF, Tongass NF [North and South Tongass NF], Yukon - Kuskokwim NF, Wrangell Mountain NF, Noatak NWR, Illiamna NRR, and remaining Bureau of Land Management [BLM] lands). This has to be done to sustain the local economy adjacent to the area considered, if not indeed the economy of the State of Alaska. Yet some national parks and wildlife refuges will need to be managed in such a way as to preserve the land, biota, and scenic features for the enjoyment of future generations. The National Parks in this category include Katmai, Lake Clark, Kenai Fiords, Gates of the Arctic, Mount McKinley, Glacier Bay*, and Aniakchak Crater. These parks are given enlarged boundaries to best protect their attributes from future offending land developments that will claim adjacent areas of the State. Within their borders money should be funded to acquire any private or native inholds as well as any State lands and to compensate the owners fairly by land or/and money. This is to be done as soon as possible (maybe even within the enabling legislation for establishing the parks) in order to present them to all people as a clean slate natural areas (*These Parks should have the highest priority in securing their existance as the dominant use areas [along with those areas in the National Park and National Wildlife Refuge Systems]). The National Wildlife Refuges in the natural area class include Arctic, Aleutian Islands, Izembek, Fire Island, Barren Islands, Chukchi Sea, St Lazaria, Hazy Islands and Forrester Island. The reason for maintaining these areas in their natural condition is for the sake of the wildlife more than for the people that are <u>permitted</u> to visit them.

With in Alaska's interior are rich pockets of white spruce - paper birch type forest lands, that can support a thriving forest industry in adjacent cities and towns. The largest of these pockets are in the upper Kuskokwim, the Yukon - Nowitna watershed, the eastern Yukon Flats centering around the Porcupine River, and the upper Tanana headwaters north of the Wrangell - St Elias National Park. The national forests proposed encompass these areas and more. Besides forest lands supporting a continuous flow of wood; there are marshes for broods of waterfowl, wildlife habitats supporting most of the big game species present in the State, upland meadows where domestic livestock graze with the wildlife, and high glacier clad peaks where miners continue the search for minerals plus the inevitable day when non-consumtive users (such as recreationists) gradually discover these areas. Obviously a variety of uses will have to be allowed in accordance with the US Forest Service's multiple use policy.

It is the opinion of this person that each agency should be given lands compatible with its basic mission and that <u>all</u> the retained Federal lands in Alaska should be assigned to the Federal agency that is deleyated as the best agency to manage the land resources of given areas. Here is where professional opinion [illegible] experts. Also, it can safely be assumed that only a fraction [illegible]

of the lands covered in proposed areas will ever pass Congress and be established in any final proposal for ~~that any pass Congress~~. Opposition to these proposals is extremely acute, especially up in Alaska where at least 40,000,000 acres of State selected lands were cancelled under Secretary Morton's D-2 and D-1 land withdrawals triggering a possible State land suit against the Federal Government (Alaska State Department of Natural Resources). Many private individuals up there express similar dislike in contending that the land in the proposals should be open settlement and developement of natural resources. Even many of the areas presently withdrawn by the Federal Government such as Mt McKinley NP and Glacier Bay NM are already being coveted for their minerals, timber, and open space for settlements. In fact it is logical to use mining as it is practiced in these two areas as a wedge to pry about timber cutting and ultimate disposal of the areas involved into private ownership. Such a step finds popular support up there because there is so much undeveloped lands that Alaskans see no shortage of future lands for recreation and a shortage of such lands will occur. Resource developement and settlement does presidence today as it should and most of the D-2 and D-1 lands should be devoted to resource development leaving Katmai NP, Lake Clark NP, Mt McKinley NP, Gates of the Arctic NP, Kenai Fiords NM, Aniakchak Crater NM, Cape Krusenstern NM, Arctic NWR, and any wilderness areas on National Forest lands as undeveloped retained areas. The remaining areas in the National Park, National Forest, National Wildlife Refuge, National Wild Rivers, Defense, and other Federal retained lands as shown on the map (next two pages) should be subject to varying mineral, and other resource developement policies (except that Glacier Bay NM may or may not end up being disposed into private ownership; if not disposal then it can qualify for either national area classification or for resource developement area classification. (see Summary of Plan in back). Settlement within any of the retained Federal land should not be allowed nor should direct disposal of surplus Federal lands into private ownership be allowed after these proposals go into effect. The State should have that right after all it is the people living up there that have the direct stake in the economic growth and developement of Alaska and must likewise bear the consequences of any such act, whether the effects end up for good or ill. Placing the right of disposal into State hands exclusively will give the State and its people to set up settlement areas and thus be able to directly influence future settlement patterns of Alaska's now remote outback. Finally with the three Cooperative Management Zones (at Mt McKinley, Gates of the Arctic and Illiamna Lake basin as a start, it is hoped that increased Federal, State and inter-agency cooperation can be projected across the whole face of Alaska. In time the State will hopefully set up a large State Park and Wild River system under its State Division of Parks to complement the National Park and the National Wild and Scenic Rivers Systems. Already most of the Bureau of Land Management campgrounds on the existing State highway system have been turned over to the State Division of Parks.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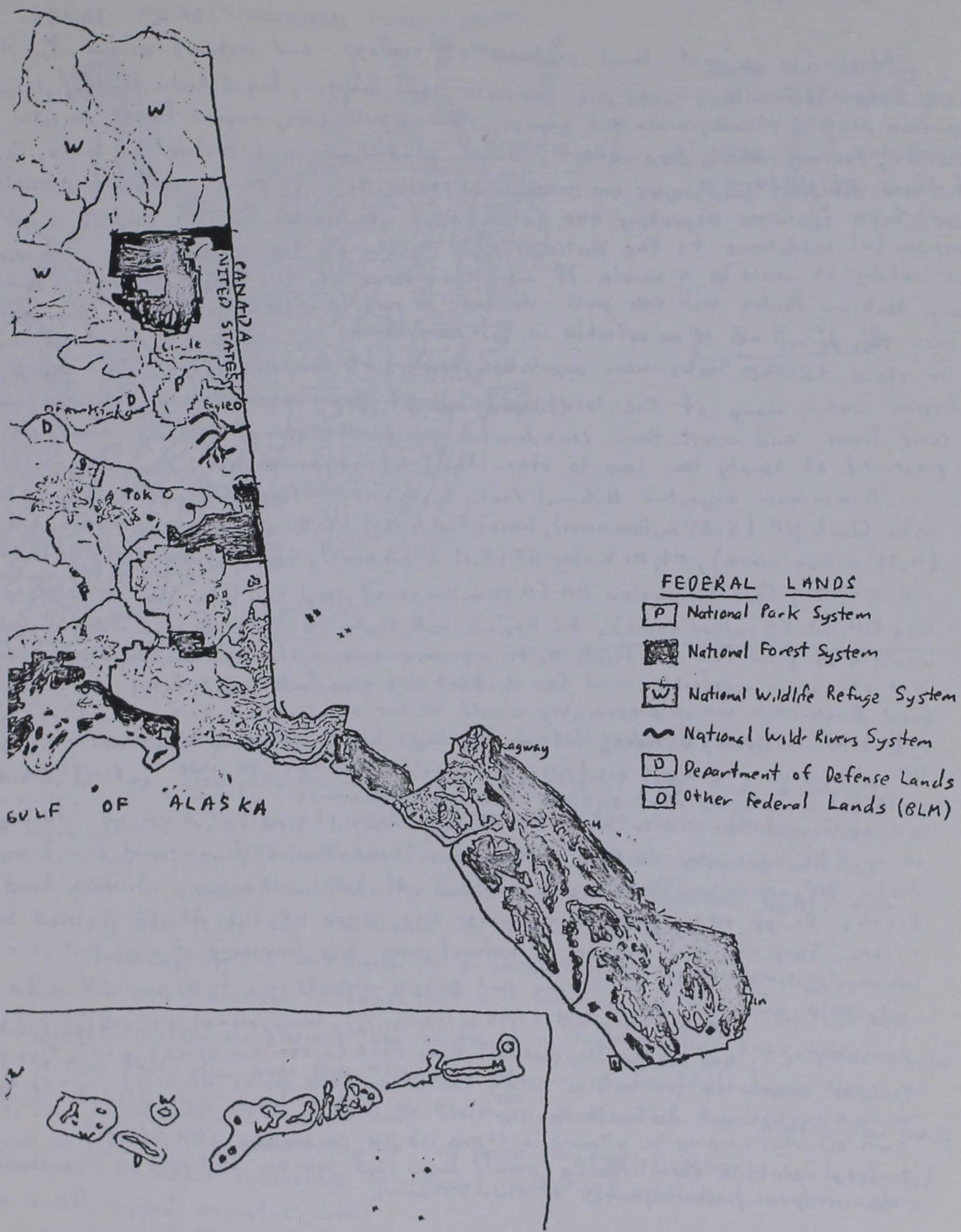
CANADA
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FEDERAL LANDS
P National Park System
National Forest System
W National Wildlife Refuge System
National Wild Rivers System
D Department of Defense Lands
O Other Federal Lands (BLM)

NATIONAL PARK SYSTEM

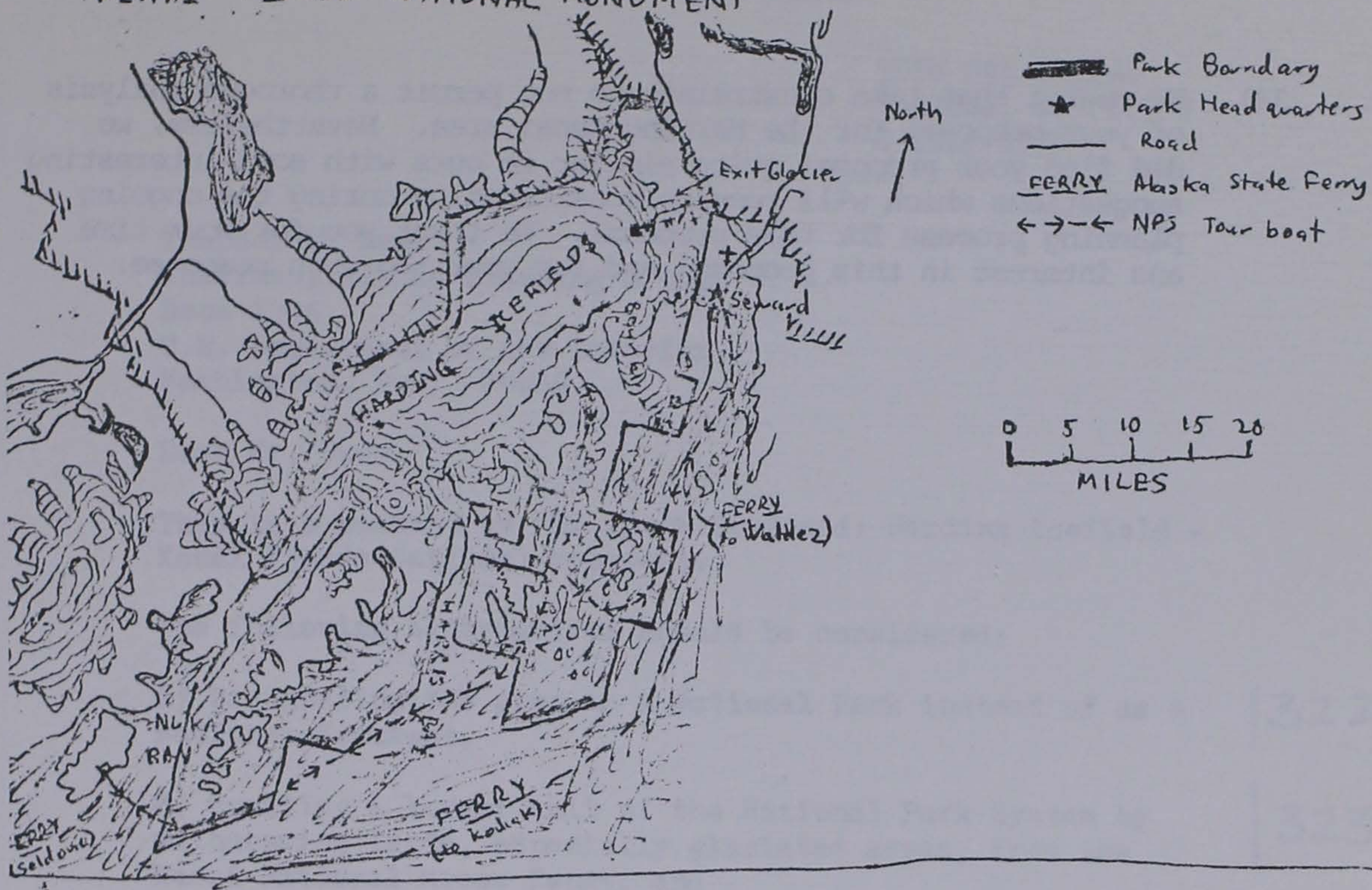
Alaska is a vast land in terms of acreage and natural scenery. In its more than 365 million acres are temprate rain forests, frigid Arctic tundra, glacier mountain peaks, plains, warm hot springs, steaming volcanoes, rugged fiords, smooth beaches, roaring rivers, deep valleys, barren sand dunes, and fertile low lands. Some of these different landscapes are encompassed in the National Park proposals presented here. Such features depicting the natural face of Alaska on the surface are wonderful additions to the National Park System of the United States. However in reality it would be a miracle if more than three of the major proposals for new National Parks will ever pass into law in any form by the Act of Congress. Thus this person has to be selective in his preferences by going for proposals that lie close to the States main population centers of the Anchorage - Fairbanks region where many of the local and out-of-State recreational users will come from and merit their consideration by great natural scenery that is preserved at fairly low loss to other types of resource uses.

A minimum objective National Park System in Alaska should encompass Lake Clark NP (3.85 million acres), Kenai Fiords NM (0.55 million acres), Katmai NP (4.72 million acres), Mt. McKinley NP (5.12 million acres), Gates of the Arctic NP (8.13 million acres, Cape Krusenstern NM (0.35 million acres), and hopefully soon a Glacier Bay NP (2.85 million acres). An Aniakchak Crater NM of 0.486 million acres would also pose few conflicts as to resource use patterns now in the area but it is inaccessible and far distant by any future road or air connection from Anchorage which presumably would be the starting point for most of its potential visiters; besides, Katmai NP, Lake Clark NP, Kenai Fiords NM, and Mt McKinley NP will draw the most visiters. It would therefore be wise to give these park enlarged boundaries that enclose the "scenic province" otherwise such enlargements will be fought for later when the Alaska Federal Task Force studies prove to many Park advocates to be "inadequate." These Parks plus the Gates of the Arctic NP, which protects a cross-section of northern Alaska's tundra and the Brooks Range near Bettles, comprize the core of the Alaska National Park System. They should be managed as natural areas free from most of man's destructive activities.

Conflicts with lumbering and mining interests are to be expected in the cases for the Kobuk Valley NM (1.95 million acres), Wrangell-St. Elias NP (12.587 million acres), and the Charley National River Park (2.23 million acres) among the remaining proposals (as well as in all the other Park units mentioned before) will make establishment difficult for the three Park units in this paragraph even if such activities were to be allowed in them. Such concessions will probably be necessary to help establish them. Alaska should know that tourism will play a very important role in spurring developement of their resources.

Katmai NP, Kenai Fiords NM, Lake Clark NP, Mt. [illegible]

KENAI FIORDS NATIONAL MONUMENT



Total Gross Acreage: 550,000

This unit preserves a pocket sample of Alaska's fiordlands and glaciers. It lies close to Anchorage, Alaska's largest city and is already accessible by road to Seward which will serve as the parks headquarters. Seward will have an NPS historical museum and visiters center as well as a boat dock for charter tours of the fiords and an air field for flights over the Harding Ice fields and the fiords to Homer and back.

Tramway up the Exit Glacier to an observation station is promising provided a means for waste disposal is found that will not mess up this area. Alternative transportation method on glaciers can be found in large tracked snow mobiles similar to the type that plow over the Athabaska Glacier in Canada's Jasper National Park. Probably this could be done on the lower stretches of Bear Glacier. Few trails

Strict NPS protection to this area to protect scenic and biological features. An ideal laboratory to measure impact of regulated visitor use on a small, rugged primative area.

RESPONSES TO COMMENTS BY
DAVID WILLIAMSON

321. We regret that time constraints do not permit a thorough analysis of your proposal for the Harding-Kenai area. Nevertheless, we did find your proposal quite similar to ours with some interesting suggestions which will receive consideration during the ongoing planning process for this proposal. We thank you for your time and interest in this proposal and for your thorough response.

3084 6th Street
Boulder, CO 80302
2 July 1974

Theodor R. Swem
Chairman, Alaska Planning Group
Room 1345
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem:

This is a comment on DES 73-86 Proposed: Harding Icefield - Kenai Fjords National Monument.

The following alternatives should be considered:

1) Designating the area as a National Park instead of as a National Monument, 322

2) Creating a larger unit of the National Park System by withdrawing lands, especially glaciated areas, from the Kenai National Moose Range, and 323

3) Diversifying the proposal with lands currently in the Chugach National Forest or proposed for addition to the Chugach National Forest. Many of these lands have great potential for addition to the proposed area. Enlarging the proposal would tend to spread impacts over a greater area, much of which is more easily accessible to the public than proposal lands. 324

Sincerely,

Ken Zafren

RESPONSE TO COMMENTS BY
KEN ZAFREN

322. The decision to make Harding Icefield-Kenai Fjords a National Monument rather than a Park was based primarily on the criteria for parklands as set forth in NPS Administrative Policies.

Because the area was not given park status it does not mean that it would receive any less protection than the monument. Both would be legislatively established and both would carry the same legal management restrictions and stipulations.

Harding-Kenai was made a monument mostly because of the fact that, by Alaskan standards it fit the requirements of scope, space and diversity which are considered compatible with designation as a monument.

323. The alternative of including lands from the Kenai Moose Range in the National Monument is not being considered because these lands are presently unavailable for selection and are not covered by the section 17 withdrawals as mandated by ANCSA.

324. The alternative of including lands which are now part of the Chugach Forest is not considered because these lands are already under management of one of the four systems. They are not presently available for selection; nor are they covered by the section 17 withdrawals as mandated by ANCSA.

The d-2 lands proposed for addition to the Chugach Forest are also not being considered as an addition to the monument. The primary reason for not including these lands in the monument is the fact that they were considered to be too far removed from the Icefield to form a contiguous part of the monument.

APPENDIX A

ANNOTATED CHECKLIST OF THE BIRDS ASSOCIATED WITH THE SOUTH COAST OF THE KENAI PENINSULA

The birds listed here by no means include all the species in the monument area. The detail with which each species is discussed varies greatly depending upon its place in Alaska's avifauna or its importance in the context of marine environments.

ORDER GAVIIFORMES

Family Gaviidae

Gavia immer	Common loon
Gavia adamsii	Yellow-billed loon
Gavia arctica	Arctic loon
Gavia stellata	Red-throated loon

All four loon species are found in Alaska. These birds nest at the edge of fresh water, rarely coming ashore except when nesting. All four winter on salt water. The common loon and the red-throated loon winter in the Aleutians and southward along the Pacific Coast. The arctic loon and yellow-billed loon winter from Shelikof Strait south. All of these birds have a flightless period during their postnuptial molt.

ORDER PODICIPEDIFORMES

Family Procellariidae

Puffinus griseus	Sooty shearwater

The sooty shearwater has two breeding populations, one around New Zealand and another around southern South America. The bird spends the North American summer months in Alaskan waters. It is not known where these shearwaters originate, but the assumption is that they are New Zealand birds making the usual circum-Pacific trek. They migrate through American waters on their way south in dense flocks.

Puffinus tenuirostris Slender-billed shearwater

The slender-billed shearwaters' breeding range centers on Bass Strait between Australia and Tasmania. They migrate in a circum-Pacific trek, penetrating the Arctic in the Chukchi and Beaufort seas probably as far north as 72°.

Known as Tasmanian mutton birds "down under," the slender-bills are a commercially harvested species there. In 1968, 177 persons were employed in the harvest of 466,200 young birds. The flesh is sold as food, proventicular oil for pharmaceuticals, fat as a supplement for feeding dairy cattle, and the down for the same use as duck down.

The huge swarms of slender-billed shearwaters, which can be seen in Bristol Bay, around the islands of the eastern Aleutians, Portlock Banks, and on down the Pacific Coast in the fall, must be seen to be believed. Even then they are hardly comprehensible to the average observer. One seasoned observer has calculated that 400,000 birds passed close to his ship in the course of one day. Another calculation made in Unimak Pass of a mass measuring 15 miles along by 2 to 3 miles wide totaled 15 million shearwaters.

Family Hydrobatidae

Oceanodroma furcata — Fork-tailed petrel

The fork-tailed petrel breeds around the entire Pacific rim from California to Honshu Island. Its marine range is substantially the same and includes the Bering Sea as well. While it is an easy bird to find at sea because of its abundance, many of its breeding colonies remain undetected. It is a burrow nester and like so many of that ilk, it is crepuscular by habit around its colonies. The only reason that so many colonies have been located is because of the strong attraction of this bird to artificial light. The nest is most frequently in a burrow and lined with a small quantity of grass. The clutch is a single egg. These birds feed on small fish, crustaceans, and fat globules from the wounds of marine mammals.

Oceanodroma leucorhoa — Leach's petrel

Leach's petrel has much the same range as the fork-tailed petrel but it does breed somewhat farther south at either end of its range. It also breeds across the North Atlantic. Presumably, it stays somewhere near its breeding areas, but it has a more southerly shift than the fork-tailed petrel. It is also markedly crepuscular around its breeding grounds.

ORDER PELECANIFORMES

Family Phalacrocoracidae

Four of the 29 cormorant species can be found in or near the South Coast. The cormorants are sociable birds and several species may be found resting on the same rock or nesting on the same cliff.

Phalacrocorax auritus	Double-crested cormorant
Phalacrocorax penicillatus	Brandt's cormorant
Phalacrocorax pelagicus	Pelagic cormorant
Phalacrocorax urile	Red-faced cormorant

The double-crested cormorants nest on fresh water as well as salt water, using both trees and cliffs for nest sites. The other three species are coastal species which place their typical cormorant nests on ledges or plastered to the face of a steep cliff. For the most part, they stay where they breed.

The double-crested cormorant is an uncommon nester in the Aleutians and eastward to Prince William Sound. There are also a few colonies on lakes in south-central Alaska and on the northern shore of Bristol Bay. Brandt's cormorant is uncommon in Alaskan waters. It has been recognized as an occasional visitor to the southeastern coast and Kodiak Island, but has recently been found in Prince William Sound in circumstances strongly suggesting breeding. The pelagic cormorant is the common cormorant of Alaska, breeding throughout the Bering Sea, Aleutians, and southeastern Alaska. The red-faced cormorant breeds at the Pribilof Islands, throughout the Aleutians, and eastward to Prince William Sound.

ORDER ANSERIFORMES

Family Anatidae

Anas platyrhynchos	Common mallard

The common mallard probably ranks second or third in abundance among Alaska's puddle ducks, breeding throughout the State, wherever conditions

are suitable. It is a resident species as large numbers winter in southeastern Alaska and occasionally in the interior where water is open and available.

Aythya marila	Greater scaup
Aythya affinis	Lesser scaup

Greater scaup nest in Alaska's coastal zone from the North Slope to the Alaska Peninsula and the Aleutian Islands and in south central Alaska. They can be found elsewhere in interior Alaska and winter in the salt water from Attu Island to Baja California. The lesser scaup breeds almost entirely in the upper Yukon Valley and its tributaries.

Bucephala clangula	Common goldeneye
Bucephala islandica	Barrow's goldeneye
Bucephala albeola	Bufflehead

The common goldeneye nests throughout much of forest Alaska on fresh water. In Alaska it winters on salt water. Barrow's goldeneye is a common breeder on lakes in the interior of south-central Alaska. In Alaska it winters on the coast in southeastern Alaska. The bufflehead nests in the timbered valleys of interior Alaska. It winters in salt-water bays and inlets along the Pacific coast including the Aleutians.

Histrionicus histrionicus	Harlequin duck

Harlequin ducks prefer to nest along clear, swift alpine streams throughout the State. They can be found year round in the heavy surf along Alaska's entire Pacific coast from Attu eastward.

Polysticta stelleri	Steller's eider
Somateria mollissima	Common eider
Somateria spectabilis	King eider

The common eider nests on offshore islands and protected beach areas around the entire Alaskan coast. It winters in the salt water along the Pacific coast, often collecting in immense rafts. The king eider nests on freshwater ponds along the Arctic coast. It winters from the edge of the pack ice south in the Bering Sea and south along the

Pacific coast. Steller's eider winters in Bristol Bay, the Bering Sea, and along the coast to Prince William Sound.

Clangula hyemalis	Oldsquaw

The oldsquaw is abundant in its Alaskan breeding range which includes the Arctic coastal plain and western Alaska. It winters on the salt water in the Pacific Ocean and Bering Sea, often far from land. Up to a million have been estimated to use Izembek Lagoon during the winter.

Melanitta deglandi	White-winged scoter
Melanitta perspicillata	Surf scoter
Oidemia nigra	Common scoter

The common scoter breeds along the coast of western Alaska and the Alaska Peninsula. The white-winged and surf scoters breed in the interior of southern Alaska. All three species winter in the Aleutians, the Bering Sea, and along the Pacific coast as far south as Baja California. Large numbers of any of these species may be found throughout the year in the coastal wintering areas in Alaska.

Mergus merganser	American common merganser
Mergus serrator	Red-breasted merganser

The common merganser is a resident chiefly in the southern coastal area and its breeding range extends into Prince William Sound. In southeastern Alaska, it is found throughout the year.

The red-breasted merganser breeds over most of Alaska but principally the coast. It winters in Alaska, in the Aleutians, in Shelikof Strait, and southeastern Alaska.

ORDER FALCONIFORMES

Family Accipitridae

Haliaeetus albicilla	White-tailed sea eagle
Haliaeetus leucocephalus	Bald eagle
Haliaeetus pelagicus	Steller's sea eagle

The genus Haliaeetus to which these eagles belong has a holarctic distribution. All three are found on coastal islands, sea coasts, estuaries, major fish streams and lakes. The bald eagle is among the threatened species of the lower 48 states. Though found in most of these states, it is gradually decreasing in number except in Alaska where it is most abundant around the Pacific rim with highest levels in the Alexander Archipelago. Steller's sea eagle has an analagous range on the Asiatic portion of the Pacific rim south to Korea. The white-tailed sea eagle is the analog of the bald eagle in Eurasia, Iceland, and Greenland. The latter two species are visitors to the Bering Sea and Arctic Ocean areas of Alaska, and the white-tailed sea eagle has been reported nesting at Fairway Rock. Referred to as the "fish eagles," these birds feed on fish, carrion, and marine birds. In the Aleutian Islands, large alcids appear to provide the bulk of the food eaten by nestling eagles.

Family Falconidae

Falco peregrinus — Peregrine falcon

The pealii race of the peregrine falcon is a bird associated with marine bird colonies along the Pacific rim from the Kurile Islands to British Columbia. It can often be seen hunting for smaller marine birds several miles at sea. It is a relatively sedentary species which makes it potentially very valuable for crossbreeding in any future attempts to reintroduce the peregrine falcon to the eastern United States. Although not numerous, it is not endangered as are the other two North American races.

In the Arctic the endangered race anatum can be found nesting near marine bird colonies and preying on smaller species.

ORDER CHARADRIIFORMES

Of the 12 families in the order Charadriiformes which are grouped under the loose umbrella of the term "shorebird," seven are found in Alaska. Most of the Alaska species can be found on the beaches and mudflats during migration.

Family Haematopodidae

Haematopus bachmani — Black oystercatcher

The black oystercatcher is a permanent Alaskan resident breeding around the entire northeastern Pacific rim from Attu Island to Abreojos

Point in Baja California. It will be found at one time or another on virtually every offshore rock and rocky beach throughout its Alaskan range. These garrulous birds of the intertidal zone nest right where they spend their lives, on the rocks barely out of reach of the surf. A clutch of three eggs is laid directly on the rock in a slight depression. Nests have also been reported on the beach or in the vegetation at the edge of the intertidal zone. The diet of the oyster-catcher includes barnacles, mussels, marine worms, crustaceans, and limpets. In winter these birds collect in small groups throughout their range.

Family Charadriidae

Aphriza virgata — Surfbird

The surfbird breeds and winters in such totally different environments as to be almost two different birds in summer and winter. It breeds in the high, mountainous areas of south-central Alaska, living the life of an alpine species. In winter it can be found down the entire Pacific coast to the Straits of Magellan. It is then a confirmed creature of the intertidal zone, feeding on mussels and barnacles. Nowhere is it common, but it does have a regular occurrence throughout its winter range.

Arenaria melanocephala — Black turnstone

The black turnstone nests on tundra ponds and forest pools adjacent to the coast from the Bering Straits to Sitka. In winter it is a creature

of the rocky coasts and headlands from southeastern Alaska to Baja California. It is often seen feeding among kelp with surfbirds, on the same sorts of food, and less frequently with its beach-loving relative, the ruddy turnstone.

Family Scolopacidae

Acitis macularia — Spotted sandpiper.

The spotted sandpiper breeds south of the treeline throughout Alaska. It is most abundant on the south coast of Alaska (Kenai Peninsula-P.W.S.). It is mostly a summer bird, arriving in mid-May and leaving by mid-September.

Heteroscelus incanum — Wandering tattler

It winter the wandering tattler is a bird of the coral strands and palm-lined beaches from Hawaii to the Galapagos Islands and New Zealand, as well as a resident of our West Coast. It breeds on the seepage meadows of the high mountains and long tumbling glacial streams. It is a lover of surf-pounded reefs and headlands and can be found in such places during both migrations, and all winter long when the chosen wintering range permits.

Erolia ptilocnemis — Rock sandpiper

The rock sandpiper is a true inhabitant of the Bering Sea coasts and the Aleutian Islands. It breeds on tundra ponds near the coast and spends the rest of its time close to the pounding surf. It remains year round in the Aleutians and also winters south into Oregon. The Russians, calling

it the marine sandpiper, consider it to be conspecific with the purple sandpiper of other polar seas. It feeds on kelp flies and small marine invertebrates such as the ever-abundant amphipod.

Crocet alba Sanderling

The sanderling breeds in the eastern Arctic, and reaches Alaska most commonly in the fall migration.

Family Phalaropodidae

Phalaropus fulicarius Red phalarope

When not breeding, the red phalarope is the most truly pelagic species among the shorebirds. It is distributed sporadically throughout the Arctic. After the breeding season, this phalarope becomes cosmpolitan, ranging the seven seas on its way to wintering areas in the Antarctic seas. It feeds on crustaceans, molluscs, annelida, and algae.

Lobipes lobatus Northern phalarope

The northern phalarope has much the same distribution as its red cousin. Diet and habitats are similar. Though not quite as tied to the sea, it migrates over land as well as water.

Family Stercorariidae

Stercoranius parasiticus Parasitic jaeger

Stercorarius longicaudus — Long-tailed jaeger

The parasitic, and long-tailed jaegers are common breeders on the Arctic coast and are conspicuous elements of the marine avifauna during the spring and fall. They migrate south through the Aleutians and the Gulf of Alaska.

Family Laridae

There are 15 gulls which either breed in Alaska or can be found over Alaska waters. This is roughly a third of the earth's living gull species.

Larus argentatus — Herring gull

The herring gull breeds in south-central and eastern Alaska and some of the birds winter on the south-central and southeastern coasts.

Larus canus — Mew gull (short-billed common gull)

The mew gull has a wide breeding distribution from the coastal salt marshes to the river valleys of the interior. Mew gulls winter on the coast.

Larus glaucescens — Glaucous-winged gull

The glaucous-winged gull is numerous, breeding all across the American Arctic, throughout the Bering Sea, and down the Pacific coast to Washington. It winters in these same areas when they are free of ice. Colonies are either on low barrier islands or on the tops of islands used by nesting alcids.

Rissa tridactyla Black-legged kittiwake

The black-legged kittiwake is the most oceanic of Alaska's gulls. It breeds on precipitous cliffs facing on the ocean and winters well offshore. Its breeding range encompasses all the American fringe of the Bering Sea and Alaska's coast from Barrow to Prince William Sound. It nests in large concentrations, and colonies exceeding 100,000 breeding birds are not uncommon.

Sterna paradisaea Arctic tern

The Arctic tern is a common nester near fresh water over most of Alaska's coastal zone. It migrates almost exclusively across salt water to Antarctic regions for the winter.

Family Alcidae

The Northern Hemisphere counterparts of the penguins of the Antarctic fringe are the alcids. These two groups are remarkably similar in their niche adaptations. One recently extinct alcid, the great auk, resembled the penguins to the point of being flightless.

The alcids are holarctic in distribution. Their center of distribution is the Bering Sea and adjacent shores of the Arctic Ocean, with 19 of 22 living species occurring there.

The alcids, like the waterfowl, have a complete postnuptial molt in which

all of the wing and tail features are lost simultaneously. This leaves all, except possibly the least and whiskered auklet, flightless for a short period of time.

Uria aalge	Common murre
Uria lomvia	Thick-billed murre

The common murre and the thick-billed murre often nest together in cliff colonies. Each lays a single egg directly on the base rock of a ledge. Both breed in the North Atlantic, the North Pacific, and the Bering Sea. The thick-billed murre has the more northerly distribution of the two species and tends to be the most common in joint colonies in the north while those in the south tend to be dominated by common murres. They winter in the southern part of their range.

Young murres are sufficiently thermo-regulated to leave the nesting cliffs by the time they are 18 to 25 days old, and often do. They are flightless for the first weeks at sea. Murres often collect in large, dense rafts in the littoral areas. They feed on fish, crustaceans, and molluscs.

Cepphus columba	Pigeon guillemot

The pigeon guillemot is characteristically found nesting on coastlines with low rocky cliffs fronting directly on the water, while the black guillemot can be found nesting on Arctic coastlines with low relief. The birds often nest in clefts in the rocks barely above the reach of the splashing surf. In Alaska they nest on all suitable coastlines from the Chukchi Sea south. Their nesting aggregations are seldom large but the total breeding population for Alaska must be immense. The whole rocky coastline from Attu to Forrester Island might be thought of as one vast, but dispersed, colony. While these guillemots tend to withdraw from their more northern breeding areas in winter, some birds can be found there year-round.

The pigeon guillemot nests in crevices and crannies on rock cliffs or among large boulders on the beach, having no nest and depositing two eggs directly on the rock. It feeds just outside the surf for fish, crustaceans, molluscs, and marine worms.

Brachyramphus marmoratum — Marbled murrelet

The marbled murrelet breeds in Alaska approximately from Unalaska east and south into British Columbia. Very few of its nests have been discovered.

In parts of its range, the marbled murrelet is a very abundant bird. In Prince William Sound, which has been studied in the greatest detail, it has been found to have a density of about 100 birds per square mile. This density is based on surveys made during the peak of the breeding season when many of the breeders would have been on the nest. The breeding population within the Sound very possibly approaches 500,000 birds.

In the spruce-hemlock coastal forest of British Columbia, the marbled murrelet has been found nesting in trees several miles from salt water. In Alaska where the tree fringe along the coast can be very narrow or non-existent, it has been found nesting on the ground in alpine areas. Though it is certainly not a true colonial nester, in some areas of high density its nests are quite close together. Marbled murrelets tend to winter near their breeding grounds, but there is a southward shift of a portion of the population.

Brachyramphus brevirostre — Kittlitz's murrelet

Kittlitz's murrelet is almost exclusively an Alaskan bird, but it does wander westward to Kamchatka and the Kurile Islands. It is distributed from Cape Prince of Wales southward to southeastern Alaska but shows a marked preference for the colder waters around live glaciers. In such glacier-bordered areas as College Fjord, Unakwik Inlet, and Glacier Bay, it is abundant. The nest of the Kittlitz's murrelet is not well known, but the bird does nest high in the mountains and even at some distance from the sea.

Synthliboramphus antiquum — Ancient murrelet

The ancient murrelet is found breeding and wintering around much of the North Pacific rim. In Alaska it breeds from Attu east and south into British Columbia. Some of the birds move southward, but most of them appear to winter near their breeding areas or at sea, as far as 400 to 500 miles offshore. Populations status is not well known because it is nocturnal around its colonics. Because of the timing of his visit, Gabrielson did not see a single bird in almost a whole day around Forrester Island, while Willet, in 1915, had reported estimating the population at 20,000 nesting pairs. The ancient murrelet nests colonially in crevices

in the rocks, on talus slopes, and among boulders on the beach. In the Commander Islands, these birds feed on small invertebrates, particularly on small crustaceans such as Gammaridae. They are strong fliers and often feed at quite a distance from their colonies.

Cyclorrhynchus psittacula — Parakeet auklet

The parakeet auklet nests from Prince William Sound westward along the Aleutian Chain to the Commander Islands, on the islands of the Bering sea, and on the Chukotsk Peninsula.

It nests among boulders on the beach or in crevices on cliffs. The nest is unlined and the clutch consists of a single egg. It is the least colonially inclined of the six Alaskan auklets. It tends to be solitary on its feeding grounds. In winter it has been found as far south as Monterey Bay.

Aethia cristatella — Crested auklet

The crested auklet breeds from the Diomede Islands south through the islands of the Bering Sea, Sakhalin Island, the Kurile, Aleutian and Shumagin islands, and as far east as Kodiak Island. This auklet nests in great colonies. Eggs are laid directly in rock crevices, among debris on talus slopes, and among boulders on the beach. There is no attempt to build a nest. The clutch is one egg. Both members of the pair share incubation duties, and it is possible to see incredible concentrations of birds around their nesting colonies in the early evening when the shift changes. The birds feed in large groups often at some distance from the colony. They feed on small crustaceans -- amphipods, copepods,

and shizopods. In the nonbreeding months of the year, these birds wander far and wide over the Bering Sea and North Pacific.

Fratercula corniculata Horned puffin

The horned puffin breeds on all islands of the Bering Sea, Sakhalin Island, the Kurile Islands, Kamchatka, the Aleutians, and on the Alaskan coast from Cape Lisburne south, almost to British Columbia. Throughout this area it is one of the more common alcids, apparently restricted only by availability of suitable nesting areas. Colonies rarely reach the size of those of the tufted puffin. The largest known colony, though probably not the largest, is on Amagat Island.

This puffin nests in crevices or among boulders, and less commonly in burrows on seaside cliffs. The usual clutch is one egg and the nest may or may not be lined with grass. These birds remain at sea until they reach sexual maturity at two years, and during the winter thereafter. They feed on small fish, crustaceans, and molluscs.

Lunda cirrhata Tufted puffin

The tufted puffin is even more numerous than its horned relative. It has much the same breeding range but nests farther south to southern California. It nests in burrows in the peat on top of cliffs and in the organic accumulation on less vertical cliff faces. The clutch consists of one, or rarely two, eggs. Suitable cliffs and island tops are often honeycombed by burrows to the point that it is difficult to walk among them.

The birds remain at sea until they are sexually mature and during the nonbreeding months. Even during the breeding months, large numbers can be found hundreds of miles at sea. They are among the most truly pelagic of northern hemisphere seafowl. Even the winter gales of the North Pacific do not intimidate them. The tufted puffin can survive on the surface when such pelagics as albatrosses, shearwaters, and fulmars must remain aloft. The birds feed mainly on sand lance but eat sea urchins and molluscs as well.

ORDER PASSERIFORMES

Family Corvidae

Cyanocitta stelleri — Northern Steller's jay

The Steller's jay is a permanent resident of the coastal forests from Dixon Entrance to the shores of Cook Inlet.

Lagopus leucurus peninsularis Kenai white-tailed ptarmigan

Resident on alpine summits from south central Alaska to Cook Inlet and the Kenai Peninsula, extending east and southeast to Glacier Bay and White Pass, this form of the white-tailed ptarmigan is found only in Alaska. Four other subspecies have ranges that, when combined, extend south from the northern Yukon and Mackenzie, the alpine summits of the Rocky Mountains and coast ranges to Washington, Wyoming, Colorado and northern New Mexico. This species is the only member of the group found in the continental United States. It is the smallest and also the rarest of all Alaskan ptarmigans. As in the Rockies and the Cascades, it is a bird of the higher mountain tops where it lives on the steep slopes just below the permanent snow and icefields.

Corvus corax — Northern Raven

This great black bird, the largest Passerine bird in North America, has a wide breeding range in Alaska. It is a permanent resident that nests from the Seward Peninsula and the Brooks Range throughout the mainland south to Kodiak, the Semidi and Shumagin islands, throughout the Aleutian Chain, and along the coast and mountains of the southeastern district to Dixon Entrance.

Corvus caurinus — Northwestern crow

This small crow nests along the Alaskan coast from Dixon Entrance to Kodiak Island and is a year-long resident of the same territory.

Troglodytes troglodytes — Winter wren

This little wren is resident along the coast of Alaska from the southeastern district, north and west through Kodiak and the Aleutians.

ORDER GALLIFORMES

Family Tetraonidai

Canachites canadensis — Hudsonian spruce grouse

The Hudsonian Spruce grouse is widely distributed wherever forests are found, from Bering Sea to the Canadian boundary to the northernmost limits of spruce timber. It is a permanent resident in all wooded areas in this vast region.

Canachites atratus Valdez spruce grouse

Resident in the coast region of southern Alaska from Bristol Bay to Cook Inlet, Prince William Sound, and Kodiak Island.

CONTINUATION OF APPENDIX A

STATUS OF MARINE AND ENDANGERED BIRD SPECIES BREEDING IN STUDY AREA

Species	
Double-crested cormorant	U
Pelagic cormorant	C
Red-faced cormorant	U
Common eider	U
Bald eagle	C
Peregrine falcon	P*
Black oystercatcher	C
Glaucous-winged gull	C
Black-legged kittiwake	A
Common murre	U
Thick-billed murre	U
Pigeon guillemot	C
Marbled murrelet	P
Ancient murrelet	P
Cassin's auklet	C
Parakeet auklet	P
Rhinoceros auklet	U
Horned puffin	C
Tufted puffin	A

Key:

* endangered	U = uncommon
A = abundant	R = rare
C = common	P = probable occurrence

APPENDIX B
ANNOTATED CHECKLIST OF MARINE, MARINE-ASSOCIATED AND TERRESTRIAL MAMMALS ON SOUTH COAST OF THE KENAI PENINSULA

ORDER CETACEA

The order Cetacea is divided into two suborders, the Mysticeti or baleen whales and the Odontoceti or toothed cetaceans. Eight of 10 recent baleen whale species are found in Alaska waters and only 14 of the 74 species of toothed whales, dolphins, and porpoises. The baleen whales are better known than the toothed cetaceans because of their past commercial importance.

Suborder Mysticeti

Family Balaenidae

This suborder contains the three families of whales which instead of teeth have hundreds of plates of baleen suspended from the upper jaw. These form strainers for sifting their food from the ocean, usually small crustaceans, or in some cases small fish. The blue whale is the largest mammal ever known.

Right Whales

Two species of right whale are found in Alaskan waters. These whales are called right whales because to the ancient whalers they were the right whale to hunt. Not only are they large and easy to overtake for the kill, but most important of all, they floated after they were killed.

Black right whales were hunted as early as the 10th century in the Bay

of Biscay, and Scandinavian whalers were already making heavy inroads into Greenland right whales (known as bowheads to Alaskans) by the early 17th century. Commercial whaling for these whales reached the Bering Strait in 1848. The stock of both whales was greatly diminished by the close of the 19th century in the North Pacific. The bowhead does not frequent the waters of the monument area.

Family Balaenopteridae

The rorquals are whales of high latitude seas, streamlined coursers compared to the right whales. They are oceanic whales and generally avoid shallow coastal waters. There are two family lines, the finbacks and the humpbacks. Unlike the right whales, the rorquals were not seriously exploited until the advent of pelagic whaling in the 1930's. Two species, the blue and the humpback, are commercially extinct and the remaining finbacks are in serious trouble.

Rorquals feed on euphasid crustaceans, called "krill," and on anchovies and sauries. Sei whales feed largely on "brit."

<u>Balaenoptera musculus</u> Blue whale

The eastern North Pacific stock of blue whales winters off the west coast of Baja California. A close look at pelagic whaling statistics shows that these whales summer in greatest numbers in the eastern Gulf of Alaska, south of the eastern Aleutians (Shumagin Islands to Amchitka Pass) and from

the Near Islands to Kamchatka. The preexploitation population of this stock is postulated to be around 6,000 whales. By 1967 the remaining stock had dropped to an estimated 1,420 animals. The timing of the presence of blue whales off Baja California coincides with the greatest abundance of the pelagic red crab, Pleurocodes planipes, and the whales have been observed feeding on the crabs. The expansion of an experimental crab fishery could further jeopardize the status of these whales which are classified as endangered.

Balaena glacialis — Black right whales

The black right whale is an animal of temperate seas. The North Pacific population was once very common throughout the Gulf of Alaska in summer. It rarely penetrates the Bering Sea. Its wintering ground has never been found. This whale was almost exterminated by the close of the last century and the entire existing stock probably numbers only a few individuals today. It is listed as endangered.

Family Eschrichtidae

Eschrichtius robustus — Gray whale

The gray whale is monotypic, with one population breeding in shallow estuarine areas on the coast of Korea and the other in lagoons on the coast of Baja California. It is a Nearctic species migrating north through shallow coastal waters. The two populations possibly overlap somewhat at summer locations in the shallow coastal waters of the Bering, Okhotsk, Chukchi, and Beaufort Seas.

The 1850 California population of gray whales has been estimated at about 25,000. By 1946 it was almost extinct with not more than 250 whales left. Given complete protection from commercial whaling, the California population has increased to about 11,000 but the species is still classified as endangered.

The gray whale migrates the longest distance of any mammal. It feeds on benthic amphipods which it obtains by stirring up the bottom sediments and scooping up the dislodged crustaceans.

Balaenoptera physalus — Fin whale

The eastern North Pacific fin whale's summer range is the nearshore waters of both sides of the North Pacific from California to Japan and includes the Bering and Chukchi Seas. The wintering grounds are suspected to be well offshore and possibly on the latitude of California's Channel Islands. When exploitation of the whales started in 1958 there were probably about 20,000 animals in this stock. By 1971 the population had dropped 55% to around 9,000. In about a decade, therefore, they were harvested to a point well below that permissible for maximum sustained yield.

Balaenoptera borealis — Sei whale

The summer range of the sei whale is similar to that of the fin, except that it rarely enters the Bering Sea for any distance. The wintering range is not known except that it may be off the California coast. A solitary sei whale is known to have spent several winters in Orca

Inlet, the sea lane into Cordova, Alaska. Exploitation of the eastern North Pacific stock of this whale didn't become significant until 1959, but by 1971 the population had been reduced from an estimated 50,000 whales to 30,000. The species is listed as endangered.

Balaenoptera acutorostrata — Minke whale

The smallest of rorquals, the minke whale has so far been protected from over-harvest in the eastern North Pacific by its small size. It is less than 10 meters in length. The minke whale of the eastern North Pacific ranges in summer from Baja California to the Chukchi Sea. In winter it ranges south from central California. The adult males summer in the open sea but the females and calves remain close to shore. In Alaska they are particularly noticeable in relatively sheltered areas like Prince William Sound.

Megaptera novaeangliae — Humpback whale

The humpback whale lacks the streamlined form of the other rorquals and is easily overtaken and killed. Because of this, it has been drastically overharvested and probably only a few hundred whales presently constitute the entire eastern North Pacific stock. The summer range of this population is the eastern Aleutians to the Chukchi Sea with a few scattered all the way south to California. It winters from Baja California to west-central Mexico, and around the oceanic islands as far west as Hawaii. The species is classified as endangered.

Suborder Odontoceti

This suborder of the order Cetecea contains the sperm whale, beaked whales, dolphins, and porpoises. Its members are carnivorous, feeding on fish, squid, and even birds and mammals. The toothed whales usually sink when killed, and therefore, were largely ignored by primitive whalers Only two, the sperm whale and giant bottlenose whale, are large enough to be important as commercial species.

Family Physeteridae

Physeter catodon — Sperm whale

The sperm whale is found in all oceans of the world. It winters in these oceans to 40° latitude on either side of the equator. The area of greatest density in the North Pacific is from the southwestern Bering Sea and northern Gulf of Alaska south along the west coast of North America to 40° N. This whale has been exploited since the beginning of the 18th century. The total annual kill has reached 25,000 in recent years and the North Pacific stock has dropped from an estimated 134,000 in 1964 to 64,000 in 1970. At the same time the kill of males has decreased and the kill of females has increased. The sperm whale is a deep diver feeding on squid, sharks, skates, and teleost fishes. It is classified as endangered.

Family Ziphiidae

The biology of this group of whales is not well known, and for some of the species ranges are outlined by a mere handful of records. Distinct species may remain to be discovered. On Amchitka Island for 3 years, 1967-1970, the carcasses of three or four beaked whales of at least two species washed ashore each year. Beaked whales are deep divers feeding on squid and deep sea fishes.

Berardius bairdi Giant bottlenose whale

The giant bottlenose whale is the largest of the beaked whales and the second largest toothed whale. There is only a limited interest in commercial exploitation of this whale. It is a species endemic to the North Pacific area ranging from St. Matthew Island to southern California in the east, and to Japan in the west.

Mesosplodon stejnegeri Bering Sea beaked whale

The Bering Sea beaked whale is very poorly known. From the few existing records it appears to occur in the eastern North Pacific from California to the Bering Sea.

Ziphius cavirostris Goose-beaked whale

The goose-beaked whale is known only from a handful of records. It occurs in the Bering Sea and ranges south on either side of the Pacific to California and Japan.

Family Monodontidae

This group contains two small whales of Arctic and sub-Arctic seas.

Delphinapterus leucas Beluga

The beluga is one of the most abundant whales in Alaskan waters. It is a largely neritic species ranging as far north as possible in the pack ice and no farther south than Cook Inlet. Belugas are too wary to be hunted from a boat with much success, and Alaskan Eskimos hunt it in the leads where they can kill it from the ice.

Family Phocoenidae

Phocoena phocoena — Harbor porpoise

The harbor porpoise is a green (shallow) water resident found in bays and estuaries occurring along the mainland coast as far north as Point Barrow.

Phocaenoides dalli — Dall porpoise

The Dall porpoise is an inhabitant of the clear blue water over the continental slope and feeds on squid. It is among the fastest of the cetaceans and likes to race in alongside of ships and "surf" on the bow waves. The Dall is well distributed in Alaska's coastal waters.

Family Delphinidae

These cetaceans are creatures of epipelagic zone of the open ocean.

Globicephalla macrorhyncha — Short-finned pilot whale

The pilot whale is a highly gregarious species occurring in large packs. In the eastern North Pacific it ranges from the Gulf of Alaska to the Gulf of California and feeds on squid.

Orcinus orca — Killer whale

The Killer whale is the third largest toothed cetacean and is found in all oceans. Because of its intelligence it is not an easy prey. The killer whale feeds on fish, marine birds, and marine mammals including whales.

Lagenorynchus obliquidens North Pacific white-sided dolphin

This dolphin is a little known, but common cetacean which ranges the Pacific coast from Mexico to Alaska. Habits are similar to those of the Dall porpoise except that it is much more gregarious and can often be seen in the Gulf of Alaska traveling in herds containing hundreds or even thousands of animals.

Lissodelphis borealis Northern right whale dolphin

The right whale dolphin is a little known, finless dolphin which ranges the Pacific coast from California to the Bering Sea.

ORDER ARTIODACTYLA

Family Bovidae

Ovis dallie Dall sheep

The Dall sheep occurs in one place in the immediate area just south of the Kenai National Moose Range (south of Sheep Creek and north of Kachemak Creek). This is the southern terminus for sheep on the Kenai. Further southern movement is most likely prohibited by coastal winter conditions.

Oreamnos americanus Mountain goat

The mountain goat is probably the most abundant game animal in the immediate area. It is present throughout all the mountainous parts of the area.

Family Cervidae

Alces alces Moose

The moose is not distributed very widely. Habitat is limited to narrow mountain valleys and south-facing slopes. Its distribution is south along Resurrection Bay and west to the Harding Icefield. It also occurs along the Nuka River.

ORDER CARNIVORA

Family Canidae

Canis lupus — Wolf

The wolf could be present in small numbers throughout the area. Its numbers are increasing in some parts of the region.

Family Ursidae

Ursus americanus — Black bear

The black bear is widely distributed and abundant. At least ten concentrations of fish streams are known in the area.

Ursus Kenaiensis — Brown bear

The brown bear is present in the area. It appears most likely to occur on the west side of Resurrection Bay and on the north side of glaciers towards the Kenai National Moose Range. The bears occur in low numbers but are on the increase. Low numbers could be a result of human pressure during the late 19th and 20th centuries, but it is possible that the area never supported a very high population factor.

Family Mustelida

Gulo gulo — Wolverine

The wolverine is present throughout the area.

Enhydra lutra — Sea otter

The sea otter ranges from Kamchatka to Prince William Sound and sporadically from there south to Baja California. These animals were exploited from the first days of Russian exploration of Alaska, and were almost extinct by 1911. It has fully recovered in many parts of its range and is rapidly extending into other areas from which it had been extirpated.

Unlike the pinnipeds, sea otters are totally dependent upon their pelage for insulation. Sea pollutants, such as oil, spell certain disaster for sea otters, for once their fur loses its water repellency, they quickly die from shock and exposure.

Sea otters are present throughout the monument area. The largest populations are at Whidbey, Aialik, Harris and Nuka Bays, and Port Dick. Present population is about 1500. The otters should reach aboriginal levels in the near future. Limited habitat will prevent levels from becoming as high as in the Aleutians.

ORDER PINNIPEDIA

Family Otaridae

Callorhinus ursinus — Northern fur seal

The northern fur seal has two major breeding areas, one in the Kurile Islands and another, the largest, in the Pribilof Islands. Recently a small colony has been discovered on San Miguel Island off California. There are approximately 1.4 million seals in the Alaskan breeding stock. They rarely come ashore except on their breeding rookeries. These animals migrate to wintering areas as far south as Mexico.

Eumetopias jubata — Steller's sea lion

The range of this seal is from Bering Strait south through the southern Bering Sea, the Aleutian Islands, and along the Pacific coast to southern

California. Sea lions were heavily harvested up to the 20th century. Alaska Natives hunted the sea lion for food and for hides. It was also commercially exploited for hides and oil. Sea lions have not been exploited to any great extent during the first half of this century and have fully recovered to original populations in much of their range. In recent years there has been a market for the skins of pups; 27,187 were harvested commercially in Alaska during the period 1964-1970. This harvest has been curtailed by the Marine Mammal Protection Act.

Population is at near maximum level. There are at least 10 major concentration sites in the area, two of which contain more than 4,000 animals (Chiswell and Outer Islands). Matushak and Beehive Islands are used as hauling grounds.

Family Phocidae

Phoco vitulina — Harbor spotted seal

The harbor (or common) seal is a widely distributed species in both the North Atlantic and North Pacific regions and in many areas is the most common seal. It is found along the eastern rim of the Pacific from the Near Islands to Mexico, on the islands and coast of the Bering Sea, and eastward as far as the Beaufort Sea. It is not adapted, as are the more northern seals, to living on the pack ice and there is a seasonal north-south movement to avoid it. The harbor seal has a conflicting economic impact, in that it is both a fish predator and a

food and skin source for the Eskimo. Prior to the Marine Mammal Protection Act of 1972 it was bountied by the State of Alaska. Commercial importance is presently minor.

Harbor seals are present throughout the coast of the monument area. No harbor seal population estimate is available but concentrations at the head of bays are common with known concentrations of several hundred at Aialik, Harris and Nuka bays, and Port Dick.

CONTINUATION OF APPENDIX B

STATUS OF MARINE MAMMALS OCCURRING IN OR ADJACENT TO STUDY AREA

Species	
Black right whale*	v
Fin whale	v
Sei whale*	V
Minke whale	V
Blue whale*	v
Humpback whale*	v
Gray whale*	V
Giant bottlenose whale	v
Bering Sea beaked whale	v
Goose-beaked whale	v
Sperm whale*	v
Beluga whale	V
Harbor porpoise	V
Dall porpoise	V
Short-finned pilot whale	V
Killer whale	V
N. Pac. white-sided dolphin	V
Northern right whale dolphin	v
Sea otter	B
Northern fur seal	V

Steller's sea lion	H
Harbor spotted seal	H

Key:

V = regularly found in the vicinity

v = irregularly found in the vicinity

H = regularly used as a hauling ground

h = irregularly used as a hauling ground

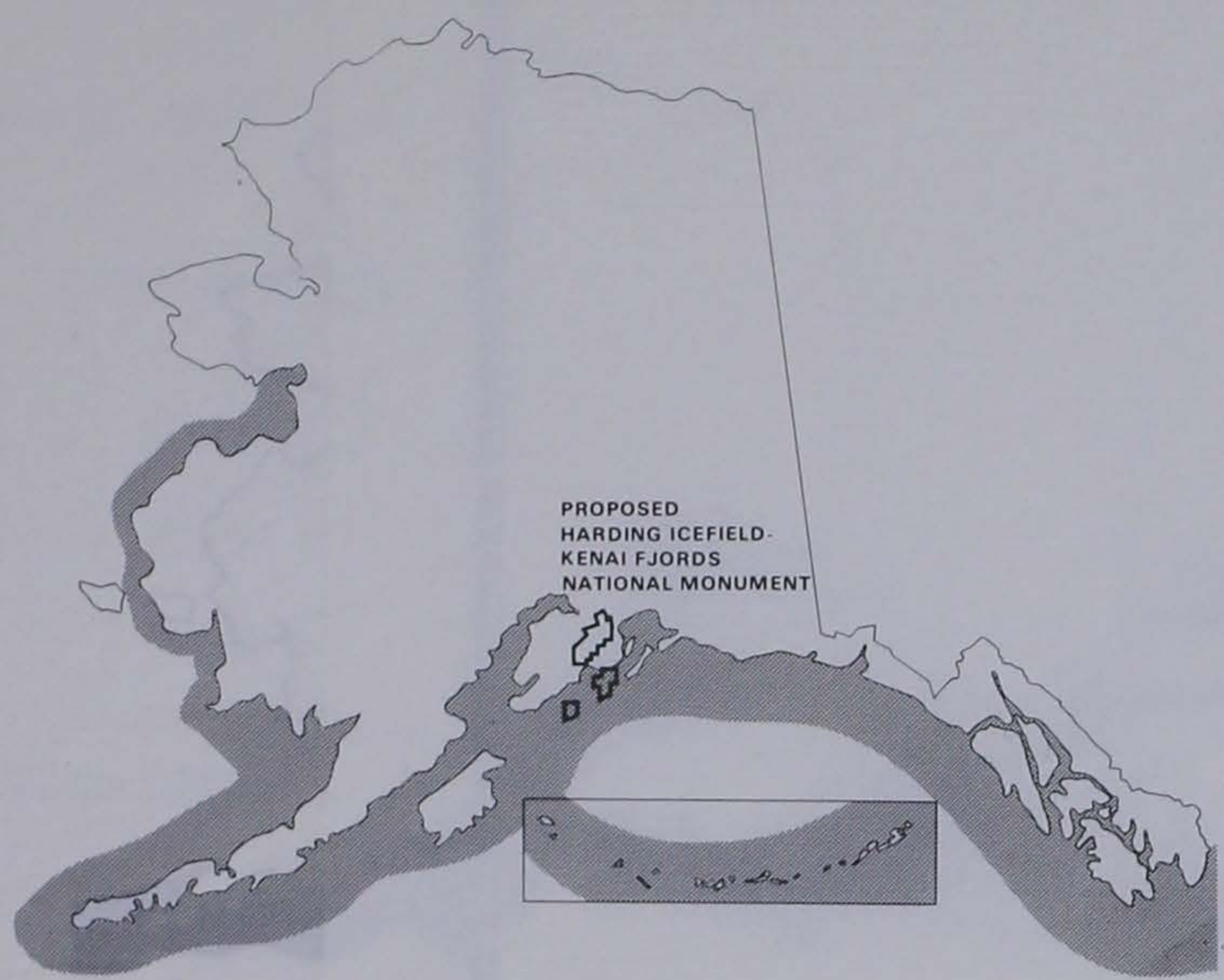
B = regularly breeding on or near area

b = irregularly breeding on or near area.

APPENDIX C

Alaska Commercial Fisheries Areas

FISHERIES MAP 1



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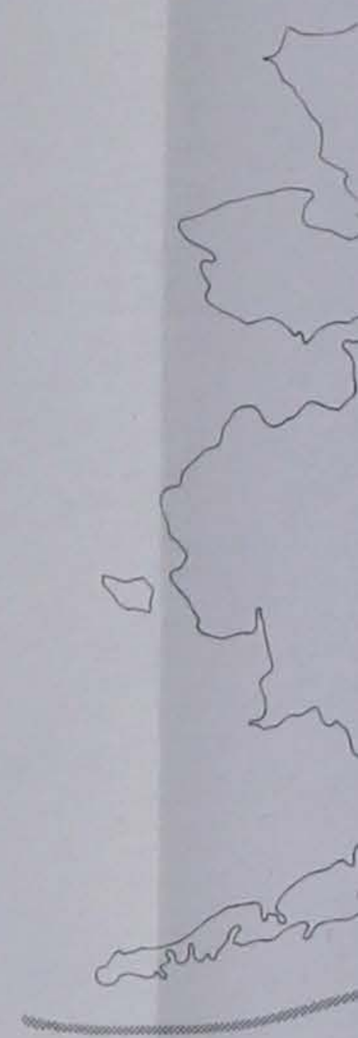

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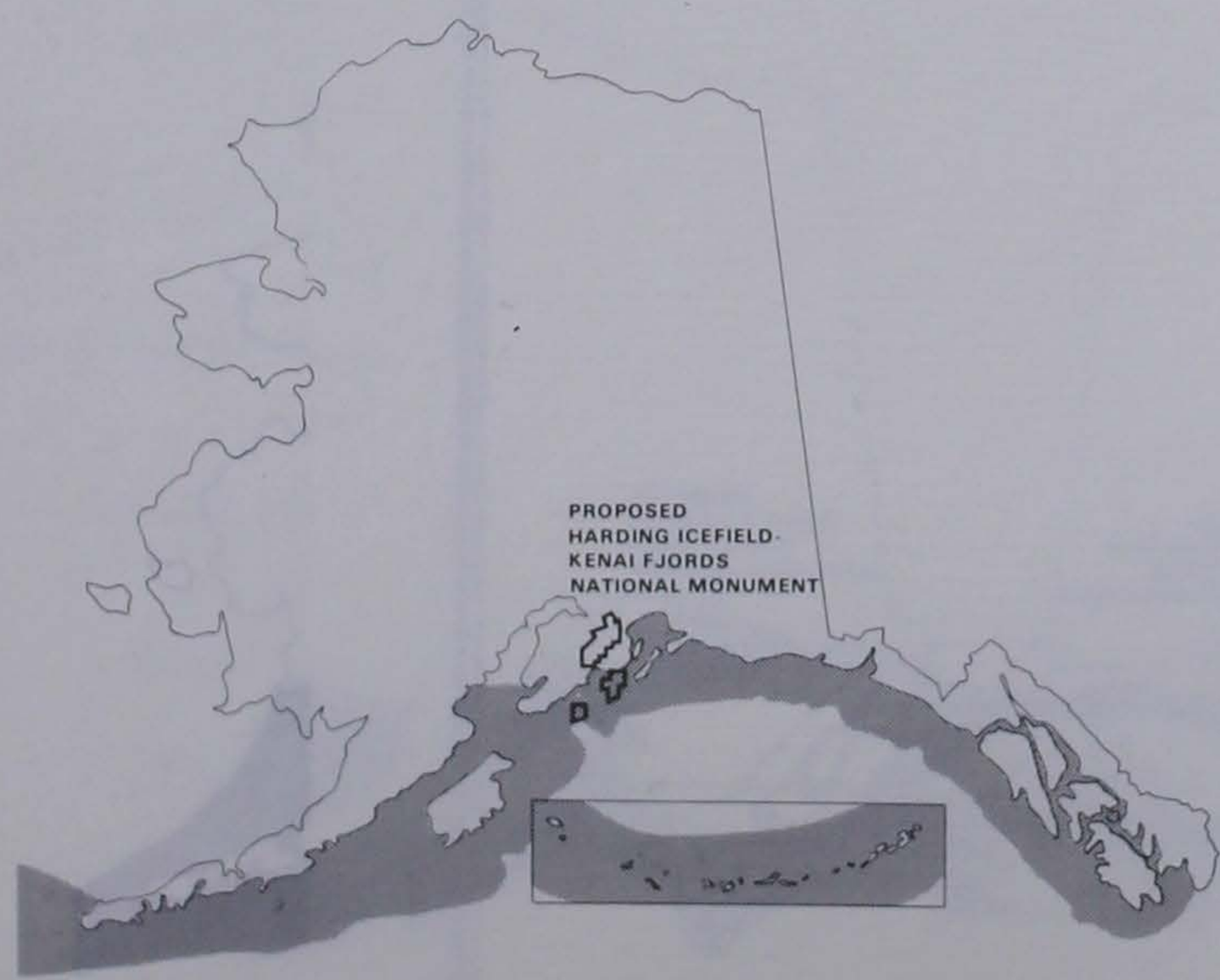

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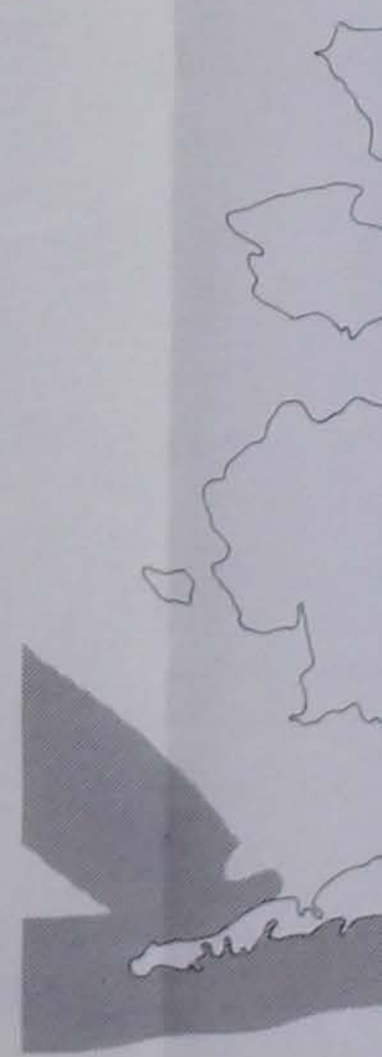

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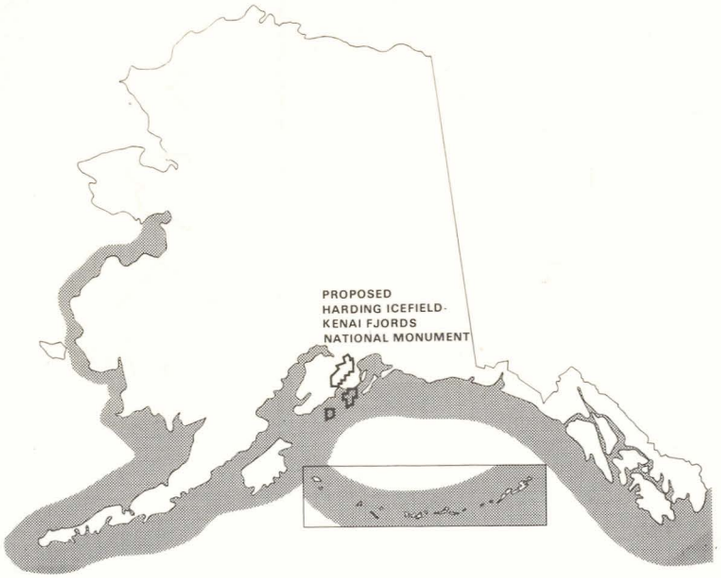
FISHERIES MAP 1



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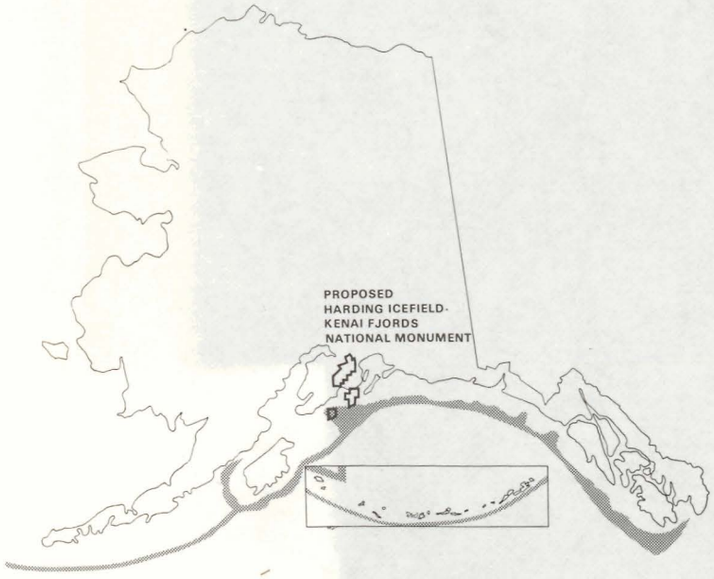

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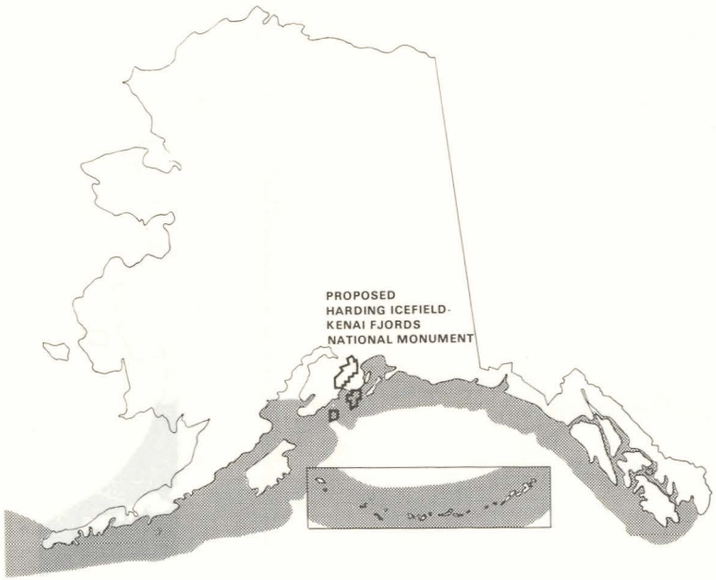

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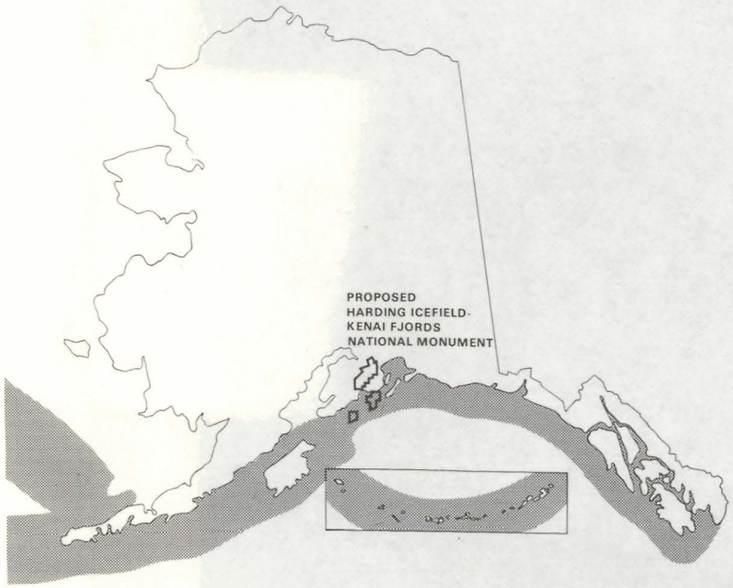

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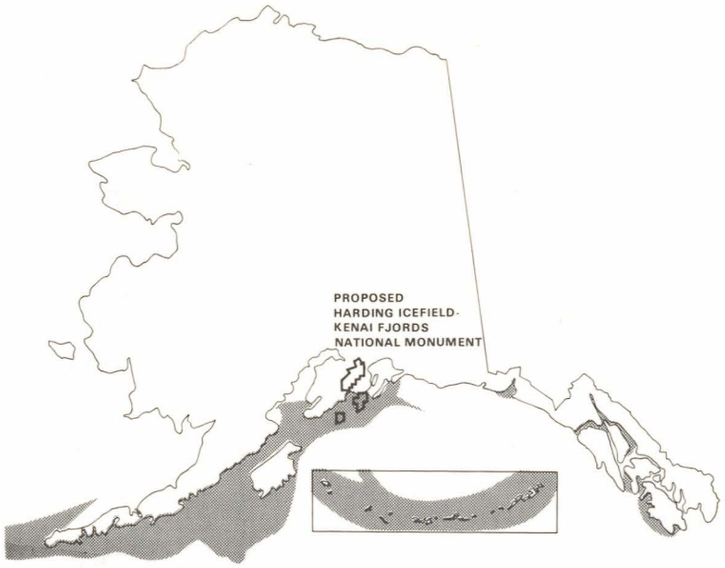
FISHERIES MAP 2



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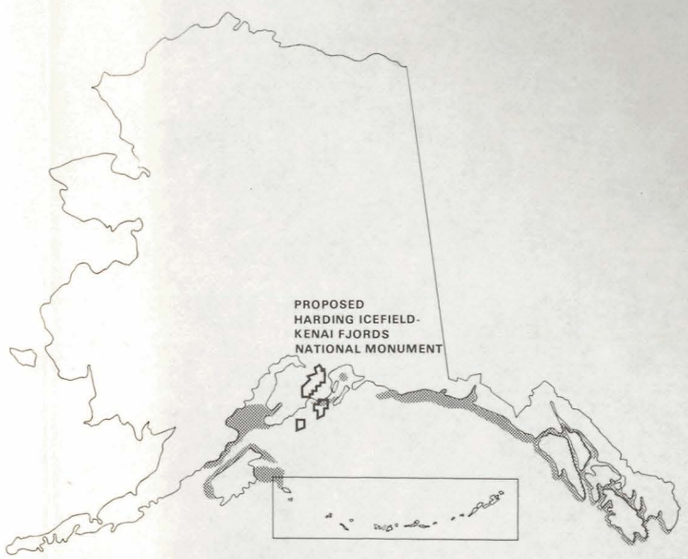

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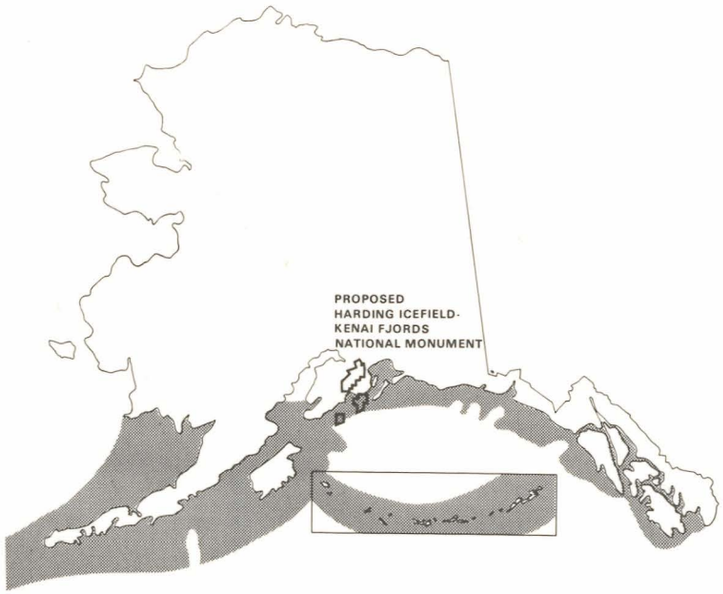

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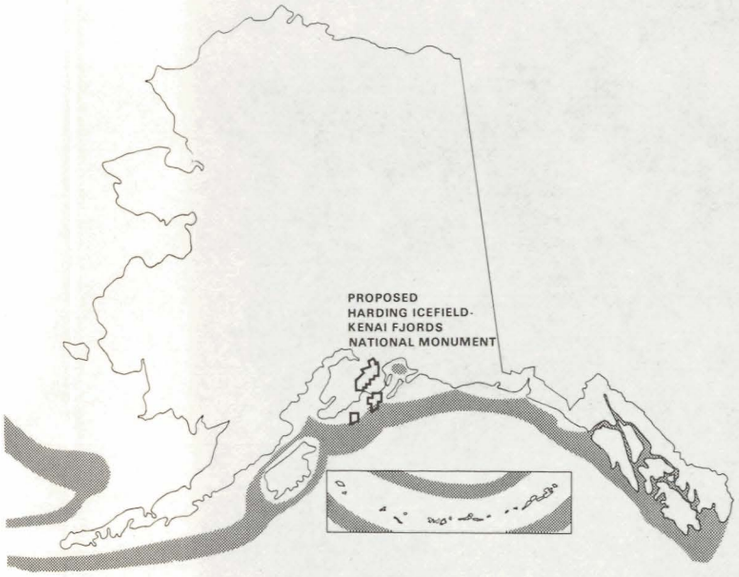
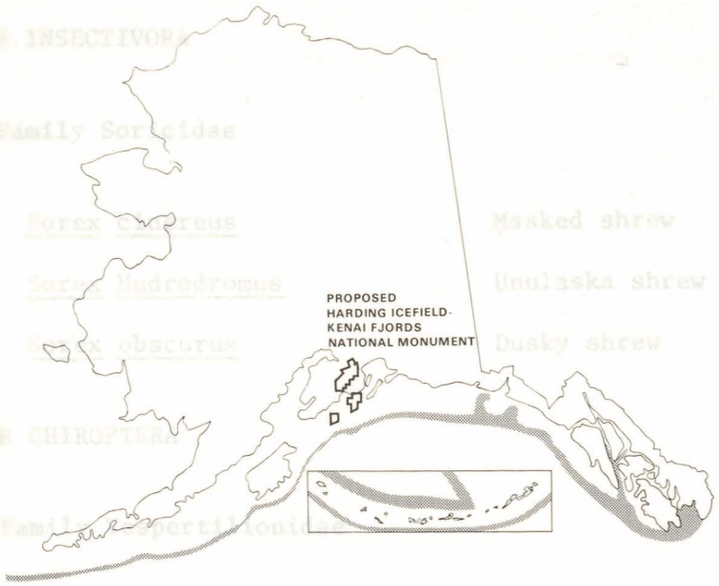


TANNER CRAB

FISHERIES MAP 3



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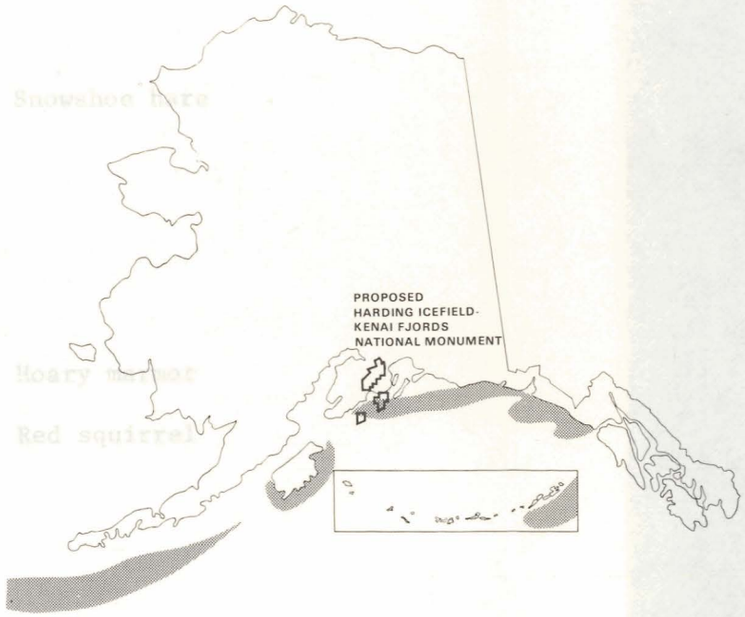
CLAMS



SCALLOPS

APPENDIX D

LAND MAMMALS WHICH MAY OCCUR IN THE PROPOSAL AREA

ORDER INSECTIVORA

Family Soricidae

Sorex cinereus	Masked shrew
Sorex Hudrodromus	Unulaska shrew
Sorex obscurus	Dusky shrew

ORDER CHIROPTERA

Family Vespertilionidae

Myotis Lucifugus	Little brown bat

ORDER LAGAMORPHA

Family Leporidae

Lepus americanus	Snowshoe hare

ORDER RODENTA

Family Sciuridae

Marmota caligata	Hoary marmot
Tamiasciurus hudsonicus	Red squirrel

ORDER CARNIVORA

Family Ursidae

Ursus americanus americanus	Black bear

Family Canidae

Canis latrans	Coyote
Vulpes fulva	Red Fox

Family Mustelidae

Martes americana	Pine marten
Mustela erminea	Short-tailed weasel
Mustela rixosa	Least weasel
Mustela vison	Mink

Family Felidae

Lynx canadensis	Lynx

ORDER ARTIODACTYLA

Family Cervidae

Rangifer tarandus	Reindeer
Rangifer arcticus	Barren ground caribou
Alces alces gigas	Moose

APPENDIX E

CHECKLIST OF PLANT SPECIES FOUND ON THE SOUTH COAST OF THE KENAI PENINSULA

1. Plants found in alpine areas above timber line and usually above 2,000 feet elevation:

Dryopteris linnaeana	Oak-fern
Cryptogamma sp.	
Botrychium sp.	Grape-fern
Equisetum arvense	Common horsetail
E. variegatum	Northern scouring-rush
Lycopodium alpinum	Alpine club-moss
L. selago	Fir club-moss
Hierochloe alpina	Alpine holy-grass
Phlium alpinum	Mountain timothy
Arctagrostis latifolia	Arctagrostis
Podagrostis thurberiana	Thurber redtop
Vahlodea atropurpurea	Mountain hair-grass
Trisetum ceruum	Nodding trisetum
T. spicatum	Downy oat-grass
Scizachne purpurascens	False Melic
Poa alpina	Alpine bluegrass
P. glauca	Glaucous spear-grass
P. leptocoma	Bog bluegrass
Festuca altaica	Rough fescue
Bromus pumpellianus	Bromegrass
Agropuron angustiglume	Slender wheat-grass

Carnex nardina	Hepburn sedge
C. scirooidea	Northern single-spiked sedge
C. pyrenaica	Pyrenean sedge
C. Lachenalii	Arctic hare's foot sedge
C. mertensii	Mertens sedge
C. macrochaeta	Alaska long-awned sedge
C. nesophila	Bering Sea sedge
C. podocaroa	Short-stalk sedge
Juncus drummondii	Drummond rush
J. mertensianus	Mertens rush
Luzula arcuata	Alpine wood-rush
L. nivalis	Snow wood-rush
L. parviflora	Small-flowered wood-rush
L. seicata	Spiked wood-rush
Tofieldia coccinea	Northern asphodel
Veratrum sp.	Hellebore
Lloydia serotina	Alp lily
Sterptopus amplexifolius	Cucumber-root
Salix lasiandra	Pacific willow
S. reticulata	
S. rotundifolia	
S. arctica	Arctic willow
S. commutata	
Oxyria digna	Mountain sorrel
Polygonum viviparum	Alpine bistort

Stellaria sitchana	Sitka starwort
Silane acaulis	Moss pink
Papaver alboresium	
Cardamine bellidifolia	Alpine cress
Draba oligosperma	
Arabis lyrata	Rock-cress
Sedum rosea	Rosewort
Leptarrhena pyrolifolia	Leather-leaf saxifrage
Saxifraga bronchialis	Spotted saxifrage
S. caespitosa	Tufted saxifrage
S. cernua	Nodding saxifrage
S. ferruginea	Alaska saxifrage
S. foliosa	Foliose saxifrage
S. Lyallii	Red-stemmed saxifrage
S. nivalis	Alpine saxifrage
S. oppositifolia	Purple mountain saxifrage
S. punctata	Brook saxifrage
S. rivularis	Alpine brook saxifrage
S. tricuspidata	Three-toothed saxifrage
S. unalaschkensis	Unalaska saxifrage
Mitella pentandra	Alpine mitrewort
Luetkea pectinata	Luetkea
Aruncus sylvester	Goat's beard
Potentilla diversifolia	Diverse-leaved cinquefoil
P. uniflora	One-flowered cinquefoil

P. villosa	Villous cinquefoil
Geum rossii	Ross avens
Dryas octopetala	Eight-petaled dryad
Oxytropis nigrescens	Black oxytrope
Hedysarum alpinum	American hedysarum
Phyllodoce glanduiflora	Yellow heather
Cassiope stelleriana	Alaska heather
Arctostaphylos alpina	Alpine bearberry
Vaccinium uliginosum	Bog blueberry
Diapensia lapponica	Diapensia
Gentiana arctophila	Arctic gentian
G. glauca	Glaucous gentian
G. platypetala	Broad-petaled gentian
Swertia perennis	
Myosotis aleostris	Forget-me-not
Veronica wormskioldii	Aloine speedwell
Castilleja pallida	
Rhinanthus minor	Rattlebox
Pedicularis sp.	
Pinguicula vulgaris	Common butterwort
Galium aparine	Cleavers
G. boreale	Northern bedstraw
Valeriana sitchensis	Sitka valerian
Campanula latisepala	
Solidago multiradianta	Northern goldenrod

Erigeron peregrinus

Arnica Lessingii

2. Plants found in alpine areas and also in areas below timber line:

Woodsia ilvensis	Rusty woodsia
Athyrium sp.	
Calamagrostis canadensis	Bluejoint reed-grass
Juncus castaneus	Chestnut rush
Salix glauca	
S. pulchra	
Betula glandulosa	Glandular scrub birch
Aconitum delphinifolium	Delphinium-leaved aconite
Anemone narcissiflora	Narcissus-flowered anemone
Heuchera glabra	Alpine heuchera
Spiraea Beauverdiana	Beauvered spiraea
Sanguisorba sitchensis	Sitka great burnet
Empetrum nigrum	Crowberry
Viola glatella	Stream violet
Shepherdia canadensis	Buffaloberry or soapberry
Epilobium leptocaroum	Willow-herb
Heracleum lanatum	Cow parsnip
Polemonium pulcherrimum	Polimonium
Linnaea borealis	Twin-flower
Campanula lasiocarpa	Mountain harebell
Achillea lanulosa	Yarrow
Artemisia arctica	Arctic wormwood

3. Plants found only in areas below timberline, usually from sea level to 2,000 feet elevation:

Tsuga nertensiana	Mountain hemlock
Salix sitchensis	Sitka willow
Alnus crispa	Alaska alder
Delphinium glaucum	Glaucous larkspur
Ribes laxiflorum	Trailing black currant
Rosa nutkana	Nootka rose
Rubus spectabilis	Salmonberry
Geranium erianthum	Northern geranium
Polemonium acutiflorum	Polemonium
Mimulus guttatus	Yellow monkey-flower
Viburnum edule	Highbush cranberry

4. Other plants mentioned in the area:

Picea glauca	White spruce
P. sitchensis	Sitka spruce
Tsuga heterophylla	Western hemlock
Thuya plicata	Western red cedar
Juniperus horizontalis	Creeping juniper
Lysichitum americanum	Skunk cabbage
Rumex fenestratus	Great western dock
Batula kenaica	Kenai birch
Populus tricocarpa	Black cottonwood

Ribes triste	Red currant
Sorbus scopulina	Western mountain ash
Rubus chamaemorus	Cloudberry
Potentilla fruticosa	Shrubby cinquefoil
Sambucus racemosa	Red-berried elder
Epilobium angustifolium	Common fireweed
E. latifolium	Dwarf fireweed
Cplopanax harridus	Devil's club
Cornus canadensis	Bunchberry
Loiseleuria procumbers	Alpine azalea
Menziesia ferruginea	Buckbrush or rusty menziesia
Arctostaphylos uva-ursi	Common bearberry
Vaccinium vitis-idea	Mountain cranberry
Artemisia	Sage

APPENDIX F

FRESHWATER FISHES

SCIENTIFIC NAME	COMMON NAME
Salvelinus malma	Dolly Varden
Salmo gairdneri	Rainbow-steelhead trout
Oncorhynchus nerka	Red salmon
Oncorhynchus kisutch	Silver salmon
Oncorhynchus keta	Chum salmon
Oncorhynchus gorbuscha	Pink salmon
Gasterosteus aculeatus	Threespine stickleback
Cottus asper	Prickly sculpin
Cottus aleuticus	Coastrange sculpin
Cottus cognatus	Slimy sculpin

* * * *

APPENDIX G

ANCHORAGES FOR SMALL VESSELS ALONG THE SOUTH COAST

The following is a complete list of all anchorage sites in the general area. For a detailed description see "U.S. Coast Pilot 9," by Morgan B. Sherwood. (See bibliography.)

Aialik Bay

- Paradise Cove
- Three Hole Bay

Harris Bay

- Granite Passage
- Crater Bay
- Cup Cove
- Sandy Bay
- Paguna Arm
- Taroka Arm
- Thunder Bay

Nuka Bay

- Wildcat Pass
- Roaring Cove
- Morning Cove
- Moonlight Bay
- Shelter Cove
- Surprise Bay
- Ariadne Cove

Pilot Harbor

Wildcat Cove

McArthur Cove

Chance Lagoon

Midnight Cove

Yalik Bay

Palisades Lagoon

Quartz Bay

APPENDIX H

MITIGATING MEASURES

Paragraph 5 of the Council of Environmental Quality guidelines identifies those Federal actions which require the preparation of environmental statements. With regard to archeological resources, a "major Federal action" is any action in any geographic location which:

1. Results in a disturbance or change in the natural surface of the land;
2. Results in alteration of soil composition;
3. Changes an existing use of the land by alteration or construction activities.

To avoid such adverse impacts in proposed development areas by NPS or by its licensee, permittee, lessee, or grantee or other recipient of privilege, the following archeological clearance procedure will be effected:

Archeological Clearance Procedures:

1. Prior to the start of any earth-disturbing action whatsoever, the contractor or his recipient of privilege shall obtain an archeological clearance from the regional archeologist.

2. The monument archeologist will evaluate the potential significance of the resources, identify any which may merit listing in the National Register of Historic Places, and recommend appropriate mitigating actions in a report to the Regional archeologist.

3. In those instances when NPS archeologists are not available, the regional archeologist will provide a list of institutions qualified for this work and will assist in making arrangements for contracting the work.

4. Archeological clearance will be granted by the regional archeologist when significant archeological resources are not identified in a development area.

5. Archeological clearance will be denied by the regional archeologist when significant archeological resources are identified in a development area.

6. The presence of archeological resources which may merit listing in the National Register of Historic Places will require compliance with Section 2(b) of Executive Order 11593 of May 13, 1971.

7. The presence of archeological resources of major scientific importance will require a complete reevaluation to consider relocating a development or portion thereof.

8. With archeological resources of lesser significance than (6) or (7) above, NPS or its recipients of privilege may select the option of

(1) relocating the project so as to avoid damage to the resources or

(2) providing the archeological studies, including analysis and reports, sufficient to mitigate realistically the loss of the resource.

9. An archeological clearance will be granted to remove a denial of clearance at the completion of archeological field work where mitigating studies are the selected option.

10. If archeological resources are discovered in the course of construction on areas previously given archeological clearance, the contractor will immediately notify the regional archeologist. In this event, emergency salvage will be required.

METHOD OF INVESTIGATION

A preliminary reconnaissance can provide the information necessary for general program studies or for a project in the initial planning stage. An intensive field testing survey will be necessary to obtain the data for projects at the feasibility or preauthorization stage of planning, and for which the preparation of an environmental statement is anticipated.

1. Preliminary Reconnaissance

At the initial planning stage of an action, or in general program studies, an inventory should define the categories of cultural resources in the area and the nature of the predicted effects of the action on them. The inventory will be a realistic and reliable basis for evaluating the known and potential cultural resources which may be affected by the action.

In some cases, the inventory will be made from existing primary scientific or historic records; information also will be obtained through consultation with competent professional archeologists having personal knowledge of the area. The degree to which this information represents comprehensive

coverage of the area should be stated.

The inventory will identify the indigenous cultures, historic and prehistoric, in the project or program area and state their significance in local, regional, and national contexts. Cultural resources that appear to qualify for the National Register of Historic Places will be identified.

If existing knowledge of the cultural resources of an area is insufficient for an adequate inventory, a preliminary field reconnaissance of the project area will be carried out. This will be an examination by a competent archeologist to obtain representative data of the cultural resources, permitting determination of the scope and significance of resources which will be affected by the project, as described above.

2. Intensive Field Testing Survey

In conjunction with projects in feasibility stage or those to be proposed for authorization through legislative action, a detailed statement of impact should be prepared based on an inventory from an intensive field testing survey. This survey will involve a comprehensive examination of the project area supplemented by test excavations as necessary to accomplish adequately the following:

a. Identify and describe the archeological resources which will be affected by the action;

b. Sample all categories of archeological resources in all environmental contexts which will be affected directly or indirectly by the action;

c. Develop a reliable statement of the significance of archeological

resources to be affected;

d. Develop an estimate of the cost of recovering all data from resources to be affected, as a monetary measure of the value of the resources base. This estimate should be used in computing cost-benefit ratios;

e. Develop an estimate of the cost of mitigating the adverse effects of an action on archeological resources;

f. Identify locations that are listed on, or appear to qualify for, the National Register of Historic Places established by the Historic Preservation Act of 1966 (P.L. 98-665). These locations must be identified to comply with Executive Order 11593 of May 13, 1971;

g. Develop a basis for recommending alternative dispositions of the archeological resources affected by the action. These recommendations can include: (1) Mitigation studies; (2) Relocation of part or all of a project to preserve archeological remains; (3) Other protective or management measures to preserve these remains; (4) No action required concerning archeological resources. All recommendations in the survey report and the impact statement shall be justified.

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APPENDIX I

FISH AND WILDLIFE MANAGEMENT POLICY

The National Park Service policy on fish and wildlife management is set forth in Administration Policies for Natural Areas of the National Park System (U.S. Department of the Interior, National Park Service, 1970). The policy is based on precedent set in the Yellowstone National Park legislation of 1872 and similar subsequent national park legislative actions. Article III of the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere Between the United States of America and Other American Republics, and recommendations of the Advisory Board on Wildlife Management in the National Parks. The full texts of the latter two documents are included as appendixes in Administrative Policies for Natural Areas of the National Park System.

The following policy statement issued by the Secretary of the Interior on May 2, 1968, is quoted from the administrative policies (emphasis added):

"A. In all areas administered by the Secretary of the Interior through the National Park Service, the Bureau of Sport Fisheries and Wildlife, the Bureau of Land Management, and the Bureau of Reclamation, <u>except the National Parks, the National Monuments, and historic areas of the National Park System</u>, the Secretary shall -

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"1. Provide that public hunting of resident wildlife and fishing shall be permitted within statutory limitations in a manner that is compatible with and not in conflict with, the primary objectives as declared by the Congress for which such areas are reserved or acquired;

"2. Provide that public hunting, fishing, and possession of fish and resident wildlife shall be in accordance with applicable State laws and regulations, unless the Secretary finds, after consultation with appropriate State fish and game departments, that he must close such areas to such hunting and fishing or restrict public access thereto for such purposes;

"3. Provide that a State license or permit, as provided by State law, shall be required for the public hunting, fishing, and possession of fish and resident wildlife on such areas;

"4. Provide for consultation with the appropriate State fish and game department in the development of cooperative management plans for limiting over-abundant or harmful populations of fish and resident wildlife thereon, including the disposition of the carcasses thereof, and, except in emergency situations, secure the State's concurrence in such plans; and

"5. Provide for consultation with the appropriate State fish and game department in carrying out research programs involving the taking of fish and resident wildlife, including the disposition of the carcasses thereof, and secure the State's concurrence in such programs.

"B. In the case of the National Parks National Monuments, and historic areas of the National Park System, the Secretary shall--

"1. Provide, where public fishing is permitted, that such fishing shall be carried out in accordance with applicable State laws and regulations, unless exclusive legislative jurisdiction* has been ceded for such area, and a State license or permit shall be required for such fishing, unless otherwise provided by law;

"2. Prohibit public hunting and

"3. Provide for consultation with the appropriate State fish and game departments in carrying out programs of control of over-abundant or otherwise harmful populations of fish and resident wildlife or research programs involving the taking of such fish and resident wildlife, including the disposition of carcasses therefrom.

"In any case where there is a disagreement, such disagreement shall be referred to the Secretary of the Interior who shall provide for a

thorough discussion of the problems with representatives of the State fish and game departments and the National Park Service for the purpose of resolving the disagreement.

"*The term "exclusive legislative jurisdiction" is applicable to situations wherein the Federal Government has received, by whatever method, all the authority of the State, with no reservation made to the State except the right to serve process resulting from activities which occurred off the land involved. This term is applied notwithstanding that the State may exercise certain authority over the land, as may other States over land similarly situated, in consonance with the several Federal statutes. The term is also sometimes referred to as "partial jurisdiction."

Normally, exception to the policy must be approved by Congress.

APPENDIX J

United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

DEC 17 1973

Dear Mr. Speaker:

Transmitted herewith is a bill, "To provide for the addition of certain lands in the State of Alaska to the National Park, National Wildlife Refuge, National Forest, and the Wild and Scenic Rivers Systems, and for other purposes."

We recommend that this bill be referred to the appropriate Committee and that it be enacted.

On December 18, 1971, President Nixon signed into law the historic Alaska Native Claims Settlement Act (ANCSA) (PL 92-203). This legislation extinguished all aboriginal claims to land in Alaska and in return provided the Natives with a land settlement of 40 million acres and a monetary settlement of nearly a billion dollars.

In addition, section 17(d)(1) of the Act authorized the Secretary of the Interior (hereinafter referred to as the "Secretary") to withdraw such public domain lands as he thought advisable to ensure that the public interest in them is properly protected.

Section 17(d)(2) of the Act authorized the Secretary to withdraw up to 80 million acres of land to be studied for possible addition to the National Park, Forest, Wildlife Refuge, and Wild and Scenic Rivers Systems. Section 17(d)(2) also required all legislative proposals coming from such studies to be submitted to the Congress within two years, by December 18, 1973, and provided that Congress would have five years to act following receipt of the legislation. During this period lands in those proposals withdrawn under 17(d)(2) would not be subject to appropriation under the public land laws. The bill transmitted with this letter constitutes the legislative proposals pursuant to that authority.

The process of developing the proposals began in January of 1972 with the Bureau of Sport Fisheries and Wildlife and the National Park Service concentrating on the identification of their "areas of interest" in Alaska without regard to management jurisdiction.

During February 1972 these two agencies screened the "areas of interest" to identify the specific areas that warranted detailed on-the-ground study for possible addition to the National Wildlife Refuge and Park Systems. These particular areas were then reviewed within the Department to determine the lands to be withdrawn in March of 1972 under the 17(d)(1) and 17(d) (2) provisions of the Act. The March withdrawal also recognized certain river areas that warranted study for possible addition to the Wild and Scenic Rivers System. In addition, additional acreage from which the Natives were to select some of the land to which they were entitled was withdrawn.

During the summer of 1972 the National Park Service, Bureau of Outdoor Recreation, Bureau of Sport Fisheries and Wildlife and Forest Service conducted detailed studies of the withdrawn lands.

In August of 1972, the Joint Federal-State Land Use Planning Commission, a commission created by the ANCSA to advise the Federal and State governments, provided its recommendations for the final 17(d)(2) withdrawals to be made in September. On September 17 the final 17(d)(2) withdrawals of 79.3 million acres were made. The withdrawals reflected negotiations with certain of the Native Regional Corporations. Subsequent adjustments have also been made in native deficiency withdrawals, after consultation with the Natives.

During the remainder of 1972 and early 1973 the agencies refined their studies on the D-2 and the related D-1 lands.

During May and June of 1973 the Joint Federal-State Land Use Planning Commission held over 30 hearings in Alaska and four hearings in the Lower 48 States to obtain comments from the public concerning use potentials for the 17(d)(2) lands. The testimony from these hearings, as well as specific recommendations submitted by the Commission regarding 17(d)(2) withdrawals, were all considered in developing final recommendations.

The decisions on additions to the National Park, Refuge, Forest and Wild and Scenic Rivers Systems have not been easy to make. Alaska is a vast land with a great variety of resource values, many of which are of national and international importance. It contains great mineral, oil, and forest resources, a wide variety of ecosystems, outstanding archeological artifacts, and some of the most magnificent scenery in the world. It is the only place in the United States where Native people are living on the land on a subsistence basis.

In the proposed legislation, we have taken into account the special characteristics of Alaska and we have used several new approaches which we believe are particularly suited to Alaska. For example, we are proposing joint management of resources by two or more federal bureaus in several instances, because the resources of the areas seem to require this joint approach. The Chukchi-Imuruk National Reserve and the two southern units of the Harding Ice Field-Kenai Fjords National Monument, which have both park-quality resources and high fish and wildlife values, will be administered jointly by the National Park Service and Bureau of Sport Fisheries and Wildlife. Iliamna National Resource Range will be administered as a unit of the National Wildlife Refuge System and will also be administered to permit multiple-use activities compatible with the Bristol Bay fishery resource. The Noatak National Arctic Range will be jointly managed by the Bureau of Sport Fisheries and Wildlife and the Bureau of Land Management to provide for protection of the natural features of the area and for scientific research.

We intend to negotiate cooperative agreements where possible with the owners of adjacent lands including federal agencies, state and local governments, and private persons, including native corporations, as well as foreign nations, provided the Secretary of State concurs. The agreements would have as their purpose assuring that these adjacent areas will be managed, insofar as possible, in a manner consistent with preservation of the park system and refuge system units. The maps referred to in the proposed legislation show certain areas adjacent to park and refuge units designated as "areas of ecological concern"; we will make particular efforts to conclude cooperative agreements with respect to these areas. Government agencies licensing, funding, or carrying out undertakings on adjacent lands, unless they are parties to a cooperative agreement, would be required by our proposal to offer the Secretary a reasonable opportunity to comment on their undertakings.

We have also provided for subsistence use of fish, wildlife and plant resources in recognititon of the established subsistence hunting practices in Alaska, on both national park and refuge system areas. The need for a subsistence use provision is unique to Alaska, where members of the Native population are living on a subsistence basis.

We recognize in submitting these proposals to the Congress that further information is needed before decisions can be reached on some issues. As Alaska continues to develop, there will be a need for rights of way and corridors to adequately accomodate transportation and utility requirements. However, the information on these needs is not fully developed at this time and therefore decisions cannot be made before the December 18, 1973 deadline for submitting 17(d)(2) legislative proposals to Congress. We plan to work with the Congress and the State of Alaska in determining what these needs are and how they can be met. We plan to keep our proposals and their resources under continuing study to determine if any subsequent changes in boundaries or uses are necessary. If such changes are determined to be necessary, they will be referred to the Congress for appropriate action.

The following pages deal with specific proposals in detail. The legislation has been divided into four titles: 1) National Park System, 2) National Wildlife Refuge System, 3) National Forest System, and 4) Wild and Scenic Rivers System additions which are not located in any of the above three systems. Wild and Scenic Rivers System proposals are also found in the first three titles, in cases in which the river runs through a national park, refuge, or forest system area.

We are proposing to add acreage to two existing national park system areas, and to create nine new park areas, as follows:

1.	Mt. McKinley National Park (additions)	3.18 million acres
2.	Katmai National Park (additions)	1.87
3.	Aniakchak Caldera National Monument	.44
4.	Harding Ice Field-Kenai Fjords National Monument	.30
5.	Cape Krusenstern National Monument	.35
6.	Kobuk Valley National Monument	1.85
7.	Lake Clark National Park	2.61
8.	Wrangell-St. Elias National Park	8.64
9.	Gates of the Arctic National Park	8.36
10.	Yukon-Charley National Rivers	1.97
11.	Chukchi-Imuruk National Reserve	2.69
		32.26 subtotal

We are proposing nine new additions to the National Wildlife Refuge System:

1.	Alaska Coastal National Wildlife Refuges	.07 million acres
2.	Arctic National Wildlife Refuge	3.76
3.	Iliamna National Resource Range	2.85
4.	Koyukuk National Wildlife Refuge	4.43
5.	Noatak National Arctic Range	7.59
6.	Selawik National Wildlife Refuge	1.40
7.	Togiak National Wildlife Refuge	2.74
8.	Yukon Delta National Wildlife Refuge	5.16
9.	Yukon Flats National Refuge	3.59
		31.59 subtotal

We are proposing establishment of three new national forest system areas, and additions to a fourth existing area:

1.	Porcupine National Forest	5.50 million acres
2.	Wrangell Mountains National Forest	5.50
3.	Yukon-Kuskokwim National Forest	7.30
4.	Chugach National Forest (additions)	.50
		18.80 subtotal

We are proposing six additions to the National Wild and Scenic Rivers System which are located entirely within park system areas, five located entirely within refuge system areas, one which flows through both a park and a refuge system area and four located entirely within forest system areas. In addition, we are proposing four components not located on park, refuge or forest system lands:

1.	Beaver Creek	.20 million acres
2.	Birch Creek	.20
3.	Fortymile	.32
4.	Unalakleet	.10
		.82

The total acreage added is 83.47 million acres.

National Park System

Administration

Title I of the proposed legislation would add additional acreage to two existing parks and monuments and create nine new units of the National Park System. Administration of these areas will be under the authority of Act of August 25, 1916 (39 Stat. 535 *et seq.*) as amended and supplemented (16 U.S.C. 1, *et seq.*). Chukchi-Imuruk National Reserve and the two southern units of the Harding Ice Field-Kenai Fjords National Monument will be managed jointly by the National Park Service and the Bureau of Sport Fisheries and Wildlife pursuant to a cooperative agreement. The other areas will be managed entirely by the National Park Service. Lands within the boundaries of the added and new areas may be acquired by purchase, donation, or exchange; except that lands owned by the State or political subdivisions of the State may be acquired only by donation or exchange, and property owned by a native village or corporation may be acquired only with the concurrence of the owner. Minor boundary changes may be made, after notice requirements are met, including notice to the Interior and Insular Affairs Committees. Administrative sites located outside the park system area boundaries may be added to the areas and included within the boundaries after notice requirements are met, but the sites may not exceed 80 acres for any one park system area.

Mining and Mineral Leasing

The federal lands within the boundaries of the areas added to existing units or established by the title are withdrawn, subject to valid existing rights, from location, entry and patent under the public lands laws, including from all forms of appropriation under the United States mining laws, and from operation of the mineral leasing laws. This withdrawal also applies to areas presently within Mount McKinley National Park. Since lands within the existing Katmai National Monument are already withdrawn, no reference is made to them in the legislation. A one year limit is established during which all mining claims must be recorded; an application for patent must be made within three years of recordation, or the claim will be presumed invalid.

An exception to these withdrawals is made to allow mineral leasing in the Yukon River watershed of the Yukon-Charley National River, other than the Charley River; these lands are not withdrawn from operation of the mineral leasing laws and are specifically made subject to the Mineral Leasing Act of 1920, except that provision is made for administrative cancelling of leases and permits for violations of the terms of leases and permits or regulations. These lands are withdrawn from appropriation under the mining laws by subsection 106(a), but minerals of the types subject to the mining laws may be removed under a permit system provided for in subsection 106(b).

Sport Hunting

Sport hunting will be permitted in specified townships of Aniakchak Caldera National Monument and in Lake Clark National Park, Wrangell-St. Elias National Park, the Gates of the Arctic National Park, Chukchi-Imuruk National Reserve, and Yukon-Charley National Rivers, in accordance with regulations prescribed by the Secretary. Sport hunting may not take place, however, if prohibited by state or federal law. The Secretary may establish limits on numbers and types of species taken and manner of taking, and may prohibit taking; he may also designate zones where, and periods when, no sport hunting will be permitted for reasons of public safety, administration, fish and wildlife management, or public use or enjoyment. Regulations except in emergencies, are to be put into effect only after consultation with the appropriate fish and game agency of the State of Alaska.

The proposal requires a report to the Congress at specified intervals on the effect of all hunting, fishing and trapping, including subsistence uses, on the flora and fauna of the areas added to existing units or established by the title.

Subsistence Uses

Except as otherwise prohibited by state or federal law, subsistence uses of fish, wildlife and plant resources will continue within the areas added to existing park system units or established as new units, to the extent that such uses were in effect on the date of enactment of ANCSA, unless the Secretary finds that such uses would materially and negatively affect the fish, wildlife or plant resources of such areas. The Secretary may prescribe conditions under which subsistence uses shall be conducted, and may prohibit takings altogether. Regulations on subsistence uses are to be promulgated after consultation with the appropriate fish and game agency of the state.

Cooperative Agreements

The Secretary is specifically authorized to enter into cooperative agreements with federal agency heads and owners of land within, adjacent to, or related to the park system areas added to existing units or estab lished by the title. The agreements may be made, for example, with fede agencies, state or local governments, native corporations, villages

or groups, and foreign governments, with the concurrence of the Secretary of State. The agreements would be drafted to ensure management of the areas subject to the agreement in a manner consistent with preservation of the park system areas. They could also provide for access by the park visitors to and across the lands. A provision similar to section 106 of the Historic Preservation Act of 1966 is included in the legislation, requiring agencies licensing, funding or carrying out projects or other undertakings in the areas within, related to or adjacent to park system areas to give the Secretary opportunity to comment on such undertakings; federal agencies which are parties to cooperative agreements with respect to the particular park system area are exempted from this requirement since such reporting requirements could be included in the agreement.

Wilderness Review

With respect to the areas added to existing units or established by the title, the Secretary has 3 years from the date of enactment to report his recommendations for wilderness designation, in accordance with subsections 3(c) and 3(d) of the Wilderness Act. The wilderness recommendation for the existing Mount McKinley National Park must also be made within 3 years, from date of enactment.

Wild and Scenic Rivers System Components

Seven river components — Alatna, Aniakchak, Charley, Killik, Noatak, Salmon and Tinayguk — are added to the wild and scenic rivers system by title I. Studies of these rivers have been completed which are the equivalent of the studies carried out on rivers designated under section 5(a) of the Wild and Scenic Rivers Act (16 U.S.C. 1276(a)). We are therefore recommending addition of these rivers directly to the system, rather than inclusion on the 5(a) study list. All seven rivers are classified as wild rivers and are to be administered as wild rivers pursuant to the Wild and Scenic Rivers Act. The rivers are exempted from the requirements of 3(b) of establishing detailed boundaries, preparing development plans, and classifying as wild, scenic or recreational rivers. They are also exempted from the duplicative and potentially conflicting acquisition provisions of section 6 of the Act and fish and wildlife provisions of section 13(a) of the Act.

Specific Areas

Descriptions of specific areas and specific legislative provisions applying to these areas follow:

1. Mount McKinley National Park Additions. Mount McKinley National Park was established in 1917. This proposal will add approximately 3.18 million acres to the present park, which now includes about 2 million acres. About half of the additions are to the north of the existing park, and constitute critical wolf, sheep, moose and caribou range necessary to ensure the continued viability of the ecosystem of the Mount McKinley area. The area also has important waterfowl values. The remaining half of the added acreage is to the south of the park. It includes part of the Mount McKinley mountain massif not now within the park, spectacular glacial systems, and the intricately dissected, awesomely beautiful Cathedral Spires. Lowland areas in the southern portion will provide ecologic diversity for the park and opportunity for recreational use and access. The added areas will be managed as natural areas with the primary objectives of preserving the large mammal ecosystem and the scenic beauty of the area; development will be minimal, with emphasis on the recreation potential of the area in its natural condition. Headquarters will be relocated from its present site north of the Alaska Range to the south side of the range.

A cooperative planning and management zone, adjacent to the south and east boundaries of the expanded park, has been designated on the maps referred to in the legislation. This area encompasses the threshold lands to Mount McKinley. Within 3 years from the date of enactment of the title, the Secretary will be required to submit a report to the Congress on whether land-use controls needed for proper protection of the park have been instituted by the State and local governments with respect to this zone. Comments of the Governor and the Joint Federal-State Land Use Planning Commission will be solicited and submitted to Congress as well.

2. Katmai National Park. Katmai National Monument was established in 1918 by Presidential Proclamation, and subsequently enlarged to about 2.6 million acres. The legislation would add 1.37 million acres to the monument and redesignate it as a national park. The national monument, which is located on the upper Alaska Peninsula, was originally established to preserve a scenic region containing an area devasted in 1912 by volcanic eruption and ash deposition.

The proposed expanded park will include the headwaters of all watersheds draining through the present monument. Inclusion of the headwaters will help assure preservation of the sockeye(red) salmon spawning and nursery waters in these headwaters. The park would also include a protected area sufficiently large to include an unhunted, self-perpetuating population of the giant Alaskan brown bear. The southern portion of the park will include a representative portion of the Bristol Bay lowland tundra, the only representative of this landform type in the national park system. Katmai will continue to be managed as a natural category area with the primary objective of insuring maximum retention of land and wildlife in as near as possible to their natural state. Hunting, trapping, and commercial fishing will not be allowed.

3. Aniakchak Caldera National Monument. The proposed Aniakchak Caldera National Monument, which will include approximately 440,000 acres, lies on the Alaska Peninsula approximately 350 air miles south of Anchorage. The 30-square mile Aniakchak Caldera is one of the world's greatest dry volcanic caldera (craters), and contains many examples of volcanic activity, including lava flows, cinder cones, a lava plug, warm springs, explosion pits, and layers of volcanic and sedimentary rocks exposed by volcanic action. A rift running through the caldera has created portals in the caldera wall; the eastern portal is a spectacular 2,000-foot gash through which the Aniakchak River flows. Also included in the national monument are ash fields surrounding the caldera, tundra-covered lowlands, and portions of the Aleutian Mountain Range, and the Aniakchak River. The Aniakchak River is proposed by the legislation for designation as a component of the wild and scenic rivers system and classification as a wild river, pursuant to the Wild and Scenic Rivers Act.

The rivers and streams within the monument support abundant salmon, trout and many other fish. Brown bear and moose are found almost throughout the area. The coastal portion of the monument, including cliffs and off-shore islands, harbor sea lions, sea otters, seals, and sea birds.

4. Harding Ice Field-Kenai Fjords National Monument. The proposed Harding Ice Field-Kenai Fjords National Monument, consisting of about 300,000 acres, encompasses two major elements of the Alaska scene: a 700-square mile icecap, with outflowing glaciers, and a series of coastal fjords with abundant bird and marine life. It is located south of Anchorage, on the Kenai Peninsula, about 2 1/2 hours by car. The monument consists of three units and provision is made for including

a central area between the three units in the monument, as well, if all or part of this area is not selected by native corporations pursuant to the Alaska Native Claims Settlement Act. The two southern units of the monument will be administered jointly by the National Park Service and the Bureau of Sport Fisheries and Wildlife, pursuant to a cooperative agreement.

The high point of Harding Ice Field is 5,270 feet. Numerous glaciers flow outward from the icefield, some reaching the sea, others ending in large lakes, or on bare ground. Cirques, horns, morains, nunataks, and other glacial features can be seen. Of the 4 major icefields in the United States, Harding has the most expansive central area which is not broken by mountains and crevasses. The icecap-like appearance is awesome, providing the visitor a unique experience.

Glaciers from the icefield have cut deep fjords into the mountainous coast. Dense, rain forest-type vegetation cloaks the cliffs and mountains. Marine mammals and sea birds abound on these cliffs and in the fjords.

5. Cape Krusenstern National Monument. The proposed Cape Krusenstern National Monument, situated north of the Arctic Circle in northwestern Alaska, will protect an internationally significant series of archeological sites. The area proposed for the national monument, comprising approximately 350,000 acres, includes a level coastal plain dotted with sizable lagoons, which on the east meets an ancient sea cliff and low rolling hills. The area illustrates, in a horizontal stratigraphy of beach ridges that is unique in size and scope, every known cultural period in arctic Alaska; this succession of 114 gravel beaches extends from 1 1/2 to 3 miles inland. The area, which was ice-free in the late Pleistocene, may reveal information on the peopling of the Americas across the thousand-mile wide Bering Land Bridge. The land bridge is now partially under water.

The national monument, in addition to its archeological significance, will provide a representative segment of arctic coastal tundra, a type of ecosystem not now represented in the National Park System. The long term stability of the coast also makes the area significant for studies of sea level and coastal currents.

Management of the area will be to preserve evidence of prehistoric man and his environment for study by scientists and for other visitors. Developments will be minimal to preserve the overall scene and prevent damage to the fragile ecosystems.

6. Kobuk Valley National Monument. The proposed Kobuk Valley National Monument, comprising about 1,850,000 acres, is located above the Arctic Circle in the central Kobuk Valley in northwestern Alaska. It is bounded on the north by the crest of the Baird Mountains and on the south by the Waring Mountains. It includes the Kobuk River, with its myraid meander sloughs and oxbow lakes, the Great Kobuk Sand Dunes, covering more than 20 square miles that are the relics of a prehistoric dune area covering over 300 square miles, and the Salmon River. The Salmon River is proposed for inclusion in the wild and scenic rivers system, and classification as a wild river. The monument is representative of both the Western Interior Alaska and Brooks Range physiographic province, and includes the northwestern limits of boreal forest. The northern portion of the winter range of the Arctic caribou herd and several important migration routes lie within the proposal. Moose, black and grizzly bear, and wolves are indigenous.

Provision is made in the legislation for inclusion of those parts of the Onion Portage area that are not selected by native corporations pursuant to ANCSA as part of the monument; Onion Portage is one of the most important archeological sites in arctic North America, with over 30 cultural horizons.

The portion of the Kobuk Valley included in the monument has an appeal as a "friendly" place, which is rare for the arctic. Boating is safe and easy, and there is excellent hiking on the dunes and in the Waring Mountains. The Baird Mountains offer excellent mountaineering opportunities.

7. Lake Clark National Park. The proposed Lake Clark National Park, of approximately 2,610,000 acres, is located north of the existing Katmai National Monument on the Cook Inlet. It straddles the Alaska and Aleutian Mountain ranges, and includes a series of glacier-created lakes on the west. The National Park Service has been studying the area for possible addition to the park system since the late 1950's.

In the areas proposed for a national park, numerous valleys weave through a jumble of mountains. There is a maze of natural hiking routes, which permit surprisingly easy entrance to a spectacular mountain environment. The park encompasses still-smoking volcanoes, spectacular spires, and glaciers.

The park includes a portion of the Cook Inlet coastline, which ranges from gentle alluvial shapes in the north to deeply incised, spruce-covered coastal hills in the south.

Waterfowl, seabirds, trout, bear, moose, sheep and marine mammals can be found in the park. Plant communities range from coastal spruce and marsh to alpine meadows and lichen growth at high elevations.

We have had discussions with the Cook Inlet Regional Corporation regarding the possibility of exchanging at some future date land in the Kenai National Moose Range for land which they are entitled to select near the proposed Lake Clark National Park. Presently, the Bureau of Sport Fisheries and Wildlife and the Federal-State Commission are conducting studies of the Range to determine whether some of the land is no longer needed for the purposes of the Range.

Developments in the park will be located to maintain the ecological and scenic integrity of the area. The area will be managed as a natural area with the objective of preserving its scenic beauty, wilderness attributes, areas of scientific interest and plant and animal life.

8. Wrangell-St. Elias National Park. The proposed Wrangell-St. Elias National Park, including approximately 8,640,000 acres, is located in south-central Alaska, and stretches 160 miles north from the Gulf of Alaska. Much of the Wrangell-St. Elias and Chugach mountain ranges will be included in the park, including 18,000-foot Mount St. Elias 16,000-foot Mount Blackburn and the largest glacier system in the United States, including Malaspina and Bering glaciers and Bagley Ice Field. The park includes spectacular ice-sculptured valleys, rolling interior foothills, and a small sample of coastal plain. Abundant land and sea mammal and fish species include moose; wolf; wolverine; black, glacier and brown-grizzly bear; caribou; Dall sheep; sea lions; otters; seals; killerwhales; salmon; trout; and grayling. A number of historic sites from the early mining era in Alaska are located in the river valleys within and in the vicinity of the park.

The proposed legislation provides that the Secretary of Agriculture and the Secretary of the Interior shall consult in the development of management plans for the Wrangell Mountains National Forest and the adjoining Wrangell-St. Elias National Park to achieve the fullest possible coordination and cooperation.

The park would be managed to ensure maximum retention of the landscapes and lifeforms in a natural state.

9. Gates of the Arctic National Park. The proposed Gates of the Arctic National Park, comprising approximately 8,360,000 acres, is located in the central Brooks Range, 200 air miles northwest of Fairbanks, and a similar distance southeast of Barrow on the Arctic Ocean coast. The park will protect Alaska's most complete and varied array of arctic scenic and biologic resources. The area's scenic values derive from the gaunt grandeur of the tundra environment and the vast open valleys and sweeps of mountains.

Mount Igikpak, a spectacular turreted peak which is the highest in the central and western Brooks Range, (8,510 feet) is included in the western portion of the park, as are the Arrigetch Peaks, among America's most precipitous mountains, and Walker Lake, an exceptional geological and ecological area. Several other large lakes on the southern flank of the range are in the proposed park, as are two on the Arctic Slope. The eastern part of the park includes the striking mountain and valley formation called the Gates of the Arctic and other mountains and wilderness made famous in the writings of Bob Marshall. We are proposing four rivers within the park for inclusion in the wild and scenic rivers system, and classification as wild rivers -- the Alatna, the Killik, the Noatak, and the Tinayguk.

Wildlife includes migrants from the huge arctic caribou herd as well as grizzly bear, Dall sheep, moose, wolves, raptors, and arctic char, lake trout, northern pike and grayling.

Limited recreation development in keeping with the primitive character of the area appears to be appropriate for the central portion of the park. No developments except for those necessary for management purposes are planned for the eastern and western portions.

10. Yukon-Charley National Rivers. The proposed Yukon-Charley National Rivers, which comprises approximately 1,970,000 acres, is located in east-central Alaska, its eastern boundary the United States-Canadian border. It includes a part of the Yukon River, and the Charley River drainage in its entirety. The Charley River empties into the Yukon between the towns of Eagle and Circle, and this confluence is within the national rivers. The Yukon River area is rich in history. The town of Eagle, which is near the park boundary, has well-preserved buildings dating back to the gold-rush era, and there are a number of remains of buildings along the banks of the Yukon within the national rivers. There are also wildlife resources, including the highest known concentration of nesting peregrine falcons. Geologic features include an uninterrupted visible cross-section of rock strata dating from Upper Cambrian times (500 million years ago) to the present.

The Charley River basin is significant because of its undisturbed nature and its fine cross-section of interior Alaska flora and fauna. There is high potential for recreational boating on the Charley and for camping and hiking through the Charley River basin. The Charley River is recommended by the legislation for inclusion in the wild and scenic rivers system, and for classification as a wild river.

The proposed Yukon-Charley National Rivers will be managed as a recreation category area. Management will provide for protection of and use of recreational, historic and natural values. Along the Yukon River, mineral leasing under 1920 Mineral Leasing Act will be permitted, subject to certain special provisions and minerals normally subject to the mining laws may be removed pursuant to a permit system in the legislation.

11. Chukchi-Imuruk National Reserve. The proposed Chukchi-Imuruk National Reserve, comprising approximately 2,690,000 acres, is located on the Seward Peninsula in northwestern Alaska. The area is a relict of the much larger area which constituted the Bering Land Bridge. It is a superb representation of a great diversity of tundra communities. Wildlife values of the area are internationally significant; the wildlife are found in the wetlands, cliffs and estuaries, and offshore areas of the proposal. The area is also of interest because of the volcanic processes represented. Lava flows cover large areas in the southern part of the proposal. Ash explosion, unknown elsewhere in the arctic, have left deep crater lakes in the northern portion and buried, in near total preservation, a prehistoric ecosystem. The area will be managed jointly by the National Park Service and the Bureau of Sport Fisheries and Wildlife, pursuant to a joint management plan.

National Wildlife Refuge System

The proposed additions to the National Wildlife Refuge System are the results of investigations by the Bureau of Sport Fisheries and Wildlife. Enactment of these proposals would result in adding approximately 32 million acres to the National Wildlife Refuge System, presently estimated at 31 million acres. The areas would be administered as integral units of the National Wildlife Refuge System pursuant to the National Wildlife Refuge Administration Act of 1966 as amended (80 Stat. 927; 16 U.S.C. 668dd-ee), and would afford protection and preservation of nationally and internationally significant fish and wildlife populations and their habitats. Special emphasis is provided in these proposals to critical habitat areas of migratory birds, seabirds, endangered species, anadromous fish and marine mammals.

Within the framework of Federal and State laws, subsistence would be a recognized use of the fish, wildlife and plant resources in the refuges and the ranges. Refuge designation of proposed lands would not change laws applicable to existing subsistence, and authorized uses would continued until it is demonstrated that they are no longer necessary for human survival. Hunting, fishing and trapping will be allowed on the areas subject to applicable Federal and State laws. The Secretary of the Interior would be authorized, however, to regulate subsistence uses for such reasons as public safety and to prevent depletion of the resources and thereby insure sustained benefits for all Americans. Subject to valid existing rights, no use of the refuges and the ranges under United States mining and mineral leasing laws will be allowed without the express approval of the Secretary.

All areas, except the proposed "Noatak National Arctic Range, would be studied for possible inclusion in the National Wilderness Preservation System in accordance with subsection 3(c) and 3(d) of the Wilderness Act. A report would be made to the President and Congress within three years after establishment concerning their suitability or nonsuitability for classification as wilderness. Certain rivers within the proposed refuges and ranges which have been studied and found to be suitable would be designated for protection under the provisions of the Wild and Scenic Rivers Act (82 Stat. 906; 16 U.S.C. 1271-1287).

Special efforts will be made to coordinate management of fish and wildlife resources on the refuges and ranges with that of native and State-owned lands and other Federal lands within, adjacent to and related to the refuges and the ranges.

Alaska Coastal National Wildlife Refuges

This proposal to add approximately 65,000 acres to the National Wildlife Refuge System includes several hundred rock islands, spires and cliffs located along, 1,500 miles of Alaskan coast. Two of the proposed refuges will be additions to existing refuges--the Bering Sea National Wildlife Refuge and the Kodiak National Wildlife Refuge—and the rest will go into three new refuges--Chukchi Sea, Shumagin Islands, and Barren Islands National Wildlife Refuges.

It is estimated that the nesting sites of four to six million seabirds are included within the land areas of this proposal. In addition to seabird nesting, all the units are important to one or more species of marine mammals including sea lions, walrus, sea otters and polar bears.

Commercial fisheries are of prime economic importance in the area below the Alaska Peninsula. Convention agreements permit international fishing zones to located adjacent to the Shumagin Islands, Kodiak and Barren Islands units. Zones permitting loading and unloading of fish, fuel, and supplies are also located adjacent to the Shumagin Islands and Barren Islands units.

Arctic National Wildlife Refuge

Located in the northeast corner of Alaska, extending along the Canadian border from the Yukon basin to the Arctic Ocean, this proposal would establish a 3.76 million acre Arctic National Wildlife Refuge, and the existing 8.9 million acre Arctic National Wildlife Range withdrawn in 1960 by Public Land Order No. 2214 would be added to the refuge.

The magnitude and diversity of habitats account for the variety of fish and wildlife resources within the area. Nearly 130 species of migratory birds use these habitats. Also, 44 species of mammals depend upon the land base for their existence. Thirty-one species of waterfowl frequent tundra wetlands and adjacent coastal waters.

The area is a major migratory route for a variety of shorebirds and waterfowl. Birds from all four continental flyways follow inland routes and the Arctic coastal route to winter ranges around the world. Thousands of snow geese forage inland on the tundra in late summer and early fall during their annual migration. Of special interest are the endangered peregrine falcon, and possibly the Eskimo curlew which many fear is extinct.

The calving grounds of the Porcupine caribou herd (as many as 150,000 animals) are entirely within the existing Arctic National Wildlife Range and are of international importance.

Sixteen species of fish occur within the proposal including arctic grayling, anadromous and landlocked populations of arctic char, lake trout, chum salmon, northern pike, burbot and whitefish. Though no commercial fisheries exist, all species are important for subsistence use.

Iliamna National Resource Range

The proposed Iliamna National Resource Range includes approximately 2.85 million acres of land and water located on the northern end of the Alaska Peninsula between Cook Inlet and Bristol Bay.

The terrain is diversified and includes heavily glaciated mountains, alpine-like meadows, coastal bays, and numerous ponds and lakes. Lake Iliamna, in the heart of the region, is the seventh largest freshwater lake in the United States.

The Kvichak River system contains the greatest red salmon spawning grounds in the world and sustains a world-renowned freshwater trophy sport fishery. Kvichak River, which flows from Lake Iliamna to Bristol Bay has a watershed of 8,000 square miles, is 68 miles long, and has an estimated flow of 18,000 cubic feet per second. During the period 1960 through 1969, the Kvichak drainage contributed 55 percent of the red (sockeye) salmon caught in Bristol Bay, 33 percent of entire U.S. catch, and 16 percent of the world catch. The whole sale value of this commercial sockeye salmon fishery has averaged more than $12,000,000 per year over the past ten years. In addition to the red salmon, pink, chum, king, and coho are also found within the proposal boundaries. The area supports a trophy sport fishery for grayling, arctic char, Dolly Varden, lake trout, rainbow trout, and pike, The fishery is the main economic resource of the area,

supporting extensive subsistence fishing, 4,000 licensed commercial fishermen, 4,000 to 6,000 support workers for the fishermen, 23 canning lines, several salteries and freezing facilities, and an array of small businesses supported by the sport fishery—guiding operations, lodges and transportation services.

More than 100 species of birds inhabit the area. Predatory birds include the bald eagle, peregrine falcon, osprey, and gyrfalcon, and Bristol Bay is the staging area for the entire world population of emperor geese and Pacific black brant.

The area would be added to the National Wildlife Refuge System and managed jointly by the Bureau of Sport Fisheries and Wildlife and the Bureau of Land Management of this Department pursuant to a cooperative management plan which will permit only such multiple use activities as are compatible with the protection and management of the nationally and internationally significant fish and wildlife resources of the range.

Koyukuk National Wildlife Refuge

Two units of land in the Koyukuk-Innoko area of Alaska are recommended to be set aside as the Koyukuk National Wildlife Refuge.

The area produces an annual fall flight averaging over 80,000 ducks and geese, and is an important staging area for other migratory birds. One hundred and forty bird species are common in the area. In addition, the many lakes and streams make the area prime habitats for furbearing animals, as well as moose, and salmon.

The Beaver Mountains caribou herd, made up of 3,000 animals, winters in the Innoko Unit. Black bear, grizzly bear, and moose inhabitat both units. Forty percent of the entire Alaskan beaver catch is harvested in the Koyukuk-Innoko region, with approximately 80 percent of this catch from the Innoko Unit.

Noatak National Arctic Range

The Noatak National Arctic Range is proposed for addition to the National Wildlife Refuge System in northwestern Alaska for the protection of two major actic valley ecosystems, now virtually unaffected by civilization.

Two river basins are proposed for inclusion in the Range, the Noatak and the Squirrel. The Noatak River rises in the central Brooks Range and flows westward for 450 miles to the sea at Kotzebue Sound. The Squirrel, 57 miles long and draining the Baird Mountains adjacent to the Noatak on the South, is the largest tributary of the Kobuk River.

Wildlife in the proposed range include the more than 200,000 migrants from the Arctic caribou herd (Alaska's largest), the barren-ground grizzly bear, Dall sheep, moose, wolves, wolverines, and migratory birds, including waterfowl, raptors, and several Asian species. The Noatak supports the most northerly major chum salmon run in Alaska and is noted also for arctic char.

The area will be added to the National Wildlife Refuge System and managed jointly pursuant to a cooperative management plan by the two Bureaus. In addition, the National Park Service will perform certain advisory functions. The management plan will provide for the protection of the natural features of the area, for scientific research, enhancement of aboriginal cultural uses and primitive types of low density outdoor recreation. Our proposal calls for a report to Congress on future administration and management of the area within twenty years of its establishment.

Selawik National Wildlife Refuge

Approximately 1.4 million acres in the Selawik Lake area of Alaska is recommended for designation as the Selawik National Wildlife Refuge. The Chamisso National Wildlife Refuge, established in 1940 by Proclamation no. 2416 will be redisignated as part of the Selawik National Wildlife Refuge and added to the refuge.

The proposal, located on the Arctic Circle, is 200 miles west-north west of Fairbanks. The Selawik River is the main water course within the proposal. The many forms of wildlife, especially migratory waterfowl of international significance are perhaps the region's greatest natural resource. The proposed refuge produces about a third of the waterfowl within the region; a majority of the remainder, including all the black brant, cackling Canada geese, emperor geese and eiders, are produced in the adjacent areas. The Eskimo curlew, thought to be extinct or nearly so, was formerly an abundant nester in this region and may yet be found in the area.

Mammals include black and grizzly bear, wolves, wolverine, moose, and arctic fox; more than 50 species are represented. A large part of the 240,000 caribou of the Arctic herd winters along the Selawik drainage. Marine mammals, including whales, seals, and walruses, are found in the coastal waters adjacent to the refuge.

Fish species present in the area include whitefish, cisco, grayling, Dolly Verden, and lake trout. Anadromous species include silver, chum, king, and pink salmon.

Togiak National Wildlife Refuge

A 2.74 million acre area of coastal mountains between Bristol Bay and Kuskokwim Bay in southwestern Alaska is proposed for designation as the Togiak National Wildlife Refuge. The area is 400 miles west of Anchorage and is adjacent to the precipitous rock cliffs of Cape Newenham National Wildlife Refuge, one of the most important nesting areas for seabirds in Alaska. This 247,700 acre refuge will be added to the Togiak National Wildlife Refuge.

The area is the crossroads for waterfowl and shorebirds coming from wintering areas through the Pacific Ocean. Birds from the Asiatic route, mid-Pacific route, and the North American Pacific Flyway funnel through the area. The coastal zone is the breeding ground for all types of migrating waterbirds.

The proposed refuge has one of the most diverse mammalian faunas of any area in the State with 32 species of land mammals. In addition, walrus, sea lions, and 4 species of seals occur in the adjacent coastal waters and occasionally haul out on the shores of the proposed refuge.

The many rivers and lakes in the proposed refuge contain abundant stocks of anadromous and resident fishes. Anadromous fish of interest include whitefish, steelhead, and king, sockeye, coho, pink, and chum salmon. Resident species include rainbow, Dolly Verden, and lake trout, arctic grayling, and arctic char.

Yukon Delta National Wildlife Refuge

The alluvial deposits of the Yukon and Kuskokwim Rivers have, through the centuries, formed a vast river delta stretching 250 miles north to south and 200 miles east to west. This flat and nearly treeless delta contain typical arctic tundra in which have formed thousands of ponds and lakes varying in size from less than an acre to many thousands of acres. Approximately 5.16 million acres of the Yukon-Kuskokwim River Delta area of Alaska, including the 2.8 million acre Clarence Rhode National Wildlife Refuge, are recommended for designation as a National Wildlife Refuge.

The Delta produces about 80 percent of the swans and nearly all of the white-fronted geese utilizing the Pacific Flyway; also more than half of the continental population of black brant, 80 percent of the emperor geese, and nearly all of the cackling geese are produced in this area. No other area of similar size is known to be as critical to so many species.

Most of the mammals common in Alaska, except the high mountain species, are represented. Forty-three species have been noted, though populations are not great. Marine species historically have been a major element in the subsistence economy of residents in the coastal villages.

The large fishery resource of the Delta is the primary factor which permitted development of the large aboriginal population in the region; subsistence and commercial fisheries are major elements in the present economy of the area. The 1972 commercial catch totalled 6.5 million pounds of king, chum, sockeye, pink and, silver salmon and migrating smelt.

Yukon Flats National Wildlife Refuge

Approximately 3.59 million acres of the Yukon River Valley in east central Alaska, are recommended for designation as a National Wildlife Refuge. The unit, a level flood plain basin bisected by the Yukon River and ringed with highlands, occupies the western half of the largest of Alaska's interior valleys.

Water is the dominant natural feature of the Yukon Flats region which contains more than 25,000 miles of streams and approximately 40,000 small lakes and ponds eccompassing over 800,000 acres. One hundred and thirty species of birds have been identified on the Yukon Flats. Twenty species of the waterfowl nest on the proposed refuge and contribute about 720 thousand birds each year to Canada, the United States, and Mexico. The density of nesting ducks is estimated at 99 per square mile, greater than any other large area in Alaska.

Fish resources include both anadromous and resident species. Little commercial use is made of the fishery resource as far upstream as the Yukon Flats. The fish habitat of the area is essential to anadromous species harvested commercially in the lower reaches of the river and to the Bering Sea salmon fishery.

National Forest System

Title III of this proposal would designate three new National Forest units -- the Porcupine (5.5 million acres), the Yukon-Kuskokwim (7.3 million acres), and the Wrangell Mountains (5.5 million acres). In addition, the draft legislation would provide for addition of 500,000 acres of the existing Chugach National Forest to consolidate the Forest boundaries.

The proposed legislation would also designate, within the above units, all or portions of the Bremner, Porcupine, Nowitna and Sheenjek Rivers as components of the National Wild and Scenic Rivers System.

The areas recommended for inclusion in the National Forest System are those withdrawn areas which have (1) nationally significant values that should be retained in public ownership to assure permanency of protection and continuity of management and (2) the resources offer a balance of uses that would be better managed under multiple use principles than under a dominant or more limited combination of uses. In addition, it was deemed necessary that the areas be in manageable units such as those delineated by drainages, ecological relationships, or existing or proposed transportation systems.

The 1960 Multiple Use-Sustained Yield Act is the basic mandate for administration and management of the National Forests. The Act directs that the National Forests are established and are to be administered for outdoor recreation, range, timber, watershed and wildlife and fish purposes.

The establishment and maintenance of areas of wilderness are consistent with the purposes of the Multiple Use-Sustained Yield Act. The Forest Service intends to consider wilderness along with other resources in its multiple use planning process. It expects to propose and identify wilderness study areas within three years after the establishment of the proposed National Forests.

In accordance with the general mining laws, exploration and development of "locatable" minerals would be permitted. These laws allow individuals to prospect, locate, mine and remove minerals and to obtain patents to valid claims. These authorized activities are subject to National Forest rules and regulations containing appropriate environmental safeguards.

Chugach National Forest

Two isolated areas, formerly in public domain but adjacent to the Chugach National Forest are proposed as additions to the National Forest System. These areas were formerly public domain isolated by the Forest Reserve proclamations of the early 1900's because of their lack of commodity resources.

The College Fiord is 161 thousand acres in Prince William Sound. An icy and mountainous hinterland rising from sea level to over 10,000 feet, it is mostly rock and ice with 17 glaciers. Rainfall varies from 150 to 300 inches annually. Scant vegetation consists of a near sea level fringe of sitka spruce, cottonwood and mountain hemlock grading upward through alder thickers to alpine mats and heath.

The Sargent Ice Field or Nellie Juan unit is a 276 thousand acre block on the Kenai Penisula northeast of Seward. Principally ice and mountain tops, glaciers feed the Nellie Juan river which flows through a glacier-carved valley into Prince William Sound at King's Harbor. The area's vegetation is alpine tundra except for scattered riparian growth in the river flood plains and occasional mountain hemlock.

Porcupine National Forest

This 5.5 million acre proposal for the Porcupine National Forest is located in the eastcentral part of the Alaska Interior. A combination of broad river flats and low-lying hills, the area is endowed with many lakes and waterways. North America's fourth longest river, the Yukon, is joined by the Porcupine flowing west from Canada. Out of the Brooks Range to the north, spring the Rapid, Sheenjek and Coleen while the Black and Little Black meander through, draining the southeast portion of the unit. The area is characterized by extreme seasonal variations in climate. The northern half, above the Arctic Circle, experiences the summer's midnight sun and winter's prolonged darkness. Seventy percent forested, many of the area's seven ecosystems result from succession following riverbottom changes and forest fires.

The Porcupine proposal contains the eastern extension of the Yukon Flats, a major waterfowl breeding area. Upland wildlife, big game and important fisheries habitat exist. Sportfishing, hunting and river and lake oriented activities could provide the greatest recreation experiences in this area.

The densely forested area includes 750 million board feet of commercially valuable sawtimber as well as being highly valued for wildlife habitat and watershed protection. Old Indian sites and the rich history of the Hudson's Bay company lend romance to the area. These sites will be protected and archeological studies encouraged.

Wrangell Mountain National Forest

The proposed Wrangell Mountains National Forest, an area of 5.5 million acres, is located in southeastern interior Alaska. With some of the most spectacular mountain country in North America, it includes parts of the Wrangell Mountains, the coastal Chugach Mountains and the eastern tip of the Alaska Range. Rugged peaks rise to 16,000 feet in elevation and large ice fields feed massive glaciers. The Copper River courses south through a portion of the unit and drains most of the central and southern parts. The Chitina and Bremner Rivers are important tributaries. The climate is a typically subarctic continental with long cold winters, short warm summers, and precipitation which is low in the valleys and high in the mountains. Ten ecosystems and related vegetation types are represented. These range from the coastal coniferous forests to the high alpine tundra. Most of the area exhibits effects of glaciation, and permafrost is common. The Wrangells unit is one of the more road accessible areas in Alaska. Light planes are also a major means of access.

Forests cover about 30 percent of the area and are chiefly valued for watershed protection, wildlife habitat, and recreational opportunities. Major stream and river systems stemming from the vast mountain-glacier complex of the Wrangell and Chugach Ranges provide many water-based resource values. Of exceptional importance are habitat for wildlife and fish, water oriented recreation.

Yukon-Kuskokwim National Forest

Spanning the middle Yukon and Kuskokwim River Valleys, this 7.3 million acre area is proposed as the Yukon-Kuskokwim National Forest. Lying across the Kuskokwim Mountains on the north and flanked by the Alaska Range on the south, the area contains extensive forests, shrub thickets, bogs and marshes and other ecosystems of the subarctic. Characterized

by winters of extended subzero temperatures and summers in the mid 70's or above, this area experiences a brief, but productive growth cycle. Summer drought contributes to a pattern of frequent wildfire.

Over three-fourths of this area is forested, and commercial timber stands occur on more than one million acres. Providing up to two billion board feet of timber, this area, combined with surrounding ownerships could support a major forest products industry.

Wild and Scenic Rivers Located Outside of Units of the National Park, Refuge and Forest Systems

Title IV of the enclosed legislation proposes four river segments for addition to the wild and scenic rivers system that are not located within units of the park, refuge and forest systems. These four river segments are on public domain lands and will be administered by the Bureau of Land Management.

The river components are as follows:

1. Beaver Creek -- a 135-mile segment, totalling 200,000 acres, to be classified as a wild river. The river is located 50 miles north of Fairbanks, between Fairbanks and Circle. The river is excellent canoeing water and provides good fishing and hunting opportunities. The limestone peaks of the White Mountains form an almost continuous scenic background. Large mammals abound.

2. Birch Creek -- a 135-mile segment, totalling 200,000 acres, to be classified as a wild river. The river is located approximately 65 miles northeast of Fairbanks, between Fairbanks and Circle. There are numerous sites for camping and the river is an excellent family canoeing stream throughout. Good fishing and hunting opportunities are present. The river flows through a wide valley with moderately steep forested slopes. As Birch Creek flows into the Yukon flats, it becomes a slow, meandering river.

3. Fortymile -- approximately 375 miles, including tributaries, totalling 320,000 acres, to be classified variously as wild, scenic and recreational. The river segment is located in east-central Alaska and runs up to the Canadian border. The river and tributaries vary in the headwaters from small, shallow, swift streams, to meandering muskeg and become large, canyon-bound streams with numerous rapids in the middle and lower portions. Portions show evidence of placer gold mining and early settlements. Recreational gold mining can be tried with some probability of success. Hunting, fishing and canoeing are good. Hiking and camping opportunities abound.

4. Unalakleet -- approximately 60 miles, totalling 104,000 acres, to be classified as a wild river. The river is located south of the Seward Peninsula and empties into Norton Sound; the downstream river segment boundary is approximately 24 miles above the mouth. The Unalakleet Valley is generally four to five miles wide. Bluffs characterize some 20 miles of the Unalakleet before it widens to 500 feet near its mouth. Dense stands of white spruce along the

shore screen the view of adjacent areas. The river is renowned for its sport fishing. King, chum, and pink salmon; grayling; and arctic char are excellent. There is also hunting, primarily for moose, with some caribou and bear, along the river. The Kaltag Trail passes along the south side of the river; it is a link in the historic 1000 mile Iditarod Gold Rush Trail between Nome and Anchorage; the existing trail will be preserved.

The legislation provides that the Secretary shall take action required under section 3(b) -- designating exact boundaries and preparing development plans -- within three years after date of enactment for the Beaver Creek component, within two years for Birch Creek, within one year for Fortymile and within four years for Unalakleet. It also provides that the total acreage figures for specific components specified in the bill will supercede the acreage limitations contained in the Wild and Scenic Rivers Act. All of the acreage of the wild river components is withdrawn, subject to valid existing rights, from all forms of appropriation under the mining laws and from operation of the mineral leasing laws. Existing law limits these withdrawals to 1/4 mile from the bank of the river. Specific provision is made for such access across the Fortymile as the Secretary determines to be necessary to permit development of asbestos deposits in the North Fork drainage.

The Office of Management and Budget has advised that this legislative proposal is in accord with the program of the President.

Sincerely yours,

Rogers C.B. Morton

Secretary of the Interior

Hon. Gerald R. Ford
President of the Senate
Washington, D. C. 20510

Enclosure

93D CONGRESS
2D SESSION

S. 2917

IN THE SENATE OF THE UNITED STATES

JANUARY 30, 1974

Mr. JACKSON (for himself and Mr. FANNIN) (by request) introduced the following bill; which was read twice and referred to the Committee on Interior and Insular Affairs

A BILL

To provide for the addition of certain lands in the State of Alaska to the National Park, National Wildlife Refuge, National Forest, and the Wild and Scenic Rivers Systems, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*
3 That, having reviewed the recommendations of the Secre-
4 tary of the Interior made pursuant to sections 17 (d) (1)
5 and 17 (d) (2) of the Alaska Native Claims Settlement Act
6 (85 Stat. 688) for addition of certain lands in Alaska to
7 the National Park, Forest, Wildlife Refuge, and Wild and
8 Scenic Rivers Systems, the Congress designates and estab-

1 lishes new units and additions to existing units of those sys-
2 tems, subject to the provisions of the following titles.
3 SEC. 2. This Act may be cited as the "Alaska Conser-
4 vation Act of 1974".

5 TITLE I—NATIONAL PARK SYSTEM

6 PART A—ADDITIONS TO EXISTING AREAS

7 MOUNT MCKINLEY NATIONAL PARK

8 SEC. 101. (a) In order to include within Mount Mc-
9 Kinley National Park (hereinafter referred to in this section
10 as the "park") certain areas needed to provide a diversity of
11 habitat, insure the preservation of animal ecosystems, and
12 protect and interpret associated scenic resources and glacial
13 features, the boundary of the park is hereby revised to in-
14 clude, subject to valid existing rights, the lands, waters, and
15 interests therein depicted as within the proposed boundary
16 of the park on the map entitled "Mount McKinley National
17 Park", numbered 126-90-001, and dated December 1973,
18 which additional area comprises approximately three million
19 one hundred and eighty thousand acres.
20 (b) Section 4 of the Act of February 26, 1917 (39
21 Stat. 938; 16 U.S.C. 350), is repealed. Section 2 of the Act
22 of January 26, 1931 (46 Stat. 1043; 16 U.S.C. 350a), is
23 revised to read as follows: "The Secretary of the Interior
24 shall have authority to prescribe regulations for the surface

1 use of any valid mining locations made within the boundaries
2 of Mount McKinley National Park.".
3 (c) Section 6 of the Act of February 26, 1917 (39
4 Stat. 939), as amended (16 U.S.C. 352), is further amended
5 by changing the period at the end thereof to a comma, and
6 adding the following: "or for subsistence uses in areas added
7 to the park by the Alaska Conservation Act of 1974 pursu-
8 ant to section 108 of that Act.".
9 (d) In furtherance of the purposes set forth in subsec-
10 tion (a) of this section, the area adjacent to the south and
11 east boundary of the park generally depicted on the map re-
12 ferred to in subsection (a) as "Cooperative Planning and
13 Management Zone" is hereby designated as a zone within
14 which resource use and development are critical to the
15 proper protection, management, and interpretation of the
16 park. Not later than three years from the date of enactment
17 of this title, the Secretary of the Interior (hereinafter re-
18 ferred to as the "Secretary") shall submit a report to the
19 Congress as to whether land-use controls needed for the
20 proper protection, management, and interpretation of the
21 park have been instituted effectively with respect to the
22 designated zone by the State of Alaska or an appropriate
23 political subdivision thereof. The Secretary shall solicit the
24 views of the Governor of the State of Alaska and of the Joint
25 Federal-State Land Use Planning Commission for Alaska

1 on his report, and he shall submit any such views to the Con-
2 gress at the time the report is submitted.

3 KATMAI NATIONAL PARK

4 SEC. 102. (a) In order to include therein certain areas
5 needed for the protection of critical animal habitat, including
6 a watershed necessary for the perpetuation of red salmon and
7 a habitat to protect a population of brown bear, and for the
8 interpretation and preservation of outstanding scenic and
9 scientific values associated with such habitats, the boundary
10 of Katmai National Monument, as established by Proclama-
11 tion Numbered 1487 of September 24, 1918 (40 Stat.
12 1855), and revised by Proclamation Numbered 1949 of
13 April 24, 1931 (47 Stat. 2453), Proclamation Numbered
14 2564 of August 4, 1942 (56 Stat. 1972), and Proclama-
15 tion Numbered 3890 of January 20, 1969 (83 Stat. 926) is
16 hereby revised to include, subject to valid existing rights,
17 the lands, waters, and interests therein depicted as within the
18 proposed boundary of the park on the map entitled "Katmai
19 National Park", numbered 127-90-001, and dated Decem-
20 ber 1973, which additional area comprises approximately
21 one million eight hundred and seventy thousand acres.

22 (b) The Katmai National Monument is hereby redes-
23 ignated as Katmai National Park.

1 PART B—ESTABLISHMENT OF NEW AREAS

2 SEC. 103. (a) In order to protect and interpret for the
3 benefit, inspiration, and education of present and future gen-
4 erations the scenic, scientific, biological, archeological, and
5 historical values associated therewith, there are hereby es-
6 tablished, subject to valid existing rights—

7 (1) Aniakchak Caldera National Monument, the
8 boundary of which shall include the lands, waters, and
9 interests therein depicted as within the proposed bound-
10 ary of the national monument on the map entitled
11 "Aniakchak Caldera National Monument", numbered
12 NM-AC-90,001, and dated December 1973, which
13 area comprises approximately four hundred and forty
14 thousand acres;

15 (2) Harding Ice Field-Kenai Fjords National Mon-
16 ument, the boundary of which shall include the lands,
17 waters, and interests therein depicted as within the pro-
18 posed boundary of the national monument on the map
19 entitled "Harding Ice Field-Kenai Fjords National Mon-
20 ument", numbered NM-HI/KF-90,001 and dated De-
21 cember 1973, which area comprises approximately three
22 hundred thousand acres: *Provided,* That the Secretary
23 may revise the monument boundary to include any lands,

1 waters, and interests therein depicted on such map as
2 within the area marked "Potential additions" if such
3 lands, waters, and interests therein are not selected by
4 native corporations pursuant to the Alaska Native Claims
5 Settlement Act;

6 (3) Cape Krusenstern National Monument, the
7 boundary of which shall include the lands, waters, and
8 interests therein depicted as within the proposed bound-
9 ary of the national monument on the map entitled "Cape
10 Krusenstern National Monument", numbered NM-CK-
11 90,001, and dated December 1973, which area comprises
12 approximately three hundred and fifty thousand acres;

13 (4) Kobuk Valley National Monument, the bound-
14 ary of which shall include the lands, waters, and inter-
15 ests therein depicted as within the proposed boundary of
16 the national monument on the map entitled "Kobuk
17 Valley National Monument", numbered NM-KV-
18 90,001, and dated December 1973, which area com-
19 prises approximately one million eight hundred and fifty
20 thousand acres: *Provided,* That, any lands within the
21 Onion Portage Archeological District, as depicted on
22 such map, not selected by a Native corporation pursuant
23 to the Alaska Native Claims Settlement Act shall become
24 part of the national monument;

1 (5) Lake Clark National Park, the boundary of
2 which shall include the lands, waters, and interests
3 therein depicted as within the proposed boundary of the
4 national park on the map entitled "Lake Clark National
5 Park", numbered NP-LC-90,001, and dated Decem-
6 ber 1973, which area comprises approximately two
7 million six hundred and ten thousand acres;
8 (6) Wrangell-Saint Elias National Park, the bound-
9 ary of which shall include the lands, waters, and inter-
10 ests therein depicted as within the proposed boundary
11 of the national park on the map entitled "Wrangell-
12 Saint Elias National Park", numbered NP-WSE-90,-
13 001, and dated December 1973, which area comprises
14 approximately eight million six hundred and forty thou-
15 sand acres;
16 (7) Gates of the Arctic National Park, the bound-
17 aries of which shall include the lands, waters, and inter-
18 ests therein depicted as within the proposed boundaries
19 of the park on the map entitled "Gates of the Arctic
20 National Park", numbered NP-GA-90,001 and dated
21 December 1973, which park comprises approximately
22 eight million three hundred and sixty thousand acres;
23 (8) Yukon-Charley National Rivers, the boundary
24 of which shall include the lands, waters, and interests

1 therein depicted as within the proposed boundary of the
2 national rivers on the map entitled "Yukon-Charley Na-
3 tional Rivers", numbered NR–YC–90,001, and dated
4 December 1973, which area comprises approximately
5 one million nine hundred and seventy thousand acres.
6 (9) Chukchi-Imuruk National Reserve, the bound-
7 ary of which shall include the lands, waters, and inter-
8 ests therein depicted as within the proposed boundary
9 of the national reserve on the map entitled "Chukchi-
10 Imuruk National Reserve", numbered NR–CI–90,001,
11 and dated December 1973, which area comprises ap-
12 proximately two million six hundred and ninety thou-
13 sand acres.
14 (b) The boundary maps referred to in part A of this
15 title and this part shall be on file and available for public
16 inspection in the offices of the National Park Service, De-
17 partment of the Interior; the maps entitled "Chukchi-Imuruk
18 National Reserve" and "Harding Ice Field–Kenai Fjords
19 National Monument" shall also be on file at the Bureau of
20 Sport Fisheries and Wildlife, Department of the Interior.
21 In no event shall the boundary of any area added to existing
22 areas or established by part A of this title or this part extend
23 beyond the territorial sea.

1 PART C—GENERAL ADMINISTRATION PROVISIONS

2 ADMINISTRATION

3 SEC. 104. (a) The Secretary shall administer the lands,
4 waters, and interests therein added to existing areas or es-
5 tablished by the foregoing sections of this title as areas of
6 the national park system, subject to the applicable provi-
7 sions of this title and the Act of August 25, 1916 (39 Stat.
8 535 et seq.), as amended and supplemented (16 U.S.C. 1
9 et seq.).

10 (b) The Secretary of Agriculture and the Secretary of
11 the Interior shall consult in the development of manage-
12 ment plans for the Wrangell Mountains National Forest and
13 the adjoining Wrangell-Saint Elias National Park to achieve
14 the fullest possible coordination and cooperation. In addi-
15 tion, the Secretary of Agriculture shall, in cooperation with
16 the Secretary of the Interior, select and develop one or more
17 areas along the Alaska Highway between the Canadian
18 border and the village of Northway, Alaska, together with
19 other interested public agencies, for public use, administra-
20 tion, interpretation, and other provision of facilities. Funds
21 appropriated for purposes of this title shall be available for
22 the development and operation of such facilities.

2 SEC. 105. Following reasonable notice in writing to the
3 Committees on Interior and Insular Affairs of the Senate
4 and House of Representatives, and after publication of notice
5 in the Federal Register, the Secretary may make minor re-
6 visions in the boundaries of the areas added to existing areas
7 or established by parts A and B of this title, including re-
8 visions to include within the boundaries such additional lands
9 as are necessary for administrative sites but such adminis-
10 trative sites shall not exceed eighty acres for any one area
11 added to existing areas or established by parts A and B.
12 Within the boundaries of the areas added to existing units
13 or established by parts A and B of this title, or as such
14 boundaries may be revised pursuant to this section, the
15 Secretary is authorized to acquire lands, waters, and inter-
16 ests therein by donation, purchase, or exchange, except that
17 property owned by the State of Alaska or any political sub-
18 division thereof may be acquired only by donation or ex-
19 change, and property owned by any Native village or cor-
20 poration may be acquired only with the concurrence of such
21 owner.

22 APPLICABILITY OF MINING AND MINERAL LEASING LAWS

23 SEC. 106. (a) Except as provided in subsection (b)
24 of this section, Federal lands within the boundaries of the
25 areas added to existing units or established by parts A and B

1 of this title, or as such boundaries may be revised pursuant
2 to section 105 of this part, as well as Federal lands within
3 the boundaries of Mount McKinley National Park as of the
4 date of enactment of this title, are, subject to valid existing
5 rights, hereby withdrawn from location, entry, and patent
6 under the public land laws of the United States, including
7 from all forms of appropriation under the United States
8 mining laws, and from operation of the mineral leasing laws
9 including, in both cases, amendments thereto. Any mining
10 claims located under the mining laws of the United States
11 within the boundaries of those areas withdrawn pursuant to
12 this subsection must be recorded with the Secretary under
13 regulations established by the Secretary within one year
14 after the effective date of such regulations. Any mining claim
15 not so recorded shall be conclusively presumed to be aban-
16 doned and shall be void. Such recordation will not render
17 valid any claim which was not valid on the effective date
18 of this title, or which becomes invalid thereafter. Any claim
19 recorded pursuant to the regulations promulgated under this
20 subsection, for which the claimant has not made application
21 for a patent within three years from the date of recordation,
22 shall be presumed to be invalid unless the claimant presents
23 to the Secretary clear evidence of its validity.
24 (b) Lands outside the Charley River watershed which
25 are within the Yukon-Charley National Rivers, are not with-

1 drawn from operation of the mineral leasing laws, including
2 amendments thereto, and the Mineral Leasing Act of Feb-
3 ruary 25, 1920, as amended and supplemented (30 U.S.C.
4 181–263), shall apply to them: *Provided*, That, the Secre-
5 tary may administratively cancel any lease or prospecting
6 permit for violations of the terms of the lease or permit or of
7 regulations issued pursuant to the Mineral Leasing Act of
8 February 25, 1920, without regard to the requirements of
9 section 31 of such Act (30 U.S.C. 188), after thirty days'
10 notice to the lessee or permittee and failure of the lessee or
11 permittee to correct the condition giving rise to the breach.
12 With respect to mineral deposits located within such lands
13 normally subject to location, entry, and patent under the
14 mining laws and withdrawn pursuant to subsection (a) of
15 this section, the Secretary may issue permits for the explora-
16 tion and development of said deposits pursuant to regulations
17 establishing procedures, terms, and conditions under which
18 such activity may be conducted, but with right of occupation
19 and use of only so much of the surface of the land as is im-
20 mediately and directly necessary to the exploration and de-
21 velopment of said deposits.
22 SPORT HUNTING
23 SEC. 107. (a) Subject to subsection (b) of this sec-
24 tion, and except as may otherwise be prohibited by Federal
25 or State law, the Secretary shall permit sport hunting on

lands and waters under his jurisdiction within the areas established by paragraphs (a) (1) and (a) (5)-(9) of section 103 of this title in accordance with such regulations as he shall prescribe. Such regulations may include the establishment of limits on the numbers and types of species that may be taken and the manner of taking, or prohibit takings. The Secretary may, however, designate zones where, and establish periods when, no sport hunting shall be permitted in any such area for reasons of public safety, administration, fish or wildlife management, or public use and enjoyment, and except in emergencies, any regulations of the Secretary pursuant to this section shall be put into effect only after consultation with the appropriate fish and game agency of the State of Alaska.

(b) With regard to the area referred to in section 103 (a) (1) of this title, the Secretary shall permit sport hunting only in the townships described as follows:

Seward Meridian (Protraction Description)

(All Fractional)

Township 38 south, range 51 west.

Township 39 south, range 51 west.

Township 39 south, range 52 west.

Township 40 south, range 52 west.

Township 40 south, range 53 west.

Township 40 south, range 54 west.

1 Township 41 south, range 51 west.

2 Township 41 south, range 52 west.

3 Township 41 south, range 53 west.

4 Township 41 south, range 54 west.

5 (c) Not later than ten years from the date of enactment
6 of this title, and continuing at intervals of not more than five
7 years after the submission of the first such report, the Sec-
8 retary shall report to the Congress on the effect of all hunt-
9 ing, fishing, and trapping, including subsistence uses, on the
10 flora and fauna within each area added to existing units or
11 established by parts A and B of this title, and shall recom-
12 mend whether any or all of such uses shall be continued.

13 SUBSISTENCE USES

14 SEC. 108. Except as may otherwise be prohibited by
15 Federal or State law, the Secretary shall permit the continu-
16 ation of such subsistence uses of the fish, wildlife, and plant
17 resources within the areas added to existing units or estab-
18 lished by parts A and B of this title to the extent that such
19 uses were in effect on the date of enactment of the Alaska
20 Native Claims Settlement Act. Such uses shall continue un-
21 less the Secretary determines that particular uses are mate-
22 rially and negatively affecting the fish, wildlife, or plant re-
23 sources of such areas: *Provided,* That, for such reasons as
24 public safety, administration, fish and wildlife management,
25 or public use and enjoyment, the Secretary may, by regula-

1 tion, prescribe conditions under which such subsistence uses
2 shall be conducted including, but not limited to, prohibitions
3 on takings, and the establishment of limits on the number
4 and type of resources taken, and the season when and area
5 within such areas where subsistence activities can be under-
6 taken. Regulations promulgated pursuant to this section shall
7 be put into effect only after consultation with the appropri-
8 ate fish and game agency of the State of Alaska.

9 COOPERATIVE AGREEMENTS

10 SEC. 109. (a) The Secretary is authorized to cooperate
11 and seek agreements with the heads of other Federal agen-
12 cies and the owners of lands and waters within, adjacent to,
13 or related to each area added to existing units or established
14 by parts A and B of this title, including, without limitation,
15 the State of Alaska or any political subdivision thereof, any
16 Native corporation, village, or group having traditional cul-
17 tural or resource-based affinities for such areas, and, with the
18 concurrence of the Secretary of State, the governments of
19 foreign nations. Such agreements shall have as their purpose
20 the assurance that resources will be used, managed, and de-
21 veloped in such a manner as to be consistent with the pres-
22 ervation of the environmental quality of such areas. The
23 agreements may also provide for access by visitors to the
24 park system units to and across the lands which are the
25 subject of the agreements.

1 (b) The head of any Federal agency, other than agen-
2 cies that are parties to cooperative agreements pursuant to
3 subsection (a) of this section, having direct or indirect juris-
4 diction over a proposed Federal or federally assisted under-
5 taking in the lands and waters within, adjacent to, or related
6 to areas added to existing units or etablished by parts A
7 and B of this title, and the head of any Federal department
8 or interdepartmental agency, other than parties to such
9 agreements, having authority to license any undertaking in
10 such lands and waters shall, prior to the approval of the
11 expenditure of any Federal funds on the undertaking or prior
12 to the issuance of any license, as the case may be, afford the
13 Secretary a reasonable opportunity to comment with regard
14 to such undertaking.

15 WILDERNESS REVIEW

16 SEC. 110. Within three years from the date of enactment
17 of this title, the Secretary shall report to the President, in
18 accordance with subsections 3 (c) and 3 (d) of the Wilder-
19 ness Act (78 Stat. 892; 16 U.S.C. 1132 (c) and (d)), his
20 recommendations as to the suitability or nonsuitability of any
21 area added to existing units or established by parts A and B
22 of this title for preservation as wilderness; any designation
23 of any such area as wilderness shall be accomplished in ac-
24 cordance with said subsection of the Wilderness Act. Not-
25 withstanding anything to the contrary in the Wilderness Act,

1 the Secretary shall, with respect to Mount McKinley Na-
2 tional Park, report to the President his recommendations as
3 to the suitability of any area within the entire park within
4 three years and from the date of enactment of this title.

5 PART D—WILD AND SCENIC RIVERS

6 DESIGNATION

7 SEC. 111. Section 3 (a) of the Wild and Scenic Rivers
8 Act (82 Stat. 907), as amended (16 U.S.C. 1274 (a)), is
9 further amended by adding the following new paragraphs:

10 " . ALATNA, ALASKA. The seventy-five mile portion
11 of the main stem within the Gates of the Arctic National
12 Park; to be administered by the Secretary of the Interior.

13 " . ANIAKCHAK ALASKA.—The entire river, includ-
14 ing its major tributaries, Hidden Creek, Mystery Creek, Al-
15 bert Johnson Creek, and North Fork Aniakchak River,
16 within the Aniakchak Caldera National Monument; to be
17 administered by the Secretary of the Interior.

18 " . CHARLEY, ALASKA.—The entire river, including
19 its major tributaries, Copper Creek, Bonanza Creek, Hos-
20 ford Creek, Derwent Creek, Flat-Orthmer Creek, Crescent
21 Creek, and Moraine Creek, within the Yukon-Charley Na-
22 tional Rivers; to be administered by the Secretary of the
23 Interior.

24 " . KILLIK, ALASKA.—The entire river, including its

major tributary, Easter Creek, within the Gates of the Arctic National Park; to be administered by the Secretary of the Interior.

" . NOATAK, ALASKA.—The sixty-five mile segment within the Gates of the Arctic National Park; to be administered by the Secretary of the Interior.

" . SALMON, ALASKA.—The entire river within the Kobuk Valley National Monument; to be administered by the Secretary of the Interior.

" . TINAYGUK.—The entire river, and the North Fork of the Koyukuk, within the Gates of the Arctic National Park; to be administered by the Secretary of the Interior."

ADMINISTRATIVE PROVISIONS

SEC. 112. (a) The river segments designated in section 111 of this title are hereby classified and designated, and shall be administered, as wild river areas pursuant to the Wild and Scenic Rivers Act.

(b) The provisions of subsection 3 (b) and section 6 of the Wild and Scenic Rivers Act shall not apply to the river segments listed in section 111 of this title. The provisions of sections 107 and 108 of this title shall supersede those of section 13 (a) of the Wild and Scenic Rivers Act, concerning fish and wildlife.

PART E—APPROPRIATION AUTHORIZATION

SEC. 113. There is hereby authorized to be appropriated such sums as may be necessary for the purposes of this title.

1 TITLE II—NATIONAL WILDLIFE REFUGE
2 SYSTEM
3 PART A—ESTABLISHMENT OF REFUGES AND RANGES
4 SEC. 201. There are hereby established, subject to valid
5 existing rights, twelve national wildlife refuges (hereinafter
6 referred to as the "refuges"), one national arctic range and
7 one national resource range (hereinafter referred to as the
8 "ranges").
9 SEC. 202. (a) The boundary of each refuge and each
10 range shall include the area generally depicted on the appli-
11 cable map as herein described: *Provided, however,* That in
12 no case shall the boundary of a refuge or range extend be-
13 yond the territorial sea. Such maps shall be on file and
14 available for public inspection in the office of the Bureau of
15 Sport Fisheries and Wildlife, Department of the Interior,
16 and, with respect to the ranges, the maps shall also be avail-
17 able for public inspection in the office of the Bureau of Land
18 Management:
19 (1) As herein established, the (A) Barren Islands Na-
20 tional Wildlife Refuge, (B) Chukchi Sea National Wildlife
21 Refuge, (C) Shumagin Islands National Wildlife Refuge,
22 (D) additions to the Kodiak National Wildlife Refuge, and
23 (E) additions to the Bering Sea National Wildlife Refuge
24 shall be comprised of approximately .05 million acres of
25 lands, waters, and interests therein within the area generally

1 depicted as the "proposed boundary" on the maps entitled
2 "Alaska Coastal National Wildlife Refuges", and dated De-
3 cember 1973. The Kodiak National Wildlife Refuge as desig-
4 nated in Executive Order Numbered 8857 of August 19,
5 1941, and modified by Public Land Order Numbered 1634 of
6 May 9, 1958, and the additions designated in this subsection
7 are hereby established as the "Kodiak National Wildlife
8 Refuge"; and the Bering Sea National Wildlife Refuge as
9 designated in Proclamation Numbered 2416 of July 15,
10 1940, amending Executive Order Numbered 1037 of Febru-
11 ary 27, 1909, and the additions designated in this subsection
12 are hereby established as the "Bering Sea National Wildlife
13 Refuge".
14 (2) The Arctic National Wildlife Refuge as herein es-
15 tablished shall be comprised of approximately 3.76 million
16 acres of lands, waters, and interests therein within the area
17 generally depicted as the "proposed boundary" on the map
18 entitled "Arctic National Wildlife Refuge", and dated De-
19 cember 1973, and the Arctic National Wildlife Range, estab-
20 lished by Public Land Order Numbered 2214 of December 6,
21 1960, issued pursuant to Executive Order Numbered 10355
22 of May 26, 1952, is hereby redesignated as part of the
23 Arctic National Wildlife Refuge and added to said refuge.
24 (3) The Iliamna National Resource Range as herein
25 established shall be comprised of approximately 2.85 million

1 acres of lands, waters, and interests therein within the area
2 generally depicted as the "proposed boundary" on the map
3 entitled "Iliamna National Resource Range", and dated
4 December 1973.

5 (4) The Koyukuk National Wildlife Refuge as herein
6 established shall be comprised of approximately 4.43 mil-
7 lion acres of lands, waters, and interests therein within the
8 area generally depicted as the "Proposed Boundary" on the
9 map entitled "Koyukuk National Wildlife Refuge", and
10 dated December 1973.

11 (5) The Noatak National Arctic Range as herein es-
12 tablished shall be comprised of approximately 7.59 million
13 acres of lands, waters, and interests therein within the area
14 generally depicted as the "Proposed Boundary" on the map
15 entitled "Noatak National Arctic Range", and dated De-
16 cember 1973.

17 (6) The Selawik National Wildlife Refuge as herein
18 established shall be comprised of approximately 1.4 million
19 acres of lands, waters, and interests therein within the area
20 generally depicted as the "Proposed Boundary" on the map
21 entitled "Selawik National Wildlife Refuge", and dated
22 December 1973, and the Chamisso National Wildife Refuge
23 established by Proclamation Numbered 2416 of July 15,
24 1940, amending Executive Order Numbered 1658 of Decem-

1 ber 7, 1912, is hereby redesignated as part of the Selawik
2 National Wildlife Refuge and added to said refuge.
3 (7) The Togiak National Wildlife Refuge as herein es-
4 tablished shall be comprised of approximately 2.74 million
5 acres of lands, waters, and interests therein within the area
6 generally depicted as the "Proposed Boundary" on the map
7 entitled "Togiak National Wildlife Refuge", and dated De-
8 cember 1973, and the Cape Newenham National Wildlife
9 Refuge, established by Public Land Order Numbered 4583
10 of January 20, 1969, is hereby redesignated as part of the
11 Togiak National Wildlife Refuge and added to said refuge.
12 (8) The Yukon Delta National Wildlife Refuge as here-
13 in established shall be comprised of approximately 5.16 mil-
14 lion acres of lands, waters, and interests therein within the
15 area generally depicted as the "Proposed Boundary" on the
16 map entitled "Yukon Delta National Wildlife Refuge", and
17 dated December 1973, and the Clarence Rhode National
18 Wildlife Refuge, established by Public Land Order Numbered
19 4581 of January 20, 1969, amending Public Land Order
20 Numbered 2253 of January 23, 1961, amending Public
21 Land Order Numbered 2213 of December 8, 1960, issued
22 pursuant to Executive Order Numbered 10355, is hereby re-
23 designated as a unit of the Yukon Delta National Wildlife
24 Refuge to be administered as part of said refuge, and the
25 Hazen Bay National Wildlife Refuge, as established by

1 Proclamation Numbered 2416 of July 15, 1946, amending
2 Executive Order Numbered 7770 of December 14, 1937, is
3 hereby redesignated as part of the Yukon Delta National
4 Wildlife Refuge and added to said refuge.

5 (9) The Yukon Flats National Wildlife Refuge as here-
6 in established shall be comprised of approximately 3.59
7 million acres of lands, waters, and interests therein within
8 the area generally depicted as the "Proposed Boundary" on
9 the map entitled "Yukon Flats National Wildlife Refuge",
10 and dated December 1973.

11 (b) The Secretary of the Interior (hereinafter referred
12 to as "the Secretary") may make minor revisions in the
13 boundary of each refuge and each range by publication of a
14 revised map or other boundary description in the Federal
15 Register.

16 PART B—GENERAL ADMINISTRATIVE PROVISIONS

17 ACQUISITION OF PROPERTY

18 SEC. 203. Within the boundary of each refuge and each
19 range the Secretary is authorized to acquire by purchase, do-
20 nation, or exchange, lands, waters, and interests therein, ex-
21 cept that lands, waters, and interests therein owned by the
22 State of Alaska or any political subdivision thereof may be
23 acquired only with agreement of the said State or political
24 subdivision and property owned by any Native village or

1 corporation may be acquired only with the concurrence of
2 such owner.

3 COOPERATIVE AGREEMENTS

4 SEC. 204. (a) The Secretary is authorized to cooperate
5 and seek agreements with the heads of other Federal agen-
6 cies and the owners of lands and waters within, adjacent to
7 or related to each area added to existing units or established
8 by section 202 of this title, including, without limitation, the
9 State of Alaska or any political subdivision thereof, any
10 Native corporation, village, or group having traditional cul-
11 tural or resource-based affinities for such areas. Such agree-
12 ments shall have as their purpose the assurance that resources
13 will be used, managed and developed in such a manner as to
14 be consistent with the preservation of the environmental
15 quality of such areas.

16 (b) The head of any Federal agency, other than agen-
17 cies that are parties to cooperative agreements pursuant to
18 subsection (a) of this section, having direct or indirect juris-
19 diction over a proposed Federal or federally assisted under-
20 taking in the lands and waters within, adjacent to or related
21 to areas added to existing units or established by section 202
22 of this title, and the head of any Federal department or
23 interdepartmental agency, other than parties to such agree-
24 ments, having authority to license any undertaking in such
25 lands and waters shall, prior to the approval of the expendi-

1 ture of any Federal funds on the undertaking or prior to the
2 issuance of any license, as the case may be, afford the Sec-
3 retary a reasonable opportunity to comment with regard to
4 such undertaking. Nothing in subsection (c) of this section
5 shall be construed as superceding or limiting the authorities
6 and responsibilities of the Secretary under the Fish and
7 Wildlife Coordination Act, as amended (60 Stat. 1080;
8 16 U.S.C. 661–667e).

9 (c) The Secretary may seek, with the concurrence of
10 the Secretary of State, and enter into bilateral or multilateral
11 agreements with foreign countries in order to provide for the
12 protection, preservation, and enhancement of the fish and
13 wildlife of international significance.

14 ADMINISTRATION

15 SEC. 205. (a) (1) The Secretary shall administer the
16 refuges and the ranges pursuant to the provisions of the
17 National Wildlife Refuge Administration Act of 1966, as
18 amended (80 Stat. 927; 16 U.S.C. 668dd–668ee), and the
19 provisions of this title, as part of the National Wildlife
20 Refuge System. The Secretary may also utilize such addi-
21 tional authorities as may be available to him for the manage-
22 ment and protection of the resources within, adjacent to or
23 related to the refuges and the ranges, including but not
24 limited to the preservation and enhancement of nationally
25 and internationally significant fish and wildlife species, the

1 development of fish and wildlife-oriented outdoor recreation
2 opportunities, interpretive education programs and scientific
3 research, the conservation, protection, restoration, and propa-
4 gation of endangered and threatened species, and the preser-
5 vation of cultural, historical, and archeological resources.
6 (2) The Illiamna National Resource Range shall be
7 administered as a unit of the National Wildlife Refuge Sys-
8 tem pursuant to paragraph (1) of this subsection and in
9 accordance with plans, to be developed by the Secretary,
10 which will permit activities, in accordance with the principles
11 of multiple use and sustained yield, which the Secretary
12 determines will not significantly impair the nationally and
13 internationally significant fish and wildlife resources of the
14 range and Bristol Bay.
15 (3) The Noatak National Arctic Range shall be ad-
16 ministered as a unit of the National Wildlife Refuge System
17 pursuant to paragraph (1) of this subsection and in accord-
18 ance with plans, to be developed by the Secretary, which
19 will provide for the protection of the natural features of the
20 range, permit appropriate scientific research and other ac-
21 tivities which will not significantly impair the environment.
22 For a period of twenty years following the enactment of this
23 title, any developmental activities or uses are, subject to valid
24 existing rights, prohibited on the range. The Secretary shall
25 conduct a review and report to the Congress within twenty

1 years of the date of enactment of this title his findings and
2 recommendations for the future administration and manage-
3 ment of the range.

4 (b) (1) The lands within the refuges and the Iliamna
5 National Resource Range are, subject to valid existing rights,
6 hereby withdrawn from location, entry, and patent under
7 the public land laws of the United States, including all forms
8 of appropriation under the United States mining laws, but
9 not including the Mineral Leasing Act of February 25, 1920,
10 as amended and supplemented (30 U.S.C. 181–263), ex-
11 cept that, with respect to mineral deposits normally subject
12 to location, entry, and patent pursuant to the mining laws,
13 the Secretary may issue permits for the exploration and
14 development of said deposits pursuant to regulations estab-
15 lishing procedures, terms, and conditions under which such
16 activity may be conducted, but with right of occupation and
17 use of only so much of the surface of the land as is immedi-
18 ately and directly necessary to the exploration and develop-
19 ment of said deposits. Any mining claims located under the
20 mining laws of the United States within the boundaries of
21 those areas withdrawn pursuant to this subsection, must be
22 recorded with the Secretary under regulations established by
23 the Secretary within one year after the effective date of such
24 regulations. Any mining claim not so recorded shall be con-
25 clusively presumed to be abandoned and shall be void. Such

1 recordation will not render valid any claim which was not
2 valid on the effective date of this title, or which becomes in-
3 valid thereafter. Any claim recorded pursuant to the regula-
4 tions promulgated under this subsection, for which the claim-
5 ant has not made application for a patent within three years
6 from the date of recordation, shall be presumed to be in-
7 valid unless the claimant presents to the Secretary clear
8 evidence of its validity.

9 (2) The Secretary may administratively cancel any
10 lease or prospecting permit for violations of the terms of the
11 lease or permit or of regulations issued pursuant to the Min-
12 eral Leasing Act of February 25, 1920, without regard to
13 the requirements of section 31 of such Act (30 U.S.C. 188),
14 after thirty days' notice to the lessee or permittee and failure
15 of the lessee or permittee to correct the condition giving rise
16 to the breach.

17 (c) The lands within the Noatak National Arctic Range
18 are, subject to valid existing rights, withdrawn from loca-
19 tion, entry, and patent under the public land laws of the
20 United States, including all forms of appropriation under the
21 mining laws of the United States and from the operation of
22 the Mineral Leasing Act of February 25, 1920, as amended
23 and supplemented.

24 (d) Except as may otherwise be prohibited by Federal
25 or State law, the Secretary shall permit the continuation of

1 such subsistence uses of the fish, wildlife, and plant resources
2 within the refuges and the ranges to the extent that such uses
3 were in effect on the date of enactment of the Alaska Native
4 Claims Settlement Act. Such uses shall continue unless the
5 Secretary determines that particular uses are materially and
6 negatively affecting the fish, wildlife, or plant resources of
7 the refuges and the ranges: *Provided, That,* for such rea-
8 sons as public safety, administration, fish and wildlife man-
9 agement, or public use and enjoyment, the Secretary may,
10 by regulation, prescribe conditions under which such sub-
11 sistence uses shall be conducted including, but not limited
12 to, prohibitions on taking, the establishment of limits on the
13 number and type of resources taken, and the season when
14 and area within the refuges and the ranges where subsist-
15 ence activities can be undertaken. Regulations promulgated
16 pursuant to this section shall be put into effect only after
17 consultation with the appropriate fish and game agency of
18 the State of Alaska.

19 WILDERNESS REVIEW

20 SEC. 206. (a) Within three years from the date of en-
21 actment of this title, the Secretary shall report to the Presi-
22 dent, in accordance with subsections 3 (c) and 3 (d) of the
23 Wilderness Act (78 Stat. 890; 16 U.S.C. 1132 (c) and
24 (d)), his recommendations as to the suitability or nonsuit-
25 ability of any area within the refuges and the Iliamna Na-

1 tional Resource Range for preservation as wilderness, and
2 any designation of any such areas as wilderness shall be ac-
3 complished in accordance with said subsections of the Wilder-
4 ness Act, except that this section shall not apply to that por-
5 tion of the Bering Sea National Wildlife Refuge designated as
6 wilderness pursuant to the Act of October 23, 1970 (84
7 Stat. 1104; 16 U.S.C. 1132 note). Notwithstanding any-
8 thing to the contrary in the Wilderness Act, the Secretary
9 shall, with respect to any existing refuge added to the refu-
10 ges herein established by paragraphs (1) (D), (2), and
11 (8) of section 202 (a) of this title, report to the President his
12 recommendations as to the suitability of any area within the
13 entire refuge within three years from the date of enactment
14 of this title.
15 (b) With regard to the Noatak National Arctic Range
16 such a wilderness report as is required in subsection (a) of
17 this section shall be included in the Secretary's report to the
18 Congress pursuant to section 205 (a) (3) of this title.
19 PART C—WILD AND SCENIC RIVERS
20 SEC. 207. (a) Section 3 (a) of the Wild and Scenic
21 Rivers Act (82 Stat. 907) as amended (16 U.S.C. 1274
22 (a)), is further amended by adding the following new
23 paragraphs.
24 " . ALAGNAK, ALASKA.—The entire river within
25 the boundary of the Iliamna National Resource Range

1 from a point approximately eight miles below its source,
2 to a point twenty miles above the mouth, including the
3 Nonvianuk River, to be administered by the Secretary
4 of the Interior;
5 " . ANDREAFSKY, ALASKA.—From its source,
6 including all headwaters, downstream for two hundred
7 and forty miles, including the East Fork, all within the
8 boundary of the Yukon Delta National Wildlife Refuge,
9 to be administered by the Secretary of the Interior;
10 " . IVISHAK, ALASKA.—From its source, includ-
11 ing all headwaters and an unnamed tributary to Porcu-
12 pine Lake, downstream to a point near Flood Creek, all
13 within the boundary of Arctic National Wildlife Refuge,
14 to be administered by the Secretary of the Interior;
15 " . KANEKTOK, ALASKA.—The entire river within
16 the boundary of Togiak National Wildlife Refuge,
17 Kagati Lake to a point sixteen miles above the mouth,
18 to be administered by the Secretary of the Interior;
19 " . NOATAK, ALASKA.—From the east boundary
20 of the Noatak National Arctic Range to its confluence
21 with the Kelly River, to be administered by the Secre-
22 tary of the Interior; and
23 " . WIND, ALASKA.—From its source, including
24 all headwaters and one unnamed tributary in Township
25 T13S, downstream for sixty-five miles, within the

1 boundaries of the Arctic National Wildlife Refuge, to be
2 administered by the Secretary of the Interior."
3 (b) The river segments designated in subsection (a) of
4 this section are hereby classified and designated and shall be
5 administered as wild river areas.
6 (c) Notwithstanding any provisions to the contrary of
7 the Wild and Scenic Rivers Act (82 Stat. 907; 16 U.S.C.
8 1271) the boundaries of the river segments referred to in
9 subsection (a) of this section may include an area extend-
10 ing up to two miles from the mean high water level on either
11 side of the river segments. Notwithstanding the provisions
12 of section 3 (b) of such Act, the Secretary shall establish
13 boundaries for the river segments referred to in subsection
14 (a) of this section within three years after the date of en-
15 actment of this title.
16 (d) The provisions of section 6 of the Wild and Scenic
17 Rivers Act shall not apply to the river segments referred to
18 in subsection (a) of this section.
19 PART D—REGULATIONS
20 SEC. 208. (a) The Secretary may issue such rules and
21 regulations as may be necessary to carry out the provisions
22 of this title.
23 (b) Any regulations heretofore prescribed by the Sec-
24 retary for any existing refuge added to the refuges herein
25 established as referred to in paragraphs (1), (2), (6),

1 (7), and (8) of section 202(a) of this title shall remain
2 in effect until republished in total or in part by the Secretary.

3 PART E—APPROPRIATION AUTHORIZATION

4 SEC. 209. There are hereby authorized to be appropri-
5 ated such sums as may be necessary to carry out the provi-
6 sions of this title.

7 TITLE III—NATIONAL FOREST SYSTEM

8 NEW ALASKA NATIONAL FORESTS

9 SEC. 301. For the purpose of providing for the protec-
10 tion, conservation, and management of the multiple resource
11 values of certain public lands in the State of Alaska as part
12 of the National Forest System, the areas described in subsec-
13 tions (a) through (c) of this section, as generally depicted
14 on maps appropriately referenced, dated December 1973, and
15 on file and available for public inspection in the Office of the
16 Chief, Forest Service, Department of Agriculture, are hereby
17 established as the Wrangell Mountains, Porcupine, and
18 Yukon-Kuskokwim National Forests, respectively. The
19 Wrangell Mountains, Porcupine, and Yukon-Kuskokwim
20 National Forests shall, subject to valid existing rights, be
21 administered by the Secretary of Agriculture in accordance
22 with the laws, rules, and regulations applicable to the na-
23 tional forests.

24 (a) The Porcupine National Forest shall include the
25 area generally depicted on a map entitled, "Proposed Porcu-

1 pine National Forest", comprising approximately 5.5 million
2 acres.
3 (b) The Wrangell Mountains National Forest shall
4 include the area generally depicted on a map entitled, "Pro-
5 posed Wrangell Mountains National Forest", comprising
6 approximately 5.5 million acres.
7 (c) The Yukon-Kuskokwim National Forest shall in-
8 clude the area generally depicted on a map entitled, "Pro-
9 posed Yukon-Kuskokwim National Forest", comprising ap-
10 proximately 7.3 million acres.
11 ADDITION TO CHUGACH NATIONAL FOREST
12 SEC. 302. Within sixty days following enactment of this
13 title, the Secretary of the Interior shall, by public land order,
14 provide for addition to the Chugach National Forest of the
15 area comprising approximately five hundred thousand acres
16 generally depicted on a map entitled "Proposed Chugach
17 National Forest Addition" which is on file and available for
18 public inspection in the Office of the Chief, Forest Service,
19 Department of Agriculture. Subject to valid existing rights,
20 the Chugach National Forest Addition shall be administered
21 as a part of the Chugach National Forest in accordance with
22 the laws, rules, and regulations applicable to national forests.
23 WILD AND SCENIC RIVERS WITHIN ALASKA NATIONAL
24 FORESTS
25 SEC. 303. (a) Section 3 (a) of the Wild and Scenic

1 Rivers Act (82 Stat. 907, 16 U.S.C. 1274 (a)), as amended
2 is further amended by adding the following new paragraphs:
3 " . BREMNER, ALASKA.—The entire river, from its
4 origin to its confluence with the Copper River, to be admin-
5 istered by the Secretary of Agriculture.
6 " . NOWITNA, ALASKA.—The segment from the point
7 where the river crosses the west boundary of section 6, town-
8 ship 17 south, range 22 east, Fairbanks principal merdidian,
9 downstream to its confluence with the Yukon River, to be
10 administered by the Secretary of Agriculture.
11 " . PORCUPINE, ALASKA.—The segment from the
12 Canadian border downstream to the point where the river
13 crosses the north boundary of section 2, township 23 north,
14 range 18 east, Fairbanks principal meridian, to be adminis-
15 tered by the Secretary of Agriculture.
16 " . SHEENJEK, ALASKA.—The segment from the point
17 where the river crosses the north boundary of section 1,
18 township 32 north, range 16 east, Fairbanks principal me-
19 ridian, downstream to its confluence with the Porcupine
20 River, to be administered by the Secretary of Agriculture."
21 (b) The Bremner and Sheenjek River segments desig-
22 nated in subsection (a) of this section are hereby classified
23 and designated and shall be administered as wild river areas.
24 The Porcupine and Nowitna River segments designated in

1 subsection (a) of this section are hereby classified and desig-
2 nated and shall be administered as scenic river areas.
3 (c) Notwithstanding the provisions of subsection 3 (b)
4 of the Wild and Scenic Rivers Act (82 Stat. 907, 16 U.S.C.
5 1274 (b)), the Secretary of Agriculture shall establish
6 boundaries for the Wild and Scenic Rivers referred to in sec-
7 tion 303 of this title within three years after the date of
8 enactment of this title.
9 SEC. 304. The Secretary of Agriculture shall, as soon as
10 practicable after the date of enactment of this title, publish
11 in the Federal Register a detailed description and map show-
12 ing the boundaries of the Wrangell Mountains, Porcupine,
13 and Yukon-Kuskokwim National Forests, and the addition
14 to the Chugach National Forest.
15 SEC. 305. There are hereby authorized to be appropri-
16 ated such sums as may be necessary to carry out the provi-
17 sions of this title.
18 TITLE IV—ADDITIONS TO NATIONAL WILD AND
19 SCENIC RIVERS SYSTEM LOCATED OUTSIDE
20 NATIONAL PARKS, NATIONAL WILDLIFE
21 REFUGES, AND NATIONAL FORESTS
22 DESIGNATION
23 SEC. 401. Section 3 (a) of the Wild and Scenic Rivers
24 Act (82 Stat. 907), as amended (16 U.S.C. 1274 (a)),
25 is further amended by adding the following new paragraphs:

1 " . BEAVER CREEK, ALASKA.—The segment of the
2 main stem from the vicinity of the confluence of Bear and
3 Champion Creeks downstream one hundred and thirty-five
4 miles to a point approximately fifteen miles downstream
5 from the mouth of Victoria Creek, the segment not to ex-
6 ceed two hundred thousand acres; to be administered by the
7 Secretary of the Interior.
8 " . BIRCH CREEK, ALASKA.—The segment of the main
9 stem from the vicinity of the confluence of North Fork
10 downstream one hundred and thirty-five miles to the vicinity
11 of Jumpoff Creek, the segment not to exceed two hundred
12 thousand acres; to be administered by the Secretary of the
13 Interior.
14 " . FORTYMILE, ALASKA.—The main stem within the
15 State of Alaska; O'Brien Creek; South Fork; Napoleon
16 Creek; Franklin Creek; Uhler Creek, Walker Fork down-
17 stream from the confluence of Liberty Creek; Wade Creek;
18 Mosquito Fork downstream from the vicinity of Kechum-
19 stuk; West Fork Dennison Fork downstream from the con-
20 fluence of Logging Cabin Creek; Dennison Fork downstream
21 from the confluence of West Fork Dennison Fork; Logging
22 Cabin Creek; North Fork; Hutchinson Creek; Champion
23 Creek; the Middle Fork downstream from the confluence
24 of Joseph Creek; and Joseph Creek, the segments not to

1 exceed three hundred and twenty thousand acres; to be ad-
2 ministered by the Secretary of the Interior.
3 " . UNALAKLEET, ALASKA.—The segment of the main
4 stem beginning at 159 degrees 21 minutes 06.156 seconds
5 west longitude approximately six miles from the headwaters
6 extending downstream sixty miles to 160 degrees 19 min-
7 utes 15.031 seconds west longitude in the vicinity of con-
8 fluence of the Chiroskey River, the segment not to exceed
9 one hundred and four thousand acres; to be administered
10 by the Secretary of the Interior."
11 ADMINISTRATIVE PROVISIONS
12 SEC. 402. (a) The Beaver Creek, Birch Creek, and
13 Unalakleet components, as well as Mosquito Fork down-
14 stream from the vicinity of Kechumstuk to Ingle Creek,
15 North Fork, Champion Creek, Middle Fork downstream
16 from the confluence of Joseph Creek, and Joseph Creek
17 units of the Fortymile component, designated in section 401
18 of this title, are hereby classified and designated and shall
19 be administered as wild river areas pursuant to the Wild and
20 Scenic Rivers Act. The Wade Creek unit of the Fortymile
21 component is classified and designated and shall be admin-
22 istered as a recreational river area, pursuant to such Act.
23 The remaining units of the Fortymile component are classi-
24 fied and designated and shall be administered as scenic river
25 areas, pursuant to such Act. The classification as wild river

1 areas of certain segments of the Fortymile by this subsection
2 shall not preclude such access across those river segments
3 as the Secretary of the Interior determines to be necessary
4 to permit commercial development of asbestos deposits in the
5 North Fork drainage.

6 (b) The Secretary of the Interior shall take such action
7 as is provided for under section 3 (b) of the Wild and Scenic
8 Rivers Act to establish detailed boundaries and formulate
9 detailed development and management plans within three
10 years after the date of enactment of this title with respect
11 to the Beaver Creek component, within two years with
12 respect to the Birch Creek component, within one year with
13 respect to the Fortymile component, and within four years
14 with respect to the Unalakleet component.

15 (c) The provisions of section 401 of this title specify-
16 ing maximum permissible acreages for individual components
17 shall supersede any provisions to the contrary of the Wild
18 and Scenic Rivers Act.

19 (d) Notwithstanding the provisions of section 9 (a) (iii)
20 of the Wild and Scenic Rivers Act, the minerals in all Fed-
21 eral lands included in any component or part of a component
22 designated by this section as a wild river area are hereby
23 withdrawn, subject to valid existing rights, from all forms of
24 appropriation under the mining laws and from operation of

1 the mineral leasing laws including, in both cases, amend-
2 ments thereto.

3 APPROPRIATION AUTHORIZATION

4 SEC. 403. There is hereby authorized to be appropriated
5 such sums as may be necessary for the purposes of this title.

93D CONGRESS
2D SESSION

S. 2917

A BILL

To provide for the addition of certain lands in the State of Alaska to the National Park, National Wildlife Refuge, National Forest, and the Wild and Scenic Rivers Systems, and for other purposes.

By Mr. JACKSON and Mr. FANNIN

JANUARY 30, 1974
Read twice and referred to the Committee on Interior and Insular Affairs

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