DEPARTMENT OF THE INTERIOR

Final Environmental Statement

FES 75 3

Proposed
CAPE KRUSENSTERN
NATIONAL MONUMENT
Alaska

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

1974

Royston C. Hughes
Assistant Secretary of the Interior
Chairman, Alaska Task Force
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 National Park Service, Department of the Interior, proposes that approximately 518,373 acres (175,246 acres of which is inland and coastal waters) of lands and waters in northwestern Alaska be legislatively established by Congress as the Cape Krusenstern National Monument in order to protect nationally significant cultural (archaeological and historic) resources and their natural environment, that the national monument so established be administered as a unit of the National Park System; that the monument boundaries include all lands above mean high tide and oceanic waters out to 5 miles beyond the oceanic shoreline; that the monument be closed to sport hunting; that the Secretary of the Interior be directed to make every effort to enter into cooperative agreements regarding monument-related subjects with the State of Alaska, and Native groups, and other Federal agencies, research organizations, and individuals with interests in the area and its environs; that the Secretary of the Interior withdraw the monument from all forms of appropriation or entry under the public land laws including the mining and mineral leasing laws; that subsistence uses in the area be preserved; and that the monument be studied for possible inclusion into the National Wilderness Preservation System. 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 proposal may affect: (A) Opportunities for settlement and withdrawal of over 350,000 acres of public land; (B) Future mineral activities; (C) Continuation of Native subsistence use of the area; (D) Social and economic characteristics of the City of Kotzebue; (E) Preservation of significant cultural resources; (F) Conduct of scientific research in the park and elsewhere in northwestern Alaska; (G) Preservation of a unique arctic coastal environment; and (H) Transportation in the vicinity of Kotzebue.

4. Alternatives Considered:

(A) No action; (B) Alternative Management Systems; (C) Alternative Boundaries.

5. Comments Have Been Requested From the Following: (See following pages).


7. Date Final Statement Made Available to CEQ and the Public: JAN 10 1975
The following agencies and organizations were asked to comment on the draft environment statement. Those which commented are marked with an asterisk.

**FEDERAL:**
- Department of the Interior
  - U.S. Fish and Wildlife Service
  - *Bureau of Mines
  - *Bureau of Indian Affairs
  - *Bureau of Land Management
  - *Geological Survey
  - *Alaska Power Administration
  - Bureau of Outdoor Recreation
- Department of Transportation
  - *Federal Aviation Administration
  - *Federal Railroad Administration
  - *Federal Highway Administration
  - *U.S. Coast Guard
- Department of Defense
  - *Alaska Command
  - *Corps of Engineers
  - Department of the Navy
- Department of Agriculture
  - *Forest Service
  - *Soil Conservation Service
- Department of Commerce
  - Office of Minority Business Enterprise
  - National Oceanic and Atmospheric Administration
  - *Environmental Protection Agency
  - Advisory Council on Historic Preservation
- *General Services Administration
- National Science Foundation
- Smithsonian Institution

**LOCAL AGENCIES:**
- City of Kotzebue
  - Noatak Village Council
  - Kivalina Village Council

**OTHER AGENCIES:**
- *Joint Federal-State Land Use Planning Commission for Alaska

**NATIVE ORGANIZATIONS:**
- *NANA Regional Corporation, Inc.
- Mauneluk, Inc.
- Kotzebue Native Village Corporation
- Kivalina Native Village Corporation
- Alaska Federation of Natives
- Alaska Native Foundation

**OTHER ORGANIZATIONS:**
- *Sierra Club
- *Friends of the Earth
- *The Wilderness Society
- National Parks and Conservation Association
- *National Wildlife Federation
- Alaska Historic Commission
- Alaska Historical Society
- National Trust for Historic Preservation
- Department of Anthropology, University of Alaska
- Haffenreffer Museum, Brown University
- Department of Anthropology, Brown University
- Department of Anthropology, University of Pennsylvania
- Arctic Institute of North America
- *Alaska Conservation Society
- Alaska Wilderness Council
- Alaska Professional Hunters Association
- Department of Anthropology, Alaska Methodist University
- Sea Grant Program (Alaska)
- *Alaska Wildlife Federation and Sportsmen’s Council
- *Alaska Oil and Gas Association
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I. DESCRIPTION OF THE PROPOSAL

The National Park Service, Department of the Interior, proposes: (A) Legislative establishment of a Cape Krusenstern National Monument, and (B) Administrative action to adopt a conceptual master plan for management of the monument so established.

The proposal area included approximately 343,127 acres of (d-2) lands considered in accordance with provisions of the Alaska Native Claims Settlement Act (ANCSA). The proposal also contains 145 acres of inland water and 175,101 acres of coastal waters. Included are nationally significant archeological remains associated with early arctic cultures, elements of present-day Eskimo culture, geologic forms, and arctic lowland and coastal biological features not presently represented in the National Park System. These resources center upon the cape itself, where nearly 114 beach ridges and nearby coastal hills contain cultural remains dating back more than 6,000 years.

A. LEGISLATIVE PROPOSAL

As the result of actions prescribed by the Alaska Native Claims Settlement Act (85 Stat. 688), the National Park Service (NPS) proposes congressional establishment of a Cape Krusenstern National Monument, to be administered as a historical unit of the National Park System.

Other proposed legislative provisions include: (1) Withdrawal of the area from appropriation or entry under the public land laws, including the mining and mineral leasing laws; (2) 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 of its establishment, the monument be studied and reported upon in a manner similar to that prescribed by the Wilderness Act of 1964 (78 Stat. 890) for possible inclusion in the National Wilderness Preservation System; (4) That the Secretary of the Interior be authorized to enter into cooperative agreements for the management, protection, and public use of the monument and for the conduct of scientific research, historic preservation and environmental education in northwestern Alaska; (5) That the Secretary of the Interior be authorized to acquire those private lands and/or 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 purposes; (7) That the oceanic offshore boundary be 5 miles beyond the mean high tide line and that the monument include all lands above mean high tide within that boundary; and (8) That the monument be closed to sport hunting.

Purposes of the proposed monument are:
1. To preserve, scientifically investigate, and interpret the nationally significant archeological remains in the Cape Krusenstern area. 2. To preserve, scientifically investigate, and interpret the geological and biological features of the area. 3. To encourage and assist in every way possible the preservation and interpretation of present-day Native cultures. 4. To provide interpretive
programs that will tie together the ancient and modern cultures of the area and relate them to the broader story of man's entry into and subsequent population of the Western Hemisphere.

5. To provide for optimum visitor use of the area in a way that will leave its resources unimpaired for future generations.

B. ADMINISTRATIVE ACTION

A conceptual master plan will be submitted with the legislative proposal for establishment of a Cape Krusenstern National Monument. This plan is designed to provide for operation of the monument subsequent to its authorization.

A conceptual master plan is not intended to be a definitive document that finalizes every detail of the development and management of a park. Particularly in the case of a newly established park such as Cape Krusenstern, it is necessary to delay the development of detailed plans for construction, transportation, or other matters until the completion of intensive investigations of the values to be preserved and of the feasibility and advisability of alternative means of meeting the needs of management and the public. Planning of this sort reduces the threat to irreplaceable resources resulting from hasty or ill-conceived projects. The conceptual master plan outlines the general management philosophy for the area, identifies management problems and questions to be resolved, and establishes broad guidelines for future planning, management, and development to assure that the resources are fully protected while optimum public use is provided. Master plans are frequently reviewed and are updated as new data is obtained and as changing circumstances warrant.

In general, the concepts of this plan are expected to remain for at least the initial development period—an estimated 20 years after congressional authorization of the monument. Maximum development will not occur until visitation warrants—perhaps not for 20 years or more.

Both the master plan and the environmental statement will be reviewed periodically. The first complete review will be made within 10 years following establishment of the monument, and additional reviews will be made at least once every 10 years thereafter. If changing conditions or management directions dictate major revisions to the master plan, a new environmental statement will be prepared to cover such revisions.

In accordance with the master plan, Cape Krusenstern National Monument will be managed as a historical unit of the National Park System. Certain key requirements guide all planning and management of the area: 1. The monument's nationally significant cultural resources shall be preserved. 2. The monument's cultural resources shall be available for scientific research by qualified investigators in order to further our understanding of the history of man. 3. The monument's cultural resources shall be accessible and interpreted to the public to illustrate the history of arctic man in his environment. 4. The ecosystems of Cape Krusenstern National Monument shall be preserved in as nearly as possible their natural state, but will be made accessible to qualified researchers and to the public so that visitors may enjoy—and learn from—an experience in this arctic coastal environment. 5. The establishment, administration, and public use of the park shall recognize and facilitate the necessary pursuit of subsistence by the Natives who have used the area for millennia, and others who have come to depend on these resources to maintain a subsistence lifestyle.

The following are the objectives of management of Cape Krusenstern National Monument: 1. Cape Krusenstern National Monument will be developed and managed to preserve its important cultural resources and natural environment in as nearly as possible an unaltered form. 2. Traditional
subsistence uses of renewable resources, except as may otherwise be prohibited by Federal or State law, 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 a subsistence way of life. 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, such as demands imposed by sport hunting. 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 the 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.

The managing agency will work 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. The monument will be accessible so that the public will have the opportunity to observe, in an arctic environment similar to that occupied by early man, the visible remnants of his occupation there. At Kotzebue, the nature and extent of the physical remains at the cape, the cultures they represent, and their context in the prehistory and history of man in the Arctic will be interpreted. Scientific research by investigators from recognized educational and scientific institutions will be conducted at the monument, in conformance with the provisions of the Antiquities Act (34 Stat. 225); and the conduct of their research will be viewed by and interpreted to park visitors. For research purposes, laboratory and curatorial facilities will be developed at Kotzebue in association with an interpretive facility. Native Alaskans will be encouraged to participate in management, interpretation, and the provision of visitor services at Cape Krusenstern National Monument. They also will be encouraged to continue the production of arts and crafts indigenous to their culture. Provisions will be made for the direct sale of Native artworks to visitors. Cooperative agreements will be sought to gain scientific knowledge of the cultural history and environmental values of the Arctic and to participate with the Natives in furthering understanding of their heritage.

To meet these objectives, the master plan includes several specific proposals:

1. DEVELOPMENTS AT CAPE KRUSENSTERN NATIONAL MONUMENT

To preserve the integrity of the historic and natural scene and to prevent damage to the archeological resources or the ecosystem, and to avoid or keep to a minimum conflicts between visitor uses and subsistence uses, physical development in the monument will be limited.

Restroom facilities, shelters, and interpretive signs and devices may be erected, but they will be portable and unobtrusive, removed during the fall and winter, and repositioned each season to prevent damage. Location of visitor facilities will be determined through study and monitoring of their impacts on the terrain.

Permanent facilities are not presently deemed advisable. Should they become necessary due to concentrated visitor use they will not be constructed until all feasible alternatives have been considered and until every effort has been made to insure that the development of such facilities
GENERAL DEVELOPMENT

- Tahinchok Mountains
- Aluntikut Hills
- Noatak Shelter
- Unmanned Ranger Cabin
- Interpretation
- Backpacking Staging Area
- Walk-in Camping
- Boat Dock

Baldwin Peninsula - Proposed boundary

- Important archaeological site
- Point Hope-Kotzebue winter trail
- Potential sites for shelters, interpretive devices, visitor access

NM-CK-90002 NOV. 74/44
ACCESS AND CIRCULATION

- Proposed boundary
- Twice weekly commercial flights
- Controlled charter float planes
- In-season circulation
- Boat traffic
- Winter trail
- Proposed surface transportation corridors

MAP: TAHINICHOK / MOUNTAINS
NOATAK
ALUTIUTISH
MURATA
NOATAK
IOKIKOK
KAAGA
NOATAK
HILL
NOATAK
HILL
CHUKCHI SEA
BALDWIN PENINSULA
KEELE PRICE
CHUKCHI SEA

SCALE: 1 INCH = 1 MILE

NM-CX 8004
NOV 74/AFES
will not threaten cultural resources or natural values, and until the procedures established under Section 106 of the National Historic Preservation Act have been observed. Any proposal for such developments would be the subject of a definitive developed area plan and associated environmental statement.

This proposal bans sport hunting. Since uncertainty exists regarding what is hunting for sport and what is hunting for subsistence an in-depth study of subsistence lifestyles and resource 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.

Primary access probably should be by floatplanes, which may land in Krusenstern Lagoon. A restricted airstrip exists in the Kakagrak Hills and there is potential for a grass strip at the south end of the spit at Cape Krusenstern. A study of the feasibility of permitting access for wheeled aircraft to these strips will be undertaken, and if practicable and not in conflict with subsistence uses they will be opened to provide additional access.

Some visitors will wish to camp in the monument. Camping probably will be permitted, but initially there will be no designated campsites. If overnight use increases to the point where resources may be threatened, the feasibility of designating camping areas will be investigated.

A study will be undertaken to determine the feasibility and advisability of reconstructing an Eskimo house of a late prehistoric or early historic period to serve as an interpretive device and a shelter and contact station.

2. DEVELOPMENTS AT KOTZEBUE
A structure or complex of structures is proposed at Kotzebue to serve as a visitor center, an interpretive and museum facility, administrative offices, employee housing, and a research laboratory with curatorial facilities. This development will provide for the administration, service of visitors, interpretation, and support of research in all national park and national wildlife refuge areas in northern and western Alaska. Envisioned also are research and curatorial facilities to coordinate and support other scientific research throughout northern and western Alaska. Overnight accommodations are available in Kotzebue, none will be constructed by NPS. The visitor center will provide initial introduction to Cape Krusenstern and the availability of NPS areas and other points of interest in northern and western Alaska. The center will also provide an in-depth interpretation of the area's cultural history and natural values.

Space will be available in the visitor center for the sale of Native artworks and handicrafts by Natives to visitors.

3. INTERPRETATION
The objectives of interpretation at Cape Krusenstern will be to describe the natural history of Cape Krusenstern and surrounding areas from the Ice Ages to the present. Visitors will learn how arctic man adapted through time to the environment, and they will see the signs of his past presence. Methods of relating archeology to the history of man will be explained. Arctic culture will be interpreted from a historical perspective and will demonstrate the impacts of human use on the land. Visitors will be encouraged to explore modern Eskimo culture and the historic and prehistoric sites that illustrate and broaden our understanding of this ancient culture.
Intensive interpretation will be accomplished at the visitor center in Kotzebue, to relate fully the human and natural history of the Arctic, and to illustrate the importance and meaning of discoveries made at Cape Krusenstern, as well as to prepare the visitor for his visit to the monument. At the monument, interpretation will be low key, accomplished through the presence of trained interpreters, and perhaps interpretive signs and devices designed to help the visitor appreciate the coastal arctic environment, and to guide him, as he walks back through time across the beach ridges. When archeological research is underway, interpreters will be at hand to answer questions and explain the methods and discoveries of archeology.

4. RESEARCH
An active and continuing program of research will be accomplished to provide information for visitor use and resource management at the proposed monument. Archeological research will be encouraged, as will studies to develop techniques to stabilize archeological remains. Research will be conducted to better understand and further insure the preservation of the ecological integrity of the area. This research will include indepth study of subsistence lifestyles and resource uses to serve as a basis for arriving at a workable and equitable management plan for subsistence uses in the proposal area.

5. COOPERATIVE AGREEMENTS
Cooperative agreements will be sought with Native groups in western and northern Alaska to permit, on Native-owned lands, the conduct of scientific research in archeology, history, anthropology, and the natural sciences. Cooperation will also be sought to involve interested Natives in the conduct of research and in the interpretation of their heritage. Upon request, assistance will be given interested Native and other groups in the development of tourism programs and facilities.

Local residents will be involved to the extent possible in the management and interpretation of Cape Krusenstern, in the provision of visitor services, and in the conduct of research. A cooperative agreement may be entered into with the Northwest Alaska Native Association to provide interested members of local communities with training and employment in operating, interpreting, and preserving the monument’s resources.

Cooperative agreements will be developed with Federal, State and local agencies, and with the Natives, to promote compatible and complementary uses of lands adjacent to Cape Krusenstern, and to further the coordinated and orderly pursuit of scientific research and public enjoyment of public lands.

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 Service areas in Alaska.

Public hunting, fishing, and trapping, where permitted, will be conducted within statutory limitations and in a manner compatible with the primary objectives for which the lands are administered. Such hunting, fishing, and trapping, and the possession 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. NPS may, after consultation with the State, close all or any portion of land under its jurisdiction to public hunting, fishing, or trapping, in order to protect the public safety, to prevent damage to Federal lands or the resources thereon, and may impose
such other restrictions as are necessary to comply with management objectives.

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.

Cooperation will be sought with the U.S.S.R. and possibly other Asian nations, in furthering problems of research, preservation, and public education that seek to broaden our understanding of the Arctic and its human and natural history, with emphasis on the ancient ties between Asia and America occasioned by the Bering Land Bridge.

6. LAND CLASSIFICATION
Lands within the monument will be classified in accordance with NPS policies that are based upon recommendations of the Outdoor Recreation Resources Review Commission (ORRRC). All lands within the monument are identified as Class VI—historic or cultural.

C. INTERRELATIONSHIP WITH OTHER PROJECTS OR PROPOSALS AND JURISDICTIONS

The proposal offered in this document relates to the activities of the BLM and other divisions of the Department of the Interior, the U.S. Coast Guard, the Joint Federal-State Land Use Planning Commission, the FAA, the Alaska Department of Highways, the Alaska Power Administration, Native groups, and private citizens. The entire proposal is within an area designated as a national historic landmark by the Secretary of the Interior’s Advisory Board on National Parks, Historic Sites, Buildings and Monuments.

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.

BLM presently administers the lands included in the proposal and will probably continue management on some of the lands adjacent to the proposed monument. Cooperation between BLM and NPS will be needed relative to access, development, and to research outside the monument boundaries. The Coast Guard is responsible for maintenance of navigation aids and enforcement of certain boating regulations within the coastal waters included in the proposal. If aircraft use becomes detrimental to monument values, the NPS will seek cooperative agreement with the FAA to regulate the use of airspace above the proposal area. The Alaska Department of
Highways has proposed a "Surface Transportation and Utility Corridor" that would pass near or through the proposed monument. 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.

The responsibility for a decision as to the applicability of Section 4(F) of the Department of Transportation Act of 1966 (49 U.S.C.; 1953(F)) to the lands covered in this statement rests with the Secretary of Transportation. If the Secretary of Transportation should determine that 4(F) applies to any of the lands covered by this statement, the Secretary must then determine that no feasible and prudent alternative exists to the use of such lands for highway purposes, and that such a use includes all possible planning to minimize the harm to such lands. Such requirements would exist in addition to those of the National Environmental Policy Act of 1969 (42 U.S.C.; 4321, et seq.).

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.

A power development project has been identified on the Noatak River that would back waters into a small portion of the proposal area. There are no current plans to develop the project, but it is considered by the Alaska Power Administration to be the most favorable hydroelectric site in northwest Alaska. The Joint Federal-State Land Use Planning Commission has recommended against the development of this site.

As of 1971, there were 44 Native allotment applications for 52 tracts within the proposed monument, none of which were patented. Valid claims will require access across monument lands. Cooperation will be necessary to insure mutually satisfactory agreements between the private owners of these lands and the National Park Service.

All approved and patented Native allotments within the proposal area will be considered as private inholdings with rights of inheritance. The NPS policy regarding private inholdings would affect lands used for subsistence purposes only if there is a willing seller or if such lands are used for purposes which would threaten monument values. In the latter instance, negotiations with owners would be the first avenue of approach and condemnation would only occur with congressional approval.

The proposed monument lies adjacent to other lands proposed for addition to one of the four national systems. Coordination to preserve cultural sites and to protect vital watersheds will be an essential goal of all agencies involved in the region.

The following proposal areas under ANCSA are in the region of northwest Alaska in the vicinity of the proposed Cape Krusenstern National Monument:

1. The Chukchi Sea National Wildlife Refuge
2. The Noatak National Arctic Range
3. The Selawik National Wildlife Refuge
4. The Chukchi-Imuruk National Reserve
5. Kobuk Valley National Monument
6. Naval Petroleum Reserve No. 4 lies to the north of these d-2 proposals.
The proposal includes authority to enter into cooperative agreements with Native villages, regional corporations, and other organizations. Cooperation will help insure compatible land use within and near the monument, facilitate scientific research and historic preservation, and assist in the development of educational programs, museums, and tourist programs in the region. A management plan for subsistence resource use will also be generated with cooperation and input from the above mentioned groups.

D. BACKGROUND

The present legislative proposal for the Cape Krusenstern area has developed as a result of congressional passage of the Alaska Native Claims Settlement Act on December 18, 1971. This act permits the Secretary of the Interior to study up to 80 million acres of Alaska lands and waters (d-2 areas) for possible inclusion in the National Park, National Wildlife Refuge, National Forest, and National Wild and Scenic Rivers Systems. The results of this study were submitted to Congress by December 18, 1973. Congress has given itself 5 years from that date in which to act on legislative proposals.

The search for and the study and evaluation of suitable lands meriting inclusion in the National Park System has most recently been clarified in the policy guidelines of the National Park Service as promulgated by the Secretary of the Interior on June 18, 1969. Point 8 of the guidelines states:

The National Park System should protect and exhibit the best examples of our great national landscapes, riverscapes and shores and undersea environments; the processes which formed them; the life communities that grow and dwell therein; and the important landmarks of our history. There are serious gaps and inadequacies which must be remedied while opportunities still exist if the System is to fulfill the people's need always to see and understand their heritage of history and the natural world.

You should continue your studies to identify gaps in the System and recommend to me areas that would fill them. It is my hope that we can make a significant contribution to rounding out more of the National Park System in these next few years.

At Cape Krusenstern, where approximately 114 marine beach ridges have formed over a period of nearly 5,000 years, archeological evidences of virtually every cultural phase known for Alaska have been found. On the beach ridges, in regular, controlled succession, there are evidences of people who have occupied the arctic coast for some 6,000 years. North of the beach ridge area is a near continuum of archeological sites that provides further insight into the history of man in the Arctic. On unglaciated uplands northeast of the cape have been found cultural remains possibly dating to 6,000 or more years ago. Several of the discoveries at Cape Krusenstern have resulted in the identification of cultural manifestations not previously known. In no other comparable area has so much been revealed about the cultural development of man in the Arctic. The Cape Krusenstern area is of outstanding national, even international, significance for the information it has, and may in the future, provide on human history.

Accordingly, the area has been designated a national historic landmark. (See Alternative C3., Chapter VIII) As such, it is listed in the National Register of Historic Places and provided the procedural protection of Section 106 of the National Historic Preservation Act (80 Stat. 915).

Highly significant biologic features are also present. Arctic lowland and coastal tundra are diverse and intermixed. These features are represented in no other existing or proposed units
of the National Park System. The succession of beach ridges present a continuum of plant communities with vegetative differences between each ridge and intervening swale. Present within this proposal area are portions of three physiographic provinces, containing plant communities including beach strands, coastal bluff, estuarine, freshwater marsh, wet tundra, tussock (moist) tundra, dry tundra, low willow brush, riparian (high willow brush), Dryas fell-field, and various types associated with an array of "frost-heave" and perma-frost influenced soil phenomena. Significant wildlife include a variety of salt and freshwater-oriented aquatic animals, and upland animals including muskoxen along the northeast edge of the proposal. Topography, in addition to the unique beach ridges, includes coastal flats and bluffs, rolling plateaus and irregular buttes, knobs, and ridges.

Any Federal action affecting the integrity of Cape Krusenstern’s cultural resources must be developed in consultation with the Alaska State Historic Preservation Officer and the Advisory Council on Historic Preservation with a view to assuring that, to the extent possible, adverse effects will not result without mutually agreed upon avenues of mitigation. As a historical area of the National Park System the area will continue to be listed in the National Register.

All lands within the proposed monument are currently classified as national interest or d-2 lands, in accordance with Section 17(d)(2) of ANCSA.

Lands referred to as d-1 are lands withdrawn pursuant to Section 17(d)(1) of the act in the general public interest. This withdrawal reserves these lands, from all but mineral exploration, pending further study and classification.

Native withdrawal lands are lands reserved by ANCSA for selection by village and regional corporations. Under the provisions of the act, each village will receive the surface rights to all lands within the township in which it is located, and two to six additional townships, depending on the village population. Appropriate regional corporations will receive in ownership the subsurface rights on village selected lands.

Village and regional deficiency lands are lands withdrawn by the Secretary in the event that lands withdrawn for Native selection are insufficient to permit a village or regional corporation to select the acreage it is entitled to select. The act authorized the Secretary to withdraw three times the deficiency from the nearest unreserved, vacant, and unappropriated public lands. The Native corporations are then entitled to select any deficiencies from these lands.

Public domain lands are unreserved public lands that were not withdrawn by the Secretary pursuant to ANCSA. The lands can be classified and withdrawn at a later date by public land order.

Native allotment lands are those lands on which individual Natives have filed allotment application prior to passage of ANCSA. The Alaska Native Claims Settlement Act revoked Indian Allotment Authority in Alaska under the act of February 8, 1887 (24 Stat. 389), or the act of June 25, 1910 (34 Stat. 197). Under these authorities, a Native could secure title to 160 acres (in up to four separate tracts) of lands that he used and occupied. ANCSA also provided that allotment applications, which were then pending before the Department of the Interior, could continue to be processed. Natives with an allotment application covering their primary place of residence have the option of continuing their claim for certification under the acts of 1887, 1910, or 1906, as the case may be, or of obtaining title under subsection 14(h)(5) of ANCSA.
BLM is now recording, examining, and processing the Native allotment applications throughout Alaska. Within the proposed Cape Krusenstern National Monument, there are 44 recorded applications. None has gone to patent and it is undetermined at this time how many will go to patent. Any applications that go to patent will have the status of private land and will include the right of access.
II. DESCRIPTION OF THE ENVIRONMENT

A. THE EXISTING ENVIRONMENT

1. LOCATION

The proposed Cape Krusenstern National Monument is north of the Arctic Circle and bounded roughly by latitudes 67°00’ and 67°65’ north and longitudes 162°55’ and 164°00’ west. Cape Krusenstern is 1,500 air miles from Seattle and 560 air miles from Anchorage. The proposal area is bordered on the west by the Chukchi Sea and on the south by the mouth of Kotzebue Sound. Its principal features occur primarily on a 5-mile-wide sloping coastal plain dotted with sizable lagoons, which extend for about 30 miles in a northwest-southeast orientation between the Igichuk and Mulgrave Hills. The highest elevations are at 1,648 and 2,010 feet in the northern and southern extremities, respectively.

Three physiographic provinces are confluent in the Cape Krusenstern vicinity. (Wahrhaftig, 1960) The lowland plain immediate to the protruding cape is in the Western Alaska province. Northward about 30 miles—the Mulgrave Hills is a southern terminus of the Arctic Foothills province. Abutting Cape Krusenstern on the east, the Igichuk Hills is the western segment of the Baird Mountains section of the Arctic Mountains province. About 40 miles southeast of Cape Krusenstern lies the city of Kotzebue, a developing Native community of about 2,000 people, 26 miles north of the Arctic Circle, and the major population center of Alaska’s northwest. Bearing the name of Lieutenant Otto von Kotzebue, the Russian navigator who discovered Kotzebue Sound in 1816, it has been occupied continuously for about 600 years. The Native name Kikitaruk (Place That Is Almost an Island) adequately describes the local geography.

A transfer point between ocean and inland shipping, Kotzebue has become the focus of the regional air transportation system. Alaska Airlines and Wien Consolidated Airlines provide daily jet service, while coastal and inland villages are connected to Kotzebue by other scheduled carriers or air taxi. Cape Krusenstern and neighboring points are accessible from Kotzebue and Nome by air taxi and boat.

People who use the Cape Krusenstern area for subsistence hunting, fishing, and gathering include the residents of Kotzebue, Noatak (east of the proposal area on the Noatak River), and Kivalina (on the seacoast north of the proposal area). Subsistence lifestyles reflect a blend of cash income and items purchased with locally harvested wildlife and wild plant resources. Cash is obtained by the sale of craft articles, wage employment and various income assistance programs. The presence of a small military and other government population, retail businesses, and a small tourist industry provide some limited opportunities for involvement in the market economy in the Kotzebue area.

The status of lands adjoining the proposal area includes Native village withdrawals or unreserved public lands, both of which will in all probability continue to support subsistence hunting, gathering, and fishing. BLM discontinued reindeer herding in 1966 because of a conflict with caribou herds.

Except for fisheries, the natural resources of Cape Krusenstern have little known economic potential. There are no legally located and maintained mining claims within the boundaries of the proposed monument. Geological structures favorable to petroleum are in the Chukchi Sea, Kotzebue Sound, and the Selawik lowlands southeast of Kotzebue. All of these areas are in the vicinity of the proposed monument. The proposal area has no known potential for agriculture, timber harvest, or geothermal developments.

2. CLIMATE

During the ice-free period (mid-June to early October), the area is dominated by a polar
maritime climate with resulting frequent cloudy, foggy conditions, onshore westerly winds, and relatively uniform daily temperatures. When offshore waters become frozen during October, climatic characteristics approach the continental type. Overall climatic trends here are similar to those found in Kotzebue, lying just to the southeast.

Local temperature curves closely follow the breakup (June) and return (October) of the offshore ice pack. Mean daily temperatures during the warmest months (July-August) range from an average maximum of 52°F to 56°F to an average minimum of 41°F to 45°F. Winter average temperatures are not as severe as might be expected at this latitude, and during the coldest months (January to early March) daily average temperatures range from 5°F to -15°F. Winter-like temperatures continue into March and in turn are followed by a very late spring. June, in fact, can be colder than September, a strong reversal from conditions found over the remainder of Alaska.

The 24-hour-long sunshine in the summer does little to raise temperatures because of cloudiness caused by onshore air flow. On rare occasions, however, a combination of sunny skies and a flow of dry warm air from interior Alaska will thrust temperatures up to the 80°F level. Normally less than 5 days each year reach 70°F or higher, while about 120 days annually see temperatures dropping below zero. Although not the rule, an occasional frost is possible during the warmest months of the year. Extremes probably have ranged from a maximum in the low 80's down to a minimum of -50°F. Although minimums are not excessively low, they often occur in combination with relatively high winds. This sometimes results in extremely hazardous "wind chill" temperatures as low as -120°F. (Temperature table). Average monthly maximum and minimum temperatures (°F) at Kotzebue are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Average Monthly Maximum</th>
<th>Average Monthly Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan.</td>
<td>0</td>
<td>-13</td>
</tr>
<tr>
<td>Feb.</td>
<td>+2</td>
<td>-12</td>
</tr>
<tr>
<td>Mar.</td>
<td>+7</td>
<td>-10</td>
</tr>
<tr>
<td>Apr.</td>
<td>+22</td>
<td>+5</td>
</tr>
<tr>
<td>May</td>
<td>+36</td>
<td>+23</td>
</tr>
<tr>
<td>June</td>
<td>+49</td>
<td>+37</td>
</tr>
<tr>
<td>July</td>
<td>+58</td>
<td>+47</td>
</tr>
<tr>
<td>Aug.</td>
<td>+56</td>
<td>+48</td>
</tr>
<tr>
<td>Sept.</td>
<td>+46</td>
<td>+36</td>
</tr>
<tr>
<td>Oct.</td>
<td>+30</td>
<td>+21</td>
</tr>
<tr>
<td>Nov.</td>
<td>+13</td>
<td>+2</td>
</tr>
<tr>
<td>Dec.</td>
<td>+3</td>
<td>-11</td>
</tr>
<tr>
<td>Annual</td>
<td>+27</td>
<td>+14</td>
</tr>
</tbody>
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Precipitation averages slightly less than 10 inches annually. More than half of that occurs during a 3-month period from July to September when a warm, moist southwesterly flow predominates at higher levels. August is clearly the wettest month, receiving fully one-fourth of the total annual precipitation, with some rain occurring on half of the days. Some snow falls during 10 months of the year, and for the most part only July and August are snowfree. Annual totals nevertheless are low and average less than 50 inches of snow. Each year about 110 days receive measurable (though light) precipitation.

Windy weather is characteristic of the area. Mean annual velocities are about 13 m.p.h., with the highest average winds occurring in January (15 m.p.h.) and the lowest during May (10 m.p.h.). Cyclonic storms are frequent from October to April and are often accompanied by blizzard conditions. Wind speeds of 100 m.p.h. can be experienced. Directions vary from an onshore westerly flow from May through August and to a predominately offshore easterly flow the remainder of the year.
COMPARISON OF 1960 MEAN MONTHLY WIND SPEED (IN KNOTS)
BETWEEN KOTZEBUE AND CAPE THOMPSON, OGOTORUK CREEK
(AFTER ALLEN AND WEEDFALL, 1966).
Surprisingly, about 90 clear days are experienced each year, more than any other reporting area within the State of Alaska. Clear days are predominantly a cold season feature (about 10 days a month during winter); the average decreases markedly to only 3 clear days each month during July and August. Heavy fog is experienced about 20 days annually, varying from 1 day a month during fall and winter up to an average of 5 days during June. As in other coastal areas throughout Alaska, thunderstorms are rare. Continuous 24-hour-a-day sunlight occurs from early June through mid-July. Even on the shortest days during December and early January, artificial lighting is not required during the 6 hours of available twilight.

3. GEOLOGY

GENERAL
No detailed geologic study has been made of the area. The following geological summary uses general sources and relies somewhat on descriptions of nearby areas.

Geologic action has been quiet water deposition, mostly marine estuarine due to the Bering Sea Land Bridge. This brackish water deposition has been intermingled with short periods of glacial outwash from the Noatak River. Offshore, in the present Chukchi Sea, is a known geosyncline. Oil and gas deposits are possible. Regional uplift has acidic intrusives which favor porphyry type deposits. Local uplift would trend to these deposits.

The bedrocks at Cape Thompson, 80 miles northwest of Cape Krusenstern, are described as calcareous and siliceous strata of marine sedimentary origin and early Mississippian to Cretaceous age (Campbell, 1966). Extensive, unconsolidated sediments typically overlie these rocks. At jutting shoreline sites, like Cape Krusenstern, the unconsolidated materials primarily occur as recent and ancient beach deposits of silt, sand, and coarse gravels. Back from the shoreline, sediments are of terrace, alluvial fan, swamp, and flood plain origin. Some of the lowlands near Cape Krusenstern are mantled with about 10 feet of silt and peat, which locally can reach thicknesses of up to 50 feet. (Kachadoorian, 1966)

The summits and slopes of nearby hills are comprised of rock rubble and colluvial debris, which are usually being moved and worked finer by processes such as frost heaving. Sand, silt, and clay are admixed in this process. Downslope movement of such materials is governed by the slope angle, water runoff, texture of the deposits, and soil and vegetative development. The strong winds characteristic of the area also deform and deposit finer sediments and likewise affect snow distribution in the winter. (Kachadoorian, 1966)

"Rock types in the withdrawal are surficial deposits and outcrops of Paleozoic carbonates, metamorphic and mafic igneous rocks. The carbonates may have potential for cement. Copper occurrences are found in the same rocks to the northeast of the withdrawal. Thus, there is some potential for copper." (USGS, Chapt. IV) Other sources state that the possible occurrence of copper from this evidence is highly speculative. (Reed, NPS, Personal Communication, 1974)

There are no mining claim locations within the study area nor is any of the area within a metallogenic province.

Just to the east of the area in the Noatak Valley two large gravity anomalies, in adjacent low and high, have been identified; the gravity high is also a magnetic high. The highs represent a mafic complex that crops out on the adjacent hillside
and the gravity low probably represents a small Cenozoic sedimentary basin. The area of gravity low nearly abuts the proposal area and is almost completely covered by surficial deposits. Either the sedimentary basin or mafic complex could be of significant economic importance. More definitive geophysical surveys might provide evidence of any possible economic importance of anomalies. (Bureau of Mines, 1974, Chapter IX)

BEACH SEDIMENTATION:
Along this section of the Chukchi coast, seaward beach accretion is pronounced at two sites—Cape Krusenstern and Point Hope—about 125 miles northwest of Krusenstern. Accretion occurs essentially because the supply of sediments carried in by alongshore currents exceeds the amount that is removed.

The pattern of beach ridges at Cape Krusenstern shows that the cape was originally a spit that built from the northwest and was formed by material moving predominantly southeastward. Dated beach ridges indicate that several thousand years ago the tip of the former Cape Krusenstern spit arched back toward the coast until it impinged against the shore again. Since that time permanent deposition at Cape Krusenstern has been reduced, and most beach material has bypassed the cape and is being deposited at Sheshalik Spit, 30 km southeast. The shape of Sheshalik Spit is such that no coarse sediment can pass it, and the material moving into the spit is permanently deposited. (Moore, 1966)

At present the Point Hope deposition is about 1 mile seaward; at Cape Krusenstern it is about 3 miles. The permanent deposition occurring at these two sites represents only about 7 percent of the coastline involved. Especially active erosion of old beach deposits is occurring at only about 2 percent of the coastline on the south side of Point Hope and on the west side of Cape Krusenstern. Most of the intervening beaches are "steady state" where amounts deposited are continually removed by counter-current actions and the beach line is generally stable. At Cape Krusenstern the composition of beach materials is about 60 percent chert and 25 percent sandstone; at Point Hope the composition shifts to predominately limestone and chert. (Moore, 1966)

BEACH RIDGES:
The outstanding feature to be found at Cape Krusenstern is the series of beach ridges that have formed there over the past 4,000 to 5,000 years. By best count, there are 114 of them and they extend as much as 10 miles from east to west at the north side of the entrance to Kotzebue Sound.

These ridges were formed during a period called the "Krusensternian Transgression". Transgression means the spreading of the sea over land areas and the consequent unconformable disposition of sediments on older rocks. There have been many marine transgressions, each one corresponding to rises in the sea during warm spells in ice ages and also those following ice ages. The "Krusensternian Transgression," which takes its name from marine alluvial deposits at Cape Krusenstern, records the post-glacial (Wisconsin) rise in the level of the sea and its ensuing deposits.

Recent studies of continental shelves in other parts of the world show that sea level rose from a position near -115 meters about 20,000 years ago to a position slightly below the present sea level about 5,000 years ago. (Hopkins, 1967)

Not all of the 114 beach ridges are complete; at places unconformities appear either where the sea has eaten back into part of the series or where the direction of beach formation has changed.
Shifts in beach formation are generally attributed to changes in wind direction. Northwest winds now prevail, and studies of sediments show that the beaches were built largely of gravels that slowly shifted southward by persistent alongshore currents.

The region is comparatively stable geologically. The neighboring land was not depressed by glaciers during Wisconsin time, and the small rivers that empty into Kotzebue Sound do not carry much sediment that might weigh heavily and depress the earth’s crust. These facts, along with evidence that the locality has not been disturbed by recent earthquakes, make it uniquely suitable for studies of sea level change. The beach ridges at Cape Krusenstern, then, provide an ideal laboratory for further studies of sea level and peripheral sea currents. (Kachadoorian, 1966; Moore, 1966)

PERMAFROST:
Thick permafrost (earth material below 0°C for two or more years) underlies this coastal section of northwest Alaska. At Cape Thompson it is encountered at 20 inches below the surface. Even in the coldest places, however, a thin "active layer" thaws each summer. Its thickness is affected by such factors as the amount of heat-conductive rock present or the depth of insulative peat. (Allen and Weedfall, 1966) Disturbances, such as human construction activities, can alter insulative plant mats and thus cause the active layer to thicken from summer heating. Wherever permafrost exists, construction and transport activities that cause site alternation require careful consideration to mitigate resultant geologic or biotic instabilities.

HYDROLOGY:
At least 12 streams and innumerable freshets flow out of the western Mulgrave and Igichuk Hills into the Chukchi Sea in the vicinity of Cape Krusenstern. Drainage gradients from the uplands are low, with the streams meandering and typically following braided courses into sizeable lagoons adjoining the coast. The largest of these, Krusenstern Lagoon, is about 9 miles long and 3 miles wide. Two others to the north, Imik and Kotlik lagoons, are 2 and 4 miles long, respectively. All these standing waters and streams are frozen over during the winter. During low-water periods the streams are clear; moderate amounts of sediment are carried coastward during the high-water periods of spring ice breakup.

4. VEGETATION
Detailed tundra vegetation studies at nearby Cape Thompson 80 miles northwest of Cape Krusenstern, provide a baseline of information for this arctic coastal region. Three hundred vascular plant species, 100 mosses and liverworts, and 81 lichens were found at Cape Thompson. (Johnson et al., 1966) Although the coast is edged more by cliffs and uplands and is not as low and broad as at Cape Krusenstern, the basic plant associations are similar. Representatively common plants in this area include sedges of the genera Eriophorum and Carex in the moist, lowland sites and the rose, Dryas octopetala, and many lichen species in the dry or upland locations. Low shrubs with intermediate site preferences include 12 willow (Salix) species, the dwarf birch, Betula nana, and various heaths such as Vaccinium vitis-idaea and Ledum decumbens. Mosses occur in nearly all the plant associations.

Eight major vegetation types are distinguishable in Ogotoruk Creek valley at Cape Thompson. (Johnson et al., 1966) These include primarily the Eriophorum tussock (nearly 40 percent of Ogotoruk Valley) and Dryas fell-field types (about 30 percent). Tussocks are erect, tightly interwoven family clones of the species producing
them and generally occur in wet areas with low relief. Fell-fields occur on pebbly, wind-exposed uplands or dry, low ridges. Other vegetation types are associated with frost heaving processes (polygonal nets), frost scars (convex, bare hummocks), solifluction lobes (slumping upland soils), and late-melting snowfields, and tundra ponds.

Beach-strand sites are not favorable to plant development due to their gravelly nature. Here, there is continual disturbance and instability due to winter and spring plowing by sea ice and the severe onshore storms that may alternately remove or deposit tons of gravel. Consequently, strand plants are usually more abundant in the lee of barrier beaches. The ryegrass, Elymus mollis, several other grasses, and scattered groups of heath are common in these sites. The row upon row of ancient beaches evident at Cape Krusenstern as horizontally stratified ridges are pointed up by the slight vegetative differences between the low ridges and their intervening swales.

The northern portion of the proposed monument, north of the Kakagrak Hills, is characterized by rolling plateaus, irregular buttes, knobs and north-trending ridges with tundra slopes. This arctic tundra is a unique environment, having no southern counterpart, and often described as remote, barren, desolate, and climatically rigorous.

Rabbit Creek, the major creek, drains the valley between the Tahnichok Mountains and Alutunitok Hills. It flows southwest for approximately 20 miles to empty into the Chukchi Sea. Habitats of this watershed area are diverse because of local relief, permafrost, and frost action as well as proximity to the Chukchi Sea. It is probable that as many as eight vegetative communities can be identified; Dryas fell-field, Eriophorum tussock, Eriophorum-Carex wet meadow, Eriophorum-Carex solifluction slope, ericacious shrub polygon, Dryas step and stripe, Carex bigelowii high-canter polygon and saline.

5. SOILS
The coastal areas contain alluvial and marine deposits as beaches, spits, bars, and deltas. Water-laid deposits occupy the flood plains, alluvial fans and terraces. Highly modified moraines occur throughout the lowlands with small areas of outwash bordering the moraines. The soil is loamy, poorly drained and covered with from 8 to 24 inches of peat. (Michaelson 1974a) (See soils map.)

In the Igichuk and Mulgrave Hills, the upper slopes possess well-drained, gravelly or loamy, grey soils, with a deep permafrost table. The lower slopes contain poorly-drained gravelly soils, with a shallow to deep permafrost table.

The lower Noatak River Valley, adjacent to the proposal, contains an association of poorly-drained shallow loamy soils covered with peat on high terraces along the river and well-drained stratified loamy soils on the flood plains and low terraces.

East of the Noatak River and between the Eili and Agashashok rivers is a lowland containing poorly-drained, shallow loamy soils with a peat covering in association with fiberous, perenially frozen peat in low lying areas.

The upper Noatak River Valley has well-drained gravelly soils on slopes and ridges and poorly-drained soils covered with a thin layer of peat in the valley flats. (Michaelson 1974b)

No soils in the area of Cape Krusenstern are considered suitable for farming. However, nearly the entire proposal area is suitable for reindeer and caribou grazing. (S.C.S., Dept. of Agric., Alaska's Agric. Potential, Alaska Rural Development Council)
This high-level aerial photo clearly shows many of the nearly 114 beach ridges present on the cape. In this view north is up, Kotzebue Sound along the lower edge of the picture, and the Chukchi Sea on the left.
SOILS MAP LEGEND

1. Poorly drained--peat surface layer.

2. Poorly drained soils with peaty surface layer and shallow permafrost table.

3. Well drained loamy grey soils and poorly drained soils with peat surface layer.

4. Well drained soils on stratified layers on flood plains and low terraces. And poorly drained soils with a peaty surface layer and shallow permafrost.

5. Poorly drained soils with peaty surface layer and shallow permafrost table. And poorly drained fibrous peat of some depth with a shallow permafrost table.
Proposed boundary

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

Animals that occur in the far north respond in various ways to the severe constraints of their environment. Most of them adjust by either hibernating or being dormant during the coldest periods, or in being highly mobile and able to find and use the best habitat circumstances that are seasonally available. The arctic ground squirrel and grizzly bear exemplify the former; many birds and caribou exemplify the latter. Appendix A lists some of the birds and terrestrial mammals that may occur in the Cape Krusenstern vicinity, together with their habitat characteristics. Appendix A also contains an annotated listing of marine mammals known to occur in the adjoining Chukchi Sea or that are associated with its shifting icepack.

The coastal waters along the Cape Krusenstern proposal are packed with sea ice in winter. Ice is often offshore during summer. Marine plants grow in lower layers of the sea ice during early spring. These plants support abundant sea life. Productivity is unknown but assumed to be high.

The coastline within the proposal area is depositional. Marine alluvial deposition exists in the form of spits and bars with accompanying fresh and brackish water lagoons. Sea currents are generally northerly and deposition from these currents is a continuing process. Commercial fish and shellfish in the Chukchi Sea include flounder and yellowfin sole, all of which are unusually small. Salmon, herring, "see-run" char, king crab, tanner crab, shrimp, scallops and clams are also present. King and tanner crabs and shrimp possibly could be taken with pots in both open water and through the ice.

Pink and chum salmon spawn in the Wulik River about 45 miles north of Cape Krusenstern. Biologists from the Bureau of Commercial

1) Poorly-drained soils with a surface layer of peat.

2) Well-drained, loamy soils and poorly-drained, gravelly soils with a surface layer of peat.

3) Well-drained, stratified (in terraces and floodplains) soils, and, poorly-drained soils with a peat surface layer and a shallow permafrost table.

4) Poorly-drained soils with a surface layer of peat (locally reaching some depth) with a shallow permafrost table.

5) Poorly-drained soils with a surface layer of peat and a shallow permafrost table.
The entire area shown is within the ranges of moose, wolf, moose-grizzly, brown bear, and grizzly bear.
WATERFOWL

SEA

TAKINCHOK
MOUNTAINS

Hills

ALUTINITOK
HILLS

Rusil
Lagoons

Hills

KARAGRAK
HILLS

TAYKNIRK
HILLS

Mukpeno

FAIRBANKS

NOATAK

Igichuk

Hills

Hills

Hills

Hills

Hills

Nesting & molting area

Major migration routes

10

Proposed boundaries

scale in miles

KOTZEBUE

Hatham Inlet

BALDWIN

PENINSULA

ON MICROFILM
BERING LAND BRIDGE

Maximum expanse of land mass during Pleistocene epoch

Maximum expanse of glaciation during Pleistocene epoch

Ocean expanse during Pleistocene epoch

Present coastline (boundaries are schematic)
Fisheries (now the National Marine Fisheries Service) conducted surveys of salmon resources in the vicinity of Cape Krusenstern during the late 1950's and early 1960's. At that time it was estimated that the average annual catch of chum salmon from the Noatak River was 14,400, and from the Wulik River 600. Biologists from both the U.S. Bureau of Commercial Fisheries and the Alaska Department of Fish and Game have visited the Noatak River in recent years and estimate that escapements during poor years exceed 100,000 fish and may average 250,000 to 300,000 fish, with estimated escapements of upwards of a million fish in exceptional years. The Noatak River is the northernmost important chum salmon river on the northern Alaska coast, although the species is found as far north as the mouth of the Mackenzie River in Canada. People in the Cape Krusenstern area utilize whitefish, sheefish, burbot, northern pike, and Arctic grayling in addition to chum salmon, according to the National Marine Fisheries Service. The suitability of the small streams in the proposal area for salmon is unknown, and nothing is available in the literature to suggest that local residents fish for salmon there.

That portion of the caribou herd that frequents northwestern Alaska, summers on the north slope of the Brooks Range, and then moves south in the fall through the coastal foothills and plains adjoining the Chukchi Sea. Some of these animals may spend the winter in the northern portion of the Cape Krusenstern area, although most of the herd disperses further south and east. In the early 1960's, groups of 5,000 to 10,000 caribou were reported in the Cape Krusenstern area during the migration period. Reindeer were imported into the area early in the century for herding by Natives. Herding permits, however, were cancelled by the Bureau of Land Management in 1966, because reindeer and caribou cannot coexist successfully on the same range. A few feral reindeer remain, however, interspersed with caribou herds. Muskoxen were reintroduced in recent years (having been extirpated in past decades) north of Cape Krusenstern, near the village of Kivalina. A small band of these animals now exists in the southern Mulgrave Hills. (LaResche and Hinman, 1973) Walrus and beluga, which occur in coastal waters, frequently wash up on the beaches.

Most of the birds seen at Cape Krusenstern occur there as seasonal nesters or migrants. A concentration of eiders sometimes occurs on bluffs east of Cape Krusenstern. At nearby Cape Thompson 120 bird species have been recorded, with 65 of these species known to nest there. (Williamson et al., 1966) Some conspicuous birds at Cape Krusenstern, together with their habitat preferences, are summarized in Appendix A. Within the proposal area, nesting densities are greater in moist lowland tundra sites, such as extensive tussock areas, or in wet sedge meadows. Beaches and lagoons are important as nesting areas for migrants. Golden eagles are found in the rugged uplands along the eastern portion of the proposal area.

7. PREHISTORY AND HISTORY

THE BERING LAND BRIDGE

The findings of geology, archeology, anthropology, paleontology, paleobotany, and other disciplines have for many years coalesced to support the assertion that the Native populations of the Western Hemisphere—Indians, Eskimos, and Aleuts—descended from peoples who entered America from Asia over an expanse of land that existed where the Bering and Chukchi seas now flow. This now-submerged land area is sometimes called Beringia, and is usually termed the Bering Land Bridge.

Any discussion of the postulated history of the Bering Land Bridge and its human population
must be prefaced by a few cautionary considerations. For example, there have not yet been archeological finds in Alaska that undeniably prove the presence of man in the area before 8,000 to 10,000 years ago. Many finds of greater antiquity have been located farther south in North America. The essentially Mongoloid genetic heritage of the American aboriginal peoples, however, is well accepted. The similarity of artifacts of the earliest known peoples in Alaska to those found in Asia point to a commonality of origin. Enough data have been collected in America and Asia to permit a plausible reconstruction of the approach of man to the New World.

There probably were no actual migrations into America. Because of the extent of the land bridge—over 900 miles from north to south at the widest point—the area was more likely inhabited by shifting populations of migratory hunters who did not envision a passage between two land masses. The interior landscape of the land bridge was primarily a low rolling plain with little relief. The climate was very dry and consisted of steep-tundra, with a few bogs, swamps, and thaw ponds. (Information presented at the All Union Symposium on the Bering Land Bridge, May 10-15, 1973, Khabarovsk, U.S.S.R.) The essentially treeless, frozen expanse of land in the bridge was but a continuation of the environment on either end. That environment with its large Ice Age herbivores permitted extension of the cultures of the far north, the peoples of which pursued game in small family bands. Movements of peoples would have been influenced by the necessities of the hunt, and the total population never would have been large in numbers. As the Ice Age ended, glaciers and ice caps melted, their waters causing the sea to rise. This separated the continents, leaving groups of people, who probably were the aboriginal people of the Western Hemisphere, stranded in the New World.

Some archeologists believe the present Native populations of the Americas do not descend from simply one migration, but rather represent the descendents, intermingled to varying degrees, of peoples who appeared on the continent at various times over thousands of years. It is believed, as each new group became established, it proceeded to develop its own culture— influenced by the cultures of its neighbors, by new cultural elements coming from Asia, and by its own cultural heritage. In turn, the developing culture influenced others on the American continent, and even passed cultural developments back to Siberia.

A relatively wide variety of physical types characterize American peoples, representing genetic developments since the establishment of early populations in the Western Hemisphere. Essentially, the early advent of Asian man into America paralleled the progressive rise of Mongoloid physical types in Asia, so that later entrants into the American population were probably progressively more Mongoloid. The earliest residents of America were likely pre-Mongoloid, rather long-headed peoples, who were followed through the millennia by progressively more round-headed pre-Mongoloids, proto-Mongoloids (such as, perhaps, the ancestors of the Athapascans of Alaska, Canada, and the Southwest), and probably the latest entrants to the New World, the nearly Mongoloid ancestors of the Eskimo and Aleuts.

Evidence on this question is still sketchy, and there is no assurance that additions to the American population did not occur long after the land bridge had ceased to exist. Further, it cannot be stated that recent peoples necessarily descend genetically from an earlier people who had similar cultures. Recent people may represent the descendents of other peoples who supplanted the earlier populations, but adopted and continued the older cultural assemblage and development. If this view of the environment of the Bering Land Bridge and adjacent areas in Asia and America is
accurate, it could be assumed that the human population at any one time probably consisted of a few small bands of hunters and their families.

This would mean that the numbers of people in Alaska during and immediately following the Ice Age would also be small, leaving limited traces that are difficult to discover. However, assuming a modest average increase per generation (20 years) of 1.4 percent, an original group of 400 individuals could have increased to 10,000,000 in 15,000 years. (Laughlin, 1967) Accordingly, not only would a large influx of people be unnecessary to assure the population of the Americas in its recognized variety, but both established data and statistical logic militate against the false impression of a mass migration across the Bering Land Bridge of a horde of people bent on discovering a new continent.

The following is, in brief outline, a conjectural history of the Bering Land Bridge and its influence in American prehistory.

The great ice sheets that have several times in the past radiated from the polar zones to scour the continents absorbed enormous quantities of water from the oceans, significantly lowering the sea level. When the glaciers melted, water returned to the seas, raising their level and flooding previously dry land. The lowering the sea level proceeded much faster than the overland spread of glaciers, while the rise of the seas similarly occurred ahead of the noticeable retreat of glaciers. The early periods of glaciations then presented broad expanses of land available for living and hunting in advance of the constrictions produced by advancing ice sheets. And the great processes of nature are so ponderous that a primitive man would be unlikely to notice in his short lifetime that such events were occurring.

Three periods of glacial advance—ang consequent opening of the Bering Land Bridge—bear on the history of human movements into the Americas. The land bridge was open about 40,000 years ago, but the question of human intrusion into the Western Hemisphere at that early date is problematic. There have been discoveries of stone-tool cultural remains in North America, possibly indicating the presence of a pre-projectile point culture type (that is, projectile points have not been discovered among the artifacts) comparable to those existing in the Old World after 40,000 years ago. However, none of these finds have been indisputably dated, nor have they been adequately correlated with the dating of human advance across Asia. Consequently, it must remain for future investigators to positively determine whether men may have entered America during the first of the glacial advances discussed here.

More advanced material cultures probably appeared in Alaska during the next glacial advance. During an approximately 5,000-year-long period, from about 28,000 to about 23,000 years ago, the Bering Land Bridge was again open. Hunting peoples well adapted to the cold North, making stone artifacts of a type (termed Mousteriod) related to those in northern Europe, existed in eastern Asia and probably pushed into the land bridge to live and to hunt the Ice Age mammals that supported their existence. At least during the later portion of the period, projectile points were part of their artifactual assemblage. It is highly likely that these people expanded into what is now known as Alaska. Further, some of them probably intruded farther south and east into the continent before converging glaciers may have closed the route from Alaska.

While it is unlikely that the resurgent sea could have totally isolated Alaska from the influences of Asia, any population in the interior of North America may have continued its cultural development free of other influences. The Llano
culture complexes of North America probably represent the presence of this population, whose technologies later may have returned to influence developments in the North after the end of glaciation.

By about 15,000 years ago, a somewhat more complex culture—called Aurignacoid after its European origins—was present on the Siberian plains. For a comparatively brief period—1,000 to 3,000 years at most—beginning in the period 15,000 to 13,000 years ago, the land bridge was open again, and man again availed himself of new hunting grounds. The population of Alaska probably increased somewhat as a result of influx, and certainly the blend of old and new culture types furthered cultural development. Asiatic man was gradually becoming more Mongoloid, and it is likely that the populations of the Bering area varied in both physical type and life-ways. Inland, the hunting peoples who pursued big game probably shared the general ancestry of their pre-Mongoloid predecessors. However, it is possible that the coasts of the land bridge also were occupied—by more nearly Mongoloid, marine-oriented peoples who may have been ancestors (cultural, if not genetic) of the Eskimos and Aleuts.

As the ice began to melt and the land bridge ebbed, the ancestral Indians of the interior were benefited by the arrival of new artifacts and techniques, which added to the diversity of cultures and life-ways that already characterized the Indians of the Americas. The sea-oriented peoples, sharing in this cultural interchange, probably continued to hug the retreating coastline, and as their population expanded, migrated across the Arctic to Greenland. The Arctic tree line may have been the demarcation between Indian and Eskimo for several thousand years. The result, millennia later, of this division of cultural development was, on one hand, the variety of peoples and cultures known throughout the Americas by the term Indian, and on the other, the rich and unique Eskimo culture evidenced from Siberia to Greenland.

The closing of the Bering Land Bridge did not serve to totally isolate Asia from America, although the separation was enough that the Native cultures developing in North America thereafter can be regarded as truly American. Nonetheless, the peoples living on either side of the gap continued to influence and be influenced by each other. And despite the possible presence of sea-oriented cultures at the end of the period of glaciation, the possibility cannot be discounted that the true ancestors of the Eskimos migrated to America by sea as recently as 5,000 or less years ago.


SUMMARY OF CULTURAL DEVELOPMENTS IN ALASKA SINCE THE END OF THE ICE AGE:

The tree line that marks the boundary between the arctic and the subarctic may have become the line separating two main cultural types: the arctic cultures that would eventually be recognized as characteristic of the Eskimos, and the Indian cultures of the subarctic. There was certainly cultural interaction across the tree line as well as across the Bering Straits. Until about 3,000 years ago the lines of development of the sea-oriented arctic way of life can be traced as the ancestral line of historic Eskimo culture, but unfortunately skeletal evidence is lacking that would positively identify the peoples of the arctic coast as the genetic antecedents of the Eskimos. Similarly, while the basic lines of the development of subarctic cultures can be traced, it is likely that the movements of peoples prevent assured
judgments that today’s subarctic Indians are the actual descendents of the area’s residents of many millennia ago.

The earliest identified archeological complex in the far North is called British Mountain. It is represented in discoveries in northwestern Alaska and on the arctic coast of Yukon Territory of crude stone choppers, scrapers, and unifacial projectile points.

Despite the lack of firm dating, the complex is probably very old, and may in some elements predate similar artifactual types found in the North American High Plains and Pacific Coast regions.

If so, they could well mark the southward migrations of some of the first hunters to enter the New World by way of a Bering Strait land bridge in Pleistocene times and, as such, could be the first technical traces of the North American Big-Game Hunting and Old Cordilleran traditions. (Willey, 1966)

The possibility remains that these finds could represent an arctic backwash of artifactual types from the South.

The Plano point horizon, derived from areas in the northern Great Plains and the Great Lakes between about 9,000 and 5,000 years ago, is marked in the arctic and subarctic. The projectile points that characterize this complex are lanceolate and frequently parallel-flaked. The presence of these points may represent a northern movement of buffalo hunting peoples after the end of glaciation.

Perhaps overlapping the Plano point horizon in time is the Northwest Microblade Tradition. This primally western culture was prominent in the subarctic interior of Alaska, but also may be found in some arctic coastal areas. It is peculiarly characterized by microblades and certain types of burins—traits that almost certainly came from Siberia. "Possibly it was associated with migrations from Asia . . . and it may be that the ancestors of the later Athapascans of the western subarctic entered the New World at this time." (Willey, 1967) The cultural tradition represented actually a blend of American and Asiatic elements. It probably began around 8,000 years ago, and by 6,000 to 5,000 years ago had died out in many areas, persisting in the forests of the western subarctic as late as 4,000 to 3,000 years ago.

Around 6,000 to 5,000 years ago, the Arctic Small-Tool Tradition developed in the western Arctic; it is best represented along the Bering Sea coast by the Denbigh culture. Building on elements definitely deriving from Siberia, the tradition is primarily expressed in a core and bladelet industry evidencing excellent craftsmanship. The tiny points, sideblades, and burins were much smaller and more finely made than those that characterize the Northwest Microblade Tradition found from Alaska to Greenland. The environment of the tradition was definitely the arctic coastal tundra, and the tools indicate that the people who made them were both sea mammal and land game hunters.

Its geographical distribution, its apparent ecological adaptation, and its chipped-stone technology all suggest that the Arctic Small-Tool Tradition was the American Arctic base culture for the subsequent development of the Eskimo cultural tradition. It may be that its bearers, who in many places were the first peoples ever to explore the far northern Canadian Arctic and Greenland, were of Eskimo physical type, although this thesis cannot yet be proved. (Willey, 1967)

The Eskimo cultural tradition of 3,000 years ago is clearly defined and can be broken into four
subgroups: (1) Pacific-Aleut, a somewhat divergent manifestation, and adapted to the rather milder climate of the Aleutians and the Pacific Coast of Alaska, with some Asiatic influences; (2) the Choris-Norton-Near Ipiutak, clearly developed from the Arctic Small-Tool Tradition, centered at Norton Sound and southward, and somewhat less well adapted to sea mammal hunting than the Northern Maritime; (3) Northern Maritime, the most viable of the Eskimo subtraditions, originating on both the Asiatic and Alaskan sides of Bering Strait and on St. Lawrence Island, rising in its Okvik and Old Bering Sea phases, and spreading northward and westward across the Arctic in the Birnirk and Thule phases, and representing the classic sea mammal and whale hunting Eskimo culture that persisted into modern times; and (4) Dorset subtradition, the eastern branch of Eskimo culture, representing in the Hudson Bay to Greenland-Newfoundland area a blend of the Arctic Small-Tool Tradition with newer elements from the west, and superseded after about 900 years ago by the Thule phase of the Northern Maritime subtradition.

The cultural history of the subarctic falls into two primary traditions, Eastern and Western. Alaska's subarctic falls into the latter. It is termed the Denetasiro Tradition, and seems to have developed consistently from the earlier Northwest Microblade tradition to the present day. However, extensive archeological data on the prehistory of the Denetasiro Tradition are lacking, but the culture is more fully studied through Athapascan ethnography.

(References for this section: Willey, 1966; Giddings, 1967; Bandi, 1969; other sources in bibliography).

HISTORY OF THE CAPE KRUSENSTERN AREA SINCE EUROPEAN CONTACT:
The Kotzebue area has been a place of permanent habitation for centuries. Strategically located near the discharge of numerous major rivers, it was situated on ancient arctic trade routes. It was a crossroads linking Alaskan, Siberian, and Mackenzie Eskimos, and the Athapaskan Indians of the interior. Of the perhaps 30,000 Eskimos living in Alaska at the time of the first non-Native contact, about 10,000 lived in the northwestern part of the State.

Several voyages of exploration opened contacts between Alaskan Eskimos and the European world. In 1730 Michael Gvozdef sailed along the southern coast of the Seward Peninsula, and in 1778 Captain James Cook explored the southeastern coast of Alaska. Shortly thereafter, a few traders started moving north from Kodiak Island. The far northwest, however, was difficult to explore and failed to present the lure of great numbers of sea otters and fur seals. Thus, except for the indirect influx of some trade goods, Natives of Kotzebue and points north remained relatively free of western influences for some time after the initial contacts.

In 1816, Lieutenant Otto von Kotzebue of the Imperial Russian Navy entered the mouth of Kotzebue Sound and named the cape marking its northern entrance after his former commander, Admiral A. J. von Krusenstern. (Orth, 1967)

Kotzebue reported many habitations at Cape Krusenstern as he passed by on August 14, 1816. The "habitations on the tongue of land" lay "under ground"—that is, they were Eskimo winter houses, partially dug in and "appeared like little round hills, with fences of whalebone." His presence created considerable excitement, for he could see people "running to and fro on the shore," and two large skin boats vainly attempted to catch his wind-driven ship. (Giddings, 1967) Eskimo life must have continued relatively unchanged at Cape Krusenstern for some period, for Henry W. Elliott recalled of his 1874 passage
that "its inhabitants greet your vessel as it passes out and up the coast with the usual dress parade-climbing upon the summits of their winter houses, and ... running in light-hearted mirth along the beach." (Giddings, 1967) Probably because of the attractions of Kotzebue, however, permanent occupation of "Sealing Point" (as the Natives called Cape Krusenstern) had ended by the early 20th century. Giddings found in 1958 that the Eskimos remembered the place as only a seasonal camping ground, used for hunting, construction of caches, and reindeer herding. (Giddings, 1967)

Eskimos of the Kotzebue area have traditionally welcomed outsiders. In 1826, Captain F. W. Beechy carried the British flag as far as Point Barrow. When he visited Kotzebue Sound he was offered ivory figures, dolls, wooden bowls, and weapons in exchange for beads, knives, scissors, tobacco, and buttons. The increasingly frequent visits of whalers and others began to affect the Native way of life. Trade goods upset older habits and technologies, the reduction of the whale population threatened subsistence hunting, and diseases were introduced.

When H. Zagoskin of the Russian Navy visited Kotzebue in 1842, he found that more than half the population had perished from the smallpox epidemic of 1838-39.

In 1885, Captain M. A. Healy, commander of the U.S. Revenue 'Cutter' Corwin, visited several villages along the coast and sent Lieutenant John L. Cantwell to explore the Kobuk River and Lieutenant S. B. McLenegan to explore the Noatak River. Further exploration in the area took place during the winter of 1885-86 when Lieutenant George M. Stoney and his men explored the Kobuk River country and other parts of the western Brooks Range.

Before 1854 the Alaskan Eskimo way of life changed little from year to year. But from that time on—at an accelerated rate after 1886—some old ways fell away under the influences of the new. Of singular importance was the introduction of firearms, which changed hunting patterns; and alcohol, introduced without explanation or education—and sometimes consciously to serve greedy ends—with particularly pernicious results.

In 1897 a reindeer station was established at Kotzebue in anticipation of the arrival of herds imported from Siberia by Sheldon Jackson, Education Agent for the Department of the Interior. These were to be the foundation of a livestock industry for the Eskimos when they were faced with starvation due to the near extirpation of the caribou. A post office, opened in 1899, made the name "Kotzebue" official, and the Society of Friends opened a mission in the town in the same year.


Between 1910 and 1940, before the Federal Government recognized the strategic importance of Alaska, life for the Eskimos was difficult. The experience of cultural change was brought about by the influence of teachers, missionaries, and government agents. Diseases continued to take their toll; the flu epidemic of 1917-18 was particularly severe in Native villages. Tuberculosis, endemic in the United States, spread into Eskimo settlements with debilitating effect.

World War II brought more sudden changes to the Eskimo people—not the least of which was the opportunity to develop technical skills and learn new trades in construction activities. Fear of a Japanese invasion led to establishment of the Eskimo scout battalions and a network of Alaska National Guard armories in Eskimo villages—bringing with them two-way radio communication.
Ancient house sites on an inland beach ridge at Cape Krusenstern.
In 1955, the U.S. Public Health Service assumed responsibility for Native health care and launched a crash program to upgrade and construct medical facilities. Schools were enlarged and improved, resulting in the increasing acculturation of young Eskimos in western ways at the expense of the old ways. The Alaska Statehood Bill of 1958 guaranteed civil rights and liberties for all Alaskan Natives. Eskimo men and women began to undertake responsibilities of leadership to aid in bridging the gap between the social, economic and community conditions of the northern Eskimos and those of the rest of the State. Participation in public affairs and involvement in the bureaucratic and political processes that characterize the rest of the country have more recently been expanded by the Alaska Native Claims Settlement Act of 1971.

CULTURAL RESOURCES OF THE PROPOSAL AREA IN SUMMARY:

The concentrations of cultural resources of greatest interest within the area of the proposed monument are found on the approximately 114 successive marine beach ridges of Cape Krusenstern. The outstanding significance of the area lies in the fact that here, in horizontal succession, lie the evidences of nearly every major cultural period so far identified for prehistory of the Arctic. Some cultural types, such as Old Whaling, were identified first at Cape Krusenstern. While the full number of archeological sites at the cape may never be known, enough has been learned to identify the area as one of extremely high potential for furthering our knowledge of early man. The orderly succession of the cape's horizontal stratigraphy provides a controlled reference scale for the evaluation of archeological discoveries elsewhere in the Arctic, particularly when discoveries made at Onion Portage on the Kobuk River are used to verify the temporal scale found at Cape Krusenstern. The discoveries made at Cape Krusenstern, when compared with those at Onion Portage, permit the establishment of a definite, datable outline of cultural development. The discoveries made at Onion Portage confirm the cultural succession suggested by evidence found at the cape.

The present beach at Cape Krusenstern is the locus of the subsistence activities of present-day Eskimos. Immediately behind it the first eight beach ridges evidence the presence of modern to late prehistoric Eskimos, dating back to about 1,400 A.D. Beaches 9 through 44, dating from about 900 A.D. to about 400 B.C., contain in sequence remains of campsites, house ruins, and artifacts of Western Thule, Birnirk, Ipiutak, Near Ipiutak, and Norton cultures. The next group of beaches exhibit campsites of the Choris culture and the somewhat older Trail Creek-Choris culture of 500 to 1,500 B.C. Discovered on these beaches were projectile points similar in size, form, and workmanship to paleo-Indian Scottsbluff and Angostura points found far south on the western plains. These indicate the survival in the Arctic of artifact types associated with hunting cultures thousands of years previously.

On beach 53 there have been found the ruins of winter and summer houses of a whale-hunting culture with large stone tools and weapons never before found in the Arctic. Termed Old Whaling, this culture dates from around 1,800 B.C. Several of the Old Whaling artifacts are similar to the paleo-Indian Brown's Valley projectile points found in Minnesota. The sidenotched Old Whaling points resemble those of Old Copper, a later archaic culture present in the Great Lakes region around 3,200 B.C.

The oldest beaches contain evidences of the Denbigh culture, a remarkable stone-working complex that comprises the epitome of the Arctic Small-Tool Tradition. Denbigh artifacts are related not only to those found in regions far to the
south, but also to cultural complexes in eastern Asia. At Cape Krusenstern, ridges 78 to 80 exhibit artifacts of the Late Denbigh phase, to about 2,500 B.C., and ridges 83 to 104 evidence the Early Denbigh phase, to about 3,000 B.C.

The most important archeological investigations of the beach ridges at Cape Krusenstern were conducted by the late J. Louis Giddings. Further information on the area's cultural resources can be found in his book Ancient Men of the Arctic (1967), on which the preceding summaries are based. The great number of sites remaining on the cape provide opportunities for almost unlimited future investigations. Further, the excellent state of preservation of the cultural resources on the beach ridges not only heightens their research potential, but presents numerous opportunities for exhibition to the public. Pit houses excavated by Giddings in the late 1950's revealed in the summer of 1973 very little deterioration from natural causes. While erosion or spalling appeared in places, generally the walls of excavations and the outlines of exposed house floors and hearths were easily discernible. Without preservative measures, deterioration of excavated sites will proceed slowly through the years. The application of protective measures and stabilization techniques, if the park is established, can assure the preservation of representative examples open to public view. Since the soil was not discarded during past investigations, all excavations can easily be backfilled.

Unexcavated sites are not as readily discernible to the untrained eye. On the more recent half of the beaches, depressions that mark house pits are detectable. However, the locations, for instance, of Denbigh sites, (campsites, hearths, etc.) must be sought in breaks in the tundra mat that at once insures the preservation of the sites and impedes the researcher. Detection of sites at Cape Krusenstern has called for considerable ingenuity on the part of researchers, and this fact can add a dimension to public appreciation if properly interpreted. Although the cultural remains at Cape Krusenstern are not as obvious to the layman as are above-ground structures, they nonetheless can be as valuable in place in providing an interpretive experience.

The cultural resources of the proposed park are not limited to the beach ridges but may be found throughout the area. On the northeast shore of Krusenstern Lagoon rises Ingikialiik Mountain. Two benches extending from the mountain probably represent shorelines antedating those of the beach ridges. On the lower bench Giddings found remains that he believed were contemporaneous with or immediate forerunners of those found on the oldest beach ridges and possibly dating as far back as 3,500 B.C. Higher up on a single site Giddings discovered two sites that have yet to be fully evaluated, but which are distinct from and perhaps antedate the cultures found on the beaches. The Palisades II discovery consisted of stone implements, lime-encrusted and patinated, related to discoveries made elsewhere (including Onion Portage) and possibly dating to about 4,000 B.C. Physically associated with the Palisades II artifacts were stone implements--called Palisades I--of a different form and chipping technique--and, as indicated by their state of preservation, much older yet. The area where the artifacts were found, like most of Cape Krusenstern, was not glaciated. This seemed to indicate that they could be of great antiquity, especially in view of their evident similarity to Old World artifactual types. (Willey, 1967) However, the age of the artifacts at Palisades I and II is controversial. Confirmatory work has been limited since Giddings first identified the Palisades I artifacts.

The death of Giddings temporarily halted further pursuit of the Palisades discoveries in the Cape Krusenstern area.
The proposed monument includes a considerable portion of unglaciated topography related to Ingitkalik Mountain and of high archeological potential. The outlines of arctic prehistory are known to about 3,000 B.C. Discoveries of earlier sites, while increasingly frequent in recent years, have been more fortuitous than systematic. Discoveries of artifacts of the types represented by Palisades I, British Mountain, and Kogruk, while not conclusively dated, have indicated what might be expected. Systematic archeological surveys of the northern half of the Seward Peninsula and of the lands north of Krusenstern Lagoon probably will provide further evidence of the development of early man in North America, possibly back to the early appearance of man on this side of the Bering Land Bridge. The ridges, beaches, hilltops, ancient lakeshores, and stream edges of the proposal area may one day provide significant new insights on the origins of American cultures.

The coast north of the cape within the proposed park and the drainages flowing to it comprise a nearly continuous archeological zone whose resources have only been partially investigated. Several of the more prominent sites have been located, and a few have been excavated. Most important of these to date is a rounded limestone outcropping covered with a thin tundra sod known by its Eskimo place name of Ochrorurok (roughly, oily or slippery rock). Giddings, who excavated the site, called it Battle Rock because it was the legendary location of a great fight between the shamans of Point Hope and those of Cape Krusenstern (Giddings, 1967, Giddings 1961) described his discoveries of 1960 at Battle Rock as follows:

“Stone-line graves of Western Thule or related cultural affinity were preceded by surface or above-surface burials of Ipiutak culture, only the ivory, antler, and stone burials goods of which remain. A few artifacts of stone discovered on the surface or just under sod represent the Norton or Choris periods, though positive identification is not possible. Preceding Ipiutak and presumably as early as Norton or Choris, on the strength of linear-stamped or cord-marked pottery, there was a culture which left the remains of a large stone-lined, multiple burial. Though widely scattered by ground squirrels, this burial presented parts of more than one human skeleton—but no bones of a head—together with more than 300 antler projectile points and other artifacts and a few stone objects. This burial indicated for us a Battle Rock phase of culture not yet identified elsewhere. The styles of projectile points show a close relationship to Norton culture, but the large size of all the Battle Rock pieces and a new engraving style indicate that the dating will prove to be earlier than Near Ipiutak at Point Hope. Microblades and cores of some phase of the Denbigh Flint complex were found scattered about the site and, in one or two places, well under the surface. This suggests that the Denbigh people visited Battle Rock for purposes other than those of burial. No earlier artifacts were identified.”

As the foregoing indicates, Battle Rock is a remarkable archeological site. Of particular importance is the discovery of the previously unidentified early cultural phase that antedates the Norton and Ipiutak phases on the Alaska coast. It is now generally termed the Battle Rock phase, and its discovery opened a new avenue of insight into the development of arctic cultures. First interpreted as showing a developmental link between the Denbigh culture and the later Ipiutak, Battle Rock now is viewed further as demonstrating a common ancestry for the Near Ipiutak and Okvik phases, which are now seen as less separate than they once were. The analysis that started with the Battle Rock discovery has proceeded to the point where Henry B. Collins could predict:
Future work will no doubt continue to break down the rather sharp distinction once made between Okvik and Near Ipiutak, and bring further evidence that both these early Eskimo cultures, and indeed Eskimo culture as a whole north of the Aleutians, were derived from the pre-Eskimo Denbigh Flint complex. (Giddings, 1967) (Also Bandi, 1969, and Willey, 1966)

Whether future discoveries as important as the Battle Rock phase will be made on the coast north of the cape cannot, of course, be predicted. It is likely, however, that further investigations in the area will at least provide supplemental information that helps confirm the continuities of cultural development in the Arctic, from Asian origins through American innovations. Interpretive potential of sites near the northern coast is variable (from the surface appearance of the sites); and they are generally not as accessible as are the beach ridges at the cape itself. Battle Rock can be reached from the airstrip in the Kakagrak Hills by a moderately strenuous walk. Potential therefore exists for fuller interpretation of this site.

North of Battle Rock, the Tahinichok Mountains have the potential of revealing evidences of hunting peoples who were present in the area near the end of the Pleistocene, and possibly during the existence of the land bridge. This presence of a fossil coastline, representing the highest post-glacial sea levels, increases the archeological potential of the area. The immediate coastal area, besides exhibiting the evidences of a continuum of Eskimo occupation, represents a low area that would have been dry and possibly occupied during the time of the land bridge. The area has a high potential for research on the relation between archeology and the study of the natural processes that alter the surface of the ground in the Arctic. New evidence may be found in the area that may throw further light on some of the earlier occupations of Alaska, represented now by only a few such discoveries as Palisades.

The proposal area is within lands that have been recommended for designation as a national historic landmark. As such, the area will be listed in the National Register of Historic Places and will receive the procedural protection of Section 106 of the National Historic Preservation Act (80 Stat. 915). Cape Krusenstern is included in the Alaska State Heritage Resources Survey as an area of archeological significance.

8. PRESENT LAND USE
The primary land use of Cape Krusenstern today, as for millennia past, is subsistence hunting, fishing, and gathering by the Eskimos of Kivalina, Noatak, and Kotzebue. This activity is crucially important to the families who engage in it. Further, the pursuit of subsistence by the Natives in the Cape Krusenstern area is a continuation of the historic land use that made the area rich archeologically.

A winter-haul trail connecting Kotzebue and Kivalina runs across the proposal area. No figures are available on the volume of traffic using the trail during the winters. While the trail is visible on the ground, there are few other signs that snowmachine use has adversely affected any ground within the area.

There are several abandoned cabins within the proposal area. All are near the coast or lagoons. They represent the more permanent presence of subsistence hunters in the past, and can be regarded as cultural resources.

There is an abandoned airstrip and radio tower in the Kakagrak Hills, with which are associated some small, deteriorated structures and a moderate amount of trash. The airstrip is classified as restricted and is very seldom used.

At the spit on the northwest end of the beach ridge area at the cape itself there is a naturally
This proposal envisions little new or permanent development within the monument. An existing air strip in the Kakagrak Hills will be maintained for use as a jumping off place for those wishing a backcountry experience.

Important prehistoric and historic sites exist throughout the proposed monument. At Ochorurok (Battle Rock), about 12 miles north of the cape, remains of stone-lined graves of the 900-year-old Western Thule culture are found.
smooth, grassy area that is identified as an airstrip on some topographic maps (although not on aeronautical charts) and marked on the ground by barrels at either end. It apparently was used during previous archaeological excavations; it is presently unused.

Seasonal camps that may be erected in the proposal area for subsistence purposes vary from year to year, but usually take the form of one or two large tents, small log frame structures constructed for use as drying racks (for fish), posts for securing dogs, small excavated caches, a basketball hoop, and a moderate amount of discarded materials. Camps are positioned close to the present shoreline and represent no threat to archaeological resources. In July 1973, only two or three such camps were occupied within the total proposal area. Several abandoned camp sites are evident along the beach.

There is a tower at the southwest corner of the cape. It bears two marker panels and is an official U.S. Coast Guard aid to navigation. The tower, about forty feet tall, is unsafe for visitor use.

If there is any recreational use of the proposal area, it is casual and unreported. Cape Krusenstern is in general an unfrequented area; its only visitors are those who periodically pursue their living there, and an occasional archeologist. No archeological investigations were undertaken in the proposal area in 1973.

There are no mining claims within the proposal area. There are 44 applicants for Native allotments within the proposal area. They have applied for 52 tracts totalling 6,212 acres.

There are no patented lands within the boundaries of the proposed national monument.

One hydroelectric power site has been identified which could affect monument lands. The Alaska Power Administration states:

It appears that the potential Agashashok Project could involve a minor amount of land within the proposed monument. Based on our very preliminary studies of the project, a small amount of the reservoir and an earth dike would be in Township 23 North, Range 22 West, Kateel River Meridian.

Our January 30 letter indicated that there are no active proposals to develop the project, but that it is considered the most favorable hydroelectric development in northwest Alaska.

9. SOCIAL AND ECONOMIC CONSIDERATIONS

POPULATION:
The nine Native villages in northwestern Alaska centered broadly around Kotzebue have a total population of about 4,022. Kotzebue is by far the largest community in the region, with a population of 1,990. Noatak has a total population of 265, and Kivalina one of 188. There is some variation in population because of seasonal shiftings. The figures given relate to population enumeration and enrollments conducted under the Alaska Native Claims Settlement Act. (Table I) The population of all the communities is predominantly Native Alaskan.

The non-Native population of Kotzebue is 378, of Kivalina 5, and Noatak 7. Data on age distribution for the Kobuk Census Division indicate a median age of the Natives of 15 years. Native enrollment under the provisions of the Alaska Native Claims Settlement Act is 190 at Kivalina, 287 at Noatak, and 2,045 at Kotzebue. Enrollment is for the purpose of benefits disbursement, and is not dependent on present residence. (Table II)
TABLE I

Current Population Estimate
and
Native Enrollment

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kivalina</td>
<td>183</td>
<td>5</td>
<td>188</td>
<td>97</td>
<td>186</td>
</tr>
<tr>
<td>Kotzebue</td>
<td>1,587</td>
<td>378</td>
<td>1,965</td>
<td>81</td>
<td>1,997</td>
</tr>
<tr>
<td>Noatak</td>
<td>259</td>
<td>7</td>
<td>266</td>
<td>97</td>
<td>291</td>
</tr>
<tr>
<td></td>
<td>2,029</td>
<td>380</td>
<td>2,419</td>
<td>84</td>
<td>2,474</td>
</tr>
</tbody>
</table>

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. Enrollment differs from enumeration in that enumeration indicates the number of Natives currently residing in the village. There has been some duplication of enrollment which will be corrected by the Bureau of Indian Affairs as applications for enrollment are processed.

Beyond the eighth grade, students leave the villages to attend boarding schools operated by the Bureau of Indian Affairs or State of Alaska. Some are placed as boarders to attend city schools in Anchorage or Fairbanks. Kotzebue has a full high school program, however, so the necessity that children must be placed far from home for schooling may be reversing in the area. Some village families may move to Kotzebue for the educational opportunity.

In the northwestern region, as elsewhere in Alaska, Native children who spend time learning western ways in school are deprived of that measure of time that would have been spent in learning Native ways and participating in subsistence pursuits.

The Natives of the area have suffered for a century or more from serious and occasionally fatal diseases introduced by outsiders. While progress in health care under the guidance of the U.S. Public Health Service is evident, the people continue to be affected by health problems and occupational hazards. Changes in diet, housing, and clothing, and the persistence of introduced diseases contribute to a high infant death rate, accidental deaths among children and adults, ear and eye infections, dental problems, tuberculosis, and other infectious diseases.

Mental health problems are serious in the adult and young adult population as a result of a combination of causative social factors and inadequate treatment services. Alcoholism is both an individual and a community problem.

The Alaska Dietary Survey of 1956-61 (Heller and Scott, 1967) reported that while people of Noatak village derive the greatest proportion of their caloric intake from imported foods, local foods obtained from the country are of much greater importance for proteins and other nutritional elements.

ECONOMIC ACTIVITIES AND RESOURCE USES:
In northwestern Alaska and its communities economic activities include a blend of subsistence pursuits and wage employment. Subsistence harvests provide food, wood, and other materials. If these natural resources were not available, cash would be needed to purchase their equivalents.

SUBSISTENCE CYCLE-KIVALINA:
The following description of the Kivalina subsistence cycle was prepared by Saario and Kessel (1966) and is reproduced from Alaska Natives and the Land. (Federal Field Committee, 1968) The village of Kivalina subsists mainly on a hunting and fishing economy, and the acquisition of food must be carried on constantly. The annual subsistence cycle for the Kivalina people is summarized here:

From August to the middle of September, berry picking is an important part of the women's activities. Fish begin to arrive in the middle of August, but intensive fishing does not generally begin until the first of September. Activities from September to the first part of October revolve mainly around fishing, the first camps being established on the Wulik River. Villages fish for arctic cod through the ice of the lagoon from the time of freeze-up until the ice becomes too thick, generally about the end of November.

Caribou hunting starts as soon as the caribou arrive in the autumn. Activity continues until the rivers begin to break up in the spring and travel conditions become difficult, which is usually the latter part of April.

Trapping of the snowy owl begins about the middle of October and lasts for about a month while the birds are migrating south along the coast.

Fur trapping begins in November and is concerned mainly with fox, wolf, wolverine, and land otter. Muskrat and ground squirrel are trapped in spring.
A few seals are taken along the coast during the last of October or the early part of November. By the middle of December, the sea ice is usually thick enough to allow hunters to proceed out to leads to hunt, but this activity is hampered by short hours of daylight and frequent stormy weather. Participation in Christmas activities also causes a cessation of hunting.

Although some seal hunting occurs during the first part of January, conditions do not become particularly good until the end of the month. February is considered the best month for seal hunting, which becomes the focal point of activity during this month.

Ugruk (hair seal) are sighted sometimes in January and February and are taken whenever possible. With the increased hours of daylight and warmer weather in March and early April, many more seals are found on top of the ice; as a result, the hunting pressure increases. Belugas, or white whales, also generally become available in March or April, but sometimes the first kill is not made until July. Sea hunting continues on the ice until the ice breaks up in late May. From then until late June or early July, hunting is done from umiaks (skin boats).

About the middle of April, many Kivalina people go to Point Hope to take part in the whaling activities there. A whaling camp was established in Kivalina during the latter part of April 1960 but was not reestablished in 1961.

Birds usually arrive in the area in the middle of April although sometimes they do not arrive until about the first of May. Gull eggs are gathered about the first of June. In July men usually travel to Cape Thompson to get eggs from the cliff-dwelling murres. During the latter part of June and the early part of July, the women begin picking greens of edible plants. The summer months are also occupied by gathering driftwood along the coast and hunting occasional caribou.

May to October is the general employment season for men who obtain work in the summer months. When work is not available in Kivalina, these men go to Kotzebue or even Fairbanks to seek employment.

In August the berries begin to ripen, and the cycle begins anew.

Subsistence Cycle--Noatak:
The following description of the subsistence cycle of the Eskimos of the Noatak River during the late 1950’s was prepared by Heller and Scott (1967) and is reproduced from Alaska Natives and the Land. (Federal Field Committee, 1968)

SUBSISTENCE USE OF THE PROPOSAL AREA:
While the preceding two passages are generally accurate in presenting a picture of the subsistence cycle in the Cape Krusenstern area, it should be noted that conditions have changed in some respects since the completion of the studies on which they were based. Snowmachines have generally replaced dogsleds, and umiaks have disappeared in the face of wooden motorboats, both homemade and purchased. However, motorized equipment and modern tools and weapons have altered subsistence less in form than in detail. Some variations in the cycle occur each year, depending on the migrations of caribou, salmon, or other prey. More food is purchased in grocery stores now with the money obtained through sale of part of the catch, sale of artworks or pelts, social security or welfare, and wages. While there has been a general increase in the Native population, the actual population depending on subsistence may be theoretically stable as a result of out-migration, abandonment of subsistence life for wage jobs in permanent towns, and increasing supplementation of subsistence pursuits through wage-earning activities. Cash income is now an integral element in maintaining a living in the area.
The Native birth rate in northwestern Alaska declined from 48 to 35 per thousand between 1960 and 1966. It is likely that the birthrate will continue to decline under the influence of contraception, although population increases will continue as more young people move into the child-bearing years. The death rate in the area is lower than the average for all the United States, and combined with the high birth rate results in a rate of increase of 22.7 per thousand, twice the national average. (Federal Field Committee, 1968)

More than one-third of the natural increase in Native population is offset by out-migration, which is especially pronounced among young adults. Many villages are now populated largely by children and older people. There has been a general trend of movement within the region from the smaller villages to the city of Kotzebue.

SOCIAL AND CULTURAL:
The native people of Noatak, Kivalina and Kotzebue are Inupiat, or Northern Eskimos. Most are bilingual, speaking English as well as Inupik. There are a few who cannot speak English and an increasing proportion who cannot speak their ancestral tongue. Some non-Natives who have settled in the communities have adopted many aspects of the local subsistence lifestyle, which continues to reflect the close relationship of the Natives to the land and its resources, despite the adoption of some western patterns and possessions. Family patterns, age and sex roles, community organization and leadership, and social life remain basically Eskimo despite the obvious western influences. However, few Eskimos now living can remember how it was to live without the goods, beliefs, and customs introduced by non-Natives.

Changes are most apparent in the city of Kotzebue, where Federal and State agencies maintain offices (staffed primarily by non-Natives) and direct programs aimed at the Native population of northwestern Alaska. Kotzebue is the service, administrative, and commercial center of the region. It is a transitional community, still dependent on subsistence use of natural resources, but with an increasingly prominent cash economy. The traditional Native population has been enlarged by people from outlying villages seeking the services of government agencies and permanent or seasonal employment. (Smith, 1966; Hippler, 1970; Bloom, 1972)

At any time, some of the Kotzebue residents are transients, on their way to or from cities farther south, or present only for business (shopping, trading, medical care, etc.) or seasonal employment. Others have settled permanently, attracted to a large extent by medical services and educational opportunities.

Kotzebue's substantial non-Native population includes many government employees and many members of the business community.

The size and diversity of the population and the conflicts of cultural change place new demands on local leadership, community social organization, and traditional social controls. The Natives are caught between two worlds, as they try to accommodate to western contact while retaining their Native lifestyle. People in the outlying villages have not experienced the disruptive influences of western influence to the same extent as those who live in Kotzebue, but contact with the new culture is increasing everywhere. (Saario and Kessel, 1966; Alaska Department of Health and Social Services communication, 1973)

Family ties are important everywhere, although they are reported to be weakening in Kotzebue. Personal identification is still derived largely from family and community. Old people, with their experiences and ties to the past, are increasingly
important to the young, who are awakening to their own cultural heritage. (Smith, 1966; Hippler, 1970)

Many young people fail to return to their home villages after obtaining an education. The result is an imbalance between young men and women in most villages, altering the patterns of formation of new families, and producing a decrease in the number of people responsible for subsistence activities; those remaining carry a heavier burden of providing for the old and very young.

Many people of the area are highly mobile, traveling at least seasonally to job markets in other parts of the State. Some settle permanently in the cities returning home only for visits. There are those who cannot adjust to their new environment and also find it difficult to readjust to village life. The result is a pattern of anomie and social dislocation.

Each village has an elected village council responsible for government and public affairs. Some villages have advisory school boards and health committees. Villages have recently formed village corporations under the provisions of the Alaska Native Claims Settlement Act. The proposal area is within the Northwest Alaska Regional Corporation, headquartered at Kotzebue, and identical in area covered to the Northwest Alaska Native Association (NANA).

Recreational activities are often combined with subsistence pursuits. The same vehicles that are used for subsistence activities may also be used for recreation. For example, several people may go to check a trapline and engage in a snowmachine race on the way home. Visiting with friends and relatives may be the most important "recreation" and is usually combined with the subsistence rounds. Most villages hold festivals at various times during the winter. Such festivals provide an opportunity for renewal of acquaintances and other social interchange, and feature modern and traditional activities. Outdoor events may include racing of snowmachines, dogsleds, and individuals on snowshoes or foot.

Indoor entertainment includes storytelling, radios, card games, and reading. Television is absent in the outlying villages; it is a relatively new addition to Kotzebue life and is not yet well established. Movies may be shown periodically in community buildings. The school is the focus of considerable community interest everywhere, and school basketball games are extremely popular. Cultural heritage programs at schools are a recent addition.

In Kotzebue, the young enjoy bicycle and motorcycle riding. Picnics and fishing trips are common. Especially in Kotzebue, drinking absorbs long hours for many, both Native and non-Native. Traditional games and pastimes survive everywhere. Churches are a large part of the social life for many people.

Education has played a prominent role in the process of acculturation. Low levels of educational attainment and technical training have, however, been a barrier to employment opportunities. Increasing numbers of the young are completing school and training programs, and some are attending colleges or universities. The median number of school years completed by persons 25 years old or older was 7.0 in the Kobuk Census Division. (1970 Census) This compares with a statewide median of 12.4 years. However, the percentage of persons 14 through 17 years of age who are in school in Kotzebue is about 90 percent-about the same as the average for all the State. Today's teenagers, then, have on the average more years of formal education than their parents.

Each village of the area has an elementary school offering the first eight grades. A few have kindergartens and headstart programs. An Inupiat bilingual education program is now being developed in the area.
**TABLE II**

1970 AGE-SEX DISTRIBUTION NATIVES
KOBUK CENSUS DIVISION

<table>
<thead>
<tr>
<th>YEARS</th>
<th>MALE</th>
<th>FEMALE</th>
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<tr>
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<td>21</td>
</tr>
<tr>
<td>75-79</td>
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<td>70-74</td>
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<tr>
<td>5-9</td>
<td>363</td>
<td>338</td>
</tr>
<tr>
<td>0-4</td>
<td>283</td>
<td>259</td>
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</table>

All village families rely importantly on subsistence harvests, although not all able-bodied people engage in subsistence pursuits equally. The introduction of elementary schools in the villages, and the practice of sending high school students away from home to attend school, has dramatically affected the involvement of young people in resource harvest activities. Time formerly spent in hunting camps, or on the trap line learning the techniques and skills necessary to become successful hunters is now spent in the school room learning different skills generally related to survival in the market economy of the dominant society and acquiring new values and aspirations. Recent efforts to reverse this, and to provide time for learning traditional skills in the village have been welcomed. However, the traditional social and cultural patterns which ensured that the younger generation would acquire the necessary knowledge and skills have been seriously disrupted. The extent to which this is true varies somewhat from village to village, depending partly on the proportion of young people which has migrated to the urban centers of the State. In most cases, however, the current generation of young adults does not possess the depth of knowledge of the environment, its wildlife and plant resources, and the skills and techniques of the older generation of traditional hunters and trappers.

Foote and Williamson (1966 charts reproduced in Federal Field Committee, 1968) have charted the territoriality of Kivalina and Noatak subsistence pursuits. While the people of Kivalina generally stay north of the Mulgrave Hills, during the summer they may range down the coast as far as Kotlik Lagoon, and in the spring not quite as far. The Noatak people generally range over much of the proposed park area, concentrating in the summer along the southern coast and in the southeast quarter, in the autumn on the eastern fringe, in the winter in the northern half and overlapping the Kivalina range on the northern coast. In the spring the whole proposal area may be within their subsistence use zone. The subsistence use patterns of the people of Kotzebue are not documented, but they probably include many activities in the Cape Krusenstern area. Many people living both along the Noatak River and in Kotzebue, work out of one or the other, seasonally. The proposal area is important in their subsistence cycles.

The relative importance of subsistence harvests in the proposal area in comparison with total harvests is difficult to quantify. The area is probably vital to the welfare of the people who use it for subsistence purposes, because it supplies both essential needs and important links with traditional ways. There are no longer permanent habitations within the proposed monument--family settlements on the northeast shore of Krusenstern Lagoon and on the coast near Kotlik Lagoon have long been abandoned-seasonal camps are erected. In July 1973, only one such camp was found, north of Cape Krusenstern, within the proposed park boundaries. Most seasonal camping takes place to the east, at Sheshalik Spit, and north toward Kivalina. Local hunters and fishermen regularly travel through the proposal going from one favored locale to another. Subsistence use does not conflict with the values that qualify the area for preservation. It is a logical continuation of the generations of activities that make the area important in human history. It is probably an integral part of the ecological balance of the area. Elimination of subsistence hunting might seriously alter this balance. Subsistence uses in the proposal area appear to be relatively light and short-term here compared to some other areas in the region.

The cycle is directed first toward harvesting of natural foods for immediate family needs, and second to preparation and storage of provisions for periods when harvesting is impractical or impossible. Some of the catch may be sold or bartered.
The replacement of dogs with snowmachines as the principal mode of travel and transport is one of the most noticeable changes affecting life in the north, although problems in obtaining fuel may reverse this. The scarcity of dog teams has been apparent in most villages; most dogs today are kept as pets or racing teams, although their use in subsistence pursuits may never end. As has been noted by an Alaska Department of Fish and Game wildlife biologist (John J. Burns, Alaska Fish and Game, 1972), the decrease in the dog population is important.

With the advent of these machines, great quantities of fish and game that formerly had to be used for dog food, can now be used for local consumption or sold. Also, the machines have increased the outdoor activities of a great many people in Kotzebue. People who work during the week, and keep no dogs, can now get out when time permits, to supplement their cash income by hunting for some of their food. Also, the men who hunt and trap during the winter are now much more mobile.

According to the executive director of NANA (personal communication, 1972), this change permits boys in school to join their fathers on weekend and holiday hunting trips and thereby learn hunting techniques and pleasures. For the people in small communities like Kivalina and Noatak, snowmachines may have an even more important impact on wildlife harvest needs and capabilities.

There is no closed season on caribou hunting in northwestern Alaska and no limit on how many animals can be killed. The Alaska Department of Fish and Game does not determine the annual kill of caribou in the region. Almost the entire harvest can be presumed to be for subsistence purposes, though some animals are known to be taken by guides and sport hunters along the Noatak River beyond the proposal area. The annual subsistence kill of caribou is believed to have declined from 20 to 30 thousand in the early 1960’s to a current harvest of about 10 to 15 thousand animals. (Alaska Department of Fish and Game) The decreased need for dog food may have contributed to this decline. NANA estimates the caribou harvest within its region in 1972 as 14,219 animals, based on a household survey of average annual subsistence harvests over an unspecified number of years in all the villages of the NANA. Survey data for Noatak, Kivalina, and Kotzebue are presented in Appendix B. The State of Alaska considers most of the NANA survey results to be inflated. While these results may not be wholly reliable and should not be used to establish any limits on harvests, they suggest the continuing and dynamic role subsistence resources play in the villages of the Cape Krusenstern area.

The subsistence kill varies considerably from year to year, depending primarily on caribou movements in relation to the villages. According to the NANA survey, reported subsistence kill by Noatak villagers was 1,212 per annum. Kivalina takes 513, and Kotzebue 5,000. The proposal area probably figures in the caribou kill only marginally. Other animals taken by area villagers include some moose, bear, and occasionally, Dall sheep, red fox, wolf, arctic and snowshoe hare, land otter, lynx, muskrat, and porcupine.

Sea mammals harvested in the area are very important for the bulk of meat they provide. While Kotzebue and Kivalina account for the largest proportion of the average annual harvest of seals and beluga whales, the Noatak people also utilize the resource. The NANA survey reports an annual average harvest of 12 bearded seals, 10 hair seals, 3 walruses, and 10 beluga whales by Noatak people. Kivalina takes 125 bearded seals, 500 hair seals, 3 walruses, and 10 beluga whales. People of Kotzebue harvest 260 bearded seals, 90 hair seals, 3 walruses, and 50 beluga whales, and acquire about 2,144 pounds of bowhead whale through
exchange, barter, or trade. Some of the sea mammal hunting takes place in the vicinity of the proposal. The annual average of usable value from mammals is 176,428 pounds for Kivalina, 214,620 pounds for Noatak, and 939,368 pounds for Kotzebue.

Fish are an important part of the diet. About 23,959 chum salmon were taken by 152 subsistence fishermen in the Kotzebue district in 1971, with 9,919 coming from the Noatak River. The 1962-1971 average annual catch in the district was 30,038 and in the Noatak River 16,428. It is estimated that about 70 percent of the total subsistence catch is accounted for in these figures. (Alaska Department of Fish and Game, Annual Management Report, 1971) The NANA survey reports that the Noatak villagers averaged about 52,698 pounds of chum salmon per annum. Other fish species harvested by Noatak households are trout (73,200 pounds), whitefish, and grayling. An estimated 5,320 char were taken at Noatak village for subsistence in 1971. The highest recorded harvest was 32,350 in 1969. While sheefish are taken in the Kotzebue district, none are reported from the vicinity of the Noatak River. The average annual fish harvest for Noatak produces an estimated 133,718 pounds of usable value.

The people of Kivalina harvest an average of 1,200 pounds of arctic cod, 1,200 pounds of grayling, 600 pounds of chum salmon, 95,950 pounds of trout, and 12,000 pounds of whitefish, for a total annual average of 110,950 pounds of usable value. The people of Kotzebue harvested an average of 138,300 pounds of sheefish, 10,000 pounds of trout, 8,000 pounds of tomcod, 2,647 pounds of whitefish, 2,500 pounds of herring, 1,146 pounds of chum salmon, 840 pounds of smelt, and a total of 1,046 pounds of other fish, including char, flounder, grayling, and other salmon. The average annual fish harvest for Kotzebue produces an estimated 164,480 pounds of usable value.

Subsistence fishermen use set and gill nets and beach seines to catch salmon in bays and rivers. Nearly all the catch is consumed as dried fish. All proportions of the salmon are utilized, the dried flesh for humans, and the head and offal for dogs. Eskimos have traditionally fished for char with handlines, jigs, spears, gill nets, and traps. Today most fish are caught by hook and line or gill net. The entire fish is eaten; the head is considered a delicacy.

There is some indication that dependence on subsistence fishing has declined in the region during recent years as a result of increased welfare payments and more employment opportunities. (A.D.F.G., 1971) Dog food requirements have decreased. It may be expected that subsistence fishing will continue to decline, and regulations may be liberalized to allow a greater catch for commercial purposes. (A.D.F.G., 1971) The proposal area, it should be noted, is most important in the subsistence cycle for the fishing camps established there in the summers.

The NANA survey indicates that the taking of birds provides a valuable addition to the diet. Noatak villagers are reported to harvest an annual average of 500 ducks, 50 geese, 300 ptarmigan, and 10 spruce hens or grouse, for an average of 1,010 pounds of usable value. Kivalina reports 400 ducks, 200 aukkMurre Puffin, 98 white owls, and 3,000 eggs for an average of 1,688 pounds of usable value. Kotzebue reports 554 ducks, 1,819 ptarmigan, 12 spruce hens or grouse, 8 owls, and 2 cranes, for an average of 2,463 pounds of food value.

The relative importance of trapping is much less in the Kotzebue Sound area than in other parts of the State. But it is still an important source of income for some, especially in the villages farthest inland. Trapping activity had declined since World War II, as wild fur prices have fallen in face of the competition from synthetics and
ranch furs. Most persons who trap do so only to supplement their income, and to provide recreation. Since January 1973 the world market price of wild furs has risen, in some cases as much as 200 percent. If this is an indication of a long trend, trapping may increase in the Kotzebue Sound area. It is not known if any traps are set within the proposal area, but it is not likely that any significant trapping takes place there.

Plant resources supplement a diet otherwise dominated by meat protein. The people of Noatak are reported by the survey to take an annual average of 3,600 pounds of blueberries, 60 pounds of blackberries, 200 pounds of salmonberries, 360 pounds of sourdock, and 200 pounds of Eskimo potato (musse or mashu, a tuber), for an average of 4,220 pounds of usable value. Kivalina reports a total of 1,492 pounds from plant sources. Kotzebue reports a total of 16,674 pounds of usable plant value.

Natural variations in resource availability as well as variations stemming from new adaptations to pressures of the wider society have been contributing to changes in these traditional subsistence patterns. Yet the people retain a strong desire to maintain a subsistence lifestyle supplemented by cash income from wage employment and some of the basic facilities important to good health—electricity, adequate housing, clean water and sanitation systems, adequate communications services and good education. A variety of factors including changes in the delivery of educational and health and social services which enable young people to remain at home in the villages, and any significant improvements in the availability and reliability of local sources of wage employment may radically affect the extent of adherence to subsistence lifestyles in the future. New social, economic and political power of Native people giving people a greater involvement in determining their own futures will also affect present day patterns of village life.

For all the people of the area, even those engaged in wage employment (and possibly including some people who have moved out of the area) the opportunity to choose to return to a subsistence lifestyle serves as a significant source of individual psychological well-being. What has been pointed out for another northwest Alaskan village, is relevant in this area too: "as the need for participation in subsistence hunting activities for the sake of food diminishes, subsistence hunting activities will become more and more important as a social binding force." (MacLean, Weeden et al, 1971)

The worth of a moose or caribou, or of a fish or duck caught for personal consumption is a value not currently defined in the market place. This is because it is illegal to sell these commodities. However, this food is obviously still worth a great deal, for if it were not available, the person would have to have the money to buy the equivalent in a store. Even if an equivalent group of products could be identified and these subsistence resources assigned a dollar value on that basis, it would fail to include the cultural and social values attached to the resources and the activities associated with their harvest and preparation. Dollar values, however, would highlight the importance of subsistence resources in contributing to the quality of life of the people.

The people gain much of their living from the land, and their activity is an integral part of the balance of nature in the area. As the attractions of western goods and the convenience of permanent, wage-paying occupations increase, it is conceivable that subsistence may play a decreasing role in the Native way of life. For a long time, however, dependence on subsistence harvests will continue to characterize the lifestyles of many people for whom cash transactions will remain at most a supplement. Even those who convert totally to a cash-based way of life can be expected to periodically hunt and fish, in order to maintain
some tie with their traditional way of life, and to acquire the accustomed foods that the grocery store cannot provide.

Appendix B provides a tabular summary of the subsistence intake of the villages of Noatak and Kivalina and the city of Kotzebue, based on data obtained in the NANA survey of 1972.

OTHER RESOURCE USES:
Additional resource harvest activities occur in the region, and probably in the vicinity of and within the proposal area. These include general fishing and hunting activities of some few residents of the region who are not clearly engaged in a subsistence lifestyle, but who seek to supplement food and material items purchased in the store with a locally available fresh source. The harvest activities of a few residents are clearly oriented to the urban-type market economy. While these activities are not equivalent to the sport hunters' seeking of trophy quality targets, they also are not of a clearly "subsistence" nature. For these people hunting activities still serve as an important social binding force and source of ethnic identify, as well as recreation and food values. However the economic need may be less pressing relative to that of people engaged in a dominantly subsistence lifestyle.

Obviously these distinctions are vague and not easily made. During this period of intense pressures for acculturation, individuals and families have sought to integrate wage employment and subsistence pursuits, and many are in the process of achieving a balance between needs which can be satisfied through the market economy and the subsistence use of resources.

Sport hunting by people from outside the region is currently light. Before passage of the Marine Mammal Protection Act in 1971, sportsmen were attracted to the region, principally Kotzebue, for polar bear hunting. This activity is now illegal. Marine mammals may only be taken for subsistence purposes by Native residents of the coastal area.

MARKET ECONOMY:
The adoption of modern conveniences by the Natives has resulted in a growing need for cash with which to purchase such equipment as fishing gear, outboard motors, guns and ammunition, snowmachines, and a variety of household items. Food staples like salt, flour, sugar, coffee and tea, tobacco, liquor, and clothing are other items purchased in stores. Heating oil requires a substantial amount of cash.

Statistics from the Alaska Department of Labor for the Kobuk labor area, typical of northwestern Alaska, document the seasonability of employment. In January 1971 total wage and salary employment (excluding commercial fishing, trapping, and reindeer sales) was 596. In July 1971 wage and salary employment reached a peak of 1,028, an increase of 72 percent since January. By December 1971 wage and salary employment had declined to 691. No figures are available for individual villages.

Kotzebue is important as the employment, transportation, and communication center of the region. Because most villagers must leave their own villages in search of wage employment, the following discussion of cash income is focused on Kotzebue.

Government is the largest single employer and source of cash income in the Kotzebue Sound area. In 1971, government employment averaged 71 percent of total wage and salary employment (which in this discussion does not include commercial fishing, trapping, or reindeer herding). Government employment fluctuates seasonally
just as do other sources of employment. The following figures are taken from the 1971 statistical quarterlies published by the Alaska Department of Labor. The Department's Kobuk labor area represents a large portion of northwestern Alaska, although most government employment occurs at Kotzebue.

KOBUK LABOR AREA (1971)

<table>
<thead>
<tr>
<th>Employment</th>
<th>January</th>
<th>August</th>
<th>December</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal government</td>
<td>278</td>
<td>267</td>
<td>270</td>
</tr>
<tr>
<td>State and local government</td>
<td>121</td>
<td>489</td>
<td>195</td>
</tr>
<tr>
<td><strong>Total government employment</strong></td>
<td><strong>399</strong></td>
<td><strong>756</strong></td>
<td><strong>465</strong></td>
</tr>
</tbody>
</table>

Federal and State governmental functions in the area that provide cash income for residents include administration and operation of schools, the U.S. Public Health Service hospital, health and welfare programs, postal service, transportation, aviation and weather services, land management services (principally, firefighting), and law enforcement. These activities are carried out primarily at Kotzebue. Most villages have National Guard units. Local governmental functions include operation of public utilities, local law enforcement, and economic and social planning.

The local governments in the villages have limited financial resources to provide wage employment. In Kotzebue, the city government hires a few people. Under the influence of the Alaska Native Claims Settlement Act there is likely to be an increase in employment by local government.

Governmental expenditures that contribute to the cash income of the area include public assistance. In addition to limited unemployment compensation and social security, the residents receive three types of income assistance: Bureau of Indian Affairs payments, food stamps, and State welfare payments, including categorical programs like Old Age Assistance, Aid to the Blind, Aid to the Disabled, and Aid to Families with Dependent Children. The number of recipients and the average dollars received per household have increased in recent years, along with the increase in population. While the increase in number of welfare cases (individuals or families) has been general, the number of cases has increased most markedly in Kotzebue, but little or not at all in the smaller villages. In October 1972 there were in Kotzebue 118 State welfare cases receiving a total of $18,023; in Kivalina there were eight cases receiving a total of $1,315 in Noatak there were 29 cases receiving a total of $4,774. The material standard of living for some persons who now utilize both subsistence and public assistance has undoubtedly improved.

On the basis of October 1972 statistics (the State regards October as the typical month), about 35 percent of the households in the broad region around Kotzebue were receiving welfare payments from the State, Bureau of Indian Affairs emergency financial assistance, tabulated by fiscal year, varies both annually and seasonally. In recent years, 10 to 15 percent of the population in the Kotzebue Sound area has been receiving such aid. It is intended to meet emergency needs due to delays in or ineligibility for State assistance, or seasonal hardships suffered during the winter months when wage employment is unavailable.

Food stamp records, kept monthly, show that an average of about 33 percent of the population of the Kotzebue Sound area was receiving food stamps in 1972.

COMMERCIAL FISHING:

Some people participate in the commercial fisheries and belong to the Kotzebue Sound Area Fisheries Cooperative, founded in 1967. Others may travel south to take part in the commercial fishing of the Bristol Bay area. In addition to
licensed commercial fishermen, other villagers may find seasonal employment in Kotzebue during the summer when fishing season is open. Jobs are available in the processing plant and on tender boats.

Commercial fishing effort is concentrated near Kotzebue. Small open skiffs, powered by outboard motors, are used to operate, set, and retrieve nets and to deliver fish to commercial processors in Kotzebue. The following information is based on the Alaska State Department of Fish and Game, Division of Commercial Fisheries, Annual Management Report for the Arctic-Yukon-Kuskokwim Region, 1972. Table III gives approximate commercial catch of all fish in the Kotzebue District for 1967 through 1972. In 1972, 1,544,569 pounds of fish were harvested for a total value of fishermen of $262,287. Average income per fisherman was approximately $1,299 in that year.

The commercial fishing season opens on June 1, but actual fishing does not normally commence until mid-July, when the fish appear. In 1971, the fishing was conducted from July 14 through September 4.

Salmon may be taken in Kotzebue Sound, east of a line connecting Sheshalik Spit on the mainland to Cape Blossom on Baldwin Peninsula.

Chum salmon are harvested in Kotzebue and Norton Sounds for both subsistence and commercial purposes. Chum salmon from this area are of exceptional quality and are considered better than those taken from waters farther to the south. While the subsistence harvest of chum in the district exceeds the subsistence harvest of all other species combined, the commercial take of chum has far exceeded that for subsistence in all years for which records are available. The 1971 commercial catch of 154,956 was the second greatest on record, and far above the 10-year annual average of 76,523. The catch that year totaled 1,264,753 pounds of fish and 27,542 pounds of roe, taken by 198 licensed commercial fishermen. (Alaska Department of Fish and Game, 1971)

One of the two operators in Kotzebue processes about 94 percent of the catch. The bulk of the processed fish was tendered to a Japanese freezer ship for marketing in the Orient.

Fishermen were paid 16 cents per pound for chums in 1971, or about $1.59 per fish, and received a total of approximately $200,000 from the buyers for their catches. This was the best year on record in terms of total cash income to fishermen and far above the 10-year annual average of $66,400. (A.D.F.&G., 1971)

The only other species of fish harvested commercially are arctic char and sheefish. A total of 3,649 char averaging 6.36 pounds in weight were harvested in 1971, primarily incidental to commercial salmon fishing. A total of 277 sheefish weighing 2,489 pounds total was taken in conjunction with the salmon fishery. An additional 179 sheefish were harvested under special permit. (A.D.F.&G., 1971)

Enforcement of all sport and commercial fishing regulations is the responsibility of the Division of Fish and Wildlife Protection of the Alaska Department of Public Safety. A protection officer stationed in Kotzebue is responsible for the entire area.

TOURISM AND SERVICE INDUSTRIES:
Tourism and service industries provide important sources of employment and cash income. Besides the local businesses, such as stores, banks, restaurants, and so forth, serving the resident population, Kotzebue has an important tourist
### TABLE III

**APPROXIMATE COMMERCIAL SALMON CATCH - KOTZEBUE DISTRICT**

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Fish</th>
<th>Average Weight of Chum (lbs.)</th>
<th>Total Commercial Catch in Pounds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1967</td>
<td>29,400</td>
<td>9.3</td>
<td>273,342</td>
</tr>
<tr>
<td>1968</td>
<td>30,384</td>
<td>9.7</td>
<td>294,724</td>
</tr>
<tr>
<td>1969</td>
<td>59,383</td>
<td>7.5</td>
<td>445,372</td>
</tr>
<tr>
<td>1970</td>
<td>159,664</td>
<td>8.1</td>
<td>1,293,278</td>
</tr>
<tr>
<td>1971</td>
<td>154,057</td>
<td>8.1</td>
<td>1,265,151</td>
</tr>
<tr>
<td>1972</td>
<td>169,667</td>
<td>9.1</td>
<td>1,544,569</td>
</tr>
</tbody>
</table>

**COMMERCIAL FISHING LICENSES—1972:** $202  
**ESTIMATED DOLLARS TO FISHERMEN—1972:** $262,287  
**AVERAGE INCOME PER FISHERMEN—1972:** $1,299

About 4% of the commercial catch in the Kotzebue District are sheefish and Arctic char, the rest are salmon. Figures were derived by multiplying the salmon catch by the mean weight of chum salmon since, the overwhelming portion of the catch was chum.

Source: Alaska State Department of Fish and Game, Division of Commercial Fisheries. Annual Management Report, 1972 Arctic-Yukon-Kuskokwim Region.
industry. It is intimately connected with the transportation industry, which brings visitors to the area and provides them accommodations and services. The local businesses derive income from tourism and employ residents to serve the needs of tourists. Some residents gain cash from the sale of arts and crafts items to the stores, which in turn sell them to visitors or wholesale them to dealers outside the area. Most Native villages have cooperative stores that employ local residents as managers.

Kotzebue is an important tourism center in northwestern Alaska and will continue to be so, as long as the natural and cultural resources attract those who want to see them.

Alaska Airlines and Wien Consolidated Airlines offer package tours from Anchorage and Fairbanks. In 1972 Alaska Airlines carried 8,579 (over 10,000 if travel agents and airline employees are included) paying customers on their Arctic Circle tours to Nome and Kotzebue. Wien Consolidated Airlines carried about 1,100 tourists to Nome and Kotzebue in 1972, the first year they offered overnight tours.

Tourism ranked as one of the most important industries in Alaska in 1973; its importance increases yearly. No information is available on a regional basis, but statewide trends and statistics indicate that increasing growth in Alaskan tourism will be reflected in the Kotzebue Sound area.

Guiding services for fishermen provide some residents of the area with part-time employment. Both Natives and non-Natives are registered guides, assistant guides, camp helpers, and pilots. Their services are necessary to insure successful hunts and to meet State hunting regulations. Of eight guides in the region, four live in Kotzebue (1972 figures). In the spring of 1972, 10 guide teams (one guide, an assistant guide, and one or two hunters) operating out of Kotzebue resulted in the killing of 87 polar bears. A polar bear hunt grossed the guide about $2,000 to $2,500 per animal taken. Taxidermy fees for making a rug from a polar bear hide run around $500. Federal laws now prohibit the taking of polar bear for sport. A guided hunt for bear, sheep, caribou, and moose may cost a hunter $5,000 or more, not including licenses and transportation to Kotzebue. A guided hunt for one animal may cost from $1,000 to $2,000.

Tourists coming into the area for backcountry recreation bring a small income to the Kotzebue-based charter and air taxi service, as do scientific study teams and related exploration parties, who may also hire local residents for boat services and camp assistance.

OTHER FACTORS OF THE MARKET ECONOMY:
Construction projects, both government and private, offer important employment opportunities during the summers. Some people travel to other areas of the State for construction jobs. While construction is an important element of the economy in some years, it is so variable that it cannot be regarded as a steady and permanent source of income.

Residents find seasonal wage employment when freight and supplies hauled by ship are arriving and need to be lightered to Kotzebue or barged elsewhere. Other businesses in Kotzebue include several stores, taxi services, liquor stores and bars, hotels, restaurants, air transportation, gift shops, and utility companies. The city has a movie house, a newspaper, a broadcasting station, a dentist, and medical services.

Physical Facilities:
The physical facilities of village communities are minimal. Housing varies from very old log huts and cabins to new frame houses constructed under
NUMBER OF TOURISTS ENTERING ALASKA
BY MODE OF TRANSPORTATION
1964 – 1973

Source: Alaska State Dept. of Economic Development, Alaska Travel Division.
government housing programs. Much of the housing is inadequate from a national standard, with overcrowding, lack of sanitary facilities, frequent absence of electricity, and poor insulation. Imported housing is generally less well adapted to the climate and culture than the types that developed locally through thousands of years.

The school buildings and their teacher residences in communities often contrast with the rest of the homes and buildings. They are generally rectangular, constructed from imported materials, and frequently contain the only sanitary facilities, and occasionally the only electricity, in a village.

Government agencies have constructed buildings in Kotzebue. The Federal Aviation Administration has developed a modern employee housing complex.

Airport facilities include passenger and freight buildings and an improved runway.

Many villages have National Guard armories or community buildings, often old quonset huts or new frame or log buildings. Cooperative stores and post offices are located in structures similar to the houses of the community. Kotzebue has a full range of utilities, including an approved water system; Noatak has electrical service. Almost every community now has a radio communications facility or radiophone service.

Hotel accommodations are generally available only in Kotzebue. During the summers, the two main hotels in Kotzebue run at or near capacity most of the time. Should visitation increase in the future, accommodations would have to expand to fill the need. There is a family hotel patronized primarily by villagers staying in Kotzebue for relatively extended periods. It is likely that housing would have to be developed for any additional government employees stationed at Kotzebue.

B. PROBABLE FUTURE OF THE ENVIRONMENT WITHOUT THE PROPOSAL

As a base for predicting the probable future of this land, the following assumptions are made:

1. Native populations in the area will increase in numbers.

2. Demands will increase for use of natural resources found in the area.

3. NPS management would bring to the lands within the proposal the most restrictive of possible management systems for resource utilization. The only exception to this is that the NPS will allow subsistence uses to continue, whereas private landowners could prohibit such uses.

4. If this proposal is not enacted, it is unlikely that all of the lands within the proposal would be brought under the control of a single agency; i.e., some lands could become State or privately owned.

5. Change will continue to occur regardless of which management system is imposed upon the land.

If these assumptions are accepted, the following conclusions may be drawn:

1. Subsistence uses will increase to levels at which controls will be instituted by landowners.

2. Prospecting will be allowed.

3. Mining will occur if suitable mineral bodies are found and if it is economically feasible to develop them.

4. Extraction of oil and gas will occur, at least offshore, if it is found to exist in extractable quantities.
5. Some roads will be built in and to the area.

6. Conflicts will arise between subsistence and other resources users.

7. Tourism will continue to increase and fluctuate sharply on a seasonal basis.

8. If resource extraction, construction, homesteading, etc., occurred, additional persons would be likely to utilize the area.

9. Continued loss of some archeological and historical resources would probably occur from removal of artifacts or damage to sites.

10. Modern technology and society will continue to introduce pressures for change of Native cultural patterns in the future, both with and without the proposal.

11. Proposed hydroelectric projects might proceed to completion. The building of a dam would probably provide short-term jobs for people in the area and the dam itself would provide a long-term, low-cost source of energy. The reservoir would flood a 6,000-acre area of the Cape Krusenstern National Historic Landmark, as well as, the villages of Noatak and Nauyuaruk. It would also inundate many significant archeological sites along the Noatak River and extensive waterfowl habitat in the lower Noatak River Valley. (The historic landmark boundaries coincide with the boundaries of "Alternative C" of this proposal.)

12. A mix of landownership could occur if a new classification left the area open to entry under the public land laws. This could decrease the possibility that effective regional planning and management would occur and that environmental impacts of the above mentioned exploitive uses would be effectively controlled.

13. The area still would be listed in the National Register of Historic Places. Accordingly, any Federal or federally assisted proposal that would affect the area's cultural resources would be preceded by compliance with the provisions of Section 106 of the National Historic Preservation Act.

14. The area would probably remain relatively unvisited and of interest primarily to the archeologists who would wish to conduct research there.
III. THE ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION

A. IMPACT ON WILDLIFE
Wildlife and fish populations within the proposal area are moderate due to low productivity of most habitats. Up to 10,000 caribou may winter in the area north of the Kakagrak Hills. There are less than 30 muskoxen (recently reintroduced) in the northeast section of the proposal area. Furbearers and small predators occur in small numbers, particularly in marshes and beaches, where increased human use could affect them. Among marine mammals, limited numbers of ringed and bearded seals and beluga whales occur offshore and at lagoon mouths. In the latter area, they are subject to disturbance from boats. Waterbirds occur in low overall numbers, but with fairly high density in the limited marsh and lagoon habitats. In these areas, human disturbance, occurring at critical times in bird life cycles, could have serious effects. Few fish are found within the monument, except for a fairly substantial chum salmon population offshore. Both fish and wildlife rely on estuaries as primary sources of food. Under certain ice conditions major concentrations of waterfowl may develop and are then vulnerable to human disturbance and overhunting. Major concentrations of waterfowl may develop in the spring and early summer when only a few ponds are ice-free. On these occasions, the waterfowl are vulnerable to human disturbance and over hunting.

Hunting in the area is generally light and almost exclusively confined to subsistence uses. Most subsistence hunting is for marine animals offshore on the ice (section G). At present, sport hunting is almost nonexistent and shows little potential for future increase in pressure on wildlife populations (section H). Subsistence use probably will continue at about the present level.

The NPS would prohibit sport hunting within the proposed monument boundaries. If wildlife or plant resources declined to critically low levels, subsistence utilization might be regulated. The NPS would seek cooperative agreements with the State and with Native regional and village corporations and representatives of all area residents to protect wildlife and habitat that are within the boundaries but below mean high tide level. This could have the impact of preventing excessive hunting pressure and other possible abuses to offshore marine mammals, waterfowl and fish populations that are within the monument. Cooperative agreement would be sought with the Department of Commerce (NMFS) for the protection of marine mammals below mean high tide.

The impact of increased visitation, temporary developments, potential campsites, and foot-travel routes will be limited to disturbance of individual animals and would be localized around areas of heaviest human use. Sensitive populations such as muskoxen and nesting and molting waterfowl may be more severely affected by human disturbance although travel restrictions could lessen the potential significance of these impacts.

Overall, the impact of this proposal on wildlife would be slight.

B. IMPACT ON VEGETATION
Vegetation in the proposal area consists almost entirely of various types of arctic tundra and marshes with scattered low willow brush in draws. Wet lowland tundra, marshes, and willow brush areas are not likely to be used intensively enough to be damaged by human activities. Moist rolling tundra, the predominant tundra type in the region, is fragile and subject to disturbance by human use. Dry upland tundra, on slopes and hills, is resistant to low-intensity disturbance. Tundra communities are much slower in successional change than other northern vegetative types. Replacement of lichens destroyed by fire may be measured in centuries, or replacement of lichens cropped or trampled by caribou measured in decades.
Roughly one-half of the proposal acreage is moist tundra with the remainder about equally divided between lagoons, marshes, willow shrubs, and dry tundra. Contemplated human use of this tundra type is low, thus use-caused impacts will be low. Vegetational communities that have developed between beach ridges at the cape are sensitive to disturbance. Visitor caused impacts (e.g., trampling) on these communities could be locally severe, especially near archeological exhibits. The few temporary structures planned for the area will remove only minor elements of the vegetative complement.

Man-caused fires will be controlled. If a fire is of natural occurrence, it would be allowed to burn, with the qualifications that human life, cultural resources and visitor use areas are not endangered, and that no representative community or species will be allowed to become extirpated within the boundary as a result.

Floatplane access which is planned at two sites will require minimum dock and tiedown facilities. These facilities plus possible oil and gas spills will cause some damage to plants locally, but the overall impact will not be great. Improvement of an existing airstrip may result in similar minor impacts on vegetation. A slight increase in levels of visitor use is anticipated due to planned floatplane access facilities.

While specific campgrounds and trails are not now planned, use levels at favored sites and along convenient foot-travel routes could lead to localized trampling or removal of vegetation for fuel. Archeological investigations would require equipment and excavations, both of which are highly visible in this open country. Such sites would have a significant impact on the visual integrity of the area. This impact would be long lasting even if sites were restored because of the long regeneration period of the vegetative types in this region, e.g., sites excavated on the cape in the early 1950's showed very few signs of revegetation 23 years later and the scars are still highly visible. One or more sites will be kept open as interpretive facilities and thus would become a relatively permanent feature of the landscape.

Overall impact on vegetation resulting from this proposal will be insignificant, but in small localized areas vegetation will be destroyed.

C. IMPACT ON AIR QUALITY
Existing air quality is excellent. Increased use of light aircraft and perhaps motorboats could lead to temporary localized concentrations of exhaust gases. Effects of this impact on air quality would be negligible.

D. IMPACT ON VISUAL INTEGRITY OF THE LANDSCAPE
Several old cabins and perhaps an Eskimo house would be retained and possibly restored as exhibits of Native culture, involving disturbance to the surface at these sites and interruption of the visual integrity of the natural landscape. The National Park Service may seek cooperative agreement with the U.S. Coast Guard to rebuild the navigation aid so that it might also be used as an observation tower for visitor use. Presently the tower is considered unsafe for visitor use. The structure is presently unobtrusive and would remain so.

A very small number of portable visitor and operation facilities would be located in the area during the summer season and removed each winter.

Included would be shelters, interpretive devices, and restrooms. Unless screened by careful choice of location, such structures would be highly
visible. Human wastes and litter will be removed from the area and thus will have minor impact on the landscape.

Initially no campsites would be designated. Favored camping spots and foot-travel routes could become quite noticeable where disturbance of the ground surface altered the insulating plant mat and allowed deeper melting of the active layer above the permafrost. Use locations would be rotated if possible to minimize impact. Even temporary structures could cause such differential subsurface melting, but scars from this cause would be local.

Floatplane landing sites in several lagoons will require minimal docking facilities, which will intrude visually. An existing airstrip will be studied for possible upgrading. If restored, construction would cause local ground disturbance. The existence of wheel plane access, being cheaper and easier than float access, might bring greater visitor pressures, thereby somewhat increasing visitor use impacts on the landscape.

Overall, the impact of this proposal on the landscape would be to preserve the status quo over the large majority of the area. Light impacts will continue to occur around areas of concentrated subsistence use. These would be moderate but will not be eliminated by the proposal. Significant impacts will occur in areas of concentrated visitor use and especially around archeological excavations. Although the proposal would encourage these activities, it would regulate surface disturbance to keep their impacts localized. These impacts will nevertheless be significant where they occur and will be long in duration.

E. IMPACT ON WATER QUALITY
Water in the proposal area is generally free of pollution. Numerous streams flow from the two ranges of hills fringing the area, typically following braided courses into coastal lagoons. These are normally clear during low water, with a moderate sediment load carried coastward during high water periods of spring breakup, and occasionally during heavy late summer rains. Streams rise and fall rapidly, depending on rainfall or snowmelt. Summer concentrations of suspended sediments fall in the range of 10-100 milligrams per liter. Extensive exploration is necessary to obtain ground water supplies. Wells are generally deep and water quality from them generally poor. Surface waters are of fair to poor quality for potability, with supplies limited in winter (BLM, 1973).

Four brackish lagoons occur in the area. Sluggish circulation could make them subject to pollution quite readily. Rotting fish accumulations occur at times causing temporary local deterioration in water quality.

Disturbance of permafrost, expected to be minor, could cause siltation locally (section D). Increased airplane and perhaps motorboat use is foreseen as a result of the proposal. Such use, along with necessary facilities such as oil drums, could cause chronic small-scale pollution of waters by petroleum products, even though plans call for careful monitoring of such uses.

So far as can be presently foreseen, overall impacts on water quality due to action of this proposal would be local and of minor significance.

F. IMPACT ON CULTURAL RESOURCES
Concentrations of nationally significant cultural resources are found on the approximately 114 marine beach ridges at Cape Krusenstern and in the surrounding hills. The outstanding significance of the area lies in the fact that here, in horizontal
succession, lie the evidences of nearly every major cultural period so far identified for arctic prehistory. Its importance to archeology is demonstrated by the fact that some cultural types, such as Old Whaling, first were identified at the cape. Presently identified archeological sites date back possibly as far as 9,000 B.C. It is possible that sites exist here that will provide evidence of man's early appearance on this side of the land bridge (Chapter II, Prehistory and History).

If the monument were established, the Park Service would develop a program to interpret the archeologic sites, both excavated and unexcavated, for recreational and educational purposes.

Transportation will be made available to the area, either by floatplane or possibly by boat. Visitor numbers are very difficult to predict but are expected to remain relatively light. Within 5 to 10 years of enactment, 1,000 to 5,000 people are expected annually.

Nevertheless, the impacts of increased human use around archeologic sites could cause degradation of the sites' research value through trampling of the surface, increased erosion, or looting for souvenirs. To the extent that visitor use is small and controlled, and visitor education and the presence of uniformed personnel are effective, adverse impacts are expected to be light and relatively insignificant.

Opportunities for scientific research will be expanded and research expeditions will be encouraged. It is possible that archeologic knowledge of this area will expand more rapidly as a result of this proposal than it would otherwise. However, increased research activity will have an adverse impact, in that individual sites are significantly disturbed by excavation. Complete excavation of a site would eliminate any opportunity for future investigation and the possibility of improved methods. Issuance of research permits would be limited to recognized scientists. Thus, amateur or improper research and excavation techniques will be prohibited.

In general, the proposal would protect the cultural resources of the area from despoliation, which could occur if there were no monument. Also, the proposal would make these cultural resources available to the public. The resultant expected increase in public awareness of Eskimo cultures and history will have significant impact on the scientific and educational attention devoted to these cultural resources.

Overall, the proposal would have significant impacts on cultural resources through increased public contact with these resources and through the preservation of them.

G. IMPACT ON SUBSISTENCE USE

The primary land use at Cape Krusenstern today, as for millennia past, is subsistence hunting, fishing, and gathering by Eskimos of Kivalina, Noatak, and Kotzebue. The populations of these settlements are 188, 266, and 1,965, respectively, for a total of 2,053 persons who rely on subsistence as part of their livelihood. Subsistence uses are crucial to the survival of those families who engage in them as most do, because wage work is often difficult to find and is mostly limited to the summer season.

According to a recent NANA survey, hunting is mostly for caribou and marine mammals with some waterfowl and small mammals also taken. In 1972, 6,725 caribou were taken by the three villages; 513 for Kivalina; 1,212 for Noatak; and 5,000 for Kotzebue. This kill represents about a third of the total number of caribou killed for subsistence in northwest Alaska. An estimated 7,328,400 pounds of marine mammal products, an important source of food and clothing, were also produced.
The other major component of subsistence use is fishing. This is done mostly in the major rivers such as the Noatak and Wulik, and consists mostly of netting or trapping chum salmon and sea-run trout. Whitefish and sheefish are also taken and cod are taken by ice fishing in salt lagoons and just offshore. The total take of fish in 1972 was 409,148 pounds, with Kivalina taking 27 percent; Noatak 33 percent; and Kotzebue 40 percent. All figures are from a Northwest Alaska Native Association (NANA) survey (Chapter II and Appendix B).

Gathering of eggs, berries, and herbs is also important as a source of dietary supplement. In addition, the villagers trap for furbearers such as fox, lynx, wolverine, and wolf. Furs are then either sold or used. In general, trapping is not a major subsistence activity, but is done to supplement cash income.

While the above description of subsistence activity applies to the entire use range of these three villages, the proposed monument encompasses only a part of their range. The people of Kivalina generally stay north of the Mulgrave Hills in the northern portion of the proposal. Noatak villagers are known to use the entire proposal area over the period of a year. Kotzebue people probably also use the whole area.

The proposal area is crucial to the material and social well-being of these people. It is the seasonal source of foods and materials which are both needed and highly valued. If the resources of the Cape Krusenstern area were to become unavailable, there would be competition for resources among families, and possible depletion of some resources in limited areas outside the proposal. Yet despite the importance of this area, its occupation and use is not heavy. There are 52 Native allotment application sites. Few have structures on them. The area is used for fishing camps in summer and fall and for base camps from which to hunt marine mammals in the spring. The relative importance of trapping is much less in the Kotzebue area than in other parts of the State. It is still an important source of income for a few people, especially in the villages farthest inland. There is no record of the actual numbers of people engaged in trapping. It is probably less than 50. Very little, if any, trapping takes place in the proposal area. It is possible that some arctic and red fox are trapped there during the winter and late spring as an adjunct to marine mammal hunting expeditions. (The total is probably less than 10.) The potential for an increase in use of the proposal area does exist, and would occur should the caribou return to the area in large numbers, as they did in the early 1960's.

Despite the fact that the human population has been increasing in the villages, subsistence harvest levels appear to be remaining at relatively constant levels. This is due, in part, to out-migration of young adults, increasing reliance on wage jobs to supplement subsistence livelihood, and in some cases, abandonment of subsistence activities in favor of full-time wage earning occupations. There is a possibility that demand for resources could increase in the future, however. Cape Krusenstern National Monument, as one of five proposed Federal systems to be based in Kotzebue, could create new job openings for local residents thus providing additional sources of cash to supplement subsistence harvests.

By attracting more visitors to the region (approximately 15,000 additional annual visitors to Kotzebue within 5 to 10 years), and an estimated 5,000 visitors to the proposal area, the group of proposals could create conflicts between subsistence users and tourists and other recreational visitors. An influx of visitors to Kotzebue and the Cape Krusenstern area would cause disruption in community social life and subsistence activities. However, since the NPS does not envision a rapid increase in visitation to the proposal area itself, nor the establishment of any major visitor accommodations or services there in
the near future, and since the proposal provides for management of visitor uses to avoid conflict with subsistence activities, these impacts would be small for the first 5 to 10 years after enactment of the proposals. Modest increases in employment opportunities in the region could result in a decrease in the rate of out-migration. This could have the impact of offsetting a possible drop in the subsistence level by the addition of more potential subsistence users. The NPS policy regarding private inholdings would affect lands used for subsistence purposes only if there is a willing seller or if such lands are used for purposes which would threaten monument values. In the later instance, negotiations would be the first avenue of approach and condemnation would only occur with congressional approval. This would have a significant impact of future generations of subsistence users by assuring that such lands would continue to be available for subsistence.

Trapping for subsistence purposes—activity and sale of pelts which enables a local resident individual or family to continue to maintain a subsistence lifestyle—would be permitted.

Considerable controversy exists within the State over the subsistence question. (JFSLUPC, Feb., 1974) State hunting and trapping regulations do not distinguish between sport and subsistence harvest activities by Alaska residents, although distinction is recognized between subsistence and commercial fishing. Game harvest data maintained by the State does not distinguish between game taken by sportsmen and game taken for subsistence by local residents of an area.

The intent of this proposal is to honor the intent of ANCSA in regard to protection of subsistence resources and to further recognize and provide the opportunity for local residents to continue to pursue a lifestyle and a culture based dominantly on dependence on natural wildlife and plant resources for satisfying basic needs for food, material, shelter, fuel and for social, cultural and psychological well-being. No racial or ethnic distinctions among local residents will be made.

Cooperation in developing park policies toward subsistence will be sought with appropriate State agencies and representatives of Native corporations and all area residents. If, in the process of developing such policies and subsequent regulations, some individuals' resource harvest activities are determined to be sport hunting, or commercial trapping, those individuals would be adversely affected. They would be forced to hunt which would threaten monument values. In the later instance, negotiations would be the first avenue of approach and condemnation would only occur with congressional approval. This would have a significant impact of future generations of subsistence users by assuring that such lands would continue to be available for subsistence.
and trap on other lands in the area. While most local residents are engaged in a subsistence lifestyle, there are important numbers of residents, principally in Kotzebue, who do not depend dominantly on harvest of natural resources to satisfy essential food and shelter needs. For those who have abandoned a subsistence lifestyle, but who derive satisfaction from harvest activities, the impacts would be important. The magnitude of this impact could increase in the future.

The subsistence uses of the area do not conflict with the values that qualify the area for preservation, and are a logical continuation of the generations of activities that make the area important in human history.

Therefore those subsistence uses of renewable resources which are not prohibited by law 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 and necessary to provide opportunities for the survival of Alaskan cultures centering on a subsistence 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, with due consultation with the Alaska Department of Fish and Game, communities and affected individuals, shall have authority to restrict subsistence activities in all or part of the monument.

In the long run, protection accorded to wildlife habitat and populations, and to all subsistence resources, and the special recognition of traditional and existing subsistence lifestyle provided by this proposal would have a significant impact in maintaining future options for residents to continue to engage in a subsistence lifestyle.

H. IMPACT ON THE LOCAL MARKET ECONOMY

Kotzebue is the service, administrative, and commercial center of the region. It is a transitional community still dependent on subsistence use of natural resources, but with an increasingly prominent cash economy.

The combined effect of the three NPS proposals that would headquarter at Kotzebue--Cape Krusenstern National Monument, Chukchi-Imuruk National Reserve, and Kobuk Valley National Monument--would be to increase the availability of Federal employment. The overall seasonality of this employment is hard to predict. Maintenance and interpretive jobs would tend to be seasonal, while management jobs would be more permanent. To the extent that Natives were trained and qualified as managers, they could have available more permanent jobs than now exist. It must be noted, however, that the Park Service does not expect heavy increases in visitation nor substantial increases in staff positions within the first 5 to 10 years after the monument is established. Thus, the impact of this increase in job availability will be minor in the short run.

Cape Krusenstern National Monument, as one of the three NPS proposals that would be based out of Kotzebue, would constitute a modest stimulus to tourist-oriented services, with possibilities for increased opportunities for wage employment, at least on a seasonal basis. These impacts would certainly be small for the first 5 to 10 years after enactment of the proposals (section H.I.). Increased employment opportunities in the government sector and retail trades and services sector could result in a decrease in the rate of outmigration, with the possibility of offsetting a possible drop in the subsistence level by the addition of more part-time subsistence users. Gains in employment and payrolls in the government sector are expected to occur in the future as State and local governments expand programs and services in northwest Alaska. Most growth is
expected to occur at Kotzebue, with or without the establishment of the proposal.

1. RECREATION—TOURISM
Current tourist visitations to the Kotzebue area are roughly estimated at 15,000 annually. This is expected to grow as the numbers of out-of-state visitors in Alaska increase. Increased publicity about the area, attendant on the establishment of the three proposed areas mentioned in the previous section, could contribute to a higher rate of growth in tourism than would occur without the proposal. Within 5 to 10 years, it is anticipated that the proposal area would attract between 1,000 to 5,000 people annually. Visitor use figures are the product of our planners' best efforts, considering many variable factors including trends in outdoor recreation, increase in the population spanning the age group most commonly participating in wildlands-oriented activities, public awareness of the proposal, and transportation systems related to the pipeline construction and development in Arctic Alaska. Although no specific figures are available for tourist-oriented business and employment, it can be predicted that increased visitation will contribute to gradual increases in retail trade and service industries. Local residents may receive increased cash income from sales of arts and crafts. Native crafts and cultural heritage will be included as part of the interpretive scheme. This could provide direct income to those people who may wish to participate.

Most of the visitation to the monument itself would be on a day-use basis. It is likely that a visit to the proposed Cape Krusenstern National Monument would be combined with visits to other attractions that exist in the area.

If there is any recreational use of the proposal area at present, it is casual and unreported. With the low visitation expected in the area during the first 10 years of monument status, recreational patterns will change slowly. Recreation will probably be limited to sightseeing, hiking, and learning about present and past Native cultures. The impact of this proposal on recreation will be significant relative to the almost nonexistent levels at present. Yet the change in total numbers of visitors will probably remain small and take place gradually.

Increase in visitation to Kotzebue, due to the proximity of several Department of the Interior proposal areas, may increase the demand for overnight accommodations. Some temporary inconvenience to travelers and overcrowding could occur in the short-term. It is anticipated that a demand for more accommodations would be met by the private sector.

Overall, the impact of the proposed action on recreation and tourism in the area will be significant, especially when taken in conjunction with other proposals in the area. Yet the rate of impact will be slow and the full effect will only be felt in the long term, perhaps 10 or more years after establishment.

2. COMMERCIAL FISHING
Commercial fishing is becoming an increasingly important factor in the economy of the Kotzebue area. Since 1967, when the Kotzebue Sound Area Fisheries was established, income has increased steadily. In 1972, the total catch, 1,544,569 pounds of fish products, brought $262,287 in income to 202 licensed commercial fisheries. Thus, fishermen earned an average of $1,299 per man. (See Table III)

Fish processors at Kotzebue provide additional jobs related to the fish industry. The Park Service's proposal for Cape Krusenstern would have no foreseeable, direct or indirect effects on commercial fishing, and therefore its impact on this industry will be negligible.

3. SPORT HUNTING AND THE GUIDING INDUSTRY
Sport hunting does provide some residents of the
area with part-time employment. Four guides are registered in Kotzebue; and in the spring of 1972, 10 guide teams (1 guide, an assistant guide, plus 2 hunters) operated out of that town. Eighty-seven polar bears were taken that year providing a total potential income of $174,000 to $217,500 for persons involved in this activity. Sport hunting of polar bears is now prohibited.

The amount of sport hunting within the proposal area is unknown but is probably limited to one or two hunts, if any. The proposed action would prohibit sport hunting in the area. However, its impact on hunting in the region would probably be insignificant because of the lack of game within the proposal, relative to numbers of game elsewhere in the region.

4. MINING AND MINERAL ENTRY

There are no mining or mineral claims in the proposed monument. There is also no known potential in the area. There is a possibility that oil or gas potential exists just offshore to the west in the Chukchi Sea. Should petroleum be found within the offshore boundary of the proposal, its development could be affected by any potential cooperative management agreement between the Park Service and the State. This could have the impact of imposing regulations or restrictions on drilling within the boundary to protect water and scenic quality and marine life. Such an impact on oil potential can only be conjectural at this time since no definite agreement with the State presently exists and since the oil potential of this area is only speculative.

Subject to valid and existing rights, the proposed action would prohibit all mining and mineral entry within the monument boundaries. Since the proposed monument area contains no legally located and maintained mineral claims or oil and gas leases or applications, the effect of the mining and mineral entry prohibition would be total. All of the consequences of mining in this area would be precluded.

Since no mineral production currently takes place, no impact on the present day economy of the area will take place. The nature and size of future impacts depends upon several factors of which little is known at this time; the mineral potential, world market conditions, size and quality of deposits, the nature of the State and local economy, available modes of transportation, and other factors. Until these factors can be better identified and accurate assessment of NPS impacts on future mining development cannot be made. To the extent unknown exploitable resources are present, the impacts of the proposal are significant.

5. TRANSPORTATION

Transportation into the proposal area is, for all practical purposes, limited to air travel, on commercial flights (which carried 11,100 people into the area in 1972) and by private aircraft. To the extent that the proposed monument attracts increased visitation to the area, it will create increases in the demand for transportation into Kotzebue. This could lead to an increase in the number of capacity of flights into the town's airport. It would thereby have the indirect impact of increasing the availability of transportation to the region.

If increased demand were met only by additional tour charters, the impact on local residents' transportation service needs would be minimal.

Within the Kotzebue region itself, Park Service initiation of float or wheel plane trips to the cape will add a new factor to the transportation scheme in the area. Presently, travel is only by charter aircraft, by private boat, or by snowmobile in winter. These flights would be seasonal, however, and would probably not be very frequent during the first few years after establishment of the monument.
A proposed "Transportation and Utility Corridor," presented before the Joint Federal-State Land Use Planning Commission in July of 1973, by the Alaska Department of Highways, is routed through the eastern edge and northern half of this proposal. (See the Access and Circulation Map) The modality of this corridor has not yet been determined. Since the routes proposed are only in the reconnaissance stage, further environmental impact analysis of long range transportation needs would be conjectural.

There are several Department of the Interior proposals in the area which certainly will affect planning for eventual transportation facilities and corridor locations. The BLM and the Fish and Wildlife Service, in their Noatak National Arctic Range Proposal, have proposed to Congress a twenty year moratorium on development, including surface transportation, to allow for study, with full consideration to local residents and eventual transportation needs.

The NPS would oppose construction of a road, pipeline or railway through a park or monument. NPS opposition, in the event of the establishment of a monument, would not necessarily preclude the development of a transportation route within the boundaries of the monument. Congress has established procedures for handling such development. These procedures are included in the Department of Transportation Act of 1970, the Historic Preservation Act of 1966 and the National Environmental Policy Act of 1969.

The impact of the Cape Krusenstern National Monument upon transportation development in northwest Alaska would be minimal. The significance of the impact of all Department of the Interior proposals in the region, considered in aggregation could be significant, depending upon how far and how often a corridor must deviate from optimal routing to protect nationally significant resources. However, the Cape Krusenstern National Monument would have no affect on east-west corridor development. Its impacts would not pertain to a discussion of aggregate impacts on this corridor. Discussion of these aggregate impacts can be found in the Kobuk National Monument document and in the Gates of the Arctic National Park document.

A winter haul trail between Kotzebue and Kivalina receives moderate snowmobile use, with enough compaction to have caused a minor scar visible in summer. This proposal would not affect present use patterns, including the use of snowmobiles. It would preclude possible future all-terrain-vehicle use, on or along the route. Overall, the impact of the proposed action on transportation to and within the Kotzebue region would be minor.

A small wooden tower with blinking lights is located on the cape. It is an official Coast Guard aid to navigation and will not be removed. Access for maintenance of the tower is assured to the Coast Guard.

6. HYDROELECTRIC POTENTIALS
A hydroelectric project, the Agashashok on the lower Noatak River, is inactive but considered promising by the Alaska Power Administration. The Joint Federal-State Planning Commission considered this project and recommended against it.

Tentative plans for the project call for an earthen dike, which would result in the flooding of approximately 6,000 acres in township 23 N., range 22 W. inside the proposed monument (Section II. Hydrology) Flooding of lands within the proposed monument would normally be precluded by monument status.

Impact on the hydroelectric project would be to force an adjustment in the plans for the project;
either to lower the water level or to build a
restraining dam that would prevent flooding in the
monument.

The proposed monument may have relatively
minor impacts on the Noatak hydroelectric
potential, but the proposal for the Noatak
National Arctic Range in conjunction with the
Cape Krusenstern proposal could have significant
impacts on future consideration of the project.
Loss of the use of this site entirely would have
impacts on economic development of the area.
The Alaska Power Administration states:

The proposed monument may have relatively
minor impacts on the Noatak hydroelectric
potential, but the proposal for the Noatak
National Arctic Range in conjunction with the
Cape Krusenstern proposal could have significant
impacts on future consideration of the project.
Loss of the use of this site entirely would have
impacts on economic development of the area.
The Alaska Power Administration states:

The potential hydroelectric development on the
Noatak could have only minimal impacts on the
proposed monument and would not involve area
of archeological concern within the proposed
monument.

The building of the dam would probably provide
short-term jobs for people in the area and the dam
itself would provide a long-term, low-cost source
of energy. Currently, the production of electric
power is from fossil fuels. The reservoir created
by the hydroelectric development would flood
many sites within the Cape Krusenstern National
Historic Landmark, as well as two villages, Noatak
and Nauyoaruk. The Cape Krusenstern National
Historic Landmark's boundary coincides with the
boundary of alternative "C" of this proposal.

I. IMPACT ON LOCAL SOCIETY
AND CULTURE

Village life for Natives is presently in a state of
flux. Continuing reliance on subsistence activities
and harvests supplemented increasingly with wage
employment and income. Subsistence activities,
linked as they have now become to the cash
economy could be moderately strengthened by
additional cash income in the region. Manufactured items used in subsistence pursuits
have already altered the patterns of subsistence
activities. Additional cash income stemming
directly and indirectly from implementation of the
proposal would contribute modestly to additional
adjustments in subsistence activities and the social
patterns tied to them.

Increases in available wage employment could
discourage some young adults from leaving the
area, thus reducing the disruptive effects of a
consistent outmigration of the young.

Some new business opportunities would be
introduced, but on the basis of experience of other
small non-western groups this does not always
bring prosperity. Alternately, hostility to
outsiders could be heightened by increased
tourism (Smith, 1966). Tourism for sightseeing,
outdoor recreation and sport is expected to grow
with or without the establishment of the proposal
area, but the proposal would give added impetus
to it.

In view of the difficulty in distinguishing between
subsistence and sport hunting and subsistence and
commercial trapping which this proposal calls for,
enactment of the proposal could have socially
devisive effects. For residents whose harvest
activities would be considered "sport" and thus
not allowed, the proposal could have important
adverse impacts in denying them the important
psychological support which participation with
family and friends provides, so far as such
activities would occur on proposed monument
lands.

The proposal's provisions for potentially
precluding development of surface transportation
routes through the proposal area, if actualized,
would contribute in some measure, to limiting the
acculturative pressures which can flow from an
increasing influx of "outsiders" into the area along
a highway. Other modes of transportation, such
as air and water services would have to be used
to meet any increase in visitor demand, modes which allow for greater control of visitor movements and the adverse visitor impacts on local cultural and social patterns and community cohesion. This would be especially significant if surface routes proposed, linking northwest Alaskan villages to the interior highway network, were to be precluded.

Provisions to develop visitor management policies and monument carrying capacity in cooperation with local village governments and corporations would seek to minimize adverse impacts of increased visitation on local residents.

The NPS plans to use the archeological potential of Cape Krusenstern to interpret not only the history of past Eskimo cultures, but also the character of their recent culture. One can be investigated, preserved, and interpreted along with the other. It is intended to make programs and studies on Eskimo cultures available to the local schools so that Eskimo children may develop a better sense of their own cultural heritage. Conceivably this could have a significant impact on the loss of the old ways of life; if not to maintain their practice, then at least to increase appreciation of them among the young.
IV. MITIGATING MEASURES INCLUDED IN THE PROPOSED ACTION

The proposed conceptual master plan affirms that present knowledge is insufficient to advance detailed plans for action. Accordingly, most actions are set forth as proposals to study the environment. Before specific recommendations are made for developments, these studies will consider the needs of management and the public. They will be designed to help determine the most feasible and advisable means of meeting certain needs while preserving the resources.

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 of 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.

A program will be developed to continually monitor the affects on cultural or natural resources arising from visitor use patterns, location of temporary facilities, or other activities. Alternatives will be developed to avoid or mitigate any adverse effects and to determine an optimum carrying capacity for the monument. If it is determined that the monument is in danger of being overused and damaged, use of the monument will be limited to the carrying capacity.

Before any action is taken that would disturb the ground surface or otherwise affect cultural resources, the area involved will be examined by an archeologist to locate, identify, and evaluate any cultural resources existing therein. No action will be undertaken that would adversely affect any cultural resources unless the action is necessary, there is no feasible alternative, and measures have been taken, such as salvage excavation, to mitigate the effect to the extent possible. This measure will be applied to National Park Service activity in Kotzebue as well as within the monument.

No Federal action that might affect cultural 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.

The National Park Service will require that professionals in the disciplines contributing to historic preservation be involved in decisions affecting cultural resources. It will further be required that no structure older than 50 years shall be altered or destroyed without the permission of the National Park Service, which will base its decision on a full analysis of the historic, archeological, and architectural values of the structure in question. The term "structure" as defined by NPS would include most of the cultural resources in the proposal area.

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 park facilities and operations will be as compatible as possible with the community and its needs.
Cooperation will be pursued to resolve any problems of incompatible or conflicting uses that may arise to adversely affect preservation in the monument or activities conducted by others on lands outside the monument.

Visitors will be briefed on the dangers that inappropriate activities such as vandalism or littering pose for the resources. Uniformed personnel will be present to further insure against destruction or damage.
V. ADVERSE EFFECTS THAT CANNOT BE AVOIDED SHOULD THE PROPOSAL BE IMPLEMENTED

Increased visitation will bring with it increases in many kinds of pollution (visual, aural, etc.). These increases can only be partially offset by mitigating measures. Research operations and the construction of visitor facilities both inside and outside the monument will affect to some degree terrain, vegetative, and archeological values. Construction and occupation of NPS facilities and housing in Kotzebue, and introduction of new families, and the encouragement of tourism may be viewed by some residents as disruptive of community patterns. There will be an additional burden on utilities, the school system, and medical facilities.

The lifestyle 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 that will be restricted, such as sport hunting, trapping for other than subsistence purposes, mineral and petroleum development and the use of motorized vehicles, will affect an undetermined number of individuals in the future. Access routes across monument lands to private inholdings, such as Native allotment claims, will have to be negotiated with the National Park Service. This could have adverse effects on the landowners if restrictions cause greater expenditures of time and cause them inconvenience in reaching their holdings.

The State proposes a surface transportation and utility corridor that passes through a portion of the monument proposal area. If the monument is authorized, it is possible that the State would be required to consider alternative routes for the corridor. This could result in increased economic costs to the State or potential users of the corridor, or products which might move to market along it.
VI. THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USE OF ENVIRONMENT AND MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

A. BIOLOGICAL PRODUCTIVITY

1. Establishment of Cape Krusenstern National Monument would promote continuation of natural biological productivity of the included lands and waters. It would preclude human manipulation of resources that possibly could increase, at least in the short term, the biological productivity of the area. Lack of data prohibits reliable predictions as to which course of action would provide for the greatest long-term biological production, but it is considered probable that existing ecosystems can be retained reasonably intact and productive without retrogression.

2. Biologically, the area could act as a reservoir for indigenous wildlife that will move out of the area into land adjacent to the park, if conditions permit. This will provide better regional hunting and trapping over the long term.

3. Under park administration the area would serve as a control for experiments and uses on similar lands and waters outside the park. This could contribute to a better scientific understanding of biological processes, which would allow man to better manage biological productivity of such lands and waters over the long term.

B. ECONOMIC PRODUCTIVITY

1. It is possible that there would be a short-term decrease in economic gain by local communities if the proposal were enacted. Incomes from hunting and guiding would be decreased slightly by the deletion of lands that can now be used for those purposes.

2. Long-term economic gains probably will result as tourism increases in the area. These gains will include some of short term (e.g., during construction of facilities) but will be largely long term through provision of services (meals, lodging, guiding, etc.) and some goods for the visiting public. This could result in some change of economic base from the present resource harvest base to a more diversified base that will include many of the previously included activities plus new ones generated by increased tourism.

3. In the case of Cape Krusenstern, it is open to question that the area may possess any mineral resources of economic value. However, if any resources are discovered in the future, 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 if man's future needs so dictate. If other technologies bring about a lack of need for these resources, postponement of extraction now will allow perpetuation of natural values on these lands. In general, the short range impact of any mineral extraction that might be precluded is considered small.

Economic productivity which might result from adoption of the proposal could be insignificant compared to economic production which could be generated by mineral or other development in the area if the proposal were not adopted.

C. GENERAL

1. The Cape Krusenstern area contains cultural resources that are of international significance, that can further our knowledge of the history of man, and that can provide inspiration and enjoyment to this and future generations of people. Those resources will be protected and made available over the long term to maximize our knowledge of man and his history.
2. The establishment of the monument can provide the opportunity for short-term, nonconsumptive uses that will be possible for generations. At the same time, by assuring the preservation of the area in an unaltered form, it guarantees the maintenance of long-term productivity of the natural environment and the preservation of the elements of an ancient culture. It also assures the continued maintenance of biological productivity, and any economic productivity that might be identified with the monument for as long as the monument exists.
This proposal involves little construction or development, and it continues present uses, while restricting them to assure minimal environmental disturbance. As a result, implementation will bring about only insignificant irreversible or irretrievable commitments of resources. For example, small land spaces in Kotzebue may, for practical purposes, be almost irreversibly committed to the development of NPS facilities and housing. Some cultural remains may be disturbed or removed as the result of research activities and these effects would be irreversible.

Since any resource precluded from development by the present action may at a later date be committed by Congress to development, there are generally no significant irreversible or irretrievable commitments of resources, with the following exceptions.

The passage of time will lead to irretrievable commitments of resources. The major commitment will be of human resources, since the lifestyles of some people may be changed. All renewable resources that complete a natural life cycle without having been harvested by man will become irretrievable. Nonrenewable resources that are eroded away or chemically altered with time will also be lost. Opportunities for given individuals to recover nonrenewable resources—and opportunities for economic gain—will be irretrievable for those individuals so long as this proposal remains in effect. However, the nonrenewable resource itself will remain retrievable so long as it remains in place and untouched and so long as the technology required to extract it is not lost.
Alternatives to the proposed Cape Krusenstern National Monument are as follows:

A. NO ACTION

This alternative would provide for the future management of the Cape Krusenstern area without National Park System status.

The considerations of this alternative are applicable if the proposed Cape Krusenstern National Monument is not recommended for inclusion in the National Park System.

Upon statutory expiration of the d-2 withdrawals now in effect, automatic reversion to d-1 will occur. Under this classification, these lands will receive the same protection as under d-2; that is, the lands would be closed to appropriation under the public land laws, the mining and mineral leasing laws.

However, it is assumed that ultimately no action on the proposal is most likely to lead to some type of public multiple-use management for these lands. Yet in addition, there is a slight possibility that no action could lead to open public domain. These two alternatives, multiple use and open public domain follow.

1. MULTIPLE USE MANAGEMENT

"Multiple Use" is defined in the Multiple Use-Sustained Yield Act of 1960 as follows:

"(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 to 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."

It should be noted that this definition is for the purposes of the act as applied to the U.S. Forest Service. Also, it applies only to surface, renewable resource utilization. Other resource uses under multiple use can occur, such as development of subsurface, non-renewable resources or the construction of such things as buildings, roads, pipelines, and dams.

The proposal area has few major developable resources. Mining potential and petroleum are low, although the area lies on the periphery of the Kotzebue-Selawik-Chukchi Sea sedimentary basin. (See letter, Chapter IX, Alaska Oil and Gas Association.) As such, the area may be useful for petroleum exploratory work even though the oil potential in the area itself is limited.

There is some hydropower potential to the east of the proposed monument, as discussed in Chapter II. The reservoir from this dam would flood approximately 6,000 acres of the proposal area; this could be permitted under multiple use.

Plans exist for the construction of transportation and utility corridors through the proposed monument.

Under multiple use, sport hunting and sport and commercial trapping may be allowed, although few land mammals occur within the proposal area.
suitable for these purposes. Caribou sometimes migrate through the area.

There is a possibility under multiple use management that reindeer or muskoxen may be introduced for commercial herding.

IMPACTS:
Transportation exploratory work may provide some short-term employment and economic benefit to the area. This work could lead to surface vegetation damage and exposure of permafrost. Significant mineral or petroleum discoveries are unlikely.

Construction of a dam to the east of the area would probably provide inexpensive hydropower to the area. This dam could flood 6,000 acres of an area of potential archeological significance.

The construction of roads through the area could provide short-term employment for area residents. The road would probably have significant impacts on the subsistence lifestyle, by increasing the significance of the cash economy on the area. A road would also disrupt surface vegetation and, under non-federal management, could expose permafrost along its corridor. Road construction could disturb archeological resources, although under federal multiple use management archeological resources would receive protection. However, under multiple use management, the area would not have available to it the extensive research and curatorial resources which would be applied if the NPS managed the area for primary historical/archeological purposes.

This is not a prime hunting or trapping area; it is unlikely that hunting pressure would have significant impacts upon game populations. Hunting pressure may lead to some conflict with subsistence harvest of land mammals.

Reindeer or muskoxen herding could result in some economic benefits to those engaged in this activity. This herding would appear to have little impact on caribou habitat. In the past, however, before reindeer herding permits were withdrawn by the BLM, reindeer tended to run off with caribou herds.

Generally, under multiple use management cultural resources would be protected, but probably secondarily to the development of the economic potential of the area. The Cape Krusenstern area, in addition to development potential, would continue to be an important subsistence hunting and fishing area, and would also receive some sport hunting and trapping use. The lands of the area would be available for temporary facilities in support of these activities. Sport hunting, trapping, and attendant shelters or cabins could have minor impact upon the arctic caribou which intermittently migrate through the area. Localized impact upon the vegetation, particularly upon the coastal tundra, would result in proportion to the number of facilities constructed in support of hunting and trapping and the extent of the use of these facilities. The primary impact of sport hunting and trapping and the construction and use of shelters and cabins would be on the primitive state or wilderness character of the area. Under multiple use, these effects are seen as long range, as the area now is isolated and primitive with activities limited to summer subsistence hunting and fishing along its large lagoons and miles of shoreline.

2. OPEN PUBLIC DOMAIN
Open public domain is seen as an unlikely management alternative. With open public domain, land is open to entry under various settlement laws such as homesteads, trade and manufacturing sites, homesites, and headquarters sites.

The area would be open to mining location and mineral leasing with only limited opportunity to
control development activity and the impacts on other resources.

IMPACTS
Management under these conditions could result in unrestricted economic growth, to the extent that the minimal economic resources would permit. Little management control can be exercised over developments, generally resulting in loss of key access sites such as shores and other desirable locations. Wildlife habitat alteration and/or destruction may result; some vegetation disturbance is inevitable. Traditional subsistence uses would probably receive much greater adverse impacts than under multiple use management. Although open public domain would probably be managed by the BLM, that agency would have considerably less opportunity to protect archeological resources as it would under multiple use management. Although open public domain would probably be managed by the BLM, that agency would have considerably less opportunity to protect archeological resources as it would under multiple use management. Therefore, it is extremely likely that, although many archeological resources would receive protection, some would be damaged or lost, perhaps irretrievably.

B. ALTERNATIVE MANAGEMENT SYSTEMS

1. ADDITION TO OTHER PROPOSED UNITS OF THE NATIONAL PARK SYSTEM
One alternative to the proposed action is to designate the areas as a detached unit of the proposed Kobuk Valley National Monument, the central part of which lies 96 miles east-northeast of the city of Kotzebue.

IMPACTS
Such a proposal would have very little impact on the management of the separated areas. The effects would be about the same as the combined effects discussed in Section III of this statement and the environmental statement for the proposed Kobuk Valley National Monument. (This impact is discussed fully in the Final Environmental Statement for the proposed Kobuk Valley National Monument, Department of the Interior, 1974.) Each unit would be managed from a general office that would not only serve these two separate units but would also serve several other Federal areas. This alternative would eliminate the work and effort associated with the administration of two individual areas of the National Park System, rather than only one. The major impact associated with this alternative would be an overall deemphasis of the cultural values within the Cape Krusenstern area.

2. ADDITION TO PROPOSED UNIT OF THE NATIONAL WILDLIFE REFUGE SYSTEM
An alternative to the proposed action is to designate the area as a unit of the proposed Selawik National Wildlife Refuge. This alternative has been proposed by the Fish and Wildlife Service. It is discussed in detail in the alternatives section of the environmental statement for the proposed Selawik National Wildlife Refuge.

IMPACTS
As a result of this alternative, the area would be managed under multiple-use principles such as discussed in the no action alternative. Under this option, wildlife values would receive more emphasis than would cultural values. Specific impacts resulting from the addition of this area to the National Wildlife Refuge System are discussed in the alternatives section of the draft environmental statement for the proposed Selawik National Wildlife Refuge, Department of the Interior, 1973.

3. COOPERATIVELY ADMINISTERED PARK
This alternative would establish a Cape Krusenstern park to be owned and operated by the State or a Native group, with personnel,
technical, and financial assistance from the National Park Service.

IMPACTS
The overall impact associated with this proposal is the deemphasis of the conventional role of the National Park Service in administering an area with cultural resources of national significance. The effects of this alternative on subsistence, mining, and potential settlement would be about the same as those discussed in Chapter III of this statement. It would benefit Native people, because it would provide the opportunity for the Native corporation to adapt traditional land and wildlife conservation values and practices to contemporary land management needs. The impacts associated with the operation of this type of park would depend on the number of personnel and the funds made available for management by the cooperating agencies.

4. DOMINANT USE--RESEARCH
A variation of the cooperatively administered park alternative would be a proposal to preserve the resources of the Cape Krusenstern area through the establishment of a scientific reserve. Under this alternative, scientific and cultural research would be dominant uses. The National Park Service would have no direct involvement in the operation and management of the reserve. This would entail ownership and operation of the area by State or Native authorities, with the Federal Government providing financial assistance.

Dominant use implies that for a large area of land, one resource use will be more or less productive of public benefits on a higher priority scale than all other uses even if combined. The dominant or primary use is identified and management policies directed to maximizing its attainment. Other uses are usually permitted only to the extent that there are no major conflicts with primary use.

IMPACTS
This alternative would result in the Krusenstern area being preserved for scientific and cultural research rather than for recreational purposes. The effects on preservation of resources, opportunities for scientific research, subsistence, mining, and homesteading would be about the same as those discussed in Chapter III of this environmental statement. However, the impacts on the public would be different in that the area would not be routinely open to the public as it would if a park. Visitor movement and activities would be more restricted under this type of dominant use management. Not only would the visitor be affected by this restriction but the impacts on the park due to public use would less likely occur.

5. WILDERNESS DESIGNATION
It is proposed in Chapter I of this environmental statement that NPS study the area for wilderness designation and make a wilderness recommendation to Congress within 3 years after establishment of the area. One alternative to this would be to include 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.

IMPACTS
This alternative would change the status of approximately 300,000 acres of public domain lands to National Wilderness Preservation System. The major effect of this action would be the preservation and protection of 300,000 acres of arctic tundra and shoreline, rich in archeological resources.

Natural forces of selection and evolution would continue to operate with minimum influence by man, thus protecting the primeval condition and characteristics of the area.

Such designation would result in less flexibility in future management. Wilderness designation could increase costs to management under some circumstances. The restrictions placed on mechanized vehicles and equipment by the Wilderness Act, for example, could increase the cost of trail maintenance and the maintenance of shelters and camping spots. The cost of archeological expeditions in wilderness areas could also be increased.

The landing of aircraft and use of snowmobiles, if allowed, would likely have adverse effects on wildlife and the wilderness setting.

There are no known economic mineral or timber resources within this area. Adverse impacts could result if large quantities of commercial valuable minerals were discovered. Wilderness designation could preclude development of mineral resources. This could deny benefits to the State and local economy.

The coastal area of Cape Krusenstern is important for subsistence hunting and fishing. This alternative could have only minor impacts on these activities. These impacts would be caused by restrictions on the use of mechanized vehicles.

C. ALTERNATIVE BOUNDARIES

1. ALTERNATIVE A--DELETION OF TAHHICHOOK MOUNTAINS SECTOR
This alternative would establish a national monument about one-third smaller than the proposal. The approximately 135,000-acre deletion contains uplands that probably were a visual landmark at the time of the existence of the Bering Land Bridge. It is considered to have high potential for discovery of archeological sites dating from the earliest periods of man’s occupation of Alaska. A State-proposed surface transportation and utility corridor passes through the area.

IMPACTS
In general, impacts of this alternative would be about the same as for the proposal, but would be less intense by a factor of about one-third. For example, the effects of prohibiting sport hunting and the attendant impacts of wildlife would be reduced by about one-third. Also under this alternative, all of the impacts associated with the proposed Kotlik development site would not occur.

Physiographic and biotic diversity would not be significantly reduced by exclusion of localized butte and knob topography, the diverse vegetative communities of the Rabbit Creek Basin, and possible muskoxen range.

If this alternative is accepted it is possible that the proposed State transportation and utility corridor would be developed through the area.
included a public road it would provide a major avenue of access to those areas excluded by this alternative from the monument. Visitation to and through these lands further north along such a route might be greater in this alternative than if the original proposal were enacted. This could result in significantly more impacts on the natural and social environment from visitor use and development of the area than would occur with the proposal.

2. ALTERNATIVE B—ADDITION OF 126,500 ACRES

The area added includes a historic Eskimo village site, a potential monument access route from the Noatak River, and the upper water sheds of the Situkuyok River, Rabbit Creek, Jade Creek and others draining the Mulgrave Hills and the Alutunitok Hills.

IMPACTS

Impacts of this alternative would be the same as those related to the proposal (Chapter III), with the major exception that 115,000 acres of land presently available for Native selection and 11,500 acres of d-1 land would be included in the monument.

Also, it is possible that there would be increased access from the Noatak River, but it is doubtful that the increase would be significant.

3. ALTERNATIVE C—ADDITION OF AREAS RECOMMENDED FOR NATIONAL HISTORIC LANDMARK DESIGNATION

This alternative would establish 2.3 million acres of land and water as Cape Krusenstern National Monument. The area encompassed by the alternative would be the same as that area designated as a national historic landmark.

The area added under the alternative includes the Igiglogruk Mountain area, a large portion of both the Mulgrave and Tguhuk Hills, a section of the lower Noatak River, the Noatak Delta-Sheshalik Spit area, and the Kivalina-Imikruk Lagoon area. The area as a whole has high potential for archeological discoveries. Fossil shorelines throughout the area may provide new information on early coastal populations. Slopes and hillsides in certain portions represent that would have been good hunting areas during the Pleistocene period and after, and have further potential for expanding the knowledge of the early presence of man in the Americas. Archeological evidence on the Sheshalik Spit, while not equal to the array at Cape Krusenstern, nonetheless presents evidence of several hundred years of occupation that may provide important information. The delta area is the gateway to the Noatak River, an important historic and prehistoric avenue between the coast and the interior. There is at the present time no example of a major river delta in the National Park System. The Iguhuk Hills are integrally connected to the Palisades and have the potential for providing new evidences of early human occupation, perhaps comparable to the Palisades discoveries. The Noatak River valley includes a great number of identified archeological sites and probably many more that have not yet been identified.

Significant wildlife values include the Noatak Delta and Noatak Flats, some of the densest whistling swan nesting grounds in Alaska. It also includes the outstanding arctic char and grayling habitat of the Wulik River (an attractive float-stream), and chum salmon habitat of the lower Noatak River, as well as its scenic lower canyon. The complete muskoxen range in the Mulgrave Hills would be contained.
The village of Noatak would come within the monument in this alternative, as well as potential dam and reservoir site identified by the Alaska Power Administration. The proposed State Transportation and Utility Corridor runs through the area. Mineral and timber potential in the added areas is low. The area included under this alternative includes d-2, Noatak and Kivalina Village withdrawal, village deficiency, and unreserved public lands.

IMPACTS
Some examples of impacts under this alternative are: Greater potential for protection, interpretation and excavation of archeological sites known (and suspected) in the Noatak Valley. Areas under NPS control would have no sport hunting and this alternative would bring significant moose habitat, all of the local muskoxen range, additional Dall sheep habitat and significant caribou wintering areas within NPS boundaries. Impacts related to prevention of sport hunting would thus be much more significant than under the original proposal. Impacts related to assured continuance of subsistence would be many times greater than those under the proposal if this alternative were chosen. In view of the low potential of the area for homesteading, mining and mineral entry, timber harvest, etc., the impacts of this alternative on the economy of the area would be minor. Other impacts would be similar in kind but larger in magnitude than those associated with the original proposal. (Chapter III)
A. CONSULTATION AND COORDINATION IN THE DEVELOPMENT OF THE PROPOSAL AND IN THE PREPARATION OF THE DRAFT ENVIRONMENTAL STATEMENT

Numerous agencies, groups, and individuals were contacted during the study that preceded the formulation of the proposal and during the preparation of the draft environmental statement. Individuals throughout Alaska and elsewhere, including Natives, provided data or leads to information, and several agencies provided comments in review of preliminary drafts of portions of the statement. The proposal plan as presented in the DES was not reviewed by participating groups before the statement was made public, but the draft statement has been circulated for public review and every effort made to coordinate and cooperate in further development of the planning. The Joint Federal-State Land Use Planning Commission held a series of public hearings throughout the State of Alaska and the lower 48 States during the months of May and June 1973. The purpose of the hearings was to seek public input to the decision making process regarding the uses to be allowed on the National Interest Lands withdrawn by the Secretary of the Interior in September 1972. Hearings were held in numerous villages and cities, including Kotzebue, Fairbanks, Anchorage, Seattle, San Francisco, Denver, and Washington, D.C. Representatives from the National Park Service attended all of these hearings and utilized the information and thoughts expressed to assist in the planning process.

Individuals from the following organizations were contacted during or before the preparation of the draft environmental impact statement or provided information or comments:

FEDERAL:
- Department of Agriculture
- U.S. Forest Service
- U.S. Soil Conservation Service
- Department of Commerce
  - National Oceanic and Atmospheric Administration
- National Marine Fisheries Service
- Department of the Interior
  - Fish and Wildlife Service
  - Bureau of Mines
  - Bureau of Indian Affairs
  - Bureau of Land Management
  - Geological Survey
  - Alaska Power Administration
  - Bureau of Outdoor Recreation
- Department of Transportation
  - Federal Aviation Administration
- Alaska Railroad
- Federal Highway Administration
- U.S. Coast Guard
- Department of Defense
  - Alaska Command
  - Corps of Engineers
  - Department of the Navy
- Northwest Alaska Native Association
- Kotzebue City Government
- Resource Planning Team–Federal-State Land Use Planning Commission
- Office of Alaska State Historic Preservation
  - Officer
  - Advisory Council on Historic Preservation
- University of Alaska
  - Department of Anthropology
- Alaska Airlines
- Wien Consolidated Airlines
B. COORDINATION IN THE REVIEW OF THE DRAFT ENVIRONMENTAL STATEMENT

The following agencies and organizations were asked to comment on the draft environmental statement. Those which commented are marked with an asterisk.

FEDERAL

Department of the Interior
  Fish and Wildlife Service
  *Bureau of Mines
  *Bureau of Indian Affairs
  *Bureau of Land Management
  *Geological Survey
  *Alaska Power Administration
  Bureau of Outdoor Recreation
Department of Transportation
  *Federal Aviation Administration
  *Alaska Railroad
  *Federal Highway Administration
  *U.S. Coast Guard
Department of Defense
  *Alaska Command
  *Corps of Engineers
  Department of the Navy
Department of Agriculture
  *Forest Service
  *Soil Conservation Service
  *Department of Commerce
    Office of Minority Business Enterprise
    National Oceanic and Atmospheric Administration
  *Environmental Protection Agency
  Advisory Council on Historic Preservation
  *General Services Administration
  National Science Foundation
  Smithsonian Institution

STATE:
  *State of Alaska, Office of the Governor (State Clearinghouse)
  Alaska State Historic Preservation Officer

LOCAL AGENCIES:
  City of Kotzebue
  Noatak Village Council
  Kivalina Village Council

OTHER AGENCIES:
  *Joint Federal-State Land Use Planning Commission for Alaska

NATIVE ORGANIZATIONS:
  *NANA Regional Corporation, Inc.
  Mauneluk, Inc.
  Kotzebue Native Village Corporation
  Noatak Native Village Corporation
  Kivalina Native Village Corporation
  Alaska Federation of Natives
  Alaska Native Foundation

OTHER ORGANIZATIONS:
  *Sierra Club
  *Friends of the Earth
  *The Wilderness Society
  National Parks and Conservation Association
  *National Wildlife Federation
  Alaska Historical Commission
  Alaska Historical Society
  National Trust for Historic Preservation
  Department of Anthropology, University of Alaska
  Heffenreffer Museum, Brown University
  Department of Anthropology, University of Pennsylvania
  Arctic Institute of North America
  *Alaska Conservation Society
  Alaska Wilderness Council
  Alaska Professional Hunters Association
C. CONSIDERATION OF THE PUBLIC REVIEW IN PREPARATION OF THE FINAL ENVIRONMENTAL STATEMENT

The draft environmental statement was available for review from December 18, 1973, to July 22, 1974. A total of 203 letters were received on the draft environmental statement. Comments were received from 20 Federal agencies, 1 State agency, 3 other government agencies, 2 Native corporations, 29 organizations, and 148 individuals. Some agencies and individuals submitted more than one letter, and some letters were signed by more than one author. All letters were analyzed, and 61 are printed. These include all agency and Native corporation letters, 25 of the organization letters and 10 individual letters.

The 4 letters from organizations not printed contained comments identical in content to those in the letter from The Wilderness Society, which has been printed and responded to, to represent the other 4 letters.

Of the 148 letters from individuals, 118 commented on the adequacy of the statement. Of these, 111 letters contained comments identical in content. The letter submitted by Mr. Billy C. Wallace has been printed and responded to to represent the other 110 letters not printed. In addition, 30 letters were received which responded to the environmental statement review as a means of registering support or objection to the proposal. Letters submitted by Mr. Steve L. Marquess and Mr. John A. Pierog have been printed to represent the other 28 letters not printed which indicate those positions.

The draft statement was circulated for review of the accuracy of the information it contained and the adequacy of the environmental analysis. 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 to individual wishing to express a position on the proposal.

A total of 43 letters contained comments which raised questions requiring a written response. Both the comments and responses 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 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 of Alaska, other government agencies, Native corporations, and organizations.

INDEX OF LETTERS RECEIVED, EXCEPT FOR LETTERS FROM 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 Mines
Bureau of Reclamation
Geological Survey

Department of Transportation
Federal Aviation Administration
Federal Highway Administration
Federal Railroad Administration
U.S. Coast Guard

Environmental Protection Agency (2)

General Services Administration

STATE AGENCIES
State of Alaska

OTHER GOVERNMENTAL AGENCIES
Federal-State Land Use Planning Commission
Fairbanks North Star Borough (2)

NATIVE CORPORATIONS AND ASSOCIATIONS
Doyon, Ltd.
NANA

ORGANIZATIONS

Alaska Conservation Society--Tanana-Yukon Chapter
Alaska Geological Society
Alaska Methodist University, W. B. Workman
Alaska Oil and Gas Association
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 Co., U.S.A.
Fairbanks Environmental Center
Friends of the Earth
Friends of the Earth--Arizona Chapter
International Pacific Halibut Commission
International Pacific Salmon Fisheries Commission
National Association of Counties
National Society of Professional Engineers
National Wildlife Federation
Nature Conservancy
Northwestern University--Public Lands Project
Saguaro Ecology Club
Sierra Club
Society of American Foresters
Alaska Chapter
Juneau Chapter
Sitka Chapter
University of Alaska
Institute of Social, Economic and Governmental Research
Institute of Arctic Biology
Western Wilderness Association
The Wilderness Society
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.
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
CAFE KRUSENSTERN NATIONAL MONUMENT PROPOSAL
(DES 73-87)

Specific Comments


"The primary land use of Cape Krusenstern today, as for
millenia past, is subsistence hunting, fishing, and
gathering by the Eskimos of Kivalina, Noatak, and Kotzebue.
This activity, it is crucially important to the families
who engage in it. (sic) Further, the pursuit of subsistence
by the Natives in the Cape Krusenstern area is a continuation
of the historic land use that made the area rich archeologically."

Page 130.

"Therefore, subsistence uses will be allowed to continue and
would only be regulated in the unlikely event that local
populations of species were to become endangered."

Page 9.

"I. Cape Krusenstern National Monument will be developed
and managed to preserve its important cultural resources
and natural environment in as nearly as possible an
unaltered form."

Page 137.

"Village life nor Natives is presently in a state of flux.
It partially continues to rely on subsistence culture and
partially is adjusting to a cash economy. The greatest
impact of the new ways of life is felt among the young
adults. In Kotzebue 90 percent of the 14- to 17-year-old
age bracket are in school, while the median education levels
of adults over 25 is only 7th grade. Many young people
migrate out of the area in search of jobs after completing
high school in Kotzebue, returning to their village only for
visits. Even those who stay are experiencing a gradual
increase in wage employment. Thus, over the long run,
a subsistence way of life may play a decreasing role in the
lives of many Natives."

Page 2.

"Other proposed legislative provisions include... (8) That
the monument be closed to sport hunting."
The purpose for which Cape Krusenstern is proposed as a National Monument seem well justified in this Statement.

The effect of "no sport hunting" may, however, cause long-term changes in the environment.

If, as you say, the monument will be "managed to preserve it ... environment in as nearly as possible an unaltered form;" and if, as you say, "subsistence way of life may play a decreasing role in the lives of many Natives," then some form of man-as-predator must be substituted to maintain the existing environment.

We suggest some form of hunting, carefully managed, be permitted as a substitute for subsistence hunting at such time as hunting pressure would otherwise diminish, owing to changes in lifestyle. In this way, the environment can be maintained more nearly in an unaltered form.
RESPONSE TO COMMENTS BY
DEPARTMENT OF AGRICULTURE, 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 Alaska 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 the Federal-State 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 were 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 the 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, only one of which is more specifically set forth in this document. These considerations and steps were examined and implemented prior to development of this proposal 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 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 environmental statement additional 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 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 well.
2. It can be assumed that should Congress designate a Cape Krusenstern National Monument, adequate resources and personnel will be made available for the management of the monument. Specific analysis of the impact of a proposal on a management system is beyond the requirements of an environmental impact statement. This proposal introduces a new concept to the National Park Service management system, subsistence use. The proposal acknowledges that this is a new thrust and that the impact on overall management is difficult to assess.

3. The information you provided has been integrated into the discussion of the No Action Alternative of this proposal. Please refer to Chapter VIII.A.

4. Sections on proposal impacts on subsistence and on local society and culture have been revised to improve the analysis, and now include a discussion of the problems of anticipating both the rate, direction, and kind of cultural changes which could occur in northwest Alaska. It appears that many factors are present which suggest that subsistence lifestyles would continue as an important option for some local residents both in the short and long term future. Suggestions that there might be an early abandonment of subsistence activities have been deleted.

We share the U.S. Forest Service's concern for wildlife within the proposal area. However, it has not been determined that "man-as-a-predator" (particularly in the context of sport hunting) is an integral part of this ecosystem. Sport hunting within the proposed monument has been almost nonexistent; subsistence hunting in the area has been minimal, because of its relative lack of game in comparison to other locations in the region. Even so, the NPS has committed itself to research of subsistence lifestyles, the natural environment and resource uses in the proposed monument (Chapter I.B.4). This research may shed light on both the potential longevity of subsistence use and the importance of man as a predator in this ecosystem.

NPS policies on sport hunting are included in Appendix D of this statement; subsistence policy can be found in Chapter I.A.
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.

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
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.

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.

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.

We appreciate the opportunity to comment.

Sincerely,

[Signature]

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
PROPOSED

CAPE KRUSENSTERN NATIONAL MONUMENT OF THE ALASKA 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.

We submit the following comments for your consideration:

Page 1 - Last line and page 2, first two lines state: "(2) Assurances that subsistence uses will be allowed to continue so long as these uses do not impair the resources for which the monument is to be established;" and page 2, line 17 (8) states: "That the monument be closed to sport hunting." These appear to be in conflict with section 4 (B) of PL 92-203 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, and including any aboriginal hunting and fishing rights that may exist, are hereby extinguished."

Page 5 - Under B "Administrative Action", first paragraph reads: "A conceptual master plan will be submitted with the legislative proposal for establishment of a Cape Krusenstern National Monument." We suggest that the master plan should make use of available soil survey information as a basis for determining the ability and limitations of the soil for alternative uses, and thus as the base line for planning.

Page 27 - The location of the proposal states (second paragraph, line 7) "About 40 miles southeast of Cape Krusenstern lies the city of Kotzebue ---" We suggest adding the distance of the proposal from Anchorage, Alaska and from Seattle, Washington.

Page 29 - First paragraph, last sentence states: "The proposal area has no known potential for Agriculture, timber harvest, or hydro-electric or geothermal developments." This is not true for agriculture, for reindeer husbandry is a viable alternative land use as attested by the statement at the bottom of page 28 "BLM discontinued reindeer herding in 1966, because of a conflict with caribou herds." The conflict of caribou with reindeer is one of Management, not of suitability for use. Reindeer husbandry should not conflict with the primary purposes of the monument, and should thus be kept as an open alternative land use. Research is currently underway and more research is proposed...
for development of improved reindeer management.

Page 119 - Last paragraph states: "However, hunting in the area is generally light and almost exclusively confined to subsistence uses. Most subsistence hunting is for marine animals offshore on the ice (section G). At present, sport hunting is almost nonexistent and shows little potential for future increase in pressure on wildlife populations (section H). Subsistence use probably will continue at about the present level." This paragraph appears in conflict with the statements on the last paragraph of page 112, and first paragraph of page 113 which state: "Sport hunting and fishing provide some residents of the area with part time and full-time employment. Both Natives and Non-Natives are registered guides, assistant guides, camp helpers, and pilots. Their services are necessary to insure successful hunts and to meet state hunting regulations. Of eight guides in the region, four live in Kotzebue (1972 figures). In the spring of 1972, 10 guide teams (one guide, an assistant guide, and one or two hunters) operating out of Kotzebue resulted in the killing of 87 polar bears. A polar bear hunt grossed the guide about $2,000 to $2,500 per animal taken. Taxidermy fees for making a rug from a polar bear hide run around $500. Federal laws now prohibit the taking of polar bear for sport. A guided hunt for bear, sheep, caribou, and moose may cost a hunter $5,000 or more, not including licenses and transportation to Kotzebue. A guided hunt for one animal may cost from $1,000 to $2,000."

NOTE: The general comments are furnished with the cover letter, are applicable to this proposal, and should accompany these specific comments.
5. A soils section and map have been added to Chapter II.A.5. The information was obtained from the Joint Federal-State Land Use Planning Commission.

6. Alternative land uses are discussed in Chapter II.B., Probable Uses of the Environment Without the Proposal, and in Chapter VIII.A., Alternatives to the Proposal—No Action. Impacts of the proposal and of alternative proposals have been revised and are discussed in Chapter III and in the discussion of the alternative proposals, Chapter VIII. Trade-offs, as you characterize them, appear in Chapter VI, The Relationship Between Local Short-Term Use of Environment and Maintenance and Enhancement of Long-Term Productivity.

7. The NPS will participate in and encourage research at Cape Krusenstern National Monument, including an indepth study of subsistence lifestyles and resource uses. These two studies alone should offer abundant information for the planning and development facilities in the proposed monument. With the exception of archeological excavations or other research that may be undertaken and limited floatplane access facilities, monument status will make no significant irretrievable commitments of resources. If, in the future other resource and land uses for the area are determined to be of higher priority, congressional action could be taken to allow for such changes.

8. The Department recognizes the significance of this and other (d-2) proposals for regional and statewide land use plans which will be developed and has sought to assess and take into consideration resource values in each proposal area within the regional and State setting. The proposal includes provisions for cooperation with adjacent landowners and appropriate State and Federal agencies in land and resource management in the region.

9. The proposal, and the legislation submitted by the Department for congressional consideration recommends that Congress authorize the areas with provisions for continuation of all subsistence uses in effect at the time of the enactment of ANCSA. The Department's proposals contain no recommendation for special privileges on the basis of race or ethnic identity, but rather recommend provisions which would pertain to all subsistence users. To the extent that Alaska Natives can take advantage of such provisions in the proposed additions to the four systems, they will benefit along with any
others following a subsistence lifestyle in those areas. This in no way negates the provision of ANCSA which extinguishes aboriginal titles and claims or aboriginal title based on use and occupancy, including aboriginal hunting and fishing rights. Rather, the Department is recommending that Congress include provisions for subsistence privileges, and that this be done without racial or ethnic distinctions.

The Department makes this recommendation on the basis of acknowledgement of the vital importance of subsistence activities and harvests for rural Alaskans residing in and near areas proposed for inclusion in the four systems, and on the basis of the intent of Congress in enacting ANCSA, that the subsistence resources would be protected as necessary.

10. The soil survey information you have mentioned appears in the FEIS. The proposed Conceptual Master Plan does not contain the soils information, and will not be revised before presentation to Congress. Soils information is discussed in Chapter II.A.5., and Chapter IV contains a discussion of the Master Plan and its relation to future developments.

11. The distances from Cape Krusenstern to Anchorage and Seattle have been added to the discussion.

12. A discussion of the possible agricultural uses of the Cape Krusenstern proposal area appears with the soils information in Chapter II.A.5. It is true that caribou and reindeer can be supported on vegetation like that of the proposed monument. However, reindeer grazing will be precluded within the monument.

13. Guiding in the Kotzebue area has traditionally been concerned with sea mammal hunts, particularly of the polar bear. Today, however, sport hunting for sea mammals is no longer legal. There may be some guided hunts to the proposal area now, but the number of these hunts is thought to be minimal. The proposed action would prohibit sport hunting in the monument. The impact of this prohibition is thought to be insignificant because of the lack of game within the proposal relative to game populations elsewhere in the region. Impacts of this proposal on sport hunting and guiding have been revised. Please refer to Chapter III.H.3.
July 2, 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 Cape Krusenstern 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..."
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.

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.

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.

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.
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.

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.

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
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.

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.

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.

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. Cape Krusenstern National Monument is proposed to protect a series of internationally significant archeological sites. These sites cover approximately 5,000 acres according to our information, yet the proposed Monument is 350,000 acres. (It is our understanding that this proposal has been recently increased to 2 million acres.) 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:
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.

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 Pipelines.

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.
Economic Potential

The EIS 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 EIS should address the question: How essential are the available resources for national economic needs and well-being? Thus, the EIS 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.

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 EIS 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.

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

Environmental Protection

The EIS 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 EIS, but it is not balanced against considerations relating to economic potential.

The EIS 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 measured against the losses from other economic activities that are foregone.

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.

The EIS 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 EIS cannot be considered in isolation; it must take account of the economic effects that may arise from environmental preservation covering a broader land area. The EIS 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 Sec. 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.

We wish to draw your attention to the statement on p. 120 regarding a proposed cooperative agreement between the NPS and State of Alaska to protect wildlife below mean high tide. Under provisions of the Marine Mammal Protection Act of 1972 (Public Law 92-522) the Department of Commerce (NMFS) has the responsibility for administering the provisions of the Act. We believe the final impact statement should recognize the need for inclusion of NMFS in any agreements regarding marine mammals for which this Service has responsibility.

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
Deputy Assistant Secretary
for Environmental Affairs
RESPONSE TO COMMENTS BY
THE DEPARTMENT OF COMMERCE

15. This question has been previously discussed. Please refer to response number 1 for a discussion of the aggregate impact issue.

16. 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 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 does not always lend this treatment to quantitative presentation, but it 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, 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 benefit cost ratio as a decision tool has been widely recognized even where it is used.

17. Alternative proposals appear with their impacts in this document. Socio-economic discussions and impacts have been revised and enlarged. Also, long- and short-range implications have been considered in Chapter VI. Please refer to Chapters VI and VIII for these discussions.

18. Please refer to comment number 1 of this letter.

19. The recommendations of the Joint Federal-State Land Use Planning Commission were considered by the Secretary in developing this and other proposals. The JFSLUPC recommendations are too extensive to appear in this document. They are a matter of public record and may be easily obtained. Impacts on Transportation have been revised and the State's proposed Transportation and Utility Corridor has been discussed and included on a map. For this discussion please refer to Chapter I.C and the Access and Circulation map.

20. Chapters III-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 Section17(d)(2)of ANCSA for the four systems studies. Management for wildlife and for multiple use are discussed in Chapter VIII.B. See response 16 for a discussion concerning cost/benefit analysis.
21. We assume your 5,000 acre estimate includes only the land of the Cape itself. There are many more known and suspected archeological sites of significance within the 350,000 acre proposal area. There are also many important natural features within the proposal area. If the proposal is enacted, it will contain the only representative sample of coastal lowland and upland tundra within the NPS. The proposal also contains significant fresh and brackish waterfowl habitat, as well as a significant portion of the recently reintroduced musk oxen range.

The largest of the alternatives to this proposal (Alternative C—2.3 million acres) coincides with a National Historic Landmark. The landmark was established precisely because of its archeological importance and contains many significant sites.

22. The proposed Cape Krusenstern National Monument would not seriously restrict the proposed surface transportation and utility corridors indicated for northwestern Alaska. The proposed monument may necessitate the rerouting of a short segment of the north-south route which parallels the Noatak River. It would have no impact at all on the east-west route from the interior of Alaska to the northwest region. The impacts of this proposal on transportation in northwest Alaska are fully discussed in Chapter III.H.5.

23. The purpose of the environmental statement is to analyze the impact of the proposal on the human environment of the area. Alteration of economic forces in the area with resource development activities is recognized and discussed under the multiple use management alternative in Chapter VIII.B.2. See response 16 concerning cost-benefit analysis.

24. The environmental statement is an analysis of the Department's management proposal for Cape Krusenstern National Monument. If the documentation you request were provided, the statement would be a justification document rather than an analysis document, which is not the intent of the environmental statement.

25. The discussion of cooperative agreements for the protection of wildlife below mean high tide has been revised to include your information. Please refer to Chapter III.A.
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.
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.

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.

Sincerely,

Major General, USA

Major General, USA

Acting Director of Civil Works
<table>
<thead>
<tr>
<th>Code</th>
<th>Location</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>DES 73-87</td>
<td>Cape Krusenstern National Monument</td>
<td>No listed sites affected by main proposal</td>
</tr>
<tr>
<td>DES 73-83</td>
<td>Mount McKinley National Park</td>
<td>No listed sites affected by main proposal</td>
</tr>
<tr>
<td>DES 73-86</td>
<td>Harding Icefield-Kenai Fjords National Monument</td>
<td>No listed sites affected by main proposal</td>
</tr>
<tr>
<td>DES 73-84</td>
<td>Katmai National Park</td>
<td>(30) Naknek</td>
</tr>
<tr>
<td>DES 73-91</td>
<td>Gates of the Arctic National Park</td>
<td>No effect on viable sites.</td>
</tr>
<tr>
<td>DES 73-93</td>
<td>Chukchi-Imuruk National Reserve</td>
<td>(5) Tuksuk</td>
</tr>
<tr>
<td>DES 73-92</td>
<td>Yukon-Charley National Rivers</td>
<td>(22) Wood Chopper</td>
</tr>
<tr>
<td>DES 73-90</td>
<td>Lake Clark National Park</td>
<td>(20) Rampart</td>
</tr>
<tr>
<td>DES 73-89</td>
<td>(27) Tazimina</td>
<td></td>
</tr>
<tr>
<td>DES 73-90</td>
<td>Wrangell-St Elias National Park</td>
<td>(28) Ingersol</td>
</tr>
<tr>
<td>DES 73-90</td>
<td></td>
<td>(31) Crescent Lake</td>
</tr>
<tr>
<td>DES 73-90</td>
<td></td>
<td>(32) Chakachemana</td>
</tr>
<tr>
<td>DES 73-101</td>
<td>Yukon Delta National Wildlife Refuge</td>
<td>No listed sites affected by main proposal</td>
</tr>
<tr>
<td>DES 73-99</td>
<td>Selawik National Wildlife Refuge</td>
<td>No listed sites affected by main proposal</td>
</tr>
<tr>
<td>DES 73-95</td>
<td>Arctic National Wildlife Refuge</td>
<td>No listed sites affected by main proposal</td>
</tr>
<tr>
<td>DES 73-97</td>
<td>Koyukuk National Wildlife Refuge</td>
<td>(6) Holy Cross</td>
</tr>
<tr>
<td>DES 73-100</td>
<td>Togiak National Wildlife Refuge</td>
<td>No listed sites affected by main proposal</td>
</tr>
</tbody>
</table>
YUKON FLATS NATIONAL WILDLIFE REFUGE
(21) Porcupine
(22) Woodchopper
(76) Yukon-Taiya
(20) Rampart

ILIANNIA NATIONAL RESOURCES RANGE
(26) Lake Ilianna
(27) Tazimina
(28) Ingersol (Lackbuna Lake)
(29) Kukaklek

NOATAK NATIONAL ARCTIC RANGE (NOATAK NATIONAL ECOLOGICAL RANGE)
Three potential hydro-electric sites— one name given
(1) Agashashok

FORTYMILE NATIONAL WILD RIVER
(23) Fortymile

UNALAKLEET NATIONAL WILD RIVER
No listed sites affected by main proposal

PORCUPINE NATIONAL FOREST
(20) Rampart
(21) Porcupine
(22) Woodchopper
(76) Yukon-Taiya

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, Noatak 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

<table>
<thead>
<tr>
<th>SITE</th>
<th>KWH x 10^6</th>
</tr>
</thead>
<tbody>
<tr>
<td>23  Forty Mile</td>
<td>723</td>
</tr>
<tr>
<td>6   Holy Cross</td>
<td>12,300</td>
</tr>
<tr>
<td>11  Ruby</td>
<td>6,400</td>
</tr>
<tr>
<td>24  Crooked Creek</td>
<td>9,400</td>
</tr>
<tr>
<td>30  Naknek</td>
<td>473</td>
</tr>
<tr>
<td>7   Dubli</td>
<td>1,070</td>
</tr>
<tr>
<td>28  Ingersol</td>
<td>630</td>
</tr>
<tr>
<td>31  Crescent Lake</td>
<td>179</td>
</tr>
<tr>
<td>29  Kukaklek</td>
<td>232</td>
</tr>
<tr>
<td>26  Lake Iliamna</td>
<td>1,370</td>
</tr>
<tr>
<td>20  Rampart</td>
<td>34,200</td>
</tr>
</tbody>
</table>

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 incompatible with land withdrawals and eliminated as hydropower potential.

<table>
<thead>
<tr>
<th>SITE</th>
<th>KWH x 10^6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agashashok</td>
</tr>
<tr>
<td>5</td>
<td>Tuksuk</td>
</tr>
<tr>
<td>27</td>
<td>Tazimina</td>
</tr>
<tr>
<td>53</td>
<td>Wood Canyon</td>
</tr>
<tr>
<td>76</td>
<td>Yukon Taiya</td>
</tr>
<tr>
<td>22</td>
<td>Wood Chopper</td>
</tr>
<tr>
<td>21</td>
<td>Porcupine</td>
</tr>
<tr>
<td>32</td>
<td>Chakachamna</td>
</tr>
</tbody>
</table>

**TOTAL 8 Sites**

<table>
<thead>
<tr>
<th>% of FPC listed Film Energy</th>
<th>62,353 = 36.3%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>171,840</td>
</tr>
</tbody>
</table>
**CATEGORY-3**

**IF PROPOSAL GOES THROUGH, FOLLOWING PROJECTS WOULD HAVE DOWNSTREAM EFFECTS**

<table>
<thead>
<tr>
<th>SITE</th>
<th>KWH x 10^6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hughes</td>
<td>482</td>
</tr>
<tr>
<td>Kanuti</td>
<td>1,612</td>
</tr>
</tbody>
</table>

**TOTAL 2 Sites** 2,094

% of FPC listed Firm Energy: \[
\frac{2,094}{171,840} = 1.2\%
\]
14. The APA has identified three sites in the Noatak River Valley. The Agashashok site has been projected by the APA to have significant resource potential for the region and the Nation. Because of less favorable costs and locations, the other Noatak sites do not appear to be justifiable single use hydroelectric sites. The JFSIUPC has recommended against the development of the Agashashok site. The impact of the Cape Krusenstern proposal on the Agashashok site would be relatively minor. Refer to Chapter III.H.6, where impacts of the proposal on hydroelectric potentials are discussed. The collective impacts of the Cape Krusenstern proposal and the Noatak National Arctic Range proposal could be significant. Loss of this site entirely could have impacts on the economic development of the area. Please refer to Chapter III.H.6 for a discussion of the collective impacts of this proposal and the Noatak National Arctic Range proposal on hydroelectric development.
Mr. Theodor M. Swem 10 JUL 1974
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 instal­
lations 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 restric­
tions during a national emergency.

More detailed comments are presented for Draft Environ­
mental Impact Statements 73-84, Katmai National Park;
73-101, Yukon Delta National Wildlife Refuge; 73-100,

Sincerely,

[Signature]

MAURICE L. CLOUSER
Colonel, USA
Secretary

2 Atch
1. Maps of Areas (14)
2. Additional Comments on 6 Specific Areas
RESPONSE TO COMMENTS BY
HEADQUARTERS, ALASKA COMMAND

26. 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 in times of national emergency; therefore, there appears to be no need for additional legislative stipulations.

This proposal does not affect the areas served by barge supply. The NPS recognizes and cooperates with the Department of Transportation and the Federal Aviation Administration authorities over flight path regulation. As in the past, the Department of the Interior will continue to cooperate fully with the Department of Defense and respond to true national emergencies.
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).

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, DHEW's 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 X's Indian Health Services liaison person:

"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.

"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.

Region X DHEW appreciates the opportunity to comment upon these proposals.

Sincerely,

David P. Miller
Acting Regional Environmental Officer
RESPONSE TO COMMENTS BY DEPARTMENT OF HEALTH, EDUCATION AND WELFARE

27. Problems of overall or cumulative impacts have been addressed by the Department of the Interior. For a discussion of overall impacts, please refer to comment number 1.

28. The following discussion is the NPS policy on subsistence activity in Alaska: 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 a subsistence 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-term 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.

This general policy would apply in the proposed monument and all of its alternatives.

29. The objective of the NPS to encourage Native participation in the administration of the monument is expressed in Chapter I.B., objective number six. "Native Alaskans will be encouraged to participate in management, interpretation, and the provision of visitor services at Cape Krusenstern National Monument. They also will be encouraged to continue the production of arts and crafts indigenous to their culture. Provisions will be made for the direct sale of Native artworks to visitors."
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,

John R. Merrill
Assistant Regional Administrator
for Community Planning and Management

cc: CEQ (10)
Miller
Moore
Peyton
Riddell
AIRMAIL

To: Chairman, Alaska Planning Group
   Department of the Interior

From: Administrator

Subject: Review of Draft Environmental Statement, Proposed
        "Cape Krusenstern National Monument", DES 73-87

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.

Our comments follow:

1. The draft basically does not address the cumulative impacts
   of the proposal and related proposals for other new conserva-
   tion system units affecting Northwest Alaska. As a group
   we believe the proposals would significantly restrict further
   development and use of the region's water, energy, minerals,
   and related transportation systems. The group of proposals
   would essentially eliminate future consideration of the region's
   hydroelectric resources or other major water development.
   We believe that a detailed evaluation of the cumulative effects
   of the proposals would show significant, widespread, and
   long range impacts in the water and energy areas, and
   these impacts would have important economic, environmental,
   and social implications.

2. At page 18, first sentence, the word "proposed" should be
   changed to "identified" to reflect status of the Noatak
   hydroelectric potential.
3. Under Part II, "Description of the Environment" the draft has essentially no information on regional resources that may be of economic significance other than fish and wildlife and tourism. We suggest this section be expanded to discuss energy, mineral, and related transportation potentials of the region.

4. Item 9, page 117, under, "Probable future of the environment without the proposal" probably should be revised to indicate that the potential hydroelectric developments on the Noatak could have only minimal impacts on the proposed monument and would not involve areas of archeological concern within the monument. The term "creating at least short-term profits for individuals and corporations" is not an adequate description of benefits that might be realized through development of long range, renewable energy resources of the region.

5. The draft covers impact of the proposal on hydroelectric potential at page 125 under the section, "Impact on Water Quality". Impacts of the proposal on other resource development potentials are discussed under the heading, "Impact on the local economy". We suggest the final statement treat these items separately under a new heading, "Impacts of the proposal on resource development potential", and include discussion of impacts on local and regional economy. This would be an appropriate place to discuss cumulative impacts of the proposal and related proposals.

For example, the proposed monument may have relatively minor impacts on the Noatak hydroelectric potential, but the related proposal for the Noatak National Ecological Range would preclude future consideration of the project. Similar comments would be appropriate with respect to cumulative impacts on regional transportation systems and mineral development.

cc: Assistant Secretary -- Energy and Minerals
Attention: Mr. J. Emerson Harper
30. This question has been raised previously. Please refer to response number 1.

31. As suggested, on page 18, the word "identified" has been substituted for "proposed."

32. Chapter II.A., "A Description of the Environment" has been revised. Corrections have been made and newly available information has been added to the text. However, the discussion of "energy, mineral and related transportation potentials of the region properly belongs in Chapter II.B., Probable Future of the Environment Without the Proposal, - and also in Chapter III, The Impacts of the Proposed Action. Please refer to these chapters in the document.

33. The building of the Agashashok dam on the lower Noatak River would probably provide short-term jobs for people in the area and the dam itself would provide a long-term, low-cost source of energy. The reservoir would flood an immense area of the Cape Krusenstern Historic Landmark, the villages of Noatak and Nauyuaruk, and would inundate many significant archeological sites, as well as extensive waterfowl habitat. Tentative plans for the identified site would call for the flooding of 6,000 acres of the Cape Krusenstern National Monument proposal. Flooding of monument lands, in the event this proposal is enacted would be precluded. Please refer to Chapter II.B.9 and Chapter III.H.6 for a discussion of regional hydroelectric potential and impacts of this proposal upon its development.

34. The impact statement on hydroelectric potential has been substantially revised and relocated in Chapter III.H.6, under its own heading. In the DEIS it appeared in the discussion of Water Quality.
Memorandum

To: Theodor R. Swen
Chairman, Alaska Planning Group

From: [Signature]
Director, Office of Trust Responsibilities

Subject: Review of Draft Environmental Statement for Proposed Cape Krusenstern National Monument, Alaska (DES 73/37)

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:

The Native Alaskan, by necessity, survives in a subsistence economy provided by the renewable resources available to him from the land on which he lives. Restricting the land base available to him can adversely affect not only his survival but the future of his community. Loss of land base can also prevent the Native Alaskan from progressing beyond today's survival economy. These social and economic impacts should be comprehensively discussed as they relate to the management or restrictions placed on the land which will be lost to the Alaskan Native by the proposed withdrawal.

It would be helpful if an impact statement covering the total effect of the 80 million plus acres of D-2 land withdrawals was developed. The Krusenstern proposal, when viewed by itself, appears very harmless, with no visible significant deteriorating factors.

The general approach to subsistence use of Natives is constructive. Recognition of the basic need for survival is acknowledged. The statement is made that elimination of the human predator could create an ecological imbalance.

Substantial acreage is now under application for Native allotments (6212 acres). The map indicates the majority are located on the shore line. They are primarily used for fishing camps and for bases from which to secure other subsistence items. If the allotments are granted, access should be assured. We have a similar concern for primary residences, cemeteries, and historical sites.
Specific Comments.

In order for the statement of purpose to become reality, more specific information on how this is to be accomplished must be developed and become a part of the final impact statement and the National Monument Management Plan.
RESPONSE TO COMMENTS BY
DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS

35. The impact of this proposal on Natives and others who pursue a subsistence lifestyle will be minimal. Subsistence policy for the proposed monument is 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 nor physically necessary to maintain human life and necessary to provide opportunities for the survival of Alaskan culture 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.

For a detailed discussion of subsistence activity, please refer to Chapter II.A.9. Impacts on subsistence from this proposal are discussed in Chapter III.G.

36. The "total effect" of the (d-2) proposals on the human environment was considered by the "four systems" in the planning and assessment of the proposals. Please refer to comment number 1 for a discussion of the issue of total effect or aggregate impact of the d-2 proposals.

37. All rights accruing to patented Native allotments within the monument are recognized by the NPS. Access will be provided to patented inholdings of Cape Krusenstern National Monument.
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20240

IN REPLY REFER TO:
1792(220)

Memorandum

To: Chairman, Alaska Planning Group
From: Director, Bureau of Land Management
Subject: Cape Krusenstern National Monument

We have reviewed the draft environmental statement and offer the following comments:

This proposal fails to adequately explain how submerged lands and waters, "five-mile limit," can be incorporated in the proposal since those lands were given to the State of Alaska at the time of statehood.

The EIS does not mention the possible impacts of fires. Even though the area is in a coastal influence zone, fires are possible. Will fires be allowed to burn on caribou range? What would be the impacts if wild fires were uncontrolled? The EIS should address this subject.

The document states that the proposed monument would be closed to sport hunting if the need occurred. It was not stated how the NPS proposes to keep the herd of 10,000 caribou (wintering on the monument) in balance with its food supply if hunting is stopped. If overpopulation and overgrazing occur, how does the NPS intend to reduce the herd and what measures would be taken to restore the overgrazed vegetation? The draft statement has not discussed the potential environmental effects of overgrazing.

The draft states that the monument may be closed to subsistence hunting if such a use later conflicts with visitor usage. How does the NPS propose to compensate the Natives from fall through spring, when they rely on subsistence hunting for survival? If subsistence hunting by Natives is permitted, will snow machines or other ORV uses by Natives be permitted within the proposed boundaries? If controls are implemented, how can this be accomplished on established trails when RS2477 permits public trail use? Just what would be the socioeconomic effects on the Natives if subsistence hunting was not allowed?
Description of the Proposal

There are no coordinates on any of the maps. This makes coordination with other maps virtually impossible.

Map on p. 19. (Land Ownership) The third comment under Note is incorrect and should be deleted: "all unpatented applications expire December 18, 1975." Under certain circumstances, i.e., if proof of use is not timely filed, applications may expire, but generally all allotment applications will remain valid until examined and processed by BLM.

P. 26. Change the first sentence to: "Native allotment lands are those lands on which individual Natives have filed allotment application prior to passage of ANCSA." As written, the sentence is misleading.

Description of the Environment

P. 33. "No detailed geologic or mineralogic study has been made of the area," yet the statement is made on p. 34 that "the proposed area has no known economic mineral potential." If no data is available, then it does not seem logical to suggest that an area has no potential.

P. 35. Oil and gas map: Kodiak and Gulf of Alaska subprovinces are not shown with arrows as are the other subprovinces. The outlines do not appear to follow the outlines according to USGS. This should be checked and USGS outlines used.

P. 89. First paragraph. Delete the last sentence, "If the lands are not patented the applications will expire on December 18, 1975." This is not correct. This page incorrectly infers that by December 18, 1975, if N.A. in area are not patented they are wiped out. This could be confused with accountability of two million acres under ANCSA.

P. 115. Assumption 4 is not true. If the NPS proposal is not enacted, the land will revert to d-1 status and will be managed by BLM. Lands will be subject to classification authority of ANCSA.

The Environmental Impacts of the Proposed Action

P. 122. Last paragraph. The "lighthouse tower" was earlier mentioned and was stated to be of unknown origin. Thus it would not seem proper to reconstruct it. It may have been a USC and GS survey marker.

P. 123. Second paragraph. Scars from subsurface melting due to temporary structures would be local but not of short-term duration. Temporary structures may be of short-term duration but not the scars from subsurface melting.
P. 125. Hydroelectric Potential: Loss of use of this site may have a future impact on Kotzebue and other communities. If additional power is needed, it would mean use of more fossil fuel, rather than clean, renewable hydroelectric power.

Pp. 136-137. Closing of the winter haul road might be minor in regard to the total number of people indirectly affected, but the effect is great to those directly affected. An alternate route around this area is next to impossible.

The EIS does not cover the impact of restriction of Native use of the area by license, permit, or whatever means of control on subsistence use.

One very important aspect of ANCSA which could greatly affect this proposal was not mentioned in this statement. ANCSA and the ANCSA Regulations 43CFR 2650 provide that d-2 lands (all the lands in this proposal) are available for selection by the Regional Corporation under Sec. 14 (h). Section 14 (h) selections include cemetery sites and historical sites. Therefore, large areas (at least the control sites) may very well be selected and patented to the Regional Corporation. This possibility could greatly affect any proposed National Monument in this area.

Alternatives to the Proposed Action

Pp. 151 and 152. If the d-2 land reverts to d-1, it will have the limitations of d-2. Thus, multiple use will be constrained. There is however, no assurance of continuance of such classification. The area could be classified for use essentially the same as the proposal, but with the greater flexibility desirable with today's fast changing needs.

P. 155 §4. It assumes research as the only possible dominant use. Others are possible, such as use as a subsistence hunting preserve.

George L. Truter
Associate Director
RESPONSE TO COMMENTS BY
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

38. This question has been raised by several other correspondents. It is not the intention of the NPS to usurp State jurisdiction in offshore waters. Cooperative agreements would be sought with the State and other concerned parties in the interest of protecting the proposal area. Please refer to comment 210 for a more detailed discussion of this issue.

39. Man-caused fires will be controlled. If a fire is of natural occurrence, it would be allowed to burn, with the qualifications that human life, cultural resources, and visitor use areas are not endangered, and that no representative community or species will be allowed to become extirpated within the boundary as a result. Please refer to Chapter III.B for a discussion of the NPS policy on fire.

40. The proposal states that the monument will be closed to sport hunting.

41. It is not anticipated that the prohibition of sport hunting in the proposal will have a marked effect on the caribou population. Subsistence hunting will continue. The three villages near the proposal area accounted for over 5,000 caribou kills in 1971 (refer to Section II.A.8).

The NPS will seek cooperative agreements with other parties and agencies controlling the land over which the caribou range to provide for optimum management of the species. NPS management at Cape Krusenstern will be directed toward maintaining natural conditions for both plants and animals. Natural fluctuations in caribou numbers within the proposal area are to be expected as the result of natural causes. The NPS would not attempt to control these fluctuations. If over-grazing became evident, the NPS could initiate mitigating measures. For instance, some of the animals might be removed from the monument.

42. The NPS policy on subsistence uses is stated in Section I.A.2. It will not be the policy of the NPS to prohibit subsistence hunting due to conflict with visitor usage. Rather, visitor use management policies will seek to avoid or keep to a minimum visitor use conflicts with subsistence activities by time and location zoning. Snowmobile usage on the winter trail from Kotzebue to Kivalina will continue. ATV usage will be prohibited, because of possible damage to the environment.
43. The FEIS will contain a topographical map which should be helpful to the reader. A coordinate grid has been added to the proposal map. Coordinates did appear on the alternative proposal maps in the DEIS and will appear on those maps in the FEIS.

44. The comment in question has been clarified to reflect that allotment applications will remain valid until examined and processed by the BLM.

45. The text has been changed to clarify the point that Native allotment lands are those for which individual Natives have filed allotment applications previous to the passage of ANCSA.

46. The statement that "the proposed area has no known economic mineral potential" has been omitted and the discussion of the geological features of the proposal area has been revised. Please refer to Chapter II.A.3.

47. There were no arrows for the subprovinces you mentioned, because the printers were able to print the names inside the subprovinces on the DEIS map. Arrows have been included on the FEIS map.

48. The sentence in question has been deleted in the FEIS.

49. Any or all lands that revert to (d-1)withdrawal because of no action due to their not being in the Secretary of the Interior proposals of December 18, 1978, or not being enacted by Congress by December 18, 1978, are withdrawn by paragraph 2 of PLO 5179 to the same extent as (d-2)lands. That withdrawal continues until the (d-1) withdrawal is revoked, land is classified for any of a variety of uses, or land is rewithdrawn for some other purpose.

   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; this is reflected in the revision of assumption number four in Chapter II.B.

50. The light tower has been identified as an official Coast Guard aid to navigation. The areas of the text that relate to the tower have been changed.

51. The discussion in question has been revised to remove the assertion that scars left from subsurface melting would be of short term duration. Please refer to Chapter III.D.

52. Discussion of the impacts of this proposal on hydroelectric development have been revised to include more timely information, including those matters you have mentioned here. Please refer to Chapter III.H.6.
53. The winter haul trail and any trails and valid and existing rights-of-way will be open to existing uses.

54. Specific details of a subsistence management policy have not been identified. The proposal has been amended with the addition of a provision for involvement of and cooperative agreements with appropriate regional and village corporations, and representatives of all area residents, as well as appropriate State agencies for the development of subsistence management policies and regulations. The discussion of impacts on subsistence use has been expanded and revised.

55. It is true that 14(h) selections may be made within this proposal area. However, the NPS does not anticipate conflicts with Native regional corporations regarding lands selected under Section 14(h). This is because, if such selections were made and patented within the monument, the NPS would seek cooperation with landowners to assure the preservation of archeological values.

56. In the event Congress fails to establish this proposal by December 18, 1978, lands within the proposal area, pursuant to section 17 of ANCSA are still withdrawn under (d-l) until either the (d-l) withdrawal is revoked, the land is classified for public-land-law disposal and opened to that form or forms of entry, or the land is rewithdrawn for some other purpose. Again, it is our assumption that no action on the proposal is most likely to result in some form of public, multiple-use management for these lands.

57. There may be other possible dominant usages. However, other usages are not excluded in a research dominant proposal. Other uses are permitted if they don't interfere with the dominant use.
Memorandum

To: Chairman, Alaska Planning Group, Office of the Secretary

Through Assistant Secretary--Energy and Minerals

From: Director, Bureau of Mines

Subject: Draft environmental statement, National Park Service, proposed Cape Krusenstern National Monument, Alaska

We have reviewed the draft environmental statement on the proposed Cape Krusenstern National Monument, Alaska. The project proposes, among other things, to withdraw approximately 250,000 acres of lands and waters from appropriation or entry under the public land laws, including the mining and mineral leasing laws. Cape Krusenstern is on the north side of Kotzebue Sound in northwestern Alaska. Throughout the statement, we found not so much how the proposed action would affect potential mineral resources but rather how possible mineral development might affect the area if the action is not implemented. It seems to follow that if the proposed action justifies the statement, the statement should identify the impacts of the proposed action.

Page 29, 1st paragraph, and page 34, line 4. These comments—and particularly that on page 34—are inadequate to describe the mineral potential of the area. The statement that petroleum potential is "deemed to be slight," appears to be unjustified when it is noted that areas favorable for petroleum are immediately to the west (Chukchi Sea) and to the south (Kotzebue Sound) and the proposed monument is overlain by recent sediments effectively masking the significant bedrock. In July, the Bureau furnished the following as a suggested addition for a minerals section:

There are no mining claim locations within the study area nor is any of the area within a metallogenic province. Just to the east of the area in the Noatak Valley two large gravity anomalies, an adjacent low and high, have been identified; the gravity high is also a magnetic high. The highs represent a mafic complex that crops out on the adjacent hillside and the gravity low probably represents
a small Cenozoic sedimentary basin. The area of gravity low nearly abuts the Study Area and is almost completely covered by surficial deposits. Either the sedimentary basin or mafic complex could be of significant economic importance. More definitive geophysical surveys might provide evidence of any possible economic importance of the anomalies.

Page 35, Oil and Gas Map. The map does not show all of the geologic basins having potential for petroleum accumulations. In particular, it fails to show the Selawik Basin, which the U.S. Geological Survey reports as containing Tertiary sediments. The indeterminate northern boundary of this basin lies adjacent to the Cape Krusenstern proposal's southern boundary in Kotzebue Sound. The Selawik Basin has been partially mapped geologically and portions of the northern Seward Peninsula have had aeromagnetic and other geophysical surveys. Offshore Kotzebue Sound just to the south of Krusenstern should be included in the basin as an area of high petroleum interest.

Page 116, items 2, 3, and 4, Probable Future of the Environment Without the Proposal. These items indicate that prospecting, possibly mining, and petroleum production will occur without the proposal. Consequently, the economic impact on the region, the State, and the Nation of preventing such activity should be discussed on page 143 under adverse impacts of the proposal.

Page 146, paragraph 3. The rationale of the second sentence is fallacious. If the area is closed to mineral exploration, no mineral discoveries will be made and its potential will remain unknown.

Page 149, last paragraph. We do not agree with this paragraph in the context of NEPA. We believe the intent of an environmental statement is to record commitments of the proposed action on the basis that such commitments, for all intents and purposes, would be in perpetuity. We therefore believe that the commitments of potential mineral resources cannot be so dismissed.

The environmental statement for the Kobuk Valley National Monument expressed the concept quite well, page 215: "Since prospecting would not be allowed there may never be a complete inventory and analysis of these (mineral)
Memo. to Chairman, Alaska Planning Group, Office of the Secretary, Subj:
Draft environmental statement, National Park Service, proposed
Cape Krusenstern National Monument, Alaska

resources. Therefore a full assessment of the impacts of the proposal's
preclusions of resource removal would not be carried out." We suggest
a similar statement be included in this environmental statement.

Page 157, lines 16 and 17. Wilderness designation, per se, would not preclude
mineral development if the area is enacted into the park system under the
withdrawal provisions cited.

[Signature]
Acting Director
58. Revisions have been made in all sections of this document dealing with minerals to clarify the discussion and present an accurate analysis of impacts. Please refer to Chapter II.A.3 and Chapter III.H.4.

59. The remarks in question have been amended or deleted, and the material you have suggested for addition to the text has been included. Please refer to Chapter II.A.3.

60. The oil and gas map in this document was prepared from information taken from Memoir 15, "Future Petroleum Provinces of America," The American Association of Petroleum Geologists. The omission of the Kobuk Subprovince from the map has been corrected in the FEIS. The Selawik Tertiary Basin is not considered a petroleum subprovince in Memoir 15. Its theoretical oil and gas potential has been discussed in the FEIS, and impacts of the Cape Krusenstern proposal on oil and gas exploration and extraction in the region have also been considered. It will not appear on the oil and gas map in the FEIS.

61. Please refer to Chapter II.B where appropriate revisions have been made in "Probable Future of the Environment Without the Proposal." Chapter V, "Adverse Impacts That Cannot be Avoided Should the Proposal be Implemented," has also been revised to include the impact of this proposal on mineral and petroleum development.

62. Mineral prospecting, mining, and the extraction of minerals or the removal of soil, sand, gravel, and rock will not be permitted within the proposed Cape Krusenstern National Monument except where authorized by law or when carried on pursuant to valid existing rights or as part of an interpretive program. The public use, protection, development, interpretation and management of the monument will be predicated on documented data obtained through appropriate investigation and research. The NPS encourages and will participate in appropriate ways in the study of the geologic resources within the proposed monument. Geologic 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 monument and the policies of the Service. Procedures which might result in damage or alteration to the physical or ecological resource will not be permitted. Magnetic, gravity, geochemical, and other remote sensing surveys performed during
scientific study, when combined with structural, stratigraphic, and mineralogical studies for Cape Krusenstern National Monument without the need for prospecting per se.

63. The description of the impacts on mining and mineral entry have been revised. Please refer to Chapter III.H.4.

64. It is true that there are provisions of the Wilderness Act which allow mineral development. However, these provisions do not pertain to national parks and monuments. It is inconsistent with the administrative policies of the National Park Service to permit mineral development within parks and monuments or their respective wilderness areas.
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,

[Signature]

Commissioner
Memorandum

To: Chairman, Alaska Planning Group

Through: Assistant Secretary--Energy and Minerals

From: Director, Geological Survey

Subject: Review of draft environmental statement on Krusenstern National Monument

We have reviewed the subject draft environmental statement as you requested in a memorandum of December 28.

The known potential value of the archaeological remains on the spit clearly outweighs the unknown potential of mineral resources in the adjoining hills. However, this value ratio does not apply to the northern third or more of the proposal—the fossil shoreline premised to have older remains was formed during an earlier interglacial period, long before man's ancestors are thought to have spread to the Arctic.

The proposal to extend boundaries five miles offshore inadequately addresses the legal impact. The State of Alaska has jurisdiction to the three-mile limit and the remaining two miles are international waters in most respects. ANCSA directs disposition and management of onshore areas.

With reference to page 79, the fossil beach scarp referred to likely formed during the Sagamon. According to Lachenbruch and Moore (Cape Thompson volume) the sea returned to its present level about about 5000 years B.P. The Krusenstern area would not have been a favorable site when the land bridge existed because there would have been no sea life available and the glacial Noatak-Kobuk River would have been possibly tens of miles away.

Rock types in the withdrawal are surficial deposits and outcrops of Paleozoic carbonates, metamorphic and mafic igneous rocks. The carbonates...
may have potential for cement. Copper occurrences are found in the same rocks to the northeast of the withdrawal. Thus, there is some potential for copper. A moderate potential for petroleum exists offshore.

We find the statement reasonably adequate and accurate in its evaluation of the impact of the proposed action on water resources and related aspects of the environment. The proposed area does not have any major rivers and the streams in it are small coastal streams. The impact on water quality will probably be local and of minor significance.

We have not collected any data on the water resources of the area, nor can we foresee the need to make any studies of the water resources unless they are part of a larger study to describe the environment of the proposed monument. Water-quality data might have to be collected if water pollution at the access points becomes a problem.

Henry W. Dick

[Signature]
RESPONSE TO COMMENTS BY
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

65. During periods when the Bering Land Bridge was open the area that now forms the northwest coast of Alaska would have been a favorable vantage point from which to watch for game on the low undulating plain that was the bridge. It is very likely that camps were made along these highlands.

66. The proposed monument boundaries include all lands above mean high tide and oceanic waters out to five miles beyond the oceanic shoreline. Under the legislative proposal for Cape Krusenstern, as well as under Section 17(d)(2) of ANCSA, all lands which lie above the mean high tide line, are closed to appropriation or entry under the public land laws, including the mining and mineral leasing laws. All lands submerged or otherwise below the mean high tide line are in State jurisdiction. The NPS will seek cooperative agreements with the State, the Coast Guard and other parties, concerning these oceanic waters in the interest of protecting the natural and archeological features of the monument. If the NPS and the State of Alaska cannot reach a cooperative agreement concerning the oceanic waters in the proposed monument, the matter will probably be subject to litigation.

67. The Bering Land Bridge existed approximately 11,000 years ago. People who inhabited this area during the era could not, from available evidence, have relied on sealife for sustenance. However, during the period of the "Krusensternian Transgression" there is evidence of reliance on the sea for food. (For a discussion of the "Krusensternian Transgression," please refer to Chapter II.A.3.)

68. The information you have included here has been added to the geological discussion in Chapter II.A.3.
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 Cape Krusenstern 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).

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
69. The text has been changed to reflect the National Park Service's intent to seek a cooperative agreement with the Federal Aviation Administration in the event that aircraft use becomes detrimental to park values.
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 #73-87 to the FHWA for review and comment on the National Park Service's (NPS) proposed 350,000 acre Cape Krusenstern National Monument on the Chukchi Sea coast of northwest Alaska.

We appreciate the 120-day extension for review, which ends July 22, 1974. Our comments are enclosed for your further consideration in planning and preparation of the FEIS. The opportunity to participate in this review is appreciated and we would like to receive a copy of the FEIS.

Very truly yours,

Hugh B. Henry, Director
Office of Environment and Design

Enclosure
FHWA REVIEW COMMENTS
ON
CAPE KRUSENSTERN NATIONAL MONUMENT
DEIS #73-87

(1) Chapter I - DESCRIPTION OF THE PROPOSAL:

(a) It would be helpful if the NPS could include in Chapter I of the FEIS a brief discussion of 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). We did not find any reference in Chapter I of 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.

The LUPC is developing statewide transportation system proposals and has received 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 Alaska to present surface transportation and utility corridor proposals, and to obtain input on native concerns regarding surface transportation. We recommend that the NPS review these LUPC proposals, the public hearing testimony resulting therefrom, and provide further discussion in the FEIS regarding the effect of national monument classification on surface transportation corridors recommended to serve northwest Alaska.

(b) On pages 17-18, under INTERRELATIONSHIP WITH OTHER PROJECTS OR PROPOSALS AND JURISDICTIONS, there is no mention of other Department of Interior proposals in northwest Alaska, such as the Noatak National Arctic Range and Noatak Wild River (DEIS #73-98), Kobuk Valley National Monument and Salmon Wild River (DEIS #73-88), Selawik National Wildlife Refuge (DEIS #73-99) and Gates of the Arctic National Park (DEIS #73-91). Collectively, these other Department of Interior proposals, including the subject national monument, could have a major impact on surface transportation planning. Therefore, we suggest a map and discussion of the collective impact of implementing these proposals be included in the FEIS which would expand on the interrelationship of the above Department of Interior proposals in northwest Alaska with proposed surface transportation corridors.

It was also noted on page 17 that the NPS referred to the Alaska Department of Transportation proposal for a highway that would pass near or through this national monument. Currently, there is no Department of Transportation in Alaska. We suggest this reference be modified in the
FEIS. Also, we suggest the FEIS indicate that the Alaska Railroad and the ADH recommended both railroad, highway and dual railroad-highway surface transportation and utility corridors to the LUPC in July 1973. By referring to these routes as "surface transportation corridors", the State of Alaska and U. S. Department of Transportation will have more flexibility in considering alternative modes of transportation when environmental/reconnaissance studies are initiated.

(2) Chapter III - THE ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION:
On pages 136-137, under TRANSPORTATION, the NPS indicates that a transportation corridor proposed on a June 1973 document by the ADH would cross the northeast and eastern fringes of the proposed monument. Reference is made to the Access and Circulation Map on page 11 in Chapter I. However, this corridor and an alternative route along the Noatak River are not shown on this transportation map. We suggest these routes be shown on appropriate maps in the FEIS.

On page 137, the NPS notes that "Overall, the impact of the proposed action (Cape Krusenstern National Monument) on transportation to and within the Kotzebue region would be minor." We disagree with this assessment, as the surface transportation and utility corridors proposed by Alaska Railroad and ADH in July 1973 to the LUPC were designed to serve all of northwest Alaska. As noted in FHWA review comments above, item (1)b, other Department of Interior proposals including the subject national monument could have a major impact on planned surface transportation and utility corridors. Therefore, we again suggest the NPS assess the collective impact of implementing all the Department of Interior proposals in northwest Alaska on surface transportation and utility corridor proposals of Alaska Railroad and the ADH.

(3) Chapter V - ADVERSE EFFECTS THAT CANNOT BE AVOIDED SHOULD THE PROPOSAL BE IMPLEMENTED: The NPS notes that if this national monument is authorized, it is possible that the State would be required to consider alternative routes for the corridor. The FHWA and ADH recognize the need for studying alternative routes for surface transportation facilities during environmental/reconnaissance studies. Also, the requirements of the National Environmental Policy Act of 1969 and various federal regulations pertaining to highway construction require a rigorous examination of alternative corridors during location planning. These requirements will be closely followed by both the FHWA and ADH in any transportation planning activity in northwest Alaska. Close cooperation between the NPS and the State of Alaska on land use and transportation planning should minimize any adverse effects in the national monument area and still provide a reasonable means of ground access to serve the proposed monument and northwest Alaska.
Chapter VIII - ALTERNATIVES TO THE PROPOSED ACTION: The NPS has considered three categories of alternatives; A. No Action, B. Alternative Management Systems and C. Alternative Boundaries. Alternative B-1 would designate the proposal area as a detached unit of the NPS's proposed Kobuk Valley National Monument. Alternative B-2 would designate the proposal area as a unit of the BSF&W's Selawik National Wildlife Refuge. Alternate B-3 would establish a Cape Krusenstern Park to be owned and operated by a Native Group or by the State with personnel, technical and financial assistance from the NPS. Alternate B-4 would preserve the resources of the Cape Krusenstern Area by establishing a scientific reserve where the dominant use would be for scientific and cultural research purposes. Alternative B-5 would designate the Cape Krusenstern area as wilderness under the National Wilderness Preservation System. Alternatives B-4 and B-5 would appear to be more restrictive in regard to transportation system planning than the NPS's basic proposal. Therefore, we recommend no further consideration be given to Alternatives B-4 and B-5.

Alternative C-1 would decrease the proposal size by deleting the Tahinichok Mountains sector. The NPS notes that if this alternate was accepted, it is possible the proposed State transportation and utility corridor would be developed through the area, providing a major avenue of access to the monument area. Alternative C-2 would add 34,000 acres of lands presently available for Native selection. The NPS notes this would add a historic Eskimo village site, a potential monument access route from the Kobuk River and the upper watershed of the Situkuyok River. Alternative C-3 would establish a 23 million acre National Monument, encompassing an area that is recommended for national historic landmark designation. The NPS notes that a proposed State highway runs through this area. It appears alternatives C-2 and C-3 would be more restrictive for transportation system planning than the basic NPS proposal (Chapter I) regarding planned surface transportation and utility corridors. Therefore, we recommend no further consideration be given to alternatives C-2 and C-3. Alternative C-1 appears to be less restrictive; therefore, we urge further consideration be given to this option.

Chapter IX - CONSULTATION AND COORDINATION WITH OTHERS: On page 169, the NPS indicates they attended LUPC hearings in May-June 1973 and utilized information and thoughts expressed at these hearings to assist in development of the Cape Krusenstern National Monument proposal. The LUPC also provided the Department of Interior with recommendations on land use for the d-2 withdrawal areas. We suggest the LUPC recommendations be included in the FEIS, and any deviation therefrom be explained in detail by the NPS.
70. Chapter I.C has been revised to include a discussion of JFSWUPC activities in relation to selection and use of Federal lands identified in the Cape Krusenstern National Monument proposal.

71. The summaries of testimony at the "Transportation and Utility Corridor Meetings" have recently been released by JFSWUPC. The document containing summaries of the six meetings held is too large to include here. They are available from the Joint Federal-State Land Use Planning Commission in Anchorage, Alaska, and Washington, D.C. The summary of testimony at the Kotzebue hearing appears in Appendix C of this proposal; and the NPS has made use of the information in the preparation of this statement.

72. A map depicting all of the (d-l)proposals will be made available with the FEIS. The section concerning the impact of this proposal on transportation has been revised to include the aggregate impacts of all (d-l)proposals in the region. The other Department of the Interior proposals in this region of Alaska have been listed in Chapter I.C, Interrelationship with Other Projects or Proposals and Jurisdictions. (Please refer to Chapter III.H.5, Impacts on Transportation.)

73. "Alaska Department of Transportation" has been deleted and "Department of Highways" has been inserted in its place.

74. The Access and Circulation map has been revised to depict the location of the State's proposed "Surface Transportation and Utility Corridor" in relation to the proposed monument. Please refer to the Access and Circulation map.

75. Aggregate impacts were considered during the planning and development of the (d-l)proposals. Please refer to comment 1 for a detailed discussion of this matter.

76. The efforts of the Department of Transportation and the State of Alaska in the interest of planning and development in Alaska for the broadest public benefit are recognized and appreciated by the Department of the Interior. We agree that cooperation between agencies, interested organizations, and citizens is essential to planning for the general welfare and future needs of Alaska and the Nation. One mechanism for cooperation exists in the form of the
Joint Federal-State Land Use Planning Commission. The JFSLUPC has been an effective means of facilitating diverse and expert input into the monumental problem of Alaskan planning. The NPS sought and will continue to seek close cooperation with the JFSLUPC, the State of Alaska and all other interested parties in the interest of Alaskan planning.

77. The JFSLUPC considered the Cape Krusenstern area as part of the greater Kobuk-Selawik-Noatak (d-2) withdrawal in its recommendations of August 2, 1973. Their recommendations are too voluminous to be printed in this document. They are a matter of public record, and are easily obtained. Under the heading, Recommendations-Noatak Unit, one recommendation, specifically concerning Cape Krusenstern, is mentioned. "Any developmental uses, unless necessary for scientific study purposes, should also be prohibited in the Cape Krusenstern area."

78. The National Park Service has both contributed to and benefited from the work of the Joint Federal-State Land Use Planning Commission. The planning and development of these 28 d-2 proposals has been significantly influenced by information obtained from JFSLUPC undertakings.
January 23, 1974

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

Dear Mr. Swem:

We have reviewed the Draft Environmental Statement for the Proposed Cape Krusenstern National Monument and wish to comment on the very cursory manner in which proposed surface transportation was discussed.

Although reference was made to a proposed State surface transportation and utility corridor through a portion of the monument proposal area, very little significance was attached to the corridor. In fact, it was implied that the State would very likely be required to relocate the corridor in the event of actual construction.

Your Alaska Task Force Office should be aware of the fact that the Railroad made a joint effort with the State to attempt to define corridors that could be common to both highway and railroad construction, wherever possible. These corridors were submitted to the Federal-State Land Use Planning Commission and included the corridor discussed in the Statement.

The reason for considering a railroad in this area is due to the tremendous coal reserves lying 100 miles to the north of Cape Krusenstern on the western flank of the Brooks Range. It appears that the only logical means of bringing this coal to domestic and world markets would be via rail. Such a high tonnage railroad would require the most favorable grades, which appear to be within the recommended surface transportation corridor.

We agree that the archeological uniqueness of the Cape Krusenstern area deserves to be preserved as a natural cultural resource. However, present and future national requirements for energy and other raw materials and how to transport them to market deserves equal consideration.

Sincerely,

W. S. Johnston
General Manager

cc: T. G. Bingham, Executive Director
Federal-State Land Use Planning Commission
The NPS has no jurisdiction to require the State to relocate the corridor in the event of monument establishment. However, if this proposal is implemented, any construction would require special justification and study of alternatives (Section 4(f), Transportation Act of 1966) as amended (49 USC 1653(f)). It would also be subject to Section 106 of the National Historic Preservation Act (80 Stat. 915) or Section 2(b) of Executive Order 11593 (May 13, 1971). This would be in addition to an environmental impact statement as required by the National Environmental Policy Act of 1969.
Mr. Theodor R. Swem  
Chairman, Alaska Planning Group  
Department of the Interior  
Washington, D. C. 20240

Dear Mr. Swem:

This is in response to your letter of 28 December 1973 addressed to the U.S. Coast Guard concerning the draft environmental impact statement for certain actions relative to the Alaska Native Claims Act of 1971.

The concerned operating administrations and staff of the Department of Transportation have reviewed the material submitted. The Coast Guard commented as follows:

"Cape Krusenstern National Monument (DEIS 73-87). In reference to page 137, the small wooden tower with blinking lights is an official Coast Guard aid to navigation and is required. It is listed in the Light List as Cape Krusenstern Light 227.50. The Coast Guard must be guaranteed the right of ingress, egress and control of the arc of visibility."

"Alaska Coastal Wildlife Refuges (DEIS 73-94). In reference to page 205, there is no boarding zone off Shumagin Island. Change to Afognak and Sanak Islands boarding zones would necessitate negotiation of bilateral agreements between the U.S., Russia, and Japan."

"Arctic National Wildlife Refuge (DEIS 73-95). In reference to pages 208-211, Canadian Ice Breakers work near Barter Island in the summer months."

The Department of Transportation has no other comments to offer nor do we have any objection to the proposal contained in the draft environmental impact statement. However, the final statement should address the concerns raised by the Coast Guard.

The opportunity to review this draft statement is appreciated.

Sincerely,
RESPONSE TO COMMENTS BY
DEPARTMENT OF TRANSPORTATION
UNITED STATES COAST GUARD

80. The NPS recognizes the need for maintenance of marine navigation aids, and the importance of Coast Guard ingress, egress, and control of this facility. It is the intent of the NPS to seek cooperative agreements with the Coast Guard to insure the protection and preservation of monument values while providing opportunity for safe, convenient sea travel. The NPS may also seek agreement with the U.S. Coast Guard for the reconstruction or replacement of the existing structure, so that it might also function as a safe observation tower for visitor use.
July 18, 1974

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.

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,

[Signature]

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
81. The intent of the NPS to prepare environmental assessments and impact statements during forthcoming stages of the planning process is discussed in Chapter IV.

82. Aggregate impacts at the regional level have been discussed in topical sections of Chapter III. The intent of the NPS to coordinate planning and management of the park with the State of Alaska, Native corporations, and Native villages is discussed throughout Chapter I.B and in Chapter IV.
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.
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.

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
Director
Office of Federal Activities

Attachment
83. This question has been raised previously. Please refer to response number 1 for a detailed discussion of the matter.

84. The discussion of U.S. Coast Guard light 227.50 has been revised with the knowledge that it is a U.S. Coast Guard Aid to Navigation. The tower will not be disturbed by the NPS, although agreement may be sought with the Coast Guard so that it might be rebuilt in order to be safe for use as an observation tower for visitor use. The Coast Guard, will of course, have access to the tower and control of the arc of visibility.
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
Mr. Theodor Swem, Chairman
Alaska Planning Group
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem:

Attended hereto 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.

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.
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.
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.

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.

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.

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.

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.

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
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.

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.

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.
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.

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.

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 bureaucratic 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.

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.
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.
CAPE KRUSENSTERN NATIONAL MONUMENT
General Comments

One of the objectives of the proposed monument is to investigate and interpret the geologic and biologic features of the area. However, work required to do the scientific study would conflict with use of the land strictly as wilderness. Soil conditions do not allow for base camps to be constructed without long periods for the construction areas to be assimilated back into nature; therefore, the use of helicopters would have to be permitted to minimize damage.

If motorized subsistence hunting with snowmobiles is to be allowed, then this mode of transportation should also be allowed for all scientific investigations of the monument when weather conditions permit.

The proposed development of hydroelectric energy on the Noatak River, which will only affect a small area of the Monument, is conceivable, as Alaskans look for clean energy sources and the maintenance of a high standard of living. This is especially true for Northwestern Alaska where the people, particularly the Natives, wish to attain a higher standard of living.

Planned oil and mineral development of the area could also bring the higher standard of living. With so little geology of the area known, accurate prediction of oil and mineral land value is limited. Geologic action has been quiet water deposition, mostly marine estuarine due to the Bering Sea Land Bridge. This brackish water deposition has been intermingled with short periods of glacial outwash from the Noatak River. Offshore, in the present Chukchi Sea, is a known geosyncline. Oil and gas deposits are possible. Regional uplift has acidic intrusives which favor porphyry type deposits. Local uplift would trend to these deposits. There are three mining claims which border the proposed monument. In the future, oil and mineral reserves, presently uneconomic, may become economic and a necessity.
The recent Arab oil crisis has made oil derived from shale an economic venture and has made the exploitation of coal an almost panic situation. Guidelines should be set up to insure against panic development so that future generations will be able to enjoy the area and still maintain a good standard of living.

It would be hard not to agree that the Cape Krusenstern area is of great archaeological importance. However, a national monument of 350,000 acres to protect these sites is difficult to reconcile. Although some type of protection is necessary for these historic sites, the National Park Service has not proved that its proposed administration is the best type.

Within the proposal area are roads and trails to which the State of Alaska asserts the existence of a public right-of-way. This right-of-way will continue to exist in the event this proposal is implemented. The same is true of rights-of-way on the protracted section lines with the area.
Specific Comments

Page 1 Under Brief Description of Action, it is proposed "that subsistence uses in the area be preserved." In the next paragraph the report reads, "The proposal may affect: ... (C) Continuation of Native subsistence use of the area." What are we to believe?

Page 2 The seaward boundary is proposed for 5 miles beyond the high tide line. This not only would preempt legal State ownership but would preclude oil exploration in an area of high interest.

Page 9 Purpose #2 is unnecessary in view of similar proposed withdrawals with as good or better examples of such features.

Page 9 The Park Service does not explain why the primary objectives could not be established by another managing agency.

Page 9 The negative management proposed could have the adverse effect of focusing the attention of artifact pirates on the area at the same time it is being closed to legitimate entry.

Page 10 Item #6 indicates Natives are to be treated as part of the fauna.

Page 14 Establishment of cooperative agreements is not relevant.

Page 17 All lands are to be classified as Class VI - historic or cultural. On page 37 the report states "The outstanding feature to be found at Cape Krusenstern is the series of beach ridges." They are also outstanding features when considered in a zone system which recognizes the possible presence of Class IV - Unique Natural Areas. An early draft of the Nationwide Outdoor Recreation Plan (1972) suggested a revised system of recreation land classification. The system, in its Class IV category, might better describe this area.

Page 27 If lands withdrawn are to be justified on the basis of their historic or cultural values, about 16,000 acres along the Cape and Krusenstern Lagoon is more than adequate.

Page 27 (Paragraph 1, line 7) "northwest-southwest" should read "northwest-southeast."
(Paragraph 2) From Nome to Cape Krusenstern is not an easy trip by boat.

The first sentence under "Geology" on page 33 belongs with the final statement of that section on page 34. Mineral potential is unknown because no detailed geologic study has been made of the area.

Where are the citations for information attributed to the National Marine Fisheries Service and the Alaska Department of Fish and Game?

(Paragraph 1) McPhail and Lindsay (1970), page 150, dispute the presence of Dolly Varden in Arctic waters.

Ugruk is not fur seal. It is the bearded seal (a hair seal).

Most statements regarding subsistence utilization are dramatic and should be reworded. The people in the area will survive regardless of who manages the area.

(The tower is here described as 20 feet tall. In the Master Plan, page 7, a quotation from Giddings mentions a "forty-foot tower."

The area is most frequently utilized by Bob Uhl, a Caucasian.

Line 1 states that no mining claims are in or near the proposal area. The Alaska Department of Natural Resources identifies three mining claims which border the proposed monument.

The citation of this page should be to John J. Burns of Alaska Department of Fish and Game.

The statement that Kotzebue "purchases" about 2,144 bowhead whales should be rewritten.

(Paragraph 2) Data in the first half of the paragraph was extracted from the ADFG 1971 Annual Management Report, but not credited. The second half is a comingling of NANA and Department data, structured to be credited to NANA.

(The first sentence is from the Annual Management Report 1971, page 146, paragraph 7, sentence 1. The third sentence is from the same source. Credit has been given for neither. Also, some readers may assume that liberalized regulations may now be warranted.)
Page 108  (Paragraph 2) The number of processors in Kotzebue can vary yearly.

(Paragraph 3) $275,000 is value to fishermen who receive only part of total value. The rest is for expansion, profits, etc.

(Paragraph 4) Salmon may be taken ... east of a line.

Page 109  Information in table is incorrect.

Page 110  This entire page is from Department of Fish and Game sources, but not credited.

Page 119  (Paragraph 1) The discussion of ice conditions in the last sentence should be elaborated.

(Paragraph 2) Since sport hunting is almost nonexistent and shows little potential why is it necessary to prohibit it? Before an activity is restricted, there should be a reason for the action.

Page 121  (Paragraph 2) Visitor use is not likely to create demand for increased air access. The cost of charter flights would deter many people. Increase will probably be slight rather than moderate.

Page 128  (Paragraph 3) Again, NANA's subsistence survey is cited and, again, the figures are inflated.

Page 130  (Paragraph 2) That adoption of the proposal could have the effect of accelerating the changeover from subsistence to wage economies in villages of the area is highly speculative. On the contrary. Implementation of the proposal would eliminate development of minerals, and would deny development and place restrictions on resultant increasing subsistence pursuits.

Pages 133 and 134  Would commercial fishing be allowed within the five-mile boundary? What specific source was used to cite "the 50 most successful fishermen could make $5,000 to $10,000 ...."?

Page 136  (Paragraph 1) The "indirect impact of increasing the availability of transportation to the region" would be insignificant to residents, who cannot afford costly air fare. Benefits will be to the visitors.

Page 143  (Paragraph 2) Will restricted use of motor vehicles be enforced on the winter trail between Kotzebue and Kivalina?

(Paragraph 3) The State Department of Highways does not agree that the State's transportation corridor is in conflict with the Monument proposal, as mentioned here and elsewhere in the report.

Page 147  (Paragraph 2) Economic productivity which might result from adoption of the proposal could be insignificant compared to the economic productivity which could be generated by mineral or other developments in the area if this proposal were rejected.
It is incredible that a justification for National Park Service management of the area is because no other federal agency has expressed a major interest.

(Paragraph 3) "No matter which agency administers these lands, there are several Federal laws designed to protect cultural resources on the..." So, why a monument?

An area of the size described as Alternative A would include all areas of national significance.

(Paragraph 3) It could be argued that because the area is going to be set aside for its cultural and historical attributes, it would be beneficial for people to have access.

The hearings held by the Joint Federal-State Land Use Planning Commission were not on the specific proposals of the Department of Interior for (d) (2) lands. Many people would like an opportunity to voice their opinions on the Department's controversial proposals at a public hearing.
85. We believe that it would be repetitive to prepare another statement in addition to the 28 already completed. For a discussion of aggregate impacts, please refer to response 1, USFS. It is recognized that the proposed Cape Krusenstern National Monument would have an aggregate impact when considered in conjunction with the proposals for Noatak National Arctic Range, Chukchi Imuruk National Reserve, and other Department of the Interior proposal areas in northwest Alaska. These proposals are analyzed in terms of aggregate regional impacts of hydroelectric potential (Chapter III.H.6), Transportation (Chapter III.H.5), mining and mineral entry (Chapter III.H.4), and sport hunting and the guiding industry (Chapter III.H.3). A similar question was raised by the Department of Commerce and you may wish to refer to response 1 for an indepth explanation of the issue of cumulative impacts.

86. We disagree 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 in indicated throughout the statement. Also, regional relationships of this proposal with others in the region of northwest Alaska are analyzed in aggregate under specific topics in Chapter III.

87. In making (d-2) land withdrawals and the recommendations to Congress for management of these lands, a basic dilemma 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, 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 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 NACSA have excluded from "four system" consideration vast areas of mineral and petroleum potential already. 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 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 or petroleum potential were recommended for protective management that would exclude 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 or petroleum development. Cape Krusenstern will not be open to mining and mineral entry. The NPS will participate in and encourage research in the proposal area. For further discussion of research please refer to Chapter I.B.4.

88. In regard to the request for a research program to inventory resource potential in these areas, the NPS proposals provide that prospecting, mining and the extraction of minerals or the removal of soil, sand, gravel, and rock will not be permitted, except for portions of Yukon Charley National Rivers or where carried on pursuant to valid 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 purpose of the area and the policies of the NPS. Procedures which might result in damage or alteration to the resources would not be permitted.

89. 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 scenic wild rivers proposals, there was no way to go to the public for comment on the proposals until the draft environmental
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 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 the development of the final environmental impact statements.

90. We do not believe that the Cape Krusenstern proposal recommends withdrawal of lands exceeding that necessary to protect the archeological and natural features and qualities of the nationally significant resources. In fact, areas not recommended for inclusion in the monument but recognized as interrelated to the features and qualities of the proposed park resources are indicated as alternative proposals. Alternative "C" of this proposal contains the waterfowl habitat of the lower Noatak River, which has a significant population of whistling swans, the entire range of the musk ox in the area, and many archeological sites along the Noatak River.

91. We do not believe that a cost-benefit analysis is appropriate to 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. A similar question was raised by the Department of Commerce, and you may wish to refer to response 16 for an in-depth discussion of the issue of cost-benefit analysis.

92. The statement clearly addresses the impact of the proposal on potential hydroelectric sites and potential petroleum development near the proposal area in Chapter III. (There are no geothermal or coal potentials within the proposal area.) The statement also addresses the aggregate impact of this proposal in conjunction with others in the region. Please refer to response 1 for an in-depth discussion of the issue of aggregate impacts.
93. The proposed monument boundaries include all lands above mean high tide and oceanic waters out to five miles beyond the oceanic shoreline. Under the legislative proposal for Cape Krusenstern as well as under Section 17(d)(2) of ANCSA, all lands which lie above the mean high tide line, are closed to appropriation or entry under the public land laws, including the mining and mineral leasing laws. All lands submerged or otherwise below the mean high tide line are in State jurisdiction. The NPS will seek cooperative agreements with the State, the Coast Guard and other parties, concerning these oceanic waters in the interest of protecting the natural and archeological features of the monument.

94. The statement is an analysis of the NPS management proposal and is not intended as a document for lobby purposes. Inadvertently biased, incorrect or misinterpreted information has been corrected in this final statement in response to deficiencies brought forth in the NEPA review process. The statement has been edited to remove any tone of bias, and information in the statement is based mostly on published public sources.

95. A map is included with each set of statements which shows all 28 proposals and relief of the State of Alaska.

96. The proposals represent the goals and objectives of Section 17(d)(2) of ANCSA whereby Congress mandated the agencies to undertake the studies and make recommendations for inclusion of up to 80 million acres of lands in national systems.

97. Cape Krusenstern National Monument has been proposed to protect "nationally significant cultural (archeological and historic) resources and their natural environment." Any research undertaken will be in accordance with this objective. Please refer to section I.B.4.

98. These matters will be considered on an individual basis. The use of snow machines in the proper season probably would be allowed. Consideration of possible impact on monument values would be the overriding concern.

99. The Alaska Power Administration's identified hydroelectric site on the Noatak River has been discussed in this proposal along with the impacts of this proposal on this hydroelectric development. The Land Use Planning Commission has recommended against the establishment of this power development. If this proposal is implemented, any construction would be subject to Section 106 of the National Historic Preservation Act (80 Stat. 915) or
Section 2(b) of Executive Order 11593 (May 13, 1971). This would be in addition to an environmental impact statement as required by the National Environmental Policy Act of 1969.

100. The NPS has endeavored to present an accurate picture of the geology of the proposal area from the information available. For a more complete discussion of this topic, please refer to comment 62, Bureau of Mines.

101. This discussion has been added to Chapter I.A.3, Description of the Environment.

102. There are no legally located and maintained mineral claims within the boundary of the proposal area.

103. Only a few of the identified archeological sites within the proposal area have been excavated. There are many more known sites yet to be investigated. It is probable that more sites will be discovered. Artifacts that have been unearthed are relatively recent in origin in comparison to what possibly might be found in the area. The oldest confirmed finds at Cape Krusenstern date from 3500-4000 B.C. The last period of time when the Bering Land Bridge was passable preceded this era by several thousand years.

104. The intention of this document is not to prove that proposed NPS administration is best. Rather, it is designed to present the impacts of the proposed monument. Congress will decide whether or not NPS administration will occur.

105. 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.

The responsibility for a decision as to the applicability of Section (4f) of the Department of Transportation Act of 1966 (49 U.S.C.; 1653(f)) to the lands covered in this statement rests with the Secretary of Transportation.

If the Secretary of Transportation should determine that Section 4(F) applies to any of the lands covered by this statement, the Secretary must then determine that no feasible and prudent alternative exists to the use of such lands for highway purposes, and that such a use includes all possible planning to minimize the harm to such lands. Such requirements would exist in addition to those of the National Environmental Policy Act of 1969 (42 U.S.C.; 4321, et seq.).
106. These two statements are not contradictory. While subsistence uses will be preserved, the proposal will have important implications for such uses, which this environmental statement seeks to identify.

107. Under the Legislative Proposal for Cape Krusenstern National Monument, as well as under Section 17(d)(2) of ANCSA, all lands contained within the proposal boundaries, and which lie above the mean high tide line, are closed to appropriation or entry under the public lands laws, including the mining and mineral leasing laws. All lands, submerged or otherwise below the mean high tide line, are in State jurisdiction and could therefore be open to mining and mineral entry at the State's discretion. Potential voluntary cooperative agreements between the NPS and the State of Alaska, the U.S. Coast Guard, and other parties, which could be designed to protect the national monument values, could impose restrictions on offshore mineral leasing or other development within these lands below the mean high tide line.

108. The biological and geological features are essential to the study and evaluation of the archeological resources in permitting study of the environmental factors which confronted the prehistoric residents of the area. Furthermore, if Cape Krusenstern is established, it will have the only representative sample of coastal-lowland tundra in the National Park System.

109. It is not the purpose of the EIS to make such an explanation. Alternative management systems are discussed in Chapter VIII.B.

110. The purposes of monument management are described in Chapter I.A. In preserving the area for its archeological values, NPS management will take special care to guard against damage or destruction of all known sites and others which may be discovered. An interpretive and educational program will seek to improve public understanding of these cultural resources and the need to preserve them undisturbed. Individuals who derive an income from sale of artifacts would be denied this source of income.

111. Cooperative agreements are proposed in the Description of the Proposal I.A.(4). They are considered of vital importance in assuring that all those who have interests in the resources of Cape Krusenstern have the opportunity to contribute to management of those resources.

112. It is expected that private enterprise will emerge to provide accommodations and services as demand warrants. Temporary inconvenience and overcrowding would occur, in the short term, if private enterprise could not meet the rise in demand. The discussion of impacts on the Tourist and Outdoor Recreation Services industry has been revised to reflect this.
113. The discussion of beach ridges has been clarified in Chapter II.A.3. At this time, the National Park Service uses the ORRRC land classification system.

114. The proposal is made not only on the basis of cultural and historic values, but also on the basis of its natural values. Please refer to Alaska Oil and Gas comment 181.

115. The text has been corrected to read "northwest-southeast."

116. The sentence in question has been omitted. The "Geology" section of this document has been revised to include new information. Please refer to Chapter II.A.3.

117. The citations attributable to the Alaska Department of Fish and Game have been added to the text. Citations attributable to the National Marine Fisheries Service were incorrectly given. The survey was conducted by biologists from the Bureau of Commercial Fisheries which has now become the National Marine Fisheries Service. The citation has been attributed to articles written by BCF biologists for the USAEC's Cape Thompson study.

118. This sentence has been revised to substitute "Sheefish" for "Dolly Varden."

119. The text has been revised to reflect that Ugruk is the bearded seal (a hair seal).

120. The text has been changed to read "a forty-foot tower."

121. Mr. Uhl has been living in the area for more than 25 years, and uses the area for subsistence activity. The remark that Eskimos were the only subsistence users of the area has been corrected.

122. There are no legally located and maintained mineral claims within the boundary of the proposal area. The text has been revised to clarify this point. Please refer to Chapters II.A.3 and III.H.4.

123. The citation now reads "John J. Burns, ADFG."

124. "Purchases" is a misleading term in the context of this sentence. "Acquires" has been used to replace "purchases" in the FEIS. Also, 2,144 pounds of bowhead whale meat are acquired, not 2,144 bowhead whales. A revision has been made to correct this mistake.

125. The entire paragraph has been credited to ADFG in the FEIS.

126. While these results may not be wholly reliable and should not be used to establish any limits on harvests, they suggest the continuing and dynamic role subsistence resources play in the villages of the Cape Krusenstern area.
127. Proper citation has been made in the FEIS for the materials included from the "Annual Management Report."

128. The text has been clarified to reflect that $275,000 is not profit for the fishermen.

129. This sentence has been revised to read "east."

130. The table has been revised with accurate figures and totals.

131. Proper citation has been made.

132. The discussion of ice conditions has been elaborated and clarified in the text.

133. The administrative policies for historic areas of the NPS prohibit sport hunting (USDI NPS 1968).

134. This discussion has been revised. Please refer to Chapter III.B.

135. We have made a notation in the text to show that the State of Alaska considers these NANA figures inflated. Please refer to Chapter II.A.9.

136. Cape Krusenstern is a small area in northwest Alaska. As a national monument it probably will contribute to the economic growth of the region. The proposal would only affect mineral development within the proposal area itself. This would have minimal impact on mineral development in the region.

Development, in the event the monument is established, would not be eliminated, but would be carefully planned and controlled in a manner consistent with monument objectives.

Monument objectives and policies regarding subsistence use in the proposal area would tend to protect subsistence resources and monument impacts on current subsistence use would be minimal. Please refer to Chapter II.A.9 and Chapter III.G for further discussion of subsistence activity and monument impacts on subsistence use.

137. Yes, commercial fishing will be permitted within the five-mile boundary. The statement about the most successful fishermen has been deleted.
138. Initially, benefits would appear to be greater for visitors. The discussion of the impacts of this proposal on transportation have been revised. Please refer to Chapter III.H.5.

139. The NPS is charged with two responsibilities which have some bearing on this question. First, the NPS assures that subsistence uses will continue so long as these uses do not impair the resources for which the monument is to be established. Second, the NPS must preserve and protect the cultural and natural features within the monument. The proposal would not affect current use patterns. The "winter-haul" trail from Kotzebue to Kivalina would be open to traditional usage, including snowmobile usage. Other trails within the proposal area will also be open. ATV use would be precluded. Other modes of land transportation would be considered individually. Policies will be enforced to ensure that monument objectives will be met.

140. If this proposal is implemented, any construction would require special justification and study of alternatives (Section 4(f) Transportation Act of 1966). It would also be subject to Section 106 of the National Historic Preservation Act (80 Stat. 915) or Section 2(b) of Executive Order 11593 (May 13, 1971). This would be in addition to an environmental impact statement as required by the National Environmental Policy Act of 1969.

141. It is possible that your comparison of economic productivity of the area with or without the proposal could be true. However, no significant mineral resources in the proposal have yet been discovered, although little mineralogical research has been undertaken in the proposal area. The proposal area's economic productivity could also be significant, in comparison to the economic productivity of the area without the proposal, in the event the mineral potential of the area proves to be negligible.

142. No such assertion was made. Under the "No Action Alternative," because no other agency has developed a proposal for these lands, this alternative would probably result in the reclassification of these lands to (d-1)status. It is our assumption that some form of public multiple-use management would ultimately exist if Congress takes no action on this proposal.

143. Monument status will provide not only the protection of the several laws designed to protect cultural resources but will provide managerial authority and presence to preserve and interpret the resources for existing and future generations.
144. Alternative C, which is much larger than the proposal, coincides with a National Historic Landmark, the Cape Krusenstern Archeological District. It contains many archeological sites of national significance.

145. The means of access under the original proposal are varied and are discussed in the Description of the Proposal (I.B).

146. Congress will hold public hearings on the 28(d-2) proposals.
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.

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.

Very truly yours,

John A. Carlson
Borough Mayor

TAG:JAC:nic

cc: Planning and Zoning
For a response to your questions, please refer to comments 1 and 16 where aggregate impacts and cost-benefit analysis have been discussed. Impacts of this proposal on transportation are discussed in Chapter III.H. Regional considerations of possible impacts on transportation are considered in the discussion in Chapter III.H.
March 15, 1974

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

RE: Your letter dated December 28, 1973
Environmental Impact Statements 17 (D) (2) Lands

Dear Mr. Swem:

My office has reviewed the possibilities of the proposal by the Secretary of the Interior of the land withdrawals to be included in the National Wildlife Refuge, National Park, National Forest, or National Wild and Scenic River Systems. The withdrawals that would be of interest to Fairbanks and Interior Alaska in our estimation would be those designated as numbers 73-91, 73-92, 73-102, 73-107, 73-108, and 73-109. The following comments pertain to those specific withdrawals.

Such withdrawals put unrealistic restrictions on mineral development, which is not only of concern to Alaska but to the United States as a whole, as specified in the Mineral Industry Research Laboratory Special Paper No. 1, published by the University of Alaska in August 1972. To lock up the mineral potential, which has national and international implications at this time, would be short-sighted and increase our dependency on foreign sources of some minerals that have been indicated as plentiful in our state. New guidelines concerning mining and the impact on the land by the Environmental Protection Agency may lead to mining practices being more acceptable to the general public. The Fox area (approximately eleven miles north of Fairbanks) represents the recovery potential that nature has in repairing damages and actually leaving the mined area in a more usable condition than it was before dredging.

Tourism is big business in Alaska, and while some of the proposals recognize the importance of this part of our economy, others (such as the wild and scenic river aspects of Birch Creek and Beaver Creek) certainly restrict to a special few people the areas of scenic beauty. To the elderly or the handicapped, enjoyment of a canoe trip down a scenic river is beyond their capabilities. Restrictions of roads and trails in these areas are a concession to the able-bodied minority. In the Yukon Charley National Rivers Environmental Impact Statement, a section was included showing the answers to various questions by the local people. In general, these showed a preference for normal, natural development and satisfaction with Bureau of Land Management authority, as well as a critical opening up of the area by roads as the population indicated the necessity. Year-round maintenance of the Steese Highway to Circle was considered long past due.
At the Farm Forum (Friday, March 1, 1974) at the James T. Hutchison Development Center, the Yukon Flats agricultural potential was pinpointed as one of the important areas of the state; having possibilities not assessed in the Environmental Impact Statements. Also, the present duplication of interests in this area indicates that agriculture will be far down the line in priorities unless immediate action is taken. A major question is, "What will the effect be in changing from the nomadic Alaskan native existence to their living in a confined or defined area under the Native Allotments?" Is it reasonable to believe that they find their situation very similar to the change from pastoral living to community agriculture which occurred in primitive societies in the Old World? If being big farmers is necessary to success in this day and age, surely the native corporations are in a position to do things in a "big" way.

This brings me to a place convenient to closing the remarks on these Environmental Impact Statements by saying that there is no indication that the "social aspect" or the "human factor" was taken into consideration in their formulation.

Very truly yours,

[Signature]

JOHN A. CARLSON
Borough Mayor
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 Cape Krusenstern National Monument

Prepared by
Resource Planning Team, FSLUPC
May 1974
Proposed Cape Krusenstern National Monument

Chapter II Description of the Environment

Page 39 Geology

Photo caption

Comment: Bering Sea should read Chukchi Sea. The Bering Sea lies south of Bering Strait.

Page 91-92 Social and Economic Considerations

It is likely that the decline (birthrate) will continue under the influence of . . . the selective out-migration of young women.

Comment: It is not clear as to what is implied by the "selective" out-migration of young women. The 1970 age-sex distribution on the following page shows more women in the 20 to 29 age group than men.

Page 95 Social and Economic Considerations

"... a pattern of anomie and social dislocation . . ."

Comment: This may be a topographical error.

Page 98 Income - General

Two categories of income - subsistence and cash.
Comment: If cash were needed to purchase the equivalents of food, wood and other materials taken directly from the land, then the labor involved in this activity should also be called subsistence.

III Environmental Impacts of the Proposed Action

Page 116 Probable Future of the Environment Without The Proposal

"3. Mining will occur if suitable mineral bodies are found."

Comment: Mining will also depend on location, transportation opportunities and other factors.

Page 125 Impact on Water Quality - Hydroelectric Potential

The Joint Federal-State Land Use Planning Commission considers this proposal (Agashashok on the Noatak River) impractical.

Comment: Commission recommended against hydro development on the Noatak but did not pass judgment on the "practicalness" of any project.

Page 125 Impact on Water Quality - Hydroelectric Potential

Impact on the hydropower project would be to force an adjustment in the plans for the project; either to lower the water level or to build a restraining dam that would prevent flooding in the monument. This would have a substantial impact on the cost and practicality of the proposed hydropower project.

Comment: It may be in order to make some comment relative to the non-availability or high cost of electric power in the area and that existing power depends upon combustion of the fossil fuels.
States there is a winter haul road between Kotzebue and Kivalina which receives moderate use. "This proposal would not affect present use patterns but would preclude possible future all-terrain vehicle use, on or along the route."

Comment: If snowmobiles are "all terrain" vehicles, the proposal would stop traffic between the two villages. This should be clarified. If snowmachine use is to be terminated, the EIS should include an evaluation of the social disruption caused by the curtailment of transportation patterns.
148. The body of water which appeared on the left side of the aerial photograph of the beach ridges at Cape Krusenstern was inadvertently referred to as the Bering Sea in the caption. It is actually the Chukchi Sea, and the caption has been corrected. The photograph appears in Chapter II of the EIS.

149. The remark concerning the out-migration of young women in the discussion of "Social and Economic Considerations," has been revised to reflect the fact that under the influence of contraception, although population increases will continue as more young people move into the childbearing years, the birthrate is likely to continue to decline. Please refer to Chapter II.A.9.

150. Anomie was correctly used in the discussion of "Social and Economic Considerations." It is a word used by social scientists to refer to the condition of individual or group sense of alienation, lack of identity and role in society, loss of purpose and social involvement and of being marginal to the mainstream of society.

151. It is true that future mining in the area, in the event the proposal is not established, will be contingent not only on the discovery of mineral bodies but also transportation, location, and other factors. The remark relating to mining in Chapter II.B has been revised to include these additional factors.

152. The discussion of the JFSILPC's recommendations concerning the Agashashok hydroelectric site, which has been identified by the Alaska Power Administration on the lower Noatak River, has been revised. The JFSILPC did not pass judgment on the practicalness of the identified site, although it did recommend against its development. Please refer to Chapter III.H.6 where the impacts of the proposal on hydroelectric potential are discussed.

153. The text has been revised to include the fact that currently the production of electric power is dependent upon fossil fuels, which is more expensive than hydropower. Please refer to Chapter III.H.6.
154. Snowmobiles are not considered to be "all-terrain vehicles" by the NPS. "All-terrain vehicle" use would be precluded within the monument. Snowmobile use and other present winter transportation use patterns would not be affected.
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...
as a whole. The combined impact of the proposals is a necessity not to be overlooked.

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, Jr.
Executive Director

SK/mm
155. Congress has established a number of land and historic resource management agencies, each with different responsibilities and objectives. Each of these agencies was created by Congress to best fulfill particular objectives which Congress considers in the national interest. The proposals of the Secretary of the Interior assigned management responsibilities in Alaska based upon the perceived needs of a particular area and proposals have been designed accordingly. The proposals are consistent with the congressionally determined responsibilities of the particular agencies; it follows, therefore, that particular proposals can best be carried out by that agency designed specifically to carry out such a proposal's objective. The National Park Service was designated by Congress to study Federal lands for possible inclusion in the National Park System under the provisions of the Alaska Native Claims Settlement Act.

156. The matter of overall or aggregate impacts has been previously raised. Please refer to comment 1 for an indepth response.
May 30, 1974

Mr. Theodore R. Swem, Chairman
ALASKA PLANNING GROUP
United States Department of the Interior
Washington, D. C. 20240

RE: DRAFT ENVIRONMENTAL STATEMENTS;
Proposed Cape Krusenstern National Monument
Proposed Noatak Ecological Range
Proposed Selawik Wildlife Refuge
Proposed Kobuk Valley National Monument
Proposed Chukchi-Imuruk National Reserve

Dear Mr. Swem:

These comments are submitted on the above referred draft environmental statements on behalf of NANA Regional Corporation, Inc., its shareholders, and the village corporations of Ambler, Buckland, Deering, Kiana, Kivalina, Kobuk, Kotzebue, Noatak, Noorvik, Selawik, and Shungnak, and the respective shareholders of each.

It is essential for all who are involved and who hold the destinies of our people in their sometimes capricious, if not fumbling, hands to understand that our people always have and always will have to live by subsistence, not annuities, and that without our caribou and our fish, we are vegetarians without vegetables. Without our trails and our shelter cabins, without our streams and our camps, we are isolated from our relatives and our friends, frozen and stranded in our villages; in effect, landless, the promise of our future broken, because we will be isolated from one another, cut off from our resources, left to decay slowly, to slide into poverty.

If you and others ask how can this be so, then you and others have not analyzed the effects of the Native Claims Settlement Act and its long-term implications.

We do not charge that we, the people of the region effected by the proposals, the most important resource of the region, were ignored or forgotten by those who prepared the proposals, but we do charge that those who prepared the proposals misconstrued the Settlement Act and its effect on us. So we must set the record straight.
First, the Act will not make us rich, as many assume; and the payments will cease almost before they start. The money each individual will receive is small, ominously misconceived by many to compensate for ramifications of all aspects akin to the past uses of lands surrounding respective native villages. It will always be insufficient to support the majority of our people, even at a subsistence level. In effect, we must live off the land if we plan to survive, and we can assure you that we plan to survive.

Therefore, we must turn to the land -- and the first thing we must do is disabuse people as to how much land we have. Forty million acres? Not here. What little land we have, as compared to what we used, will be grossly insufficient to support our subsistence needs. Which means that we must continue to have access to the Federal lands covered by the d(2) proposals, and State lands not so covered, for all of our subsistence needs. Access must be guaranteed to us, and the parks, refuges, and monuments covered by the proposals must be managed with our needs always receiving first priority.

Therefore, your proposals must be altered and any legislation must embody at least these basic provisions:

1. Each park, refuge, monument, or area of ecological concern must always be open to all subsistence uses by the Natives of the region, with no projected or proposed cut-off date for such uses; for, as the years pass, the subsistence needs of our people will have to be satisfied more and more by the lands and waters of our area, not less, for the monies of the Settlement Act will be gone. The subsistence uses must be complete, extending to hunting, fishing, trapping, berry and green gathering, the use of wood for fuel and shelter, and the necessary trade with other Natives.

2. All sport hunting and fishing must be prohibited.

3. Management of all parks, refuges, and monuments must be by Natives of our region. If we cannot be trusted to manage parks, refuges, and monuments as we have in the past, which is why others perceive these areas to be valuable as parks, refuges, and monuments, then we ask: Who can be trusted to manage them?

4. All trails and navigable waters must be open for Native use. Shelter cabins must be allowed on the trails, camps by the waters, and the use of the waters must extend back for at least a mile from any bank.

5. All allotments must be allowed to pass to the heirs.

6. There must be no controlled burning and all necessary action must be taken immediately to extinguish any fire.
7. All artifacts found must be maintained in the NANA region, in suitable display, either by the regional corporation or a responsible Federal agency.

8. The proposed areas must be reduced in size. They are far too large.

9. The boundaries of the proposed areas must be reconsidered and redrawn. They bear no relation to the management of wildlife. For instance, caribou migrating from the North will cross Petroleum Reserve #4, then through an ecological range, then a national monument, then a wildlife refuge, and throughout this process they also will cross Native and State owned lands, and each of the lands crossed will be under different management. This administrative checkerboard will not foster good management and will only confuse the people of our area, interfering with their subsistence activities.

10. Development of natural resources must not be closed from these areas before careful evaluation, taking into consideration national and local needs.

11. Designated areas of ecological concern must not be closed to development and any arrangement entered into by the Secretary of the Interior for management or control of such areas must reflect the general positions stated in this letter.

Very truly yours,

NANA REGIONAL CORPORATION, INC.

JOHN SCHAEFFER
Executive Director

cc: Secretary R. Morton
    Senator M. Gravel
    Senator T. Stevens
    Senator H. Jackson
    Representative D. Young
    Representative J. Haley
    Representative L. Meeds
    F/S Land Use Planning Commission
    Alaska Federation of Natives, Inc.
    NANA Board of Directors
    NANA Regional Village Corporations
    Tundra Times
    Anchorage Daily Times
    Anchorage Daily News
    Fairbanks Daily News-Miner
    The Nome Nugget
    Kotzebue News
    The Seattle Times (Stan Patty)
RESPONSE TO COMMENTS BY
NANA REGIONAL CORPORATION, INC.

157. As noted in Chapter I, one of the principal purposes of the proposed monument would be "the preservation and interpretation of present-day Native cultures." The intent of this NPS proposal is to honor the intent of ANCSA in regard to protection of subsistence resources and to further recognize and provide the opportunity for local residents to continue to pursue a lifestyle and/or culture based predominantly on a dependence on wildlife and wild plant resources for satisfying basic needs for food, clothing, material, shelter, and fuel and for psychological well-being. This could include customary practice of barter or trade and the sale of fur pelts obtained by trappers engaged in a subsistence lifestyle. No racial or ethnic distinctions among local residents will be made. Sections dealing with the impacts of the proposal on subsistence uses have been amended to clarify NPS intent as described here. Please refer to Chapters II.A.9 and III.G.

158. Sport hunting will be prohibited and sport fishing would be managed so as to avoid or minimize conflicts with subsistence uses. Wording has been added in Chapter I, under "Administrative Policies" to the effect that: "Subsistence needs will be given priority over other demands on natural resources, such as demands imposed by sport hunting pressure. In cases where a resource cannot support all demands for use, subsistence needs would be given preference. However, if limitations on other uses fail to relieve pressure on the failing resource and to provide assurance that such resource can continue to support a sustained, long-term subsistence utilization, then subsistence uses would be limited to the extent necessary to restore and maintain viable populations or qualities of the resource.

Recreation and visitor use facilities and program will be planned and zoned as to location and season of use so that they will have minimum conflict with subsistence pursuits."

159. Provisions of the proposal call for NPS entry into cooperative agreements for the management, protection, and public use of the monument, and for the conduct of research, historic preservation and environmental education in northwestern Alaska. The management agency will work with all concerned State agencies, communities, and affected individuals in arriving at an equitable and workable management plan for subsistence uses in the proposal area. Please refer to Chapter I.B, Objectives of Management for Cape Krusenstern.
160. All rights accruing to Native allotments will be recognized by the NPS. Trails will be open to Native use; navigable waters are the immediate responsibility of the State, although so far as NPS planning is concerned, they will be open to Native use. Shelter cabins and camps, compatible with monument values and required by subsistence needs would not be inappropriate. Subsistence cabins and camps as well as visitor circulation patterns will be the subject of future specific planning.

161. All approved and patented Native allotments within the proposal area will be considered as private inholdings with rights of inheritance. The NPS policy regarding private inholdings would affect lands used for subsistence purposes only if there is a willing seller or if such lands are used for purposes which would threaten monument values. In the latter instance, negotiations with owners would be the first avenue of approach and condemnation would only occur with congressional approval. This would have a significant impact on future generations of subsistence users by assuring that such lands would continue to be available for subsistence. The section on impacts on subsistence has been amended to include this.

162. The NPS policy on natural and man-made (accidental) fire is as follows:

Man-caused fires will be controlled. If a fire is a natural occurrence, it would be allowed to burn, with the qualifications that human life, cultural resources and visitor-use areas not be endangered, and that no representative species or biotic community be allowed to become extirpated within the boundary as a result.

The National Park Service has done controlled burning in habitats where the practice was warranted. In many habitats fire is a natural feature in the succession of the ecosystem. In some instances, where habitat within NPS jurisdiction has begun to deteriorate because the natural occurrence of fire had been circumvented, controlled burning proved to be necessary. It was only undertaken after careful study of the environment and consideration of the procedure and its possible adverse effects. It is not anticipated that controlled burning will be necessary at Cape Krusenstern National Monument.
163. Procedures established under the authority of the Federal Antiquities Act of 1906 and other applicable statutes, regulations, and policies will apply to the artifacts removed during archeological digs on Federal lands. Objects obtained in excess to the needs of the National Park Service may be disposed of in accordance with applicable laws and procedures. Generally these laws and procedures require the receiving agency to handle objects in such a manner as to assure their preservation and use for public benefit.

164. The NPS will seek cooperative agreements and close working relations with other agencies and private landowners for the management of wildlife over large areas of Alaska. Provisions for cooperative agreements will include those which seek compatible and complementary policies and regulations for the management of the migrating caribou to foster good overall management of the species.

165. The NPS does not seek to manage lands outside of the proposal area. Rather it is hoped that specific cooperative agreements can be established with adjacent landowners and managers when necessary to protect park proposal values and resources. Control and management of these lands will of course be retained by the legal owners and managers.
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-Chenega National River
Gates of the Arctic

Sincerely,

TANANA-YUKON CHAPTER, ACS

Tina Stonorov
Tina Stonorov for
Richard H. Bishop
President
Comments on CAPE KRUSENSTERN NATIONAL MONUMENT

for the Tanana-Yukon Chapter, Alaska Conservation Society
By: P. E. Lent
July 1974

Our organization supports fully the desirability for protection of the significant archaeological sites and traditional subsistence and recreational use areas.

It is clear, however, that most of these significant cultural features are located in the south half of the proposed monument. The proposed action is to manage this monument as a historical unit (p.6). Therefore, we feel that justification for inclusion of the north half of the proposed area is not adequate. We urge that an area approximating those outlined in Alternative C.1.A (p.158) be adopted.

We are opposed to the proposed action to prohibit "sport" hunting and trapping within the boundaries of this historical unit. No justification for the proposed action is apparent. In fact the EIS states in at least two places that such uses have been and will continue to be relatively light. We believe the Alaska Department of Fish and Game and the US Fish and Wildlife Service, within their respective jurisdictions and responsibilities can adequately regulate these activities. Such uses are not likely to significantly conflict with other visitor activities. Furthermore, no adequate definitions or distinctions between "sport" and "subsistence" hunting are made in the EIS.

The EIS fails to describe, make note of, or deal with the impact of the proposed action on existing subsistence and recreational use of the area by non-native residents of Kotzebue. These omissions should be corrected.

Statements on p. 86 and elsewhere regarding "survival value" of subsistence uses are theatrical, misleading and not in keeping with the objective treatment desirable in an EIS. Statements on p.129 on this topic conflict with one another.

We believe the EIS fails to treat adequately the impact of proposed visitor (tourist) oriented developments and increased visitor numbers.

The treatment of projected visitor numbers is especially weak. On p. 132 of this EIS, and in the other D-2 impact statements,
it is stated that 30,000 visitors per year may come through Kotzebue. We believe that this is a minimal figure in view of the heavy visitor numbers already existing. And yet later on p. 132 it is stated that "It is doubtful that people will travel to Kotzebue because of the Monument's merits alone... For this reason it is expected that the impact of Monument status on visitation to the proposal will be an increase of only about one to five thousand annually." This is rather fallacious reasoning. With the development of visitor facilities on the Monument and given the great increase in visitors to the general Kotzebue-Noatak-Kobuk area it is only reasonable to assume that both the visitors and the commercial tourist enterprises will take advantage of the easily accessible Monument. Since it will be a possible one day trip, as the National Park Service notes, we can expect a large number of tourists moving in and out during the summer season, disrupting subsistence uses and providing potential for damage to cultural and natural features. These potential impacts are dealt with inadequately in the Monument proposal and the EIS. We believe specific plans should be prepared to limit the level of visitations to the area.

On p. 158 the EIS states that deletion of the Takinichok Mountains sector would have the impact of permitting a proposed state "transportation corridor" (road) to go through. The impact of possible rerouting of this road further east is not considered. Furthermore, on p. 143 this rerouting is considered as a possible "adverse effect" but it is not stated why this would indeed be "adverse".

Treatment of the proposal's effect on transportation corridors needs to be clarified and made less equivocal.
166. While it is true that the Cape Krusenstern National Monument would be managed as a historic unit of the National Park System, the monument is also being proposed to preserve its cultural and natural features. Cape Krusenstern has both cultural and natural features worthy of monument status. Residents of the area continue to live a subsistence lifestyle intimately related to the history of the area. Cape Krusenstern's lowland coastal tundra, in event the monument is established, will be the only representative sample of this ecosystem in the NPS. A similar question was raised by the Bureau of Mines. Please refer to comment 181 for a detailed discussion.

167. Administrative policies of NPS for historical areas of the National Park System prohibit public hunting. However, since one of the principal purposes of the proposed Cape Krusenstern National Monument is "to encourage and assist in the preservation and interpretation of present-day Native culture," and to provide interpretation of man's earliest and continuing involvement with the natural environment, confirmed subsistence uses are considered appropriate and compatible with the purposes of the monument. Further, in addition to seeking to honor the intent of ANCSA in regard to protection of subsistence resources, the Department wishes to provide opportunity for local residents to have the option to continue to pursue a lifestyle and/or culture based predominantly on dependence on wildlife and wild plant resources for satisfying basic needs for food, clothing material, shelter, and fuel, and for psychological well-being. No racial or ethnic distinctions among local residents will be made.

The Department recognizes the complexity of the issue and will not attempt to define "subsistence" at this time, but will undertake, as soon as possible, an intensive indepth study of subsistence lifestyles and resource uses in the socio-economic areas affected by our proposals. Subsistence provisions of Chapter I have been reworded and amended. Discussion of impacts on subsistence, sport hunting and local society have been revised.
168. Revisions have been made in sections dealing with subsistence to include discussion of impacts on non-Native resident use of the area. Subsistence provisions of the proposal make no ethnic distinctions among local subsistence users. Impacts of this proposal on subsistence activities appear in Chapter III.G.

169. We cannot determine from examination of the draft EIS what topics you found to be in conflict. However, discussions of subsistence activities and of the impacts of this proposal on subsistence use have been revised in the FEIS. There don't appear to be any topics in conflict in the subsistence discussion of the FEIS.

170. Visitor use figures are the product of our planners' best efforts, considering many variable factors including trends in outdoor recreation, increase in the population spanning the age group most commonly participating in wildlands-related activities, public awareness of the proposal, and transportation systems related to the pipeline construction and development of northwest Alaska. NPS planners have endeavored, considering many variables, to estimate future visitor flow into the region and specifically into the proposed monument. With the advent of the monument will come extensive study of possible visitor and visitor facility impacts including an environmental impact study which would precede the development of any visitor facility. Visitor and visitor facility impacts will be closely monitored to prevent environmental damage to the monument.

171. The NPS feels that the construction of a "surface transportation and utility corridor" within the proposal area would have adverse impacts on the features of the monument and would not be in keeping with the protection and preservation of these features. However, NPS opposition to such construction would not necessarily preclude it. Any construction would require compliance with the appropriate sections of the Department of Transportation Act and the Historic Preservation Act.

Areas of this document dealing with transportation have been revised to include more timely information. Please refer to Chapter III.H.5 and Chapter V.
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.

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.
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:

"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.)

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.

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 accomplished 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.
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.

We appreciate this opportunity to comment on behalf of the membership of the Alaska Geological Society.

Yours very truly,

Thomas Wilson,
President

By: Robert L. McCollom
Environmental Committee Chairman

RLM: cw
RESPONSE TO COMMENTS BY
ALASKA GEOLOGICAL SOCIETY

172. The section, Impact on Mining and Mineral Entry, has been revised to improve the objectivity. The statement quoted is considered objective and nonjustificatory (see letters from the Bureau of Mines and U.S. Geological Survey, this chapter).

173. The cumulative effect on mining of all the withdrawals in the region is essentially the sum of the impacts of the various environmental statements. Please refer to response number 1 for discussion of this comment.
18 February 1974

Re: Requested Comments
Cape Krusenstern
National Monument

Mr. Theodore R. Swem
Chairman
Alaska Planning Group
U.S. Department of the Interior

Dear Mr. Swem:

I attach detailed comments on certain aspects of the Krusenstern National Monument proposal for your consideration in subsequent drafts. This is not done in the spirit of nit-picking, but rather in the hope of making some minor improvements in the final form, for I approve of your plan and find your proposal in general well conceived and executed.

I have not worked in northwest Alaska, but I have been active in archaeological field work and interpretation in Alaska and northwest Canada for the last twelve years. My comments are to be understood as reflecting the views of an interested and (hopefully) informed individual, not necessarily those of my institution.

Sincerely,

[Signature]
William B. Workman
Assistant Professor of Anthropology
I wholeheartedly agree that the prehistoric record preserved in the unique fossil beach ridge sequence at Cape Krusenstern is of the highest scientific importance and should be protected by special governmental action. Allowing continued subsistence utilization of the area by the descendants of the peoples who left behind many of the archeological remains seems to me to be just, humane, educational and most appropriate. I think the proposed development of educational aspects of the area is a very good idea, even if the clientele may be meager for some years. We have relatively little in the way of interpretive field exhibits in Alaska at present, and Krusenstern, with its succession of cultures, domestic architecture, etc., would seem to be an ideal place for such work. I also applaud the implication (p. 15, 126, 139) that archeological research will be enhanced, that professionals will be consulted before potentially damaging surface alterations are made, and that international cooperation and interest will be solicited.

I believe, however, that the problem of existing native allotment claims should have been confronted more directly (p. 26 ff). This is a thorny issue with political overtones. The Park Service should make explicit what its stand will be, since the present noncommittal description of what will happen if claims are granted may well be interpreted as intent to oppose, or at best, governmental deviousness. If the National Park Service does plan to oppose these claims being granted it should forthrightly say so, if it does not this should be made clear.

I find the discussion in the prehistory section (p. 50 ff) perhaps a little too general and debatable in detail. The reference citation system does not appear adequate to me since a number of the interpretations advanced as widely accepted facts are controversial, i.e. the discussion on page 54 of a series of migrations into the New World and racial anthropology. It seems that much is not really needed for purposes of this proposal which was drawn from the continent-wide synthesis of Willey, which appears to have been heavily leaned upon.

I conclude with comments on some more specific points. With reference to the geologic significance of the beach ridge sequence at Cape Krusenstern (p. 37 ff) it might be mentioned that this is the type section for the "Krusensterian Transgression" of authors - see D.M. Hopkins p. 83 ff in The Bering Land Bridge.

It should be made clearer than it appears on page 72 that the Palisades I and II cultural material came from the same site. British Mountain-Palisades-Kograk are very slender reeds to lean upon as Beringian industries (p. 75) - I believe that most northern prehistorians would now reject either their claim to independent cultural status, great age, or both.

Although it has been suggested, it certainly cannot be proved that ancestral speakers of Eskimo-Aleut migrated into the New World via the Bering Land bridge (p. 50). The linguistic connections between Esk-Aleut and certain northeast Asian languages might well suggest otherwise. Paleobotanical considerations render it most
unlikely in my view that the tree line separated ancestral Eskimos and Indians 11,000 years ago (p. 58). Available evidence suggests that the spruce forest was of very restricted distribution in this time range and that the late Beringian landscape was a cold grassland.

There is no way that the Pacific Eskimo and Aleut area archeological cultures can be derived from the Arctic Small Tool tradition (p. 61). The assemblages differ in all significant typological details and were in part contemporary.

In closing I wish to reiterate my strong support for the preservation of, minimally, the entire Krusenstern fossil beach ridge sequence as a scientific treasure. Without question this is one of the most important proven archeological localities in northwest North America. The National Park Service plan under consideration appears likely to give this area the protection it requires and deserves while interfering minimally with local subsistence pursuits and capitalizing on the unique educational and scientific values present.
RESPONSE TO COMMENTS BY
ALASKA METHODIST UNIVERSITY
LABORATORY OF ANTHROPOLOGY

174. In the past it has been NPS policy to acquire inholdings within a national park or monument as soon as possible, usually by "opportunity purchase." At Cape Krusenstern, the NPS desires to seek cooperative agreements with landowners to insure the preservation of the habitat and its cultural riches. The NPS does not anticipate acquiring inholdings at Cape Krusenstern at this time.

175. The prehistory section of this document is general, and it draws on material which does not relate specifically to Cape Krusenstern. However, for the uninitiated reader it gives some dimension to the importance of the Cape Krusenstern area as a site for preservation and study.

The references were cited in the DEIS generally rather than specifically, and the reference citation system will be the same in the FEIS. However, the text has been reviewed by professional archeologists on the NPS staff and by other archeologists who have commented on the DEIS. From the comments we have received, we have revised and corrected the text. The text on page 54 has been changed to reflect the conjectural nature of the assertions concerning migration across the land bridge.

176. Please refer to Chapter II.A.3. A discussion of the "Krusensternian Transgression" has been added to the text.

177. The text has been revised to reflect that Palisades I and II artifacts were discovered on a single site. The age of the artifacts of the Palisades site, as you know, is controversial. Giddings in the discussion of the Palisades artifacts presented in his book, Ancient Men of the Arctic (1967), estimates the date of Palisades II artifacts at about 4000 B.C., and the date of the Palisades I artifacts at 9000 B.C., or more. In 1968, after the death of Giddings, Douglas D. Anderson, a student and colleague of Giddings' who excavated the Onion Portage site on the Kobuk River, reported in an article written for "Scientific American" evidence tending to confirm Giddings' date for the Palisades II artifacts. Anderson found artifacts at Onion Portage, "nearly identical" to those of the Palisades II complex,
which carbon 14 tests confirmed at about 4000 B.C. Anderson apparently found nothing to confirm Giddings' theory regarding the age of the Palisades I artifacts. ("A Stone Age Campsite at the Gateway to North America," Douglas D. Anderson, Scientific American, 1968). The text has been revised to reflect the conjectural nature of the age of the Palisades artifacts.

178. Even though evidence in support of the thesis that Eskimo-Aleut peoples crossed the Bering Land Bridge is mounting, it cannot be proven. The text has been changed to reflect this fact. The material concerning the ancient separation of Indians and Eskimos has been revised. Please refer to Section II.A.7.

179. This remark has been changed to avoid reference to the Pacific Eskimo and Aleut area archeological cultures as being derived from the Arctic Small Tool tradition.
Mr. Theodore R. Swem, Chairman
Alaska Planning Group
U.S. Department of Interior
Washington, D.C. 20240

Dear Mr. Swem:

Please refer to the draft environmental statement prepared by the National Park Service, Alaska Planning Group, Department of the Interior covering the proposed Krusenstern National Monument, Alaska.

On behalf of our trade association, which represents 27 companies with interest in oil and gas exploration and production in Alaska, we offer the following observations concerning this proposal.

The proposed Krusenstern National Monument area lies on the periphery of the Kotzebue-Selawik-Chukchi Sea sedimentary basin. It may be true, based on present geological knowledge, that most of the lands included within the proposal area have limited potential for oil and gas; however, the proposal area may bear greatly on the definition of the structure and stratigraphy of the sedimentary basin. In many instances the exploratory work on the periphery of a sedimentary basin holds the key to judging its oil and gas potential. As we interpret the proposal, no private geological exploration within the proposal area will be permitted. This would appear to be an unnecessary restriction and in fact, contrary to the intent of the proposal as stated under the numbered paragraph 2 reciting the purposes of the proposed monument. Hopefully, a provision to continue to conduct geological exploratory work will be included in the final proposal.

The main thrust of the proposal appears to center around the archeological remains in the Cape Krusenstern area and its adjacent beach areas. If this is the case, we cannot see any justification for the size of the proposed monument and the need to include offshore areas 5 miles beyond the mean high tide line and all lands above mean high tide within the proposal boundary. It would appear to be more reasonable to be restrictive and protective of
the known archeological remains and the immediate vicinity thereof and to manage other lands to allow compatible use by other disciplines.

Not answered in the proposal is the potential boundary conflict between the proposed monument area and State ownership of land beneath tidal waters lying landward of a line lying three miles seaward of the coastline, pursuant to the Submerged Land Act (43 USCA 1301).

The discussion of the geology of the proposal appears grossly inadequate and discusses only the isolated area itself. We feel that a general discussion of the regional geology should be made and its influence on the proposal area would make a more responsive discussion. We note that the Bureau of Mines and the USGS are reviewing the proposal and hopefully their comments will bring some balance to the geologic section of the proposal.

As to transportation of whatever nature, no consideration has been given on a regional basis except to state that if the proposal is implemented that the routing of the transportation corridor proposed by the Alaska Department of Highways would be influenced by the proposal. We understand that the Secretary of Interior in a letter dated December 18, 1973 indicated that "as Alaska continues to develop, there will be a need for right of way and corridors to adequately accommodate transportation and utility requirements." We feel that the Secretary's philosophy should be expressed in the final impact statement.

We thank you for the opportunity to present our views on the proposal.

Very truly yours,

WILLIAM W. HOPKINS
Manager

WWH:mc
180. Your question has been raised previously. Please refer to comment number 62 for discussion of research and exploration in the park.

181. Much knowledge of prehistoric northern cultures has been gained from investigations carried out on the beach ridges at Cape Krusenstern. However, only a small number of the identified sites have been excavated. It is possible that evidence of cultures heretofore unknown could be unearthed on these beach ridges. This is also true of the remainder of the proposal area, where the only excavations of record are those of J.L. Giddings on the Palisades sites near the cape and at "Battle Rock" in the upper half of the proposal. The remainder of the proposal area contains many identified sites yet to be investigated. Many northern prehistorians feel that this area of Alaska as well as the Seward Peninsula (both of which abutted the Bering Land Bridge) may yield evidence of even earlier cultures.

182. The omission of a discussion in the DEIS concerning the jurisdiction of the oceanic water of the proposal was unfortunate. Many correspondents have raised this question. Please refer to response number 66 which is in answer to a similar comment raised by the Geological Survey.

183. There have been substantial revisions in sections of this document dealing with geology, mining and mineral entry. USGS, Bureau of Mines, and State materials have contributed in large part to these revisions. Please refer to Chapter II.A.3 and Chapter III.H.4.

184. It is undeniable that "as Alaska continues to develop" there will be increased needs or at least demands for right-of-way corridors to accommodate transportation and utility corridor requirements. The (d-2) withdrawal lands may create some of these demands. However, until such time as needs occur, the location of the transportation and utility corridors cannot be evaluated.

The impacts on transportation of this proposal, as well as the aggregate impact of all the Department of the Interior proposals in the area, have been considered in the FEIS. Please refer to Chapter III.H.5 of this document and in the Kobuk and Gates of the Arctic documents.
April 1, 1974

Mr. Theodor R. Swen, Chairman
Alaska Planning Group
National Park Service
Department of Interior
Washington, D. C.

Re: Cape Krusenstern National Monument

Dear Mr. Swen:

The archeological and historical value of this area is recognized. The position of the Council, to support or oppose this proposal, will await the interest of Congress. If the area is to be a monument for people, then access, public facilities, and other needs for control must be developed. Access through the area must be afforded for native people travelling coastwise or inland. The "5 mile seaward" provision may transgress state rights and complicate jurisdiction over the use of marine resources.

Wherever possible we prefer to see local names used for identification, i.e., "Kikitarkan" preferred over "Krusenstern."

We urge the National Park Service to further define the means of reaching the objective stated in the proposal. Tourist potentials for two months of the year should be weighed against the denial of other uses for twelve months of the year.

Very truly yours,

A. W. "Bud" Boddy, Executive Director
Alaska Wildlife Federation and Sportsmen's Council

cc: National Wildlife Federation
Other Council members
185. Visitor uses and visitor facilities will be carefully planned and monitored to minimize adverse impacts on the habitat at Cape Krusenstern. The public will, of course, have access to the monument. Visitation to the monument would only be limited in the event visitor impacts become detrimental to the preservation of the cultural, historic, and natural features of the monument. Any development would be preceded by research and detailed development plans, prepared with the objective of preventing undue destruction or degradation to social or cultural patterns of natural, archeological, and historic resources known or yet undiscovered. Environmental impact statements will be prepared for all development plans which are determined to have significant impact on the natural environment.

186. Winter haul trails and other trails presently used for subsistence activities and for access to inholdings will be open to use.

187. It is not the intent of the National Park Service to "transgress State rights." The NPS recognizes the jurisdiction of the State in offshore waters. The NPS will seek cooperative agreements with the National Marine Fisheries Service, the U.S. Coast Guard and the State of Alaska in the interest of preserving the habitat of Cape Krusenstern and the offshore waters of the proposal. Please refer to the response to State comment number 93, where the seaward boundary of the Cape Krusenstern proposal and the jurisdiction of its offshore waters are discussed in detail.

188. There is no local name for the entire land area of the proposed monument. There are local names for specific sites within the proposed monument. The Dictionary of Alaskan Place Names has no listing for "Kikitaruk." It does list "Kikitaruk Mission" as another name for Kotzebue. (The Dictionary of Alaskan Place Names, Geological Survey Professional Paper 507).

189. This EIS is intended as a presentation of the proposal and an analysis of its environmental impacts. Further planning and study will be undertaken in the event of the establishment of Cape Krusenstern as a national monument.

Tourist visitation is only one of the uses proposed for the monument. Visitation will not be allowed to interfere with
monument objectives of investigation, elucidation and preservation of the natural and cultural features of the proposal area. Visitation will be coordinated so that it doesn't jeopardize subsistence activity in the proposed monument.
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 received 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 cannot take a position for or against the statement pertaining to the Alaska Native Claims Settlement Act.

Thank you for giving us an opportunity to receive the material.

Sincerely,

Lucille Shriver  
(Mrs.) Lucille Shriver  
Director

LS:dmn
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
President

cc: The Honorable Rogers C. B. Morton
   The Honorable John C. Whitaker
June 4, 1974

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.

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.

 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
July 19, 1974

Theodore Swem, Chairman
Alaska Planning Group
National Park Service
US Department of the Interior
Washington, D.C. 20240

Dear Mr. Swem,

Enclosed are four sets of comments on four Alaska D-2 proposals for the record.

The remaining sets of comments are being mailed within the next few days and we hope they will be accepted for the record upon receipt.

Thank you.

Sincerely,

Barbara Tabbert
President
Fairbanks Environmental Center, Inc.

BT: sm

Enclosures
Summary

The purposes of the proposal are supported.

Areas of Ecological Concern should be declared to offer more potential for protection of upper reaches of Creeks and rivers. These flow from upper watersheds contained within-and draining through-the proposal to the Chukchi Sea. These waterways are only generally protected in their lower reaches, while upland watersheds are not. These hills also constitute habitat for re-introduced muskoxen found nowhere else in NPS units.

The lower Noatak River valley should also be added to an Area of Ecological Concern. The Draft Statement confirms the need to have a major river delta represented within the National Park System, whereas none exists now anywhere within these units.

The proposal could be strengthened with a discussion to reveal that this is the only d-2 proposal within the National Park System which seeks to preserve a representative sample of coastal lowland tundra. Only sea bird cliffs remain in the Interior's Coastal Refuges proposal for the Cape Thompson area north of this proposal.

Jurisdictional conflicts involving state-owned tidal and submerged lands should be assessed, and a method set forth to settle such disputes. The possibility to acquire such lands to retain the integrity of the proposal, and
resultant impacts therefrom, should also be assessed. The exact extent of such waters would have to be clearly shown as they relate to the proposed monument.

An alternative which should be considered is the inclusion of this proposal area in the Coastal National Wildlife Refuges proposal, specifically, to a proposed Cape Thompson Unit as described elsewhere. (See comments on the Coastal Refuges Draft Statement).

**Land Status Changes**

Reviews and reviewers consistently support the need for a clearly, simply stated history of land status changes, ranging from such status upon signing of the ANCSA December 1971 on through to the Interior recommendations to Congress December 1973. Appropriate maps should be used. A history of status changes will greatly assist the general public in gaining an understanding of what forces and circumstances are joining together to shape, even prejudice, the outcome of the d-2 deliberations.
190. There are no lands designated as areas of ecological concern in the proposal for the Cape Krusenstern National Monument or in any of its alternative proposals. Alternative "B" has been revised to include all of the drainages you have mentioned. These drainages are already included in Alternative "C." The boundaries of Alternative "C" coincide with those of the Cape Krusenstern Historic Landmark. Within the boundaries of Alternative "C" is the entire range of the musk oxen in the Mulgrave Hills, the lower Noatak River and its delta, and the waterfowl habitat of the lower Noatak including a concentration of whistling swans. Much of this land has also been discussed as part of an alternative to the Noatak National Arctic Range, and is within an area of ecological concern for the Noatak National Arctic Range.

191. The discussion of Cape Krusenstern's coastal lowland tundra has been added to Chapter II.A.4 and III.B of this document. The coastal lowland tundra of the proposal area would indeed be the only representative sample within the National Park System.

192. The proposed monument boundaries include all lands above mean high tide and oceanic waters out to five miles beyond the ocean shoreline. All lands submerged or otherwise below the mean high tide line are in State jurisdiction. The NPS will seek cooperative agreements with the State, the U.S. Coast Guard, and the National Marine Fisheries Service concerning these oceanic waters in the interest of protecting the natural and archeological features of the monument.

193. A similar question was raised by "Friends of the Earth" in their response to the Cape Krusenstern DEIS. According to Blayne Graves of the U.S. Fish and Wildlife Service, it would make no difference which refuge (Selawik or Chukchi) the lands of the Cape Krusenstern proposal become part of under the provisions of Alternative "2." Both refuges will be managed from the Kotzebue office of the U.S. Fish and Wildlife Service.
The changes that took place during the two-year study period were made as part of the ongoing planning process within the Department. As additional information was gathered, specific needs identified, and the opinions of affected interests such as the State government, local residents, and others were made known to the Department, various alterations were made in the original land withdrawals in the State.

The statements reflect the land status at the time each was prepared for printing. The Department of the Interior maintains that it is not required in an EIS to provide chronological background on the series of changes that were made in a proposal prior to its release for public review.
July 20, 1974

Mr. Ted Swem  
Chairman, Alaska Planning Group  
National Park Service  
US Department of the Interior  
Washington, D.C.  20240

RE: Comments on D-2 Statements

Dear Mr. Swem,

Enclosed are copies of FOE's comments for the record on D-2 proposals for the Arctic National Wildlife Refuge, the Noatak, Cape Krusenstern, and Chukchi-Imuruk proposals.

Comments on the remaining proposals are being prepared and mailed with an overall cover letter in a day or two.

Sincerely,

Jim Kowalsky  
Alaska Field Representative  
Friends of the Earth
July 20, 1974
Comments on Draft Environmental Impact Statement
Cape Krusenstern National Monument

Conclusions, Recommendations

In noting the fact that "Enough data have been collected in America and Asia to permit a plausible reconstruction of the approach of man to the New World," (page 53) FOE recommends that the proposed Cape Krusenstern National Monument be also proposed as a unit of the United Nations World Heritage as conceived at the recent UN Stockholm Conference on the Human Environment (further information: David R. Brower, Chairman, FOE International, 529 Commercial, San Francisco, CA 94111).

Add Areas of Ecological Concern

An Area of Ecological Concern should be outlined for this proposal, to offer the possibility of more protection for various drainages which otherwise would receive only partial protection in the lower reaches of each creek or river.

Protection of all of these certain Creeks, such as those draining the Mulgrave Hills, as well as the uplands to the east themselves should be given watershed protection be extending the proposal boundaries eastward.
The Mulgrave Hills in particular provide range for reintroduced muskoxen found nowhere else in the National Park System and should be given protection.

Certain lands within the Noatak watershed appropriately should also be added to the Area of Ecological Concern. Support for this position comes from the NPS Draft, Alternative 3.C- page 162. Here stated is the fact that "no example of a major river delta (is now contained) within the National Park System." It further states that both suspected and identified archeological sites exist within the Noatak River Valley. Inclusion of the lower Noatak within the Area of Ecological Concern would consistently well serve the purposes of the proposed monument and offer potential protection to key values contained within the region.

Alternatives

The No Action Alternative does not clearly tell the reader what d-1 status really means. Several descriptive scenarios might be employed to convey actual situations which could result from the change from d-2 to d-1 status.

Alternative 2, page 154, should and an assessment of the addition of this proposal to the proposed Coastal National Wildlife Refuges, the Cape Thompson Unit proposed in certain comments which have been formally submitted on the Coastal Refuges proposal. A Cape Thompson
Unit could utilize the excellent research facilities already in existence there from the Project Chariot.

Alternative 3. implies that a cooperatively administered park should (but would not) be self supporting through admission fees. It is doubtful that such a park need be self supporting as implied here.

Alternative 5. (page 157) suggests wilderness designation would 1) increase costs to management, 2) result in less flexibility in future management, 3) force mass visitation elsewhere, and 4) suggests in one sentence that motorized uses would be allowed, and in another, that such uses would be restricted.

This discussion makes little sense and offers no supporting data or statements.

**State/Federal Conflicts**

State tidal and submerged lands present within the proposal area could result in the impetus for State initiated development which could conflict substantially with monument purposes and goals. Several questions emerge:

1.) How will the NPS resolve these conflicts?  
2.) What is the extent of such waters?  
3.) Is there a mechanism for placing such waters under NPS control?  
4.) What would the resultant impacts be?

**Land Status**

A discussion of the land status changes in this area using maps to show status  
1.) On December 18, 1971
2.) After state pre-filings January 1972
3.) After federal withdrawals March 1972
4.) After native deficiency withdrawals
5.) After September 1972 withdrawal changes
6.) After December 1973 Interior recommendations to Congress (S.2917)
There are no lands designated as areas of ecological concern within the proposal for the Cape Krusenstern National Monument or any of its alternative proposals. The need for protection and preservation of lands outside the boundaries of the proposal area is expressed in Alternative "B" and "C." Each of these alternatives encompasses lands outside the proposal area itself. Alternative "B" of this proposal has been revised to include the entire watershed of the proposed monument. Alternative "C" provides the addition of nearly two million acres to the proposal area. This addition includes the entire range of the musk ox in the Mulgrave Hills, the archeological sites of the Noatak River, a substantial portion of the Noatak River including its delta. There is significant waterfowl habitat in the area of the lower Noatak River and its delta, including a significant population of whistling swans.

In the event the monument is not established, the lands of the proposal which have all been classified as (d-2) under the provisions of ANCSA will revert to (d-1) status. However, these lands would have the protection afforded to (d-2) lands even though they have been reclassified (d-1), until the period Congress set aside for consideration of (d-2) proposals has expired. 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 discussion presented on Alternative 2 was taken from the Selawik National Wildlife Refuge proposal statement. As an alternative to the Selawik proposal, the U.S. Fish and Wildlife Service has proposed the inclusion of the Cape Krusenstern area into the Selawik Refuge. We have included their alternative proposal in Alternative 2 of this document as an alternative to NPS management. For a more detailed discussion of this alternative and its impacts, please refer to the Selawik National Wildlife Refuge FEIS. The possibility of including Cape Krusenstern area as part of an alternative to the Chukchi Sea National Wildlife Refuge (Cape Thompson) is a matter for the U.S. Fish and Wildlife Service to consider. However, in either case, management would be under the same agency.

The discussion of whether or not the cooperatively administered proposal area (alternative 3) would be self-supporting is irrelevant to the discussion and has been omitted.
199. Discussion of wilderness designation and its impacts in Alternative 5 has been clarified and revised in the FEIS. Please refer to Chapter VIII.B.5.

200. The statements reflect the land status at the time each was prepared for printing. Changes that took place during the two-year study period were made as part of the ongoing planning process within the Department. The Department of the Interior maintains that it is not required in an EIS to provide chronological background on the series of changes that were made in a proposal prior to its release for public review.

201. The proposed monument boundaries include all lands above mean high tide and oceanic waters out to five miles beyond the oceanic shoreline. Under the legislative proposal for Cape Krusenstern, as well as under section 17(d)(2) of ANCSA, all lands which lie above mean high tide line are closed to appropriation or entry under the public land laws, including the mining and mineral leasing laws. All lands submerged or otherwise below the mean high tide line are in State jurisdiction. The NPS will seek cooperative agreements with the State, the Coast Guard and other parties concerning these oceanic waters in the interest of protecting the natural and archeological features of the monument.
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.

Sincerely yours,

Bernard E. Skud
Director of Investigations
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
Director
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  
Legislative Research Assistant
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, P. E.
Executive Director

cc - Donald R. Dent, P. E., President,
Alaska Society of Professional Engineers
Robert L. Reitinger, P. E., President, NSPE
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.

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.

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.
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.

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-existent 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 inconsistent with the agency's stated multiple use approach to planning.
The impacts on transportation of the Cape Krusenstern proposal by itself and in relation to other d-2 proposals have been considered in this document. The State's proposed Transportation and Utility Corridor has also been discussed.

The information concerning mineral, oil and gas potentials in northwest Alaska, it appears in the FEIS, was gathered from correspondence received from the Bureau of Mines and the U.S.G.S., as well as, professional literature. Citations appear in the bibliography of this document.

The information that appears in the FEIS accurately represents what is known of the geology and minerology of the Cape Krusenstern area. However, no in-depth study has yet been made there. Therefore, information is limited.

The Secretary is aware that in the future northwest Alaska will have increased transportation needs. It is entirely possible that mineral, oil and or gas developments could occur in the region of northwest Alaska. There are known deposits of coal north of the Brooks Range. Oil, gas and perhaps other mineral development may occur in Pet 4, and potentially could occur in the Chukchi Sea. The establishment of the NPS proposals will generate increased need for transportation facilities. There are also many other interests and many other factors that will have a bearing on the future development of transportation to the region. Hasty decisions today may have adverse impacts in the future.

The NPS has and will continue to cooperate with the JFSLUPC in the planning and development of transportation in northwest Alaska. Much study remains to be done, in order to determine the best system to serve the future transportation needs in the area.
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 management tools to employ in this regard be left up to the professional managers.

We also note that subsistence 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.
National Wildlife Federation

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 Sheenjaks 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 Cryorthents. 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 Chiswell 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.

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
National Wildlife Federation

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
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
203. The NPS policy on fish and wildlife management is set forth in Administrative Policies for Historic Areas of the National Park System (U.S. Department of the Interior, NPS, Revised 1973).

Sport hunting will not be permitted within the area of the monument. Subsistence harvest will be permitted within the parameters described in Chapter I. Wildlife populations will be controlled when necessary, as determined by professional wildlife managers, to maintain the health of the species, the natural environment and scenic-historic landscape, and to safeguard public health and maintain safety. Insofar as possible, control through natural predation will be encouraged.

204. Subsistence management policies will be developed with the cooperation of appropriate Native regional and village corporations, and representatives of all area residents, as well as State agencies. Of necessity these policies will provide for careful coordination with wildlife management policies. In this way management of the monument and its resources would be sensitive to subsistence needs and consistent with NPS objectives to maintain the features of the monument.

205. Cape Krusenstern National Monument will be developed and managed to preserve its important cultural resources and the natural environment in as nearly as possible unaltered form. Wildlife management within the proposal area will be administered by professional wildlife personnel and will be consistent with NPS policies and monument objectives.
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,

[Signature]
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. H. 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 creatures. Whole faunas, such as marine anemids, abyssal larvae, and many invertebrates, are still in the earliest stages of human exploration. Second, we have discovered that a great many species exist that are very hard to distinguish, that keys, diagnoses, or nearly so, existing species are based on even in the better known animal and plant 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 mingleed 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 (W. W. Norton, 1967), the original work on the subject, and of The Insect Societies (Harvard University Press, 1963), a general work in the field.
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 1950s, 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 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 necesitated not just by the very real possibility of widespread species extinction, but by the introduction of only one wrong species, such as the yellow-tailed snail from the western Pacific.
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 organism 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 Everglades, we have magnified this process, reducing diversity 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: 

$$S = a \times \log A$$

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 a rises 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 landbridge 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 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. Inverting the area of the island (23 mi²) and its known period of

(continued on page 33)
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 diagrams at the 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: elongated 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 endemism 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 associative 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 willfully, as in the careless importations of the past, but after careful ecological analysis, to identify 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.

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 endangered species cannot be fitted into any existing communities, strains might be developed...
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 inescapable 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 barren, 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 desalination of sea water. With the achievement of these goals, men will move inexorably onto the land deserts, existing as members of organisms with them. One may hope that we will not be satisfied with limiting ourselves to a bag 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 barrons 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 Hawaii 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 imposition of compatible species to teach new and higher associatice 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 content us with exercises that make generations more of study and creative work can take.
Mr. Theodor R. Swem  
Chairman, Alaska Planning Group  
U.S. Department of the Interior  
Washington, D.C. 20240

Dear Mr. Swem,

We have reviewed the following draft environmental impact statements prepared by the Department under the Alaska Native Claims Settlement Act:

- Iliamna National Resource Range;
- Mount McKinley National Park;
- Yukon Delta National Wildlife Refuge;
- Katmai National Park;
- Koyukuk National Wildlife Refuge;
- Cape Krusenstern National Monument;
- Togiak National Wildlife Refuge;
- Noatak National Ecological Range;
- Selawik National Wildlife Refuge;
- Kobuk Valley National Monument;
- Lake Clark National Park;
- Alaska Coastal National Wildlife Refuge.

We do not have specific comments to make on these individual draft impact statements. This letter constitutes neither support for nor opposition to the proposals, as described in the DEIS's.

We do have two, general comments on these proposals:

1. Subsistence hunting use of the designated areas by Alaskan Natives should be allowed even when no longer necessary for human survival to preserve cultural traditions, and a valued way of life;

2. Areas of Ecological Concern should be included within boundaries of the designated areas, if these AEC's are not selected by Native Corporations as "deficiency lands; these areas may properly be included because the present withdrawals included the lands withdrawn for Ramparts Dam, and this prior withdrawal should not count towards the Secretary's 80 million acre limitation.

We wish to receive a copy of the Final Environmental Impact Statement for each of the above-mentioned Proposals.

Sincerely,

[Signature]

Paul J. Culhane
206. The provision of the proposal dealing with continuation of subsistence uses has been revised, as has the section on impacts on subsistence. The intent of this NPS proposal is to honor the intent of ANCSA in regard to protection of subsistence resources. Please refer to response number 157 for further information.
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, M.D.
Chairman, Alaska Task Force
Pages 18-26, land status. This section should include a discussion, with appropriate maps, of the history of land status changes:

1) as of December 18, 1971;
2) following January 1972 state selections;
3) following March 1972 federal d-2 and d-1 withdrawals;
4) following changes in Native deficiency withdrawals;
5) after September 1972 withdrawals;
6) after December 1973 final d-2 and d-1 withdrawals.

By failing to describe an area of ecological concern, the Interior Department has left open the door for inadequate protection for adjacent watersheds. Creeks such as Rabbit, Jade, and others draining the Mulgrave Hills and the Alutunitok Hills are only partially protected, since their upper drainages are outside the proposal boundary. Similarly, the upper Situkuyok River watershed is not completely enclosed by the proposal.

The entire known range of the recently re-introduced muskox herd should also be indicated on a map and included in an area of ecological concern described in the final E.I.S. An alternative should also be based upon this area of ecological concern. This alternative would involve seeking congressional authorization to add to the monument the area of ecological concern lands not selected by the Native village corporations of Noatak, Kivalina and Kotzebue.

Pages 27-89, description of the environment. Emphasis should be placed on the importance of the Cape area as the only representative sample of coastal lowland tundra in the Arctic proposed
for preservation in the National Park System. (To the north, the earlier withdrawals for Capes Thompson and Lisburne, both for wildlife refuge purposes, have been trimmed back to the sea-bird cliffs.)

Especially significant are the fresh and brackish water lagoons and the freshwater marshes. Highlands to the east offer diversity, as well as watershed protection, although the proposal boundary encloses only a portion of these highlands. Of special concern and interest should be the Mulgrave Hills, only partially within the proposal, since the hills provide range for reintroduced muskoxen not found elsewhere in the National Park System.

With respect to the waters included in this proposal:

a) what is the extent of these waters?

b) what jurisdiction will the NPS exercise over them?

c) what is the relationship between NPS jurisdiction and state-owned title and submerged lands?

d) in the event of conflict between state goals and NPS objectives, how will the conflict be resolved?

e) what are the environmental impacts of adding these waters to the proposal? of omitting them?

Page 162. Inasmuch as "There is at the present time no example of a major river delta in the National Park System," and at one time almost the entire Noatak River Delta was in d-2 status, the Noatak delta should also be within an area of ecological concern. The final E.I.S. should also discuss why this delta d-2 was replaced with village deficiency instead of a dual d-2/village deficiency withdrawal.
RESPONSE TO COMMENTS BY
THE SIERRA CLUB

207. The changes that took place during the two-year study period were made as part of the ongoing planning process within the Department. As additional information was gathered, specific needs identified, and the opinions of affected interests such as the State government, local residents, and others were made known to the Department, various alterations were made in the original land withdrawals in the State. On December 18, 1973, these ongoing modifications were crystallized in the Secretary's recommendations to Congress pertaining to the National Interest Lands. Until that time, land status had not been finalized and the allocation of the land withdrawals for the State, Natives, and national interests were subject to change. The Department of the Interior maintains that it is not required in an EIS to provide chronological background on the series of changes that were made in a proposal prior to its release for public review. It is required to list all the viable alternatives considered, and this has been done in Chapter VIII. This chapter does cover all the major alternatives which were considered for the proposal while the land status changes were being made. Description of these land status changes are a matter of public record available both through the Public Land Orders in the Federal Register and the various land status maps published by BLM. After December 1973 there were no land status changes affecting the Cape Krusenstern proposal.

208. Alternative "B" has been revised to include all of the drainages you have mentioned. Those drainages are also protected in Alternative "C." The local musk oxen range is well within the boundaries of Alternative "C" of this proposal.

209. Reference to the fact that there isn't presently an example of coastal lowland tundra within the National Park System has been made in Chapter II.A.4.

The Mulgrave Hills and the Alutimitok Hills have been included in a revision of Alternative "B." The NPS revised Alternative "B" to include all of the watershed draining through the proposal area and to provide access to the proposed monument along the Noatak River.
210. The proposed monument boundaries include all lands above mean high tide and oceanic waters out to five miles beyond the oceanic shoreline. Under the legislative proposal for Cape Krusenstern as well as under section 17(d) (2)qf ANCSA, all lands which lie above the mean high tide line are closed to appropriation or entry under the public land laws, including the mining and mineral leasing laws. All lands submerged or otherwise below the mean high tide line are in State jurisdiction. The NPS will seek cooperative agreements with the State, the Coast Guard, and other parties concerning these oceanic waters in the interest of protecting the natural and archeological features of the monument.

211. The Secretary had considered the possibility of including the Noatak River Delta within the boundaries of the proposal, and has decided against it. The delta is within the boundary of Alternative "C" of this proposal. It is within an Area of Ecological Concern of the Noatak National Arctic Range proposal. It is also included in an alternative Noatak Range proposal. For additional discussion please refer to response number 207.
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.
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
Chairman

Enclosure
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.

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. Perhaps 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.

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 permissible 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.
212. This statement is intended to identify and evaluate the known resources of commercial potential in the proposal area, but does not attempt to compare them to world or national supplies of the same commodities. Such an analysis is beyond the responsibility of this document. Areas outside the proposal boundaries are not evaluated for resource potential, as this is also beyond the scope of this EIS. A map showing the land status of all withdrawals subsequent to ANCSA, 1971, is available and, with additional resource data available from various agencies making such evaluations, a picture of overall resource distribution — Federal, State, and private — can be gained.
May 28, 1974

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.

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,

[Signature]

JOSEPH ZYLINSKI
Chairman, Juneau Chapter
213. 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 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 Impact Statements have also been considered in development of the Final Environmental Impact Statements.

214. 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.

The responsibility for a decision as to the applicability of Section 4(f) of the Department of Transportation Act of 1966 (49 U.S.C. 1653(f)) to the lands covered in this statement rests with the Secretary of Transportation. If the Secretary of Transportation should determine that Section 4(f) applies to any of the lands covered by this statement, the Secretary must then determine that no feasible and prudent alternative exists to the use of such lands for highway purposes, and that such a use includes all possible planning to minimize the harm to such lands. Such requirements would exist in addition to those of the National Environmental Policy Act of 1969 (42 U.S.C. 4321, et seq).
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  
Chairman, Sitka Chapter
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
215. Socio-economic discussion has been improved, and the analysis of proposal impacts on socio-economic conditions now and in the future has been enlarged. Please refer to Chapter II.A.9 and Chapter III.G.

216. The Department of the Interior (four systems) did not undertake the planning of the 28 (d-2) withdrawals in Alaska in isolation from one another. It has considered the aggregate impacts of aspects of these proposals from the outset. The question you have raised regarding "aggregate impacts" has been raised in correspondence addressed earlier in the FEIS. For a detailed discussion of "aggregate impacts" please refer to comment number 1.
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 acquainted 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 these 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.
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
Advisory Scientific Director
& Professor of Zoophysiology
RESPONSE TO COMMENTS BY UNIVERSITY OF ALASKA LAURENCE IRVING

217. Personnel and literature from the Alaska Department of Fish and Game have been consulted during the development of this proposal and quoted extensively in this document. It can also be assumed that the ADFG made some contribution to the comments of the State of Alaska submitted in response to publication of the DEIS.
Mr. Theodor R. Swem  
Chairman, Alaska Planning Group  
U.S. Department of the Interior  
Washington, D.C. 20240  
April 20, 1974

Dear Mr. Swem:

The Western Wilderness Association in its general comments on the National Environmental Impact Statements believes (one) all areas in the 83 million acre withdrawal should be studied for wilderness. (Two) national wildlife refuges and ranges should not be open to oil development, pipeline construction, prospecting, or mining. Now, an area by area analysis follows. These comments are on the Alaska land withdrawals.

We support the addition of 3,180,000 acres to Mount McKinley National Park. This addition would protect important wildlife habitat for wolf, caribou, moose, and Dalls sheep. This added area would also protect the mountain massif, glacial systems, and the Cathedral Spires.

The association urges the addition of at least 1,870,000 acres to Katmai National Monument in Alaska. This would preserve habitat for the Alaska Brown Bear. It is our recommendation to add the 7,300,000 acre Yukon-Kuskokwim National Forest not be established. Additional lands could then be selected. We recommend that the Battle Lake area and the Alagnak River area be added to the monument. The national monument should be changed into a national park with no mining allowed.

We support the proposal to establish a 440,000 acre Aniakchak Caldera National Monument. This would protect the world’s largest dry volcanic caldera plus lava flow, cinder cones, a lava plug, warm springs, explosions pits, and a rift. The association proposes that the unit be closed to hunting to protect the Alaska Brown Bear population.

The Association supports the establishment of a Harding Ice Field-Kenai Fjords National Monument totaling 300,000 acres. This protect a 700 square mile icecap.

The Association supports establishment of a 350,000 acre Cape Krusenstern National Monument to protect internationally significant archeological sites.

We support establishment of a Kobuk Valley National Monument totaling 1,850,000 acres. This would preserve habitat for caribou, moose, wolves, and black and grizzly bears. The Monument would include oxbow lakes, sand dunes, and the Salmon River.

The Association proposes establishment of a 2610,000 acre Lake Clark National Park. This would preserve lakes, glaciers, valleys, mountains, volcanoes, and spires. The Association opposes hunting in this unit of the National Park System. No national park allows hunting.
The Western Wilderness Association urges establishment of a Wrangell-St. Elias National Park totaling at least 14,140,000 acres. This would include the proposed Wrangell National Forest which we recommend be included in the national park. This area would preserve Mount St. Elias (17,000 feet), Mount Blackburn, the largest glacial system in the United States, rolling foothills, and coastal plain. Wildlife habitat for moose, wolf, wolverine, black, brown, grizzly, and grizzly bears, caribou, Dalls sheep, sea lions, sea otters, seals, killer whales, and salmon would be preserved. No hunting should be allowed in the national park.

We support establishment of a Gates of the Arctic National Park totaling at least 12,380,000 acres. Instead of establishing the Yukon-Kuskokwim National Forest, 4,000,000 acres of Naval Petroleum Reserve No. 4 should be added to the Gates of the Arctic National Park proposal. No hunting should be allowed in the national park.

We support establishment of a 1,970,000 acre Yukon-Charley National River. The Association recommends no mining or hunting be allowed in this unit of National Park System.

Chukotka-Uralk National Reserve should be a 2,690,000 acre National Monument. This would preserve wildlife, lava flows, and deep crater lakes. No hunting should be allowed.

The Association recommends establishment of a 120,000 acre Alaska Coastal National Wildlife Refuge. This would include addition of 56,000 to the Department of the Interior proposal. No mineral leasing should be allowed in this unit. This proposal would protect five million seabirds, 100,000 sea lions, harbor seals, walruses, polar bears, sea otters, and ringed seals.

We recommend addition of 3,760,000 acres to the Arctic National Wildlife Refuge. We oppose construction of a natural gas pipeline across this unit. The Association opposes hunting in the wildlife refuge.

Instead of establishing the Bering Sea Natural Resource Range, a 2,850,000 acre national wildlife range should be established under sole management of the Bureau of Sport Fisheries and Wildlife.

The Association recommends establishment of a 4,400,000 acre Kuskokwim National Wildlife Refuge under the sole management of the Bureau of Sport Fisheries and Wildlife with no hunting allowed.

The Association supports establishment of 7,590,000 acres under the sole management of the Bureau of Sport Fisheries and Wildlife. No hunting, oil development, or mineral leasing should be allowed.

We urge the establishment of a 1,400,000 acre Selawik National Wildlife Range.

The Association supports establishment of a 2,740,000 acre Togiak National Wildlife Refuge with the addition of an additional 500,000 acres to the north and east for a grand total of 3,240,000 acres. No mineral leasing, oil development, or hunting should be allowed.

The Association supports establishment of a 9,090,000 acre Yukon Flats National Wildlife Range. This would include 22,000 miles of streams, and 40,000 small lakes. The area has the greatest density of nesting ducks per square mile in Alaska.

The Association supports establishment of 5,100,000 acre Yukon Delta National Wildlife Range including all of the existing Clarence River National Wildlife Range. The Delta produces about 80 percent of the existing Clarence River National Wildlife Range. The Delta produces about 80 percent of the existing Clarence River National Wildlife Range. The Delta produces about 80 percent of the existing Clarence River National Wildlife Range. The Delta produces about 80 percent of the existing Clarence River National Wildlife Range. The Delta produces about 80 percent of the existing Clarence River National Wildlife Range. The Delta produces about 80 percent of the existing Clarence River National Wildlife Range.
The Yukon-Kuskokwim National Forest should not be established. 4,800,000 acres of alternate selections are mentioned earlier in this report. We recommend that 2,500,000 acres of other alternate selections be selected from lands having a high wilderness or wildlife values.

The Association recommends the following wild rivers be established: Beaver Creek (200,000 acres), Birch Creek (200,000 acres), Fortymile (320,000 acres), and Unalakleet (104,000 acres). Nonin mineral leasing or oil development should be allowed in these areas. Hunting should be allowed in the wild river areas.

Finally, we recommend no native selections be allowed in 33,000,000 acres of national interest areas including national parks, national monuments, national wildlife refuges, and wild rivers. At stake in Alaska are enormous amounts of scenic, wildlife, and wilderness lands. Thank you for this opportunity to express the Association's views.

Sincerely,

[Signature]
Reed Secord, President
Western Wilderness Association
July 19, 1974

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

Dear Sir:

The Wilderness Society appreciates the opportunity to comment on the adequacy of the Draft Environmental Impact Statement (DEIS) on the proposed Cape Krusefentern National Monument, Alaska. The Wilderness Society, a national conservation organization with 100,000 members and cooperators in all 50 states, has a long and deep involvement in public land matters, and the public lands of Alaska have been a major focal point of the Society's efforts since its founding in 1935.

The following comments are intended to assist you in preparing a final impact statement which would be more acceptable from a public land dedication and management standpoint and the interest of citizens from throughout the United States in this important potential addition to the National Park System:

1. This is basically a good proposal and would essentially protect the significant archeological values of the area. The Draft Environmental Impact Statement, however, does not adequately discuss various alternatives of including additional lands to the north and east if such lands are not selected by natives groups. We believe that these options should be fully explored and documented in the final impact statement: Such options would not only protect additional archeological values, but could assist the natives in efforts to protect the land in this area.

2. The title "National Monument" is totally out of place in Alaska. The natural scene is such that there is no justification to name the area Cape Krusefentern National Monument. It should be afforded full national park status, and so named.

3. A specific wilderness proposal must be explored, identified and presented in the final statement.

We trust that these brief comments will be helpful to you in meeting our mutually important goal of truly reflecting the national interest in preserving the archeological values of this natural important area.

Sincerely yours,

Harry B. Crandell
RESPONSE TO COMMENTS BY 
THE WILDERNESS SOCIETY

218. Lands north and east of the proposal, if not chosen by the 
Natives will revert to (d-1) status. The Secretary will oversee 
the management and disposition of these lands. It is possible 
that these lands could be included within the monument.

219. The Secretary has considered this alternative and has concluded 
that national monument designation is the most appropriate. The 
criteria for parks and monuments appear on pages 10 and 11, 
Generally, parks and monuments differ in these respects:

Parks are spacious—monuments may be any size
Parks contain two or more unique scenic or scientific values 
of superlative quality—monuments need only one 
attribute of scientific or historic significance
Parks must be established by act of Congress—monuments may 
be established by act of Congress or by Presidential 
proclamation.

Management for both parks and monuments is essentially the same.

220. This statement has discussed wilderness designation in two 
contexts. First, as a provision of the legislative proposal 
(Chapter 1A.) That within three years of its establishment, 
the monument be studied and reported on in a manner similar to 
that prescribed in the Wilderness Act of 1964 (78 Stat. 890) for 
possible inclusion in the National Wilderness Preservation System."

Second, as an alternative to include a wilderness designation with 
the proposed legislation establishing the area (VIII.A.5).

The following organizations provided letters with one or more comments 
identical to those comments of the Wilderness Society:

Bryan Outdoor Resources Group
Ecology Center of Southern California
Friends of the Earth - Arizona Chapter
Saguaro Ecology Club
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.
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 subsistence hunting by indigenous inhabitants should, of course, be permitted but even this should be very closely controlled.

Thank you for the opportunity to offer my comments for your land-use planning.

Very truly yours,

Gerald Ganopole
221. Please refer to the Fish and Wildlife Management Policy in the Appendix for the NPS policy on hunting. It is true that hunting is permitted in national monuments in only the most unusual circumstances. No sport or commercial hunting or trapping will be permitted within the monument. However, subsistence hunting will be permitted pending congressional approval; see Legislative Proposal, Chapter I.

Subsistence harvest activities are an important part of this proposal and are supported by one of the purposes (Chapter I) for the proposal. Primary resource values will be protected, since this protection is among the purposes of the monument and because continued subsistence activities depend upon the protection and perpetuation of these primary resources.
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
Associate Professor
CAFE KRUSENSTERN
National Monument

Subject: Comments on the proposal of the area for Monument status.

From: Ed Merrell

Date: 13 April, 1974.

Pages 16-17, lines 21-22 and 1-3 respectively; this idea of international cooperation is outstanding.

Another concept presented on page 87 of this proposal is very good and well worth repeating:

"The presence of subsistence activities presents an additional interpretive opportunity that could further the education of visitors without undue intrusion upon Natives."

These two concepts as well as the remainder of sections I & II are very well done.

III Environmental Impacts of the Proposed Action

P. 137, lines 5-8; Make sure the navigation aid is not essential to Native navigation before removing it; regardless of what the Coast Guard may say. An extensive survey will need to be undertaken with the Natives in this respect.

As a whole this section is extremely well done.

Sections IV, V, VI, & VII are very good.

VIII Alternatives to the Proposed Action.

A. No Action.

This alternative is unallowable. Having noted the content of Sections I through VII, it is ridiculous to make this alternate proposal. Under this proposal the resource would be damaged and basically lost forever to posterity. No damage can be allowed, especially to the 114 beach ridges present on the cape.

B. Alternative Management Systems.

1) Addition to Other Proposed Units of the National Park System

This alternative is viable, but only if the Monument status cannot be attained to preserve the area. The cultural values within the Cape Krusenstern area must be emphasized fully.
2) Addition to Proposed Unit of the National Wildlife Refuge System
   This alternative is not acceptable since obviously the cultural values
   far outweigh the wildlife values of this area.

3) Cooperatively Administered Park
   This alternative is viable as the final resort in preservation of the area.

4) Dominant Use -- Research
   This alternative is weak because it restricts visitor use too harshly. What
   good is a protected resource if the public cannot benefit from it. There
   would be public benefit from research but visitation and interpretation
   would enhance this benefit a hundred-fold.

5) Wilderness Designation
   This is a very good alternate proposal. With wilderness designation
   limited visitor use would still expose the public to the area and the
   resources both cultural and natural would be preserved.

6. Alternate Boundaries.

   1) Alternative A -- Deletion of Tahiniok Mountains Sector
      This would be basically just a reduced form of the No Action Alternative
      and is not acceptable. The uplands area has a "high potential for dis-
      covery of archeological sites dating from the earliest periods of man's
      occupation of Alaska," This cannot be thrown away which would result from
      "no action" and more so from the surface transportation and utility corridor
      proposed through the area.

   2) Alternative B -- Addition of 34,000 acres
      This is good and could be incorporated as part of the proposal if
      the necessary additional funds for management were available.

   3) Alternative C -- Addition of Areas Recommended for National Historic
      Landmark Designation
      This too is a good alternative proposal and could also be incorporated
      if sufficient funds were available for management.

I would recommend either the original proposal be accepted or that
the area be designated as a Wilderness Area as proposed in Alternative
B. 5.
RESPONSE TO COMMENTS BY
H. JESSE GROVES

222. The U.S. Coast Guard aid to navigation, Cape Krusenstern Light 227.5, is essential to navigation and will not be removed. The NPS may seek agreement with the Coast Guard to replace the structure with another suitable as both a navigation aid and an observation tower for visitor use.
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
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.

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 scientifically 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 white 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
223. We have incorporated new information on soils into the "Description of the Environment," Chapter II.A.5. It was taken from "Resources Inventory—Arctic Region (and Northwest Alaska Region)—"Soils and Watersheds Resources," Michealson, Neil E.—"Resource Planning Team," JFSUJPC, May 1974.

A map depicting the distribution of local soils has also been added to the FEIS. The information on the climate of Cape Krusenstern relied heavily upon "Weather and Climate," in Environment of the Cape Thompson Region, Alaska, Weedfall and Allen, 1966. It is the only authoritative study of the climate in the area. (Cape Krusenstern is 75 miles southwest of Cape Thompson.)
March 20, 1974

Theodore 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 (3) 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 uses. I would like to express my opposition to the proposals as they are now written and if so permitted, would have made specific comments on each of the draft environmental impact statements.

Respectfully,  

John A. Piercy
The Honorable Ted Stevens  
United States Senate  
317 Senate Office Building  
Washington, D. C.  20510  

Dear Senator Stevens:

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. Pierogi

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
Please accept my comments, as follows, concerning the proposed Cape Perpetua National Monument in Clark County, Oregon. I strongly favor such proposal inasmuch as this area contains not only unique geological features and wildlife habitat of National significance but internationally important archeological resources certainly worthy of national government protection.

I strongly suggest that this area be offered full National Park status in view of this area being slightly larger than the monument. I also strongly suggest that this area be expanded to include areas equally worthy of national park status in the north, to the east and south.

It is essential that complete wildlife refuges be included in this proposal, as well as some estuaries, including all habitat and certainly the critical habitat. I strongly suggest that this area be expanded to include all forms of habitat.

In this regard, I suggest the establishment of a proposed Cape Perpetua National Park of some 750,000 acres and possibly 1,000,000 acres.

I suggest that a large National Monument of some 1,000,000 acres be established to include Cape Perpetua and contiguous as any worthy of consideration and also without substantial support.

However, these proposals due to large acreage should not depart from the original claim. It clearly should receive separate legislative consideration on its own merits.

Sincerely,

John F. Sullivan
The Honorable Roger C. Morton, Secretary
United States Department of the Interior
Washington, D.C. 20240

Dear Secretary Morton:

Please consider my comments, as follows, concerning B-2 and B-1 lands in Alaska relative to the Alaska Native Claims Settlement Act, P.L. 92-203.

As you are required to release your proposals pertaining to B-2 lands on December 18, 1973, I would like to be informed of your plans to place nearly all of the B-2 lands in the National Forest System in Alaska. In my previous comments, I indicated that I was opposed to this plan as well.

The protection of the B-2 lands is of national importance and should be included in the National Forest System. The National Forest System is an important and essential part of the federal government's efforts to conserve and protect our natural resources. The B-2 lands are an integral part of the National Forest System and should be included in it.

Sincerely,

[Signature]

John R. Swanson
P.O. Box 922
Berkeley, California 94701

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 recommenda-
tions 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.

The alternative of not permitting mining or oil and gas leasing in National
Wildlife Refuge System areas was not discussed.

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.

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 analyse: 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 holdings through native ownership within the monument. 4. The alternative of establishing an urgently needed brown bear wildlife refuge adjacent to the 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. 2. The alternative of establishing a major national park to include national forest lands to the east of Seward to Prince William Sound. 3. The alternative of eliminating the conflict with natives by identifying deficiency withdrawals outside their corporation boundaries. 4. Problems inherent in "dual (two agency) administration" of the area, a practice which has never proven satisfactory.
5. Cape Krusenstern National Monument.

This is a good proposal to protect significant archaeological 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.


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.


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, most 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-McCarrick roads (supposed by conversationists) is not discussed. Nor are the impacts of these Forest Service-supported highways on park values and on the decision-making process considered.

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 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.


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 visitor 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.”


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.

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 leasing 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.


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.


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.


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.


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.

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.


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.]


This Yukon Flats/Porcupine proposal is second only to the Wrangell 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.


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.

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
RESPONSE TO COMMENTS BY
BILLY C. WALLACE

224. This statement has discussed wilderness designation in two contexts. First, as a provision of the legislative proposal (Chapter I.A.), that within three years of its establishment, the monument be studied and reported on in a manner similar to that prescribed in the Wilderness Act of 1964 (78 Stat. 890) for possible inclusion in the National Wilderness Preservation System."

Second, as an alternative to include a wilderness designation with the proposed legislation establishing the area (VIII.A.5).

225. The Secretary has considered this alternative and has concluded that national monument designation is the most appropriate. The criteria for parks and monuments appear on pages 10 and 11, Administrative Policies for Natural Areas of the NPS (1970). Generally parks and monuments differ in these respects:

- Parks are spacious—monuments may be any size
- Parks contain two or more unique scenic or scientific values of superlative quality—monuments need only one attribute of scientific or historic significance
- Parks must be established by act of Congress—monuments may be established by act of Congress or by Presidential proclamation.

Management for both parks and monuments is essentially the same.

226. Lands north and east of the proposal, if not chosen by the Natives will revert to (d-1) status. The Secretary will oversee the management and disposition of these lands. It is possible that these lands could be included within the monument.
SUMMARY OF PLAN

Proposed to State of all unretained Federal lands allowing for future solution

Retained Federal lands divided into "four systems" plus defense lands and

Other (miscellaneous) Federal Lands. Lands that are retained for a set purpose.

Assignment of Federal land unit to appropriate agency with basic mission

and power to best develop and care for assets of given units on an in-

definite time period.

Division of all lands within retained Federal land status into two

functional classifications:

Natural Areas - Unit to be managed by Federal agency to protect natural

features, flora and fauna, and other miscellaneous while promoting

resource development.

Resource Development Areas - Unit to be managed not only for any public re-

creational use if allowed, but also for limited resource development as the agency in charge will allow. Timber

and mineral resource development are allowed.

5. Granting to State the power to dispose of any lands it gets from the Fed-

eral 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 resource development and public recreation.

Establishment of expanded 'Lake Clark NP', 'Kenihi Ntl. Mtn.', MT Mead, NP,

Gates of the Arctic NP, and Katmai NP as major recreation/landscapes type parks

of NPS. Anakchak Emur NP, as an isolated natural area of NPS. Cape Kelenius NP

is a natural archiological area of NPS. Remainder of NP system in Alaska set as limited

resource development areas of NPS, Native subsistence needs allowed to exist or if they

can't be met elsewhere and for as long as the need either exists or can be kept at accessible loca-

tions. Natural wildlife refuges into areas of critical wildlife habitat throughout

Alaska as embodied in proposed new refuges, only Arctic Ntl. will be a natural area

Remainder is refuges managed for wildlife along with secondary natural resource development

in lieu of wild life hunting improvement. Wildlife laws will be kept. 20,000

acres and minor hunting will continue with hunting of claims after mention

along with anyroads determined. All 'dine, the study and Congress acts.

Forest - Federal forest system to incorporate critical timber land areas as new nation.

Forests - The addition of isolated forest lands adjacent to existing forests. Also

in Congress NP to remain out of LDF's with same protection and overall fre-

dom management costs. This high country in Wrangell - St. Elias region given to NPS since

it is best to give this high country to manage and keep from small timberland to

police.

Federal and State wild rivers systems plus cooperative management zones (Fed-

eral, State, and Native) at Wr. Mead, Central Emur, & other appropriate locations such as

Lake brain.
<table>
<thead>
<tr>
<th>NATURAL AREAS</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Park System</td>
<td>23,206,000</td>
</tr>
<tr>
<td>1) Aniakchak Crater NM</td>
<td>486,000</td>
</tr>
<tr>
<td>2) Katmai NP</td>
<td>4,720,000</td>
</tr>
<tr>
<td>3) Lake Clark NP</td>
<td>3,850,000</td>
</tr>
<tr>
<td>4) Kenai Fiords NM</td>
<td>550,000</td>
</tr>
<tr>
<td>5) Mt. McKinley NP</td>
<td>5,120,000</td>
</tr>
<tr>
<td>6) Lakes of the Arctic NP</td>
<td>8,130,000</td>
</tr>
<tr>
<td>7) Cape Krusenstern NM</td>
<td>350,000</td>
</tr>
<tr>
<td>National Forest System</td>
<td>2,394,000</td>
</tr>
<tr>
<td>1) Suitsa Tongass NF</td>
<td></td>
</tr>
<tr>
<td>a) Granite Fiords Wilderness</td>
<td>590,000</td>
</tr>
<tr>
<td>b) King Salmon Capez Islands Wilderness</td>
<td>120,000</td>
</tr>
<tr>
<td>2) North Tongass NF</td>
<td>980,000</td>
</tr>
<tr>
<td>a) Tracy Arm</td>
<td></td>
</tr>
<tr>
<td>3) Chugach NF</td>
<td>704,000</td>
</tr>
<tr>
<td>a) Nellice Juan Wilderness</td>
<td></td>
</tr>
<tr>
<td>National Wildlife Refuge System</td>
<td>12,920,000</td>
</tr>
<tr>
<td>1) Arctic NWR</td>
<td>12,920,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td>38,520,000</td>
</tr>
</tbody>
</table>

* First priority establishment recommended for those new National Parks
* First priority establishment for additions to existing National Parks
* First priority establishment National Forest (now)
* First priority establishment National Wildlife Refuge
<table>
<thead>
<tr>
<th><strong>JURIES DEVELOPMENT AREAS</strong></th>
<th><strong>Acres</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>National Park System</td>
<td>19,613,000</td>
</tr>
<tr>
<td>1. Glacier Bay N.P.</td>
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</tr>
<tr>
<td>2. Chichagof National River Park</td>
<td>2,230,000</td>
</tr>
<tr>
<td>3. Wrangell-St. Elias N.P.</td>
<td>12,587,000</td>
</tr>
<tr>
<td>4. Kobuk Valley N.M.</td>
<td>1,950,000</td>
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<tr>
<td>National Forest System</td>
<td>36,464,840</td>
</tr>
<tr>
<td>1. North Tongass NF</td>
<td>10,720,000</td>
</tr>
<tr>
<td>2. South Tongass NF</td>
<td>5,150,000</td>
</tr>
<tr>
<td>3. Chugach NF</td>
<td>4,900,000</td>
</tr>
<tr>
<td>4. Yukon-Kuskokwim NF</td>
<td>7,271,000</td>
</tr>
<tr>
<td>5. Wrangell Mountain NF</td>
<td>1,923,840</td>
</tr>
<tr>
<td>6. Porcupine NF</td>
<td>5,500,000</td>
</tr>
<tr>
<td>National Wildlife Refuge System</td>
<td>36,377,019</td>
</tr>
<tr>
<td>1. Aukum Island N.W.R.</td>
<td>1,700,000</td>
</tr>
<tr>
<td>2. Baranof Island N.W.R.</td>
<td>10,000</td>
</tr>
<tr>
<td>3. Bering Sea N.W.R.</td>
<td>4,860</td>
</tr>
<tr>
<td>4. Kena N.W.R.</td>
<td>1,850,000</td>
</tr>
<tr>
<td>5. Chukchi Sea N.W.R.</td>
<td>2,415</td>
</tr>
<tr>
<td>6. Chukchi-Imuruk N.W.R.</td>
<td>2,408,320</td>
</tr>
<tr>
<td>7. Noatak N.W.R.</td>
<td>7,250,000</td>
</tr>
<tr>
<td>8. Selawik N.W.R.</td>
<td>1,420,000</td>
</tr>
<tr>
<td>9. Togiak N.W.R.</td>
<td>2,650,000</td>
</tr>
<tr>
<td>10. Koyukuk N.W.R.</td>
<td>5,350,000</td>
</tr>
<tr>
<td>11. Yukon Delta N.W.R.</td>
<td>6,550,000</td>
</tr>
<tr>
<td>12. Yukon Flats N.W.R.</td>
<td>3,800,000</td>
</tr>
<tr>
<td>13. Hazy Islands N.W.R.</td>
<td>42</td>
</tr>
<tr>
<td>14. St. Lazaria N.W.R.</td>
<td>62</td>
</tr>
<tr>
<td>15. Forrester Island N.W.R.</td>
<td>2,800</td>
</tr>
<tr>
<td>16. Shumagin Islands N.W.R.</td>
<td>6,280</td>
</tr>
<tr>
<td>17. Kodiak N.W.R.</td>
<td>1,790,000</td>
</tr>
<tr>
<td>18. Chichagof N.R.R.</td>
<td>2,200,320</td>
</tr>
<tr>
<td>National Wild and Scenic Rivers System</td>
<td>725,000</td>
</tr>
<tr>
<td>1. Forty Mile River</td>
<td>275,000</td>
</tr>
<tr>
<td>2. Other Wild and Scenic Rivers</td>
<td>450,000</td>
</tr>
</tbody>
</table>

*1 Includes old-Glacier Bay National Monument.

*2 Includes Alaska's 21,310 miles ofwild and scenic rivers.

365
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 Claims ———— 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 a great bearing on Alaska's future economic and political development as well as on future land use conflicts with landuses 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 someone's toes.” Some form of defining functions and relinquishing them to various State, Federal and other-miscellaneous agencies will have to be done here. Any Federal land that is not retained under Federal ownership under the “four reserve system” or under present day withdrawals 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
head most of the areas proposed should be open to certain activities as

hunting (such as in Lake Clark NP, Wrangell - St. Elias NP, Kluane Valley RNP, Arctic NWR, Illimanaq NWR, and Yukon Flats NWR); timber cutting (as specified to such areas as Koniag NWR, Illimanaq NWR, Yukon Flats NWR and Koyukuk NWR); and mining (within Wrangell - St. Elias NP, Kluane NWR, Togiak NWR, Chuukchi - Imuruk NWR, Nung Amo NF, Togiak NF [North and South Togiak NF], Yukon Kuskokwim NF, Wrangell Mountain NF, Nana NWR, Illimanaq NWR, and remaining areas of land management [BLM] lands). The key

to be done is 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, its flora and fauna for the enjoyment of future generations. The National Parks in this category include Kat.
Lake Clark, Kluane, Gates of the Arctic, Mount McKinley, Glacier Bay, and

Anakokchuk Center. These parks are given enlarged boundaries to best protect them from future offending land developments that will claim adjacent areas of the State. Within

these parks money should be funded to acquire any private or native inholdings as well as any

state lands, and to compensate the owners fairly by land or land money. This is to be done

as soon as possible (maybe even within the enabling legislation for establishing the Parks)

order to prevent them to all people as a clean safe national parks. (These Parks then have the highest priority in securing their existence as the dominant use areas in the

National wildlife refuges in the national area class include Arctic, Aleutian Islands, St.

Metis, Fire Island, Bovee Islands, Chuukchi Sea, St. Lawrence, Hovd Islands and Forrest

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 permitted to visit them.

Within Alaska's interior are rich pockets of white spruce poplar rich
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-N加上

sierra, the eastern Yukon Flats centering around the Pasquale River, and the upper

Tahoe 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 numerous stands of waterfowl, wildlife habitats support

most of the big game species present in the State; upland meadows where domestic

livestock graze with the wildlife; and high grazing lands where miners continue the

search for minerals plus the inevitable day when non-consumptive users (such as recre-
inists) 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 land

compatible with its basic mission and that all the retained federal lands in

Alaska should be assigned to the federal agency that is delegated as the best

one to manage the land resources of given areas. Here is where professional

man.

even carry weights, also it can safely be assumed that with a would
of the lands covered in proposed areas will ever pass Congress and be established in
any final proposal form. Congress, Opposition in these proposals is
擬 to propose, especially up in Alaska where at least 40,000,000 acres of
undeveloped lands were cancelled under Secretary Morton's B-2 and B-4 land
settlements, trigging a possible State land suit against the Federal Govern-
ment (State Department of Natural Resources). Many private individuals up there
express serious dislike in contesting that the land in the proposals should be open
to settlement and development of natural resources. Even many of the areas primar-
ily owned by the Federal Government such as Mt. McKinley N.P. and Glacier Bay N.P.
are today being covered by their minerals, timber, and open space for settlements. In
light of this few views is its practice in these two areas as a whole to
seek about timber cutting and ultimate disposal of the areas involved into private
ownership. Such a step further popular support up there because there is so many
undeveloped lands that Alaskans see no shortage of future lands for recreation.
Many states of such lands will occur, Resource development and settle-
ment presence today, it should end most of the B-2 and B-4 land should
be declared to resource development leaving Katmai N.P., Lake Clark N.P., Mt. McKin-
y N.P., Gates of the Arctic N.P., Kenai Fjords N.P., Aukechich Creek N.P., Cape Krusenstern
and Arctic N.P., and any wilderness areas on National Forest lands as undevelop-
alement areas. The remaining areas in the National Park, National Forest, National
wildlife refuge, National Wild Rivers, Defense, and other Federal retained lands
should be in the same (not two page) should be subject to very minor, and
these resource development policies except that Glacier Bay N.P. may be a migrant
settle disposal into private ownership if not disposed of the areas that qualify for
other national area classification or for resource development area classification
(see Summary of Plan in Back). Settlement within any of the national Federal
and 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 this people living up there that have the
right much in the economic growth and development of Alaska and must
like wise bear the consequences of any such act, whether the effects end up for
and so all. 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 remote back. Finally
with five these Cooperative Management zones (at Mt. McKinley, Gates of the Arctic
and Chugach 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
improvements to the existing State highway system have been turned over to the
State Division of Parks.
The proposal that may pass Congress, opposition to the proposals is extremely acute, especially up in Alaska where at least 4,600,000 acres of State selected lands were cancelled under Secretary Morton's B-2 and B-3 land selections, 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 controlling it the land in the proposals should be open to settlement and development of natural resources. Even many of the areas proposed withdrawn by the Federal Government such as Mt. McKinley NP and Glacier Bay NP are already being coveted for their minerals, timber, and open space for settlements, and it is logical to use mining as it is practiced in these two areas as a wedge to try 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 land will occur. Resource development and settlement take precedence today as it should and most of the D-2 and D-3 lands shall be devoted to resource development leaving Mt. McKinley NP, Lake Clark NP, Mt. McKinley NP, Gates of the Arctic NP, Kenai Fiords NP, Aialik Glacier NP, Cape Krusenstern NP, Arctic NP, and any wilderness areas on National Forest lands as undeveloped natural areas. The remaining areas in the National Park, National Forest, National Wildlife Refuge, National Wild Rivers, Defense, and other Federal interest lands as shown on the map (next two pages) should be subject to varying mineral, and timber resource development policies (except that Glacier Bay NP, may or may not end up being disposed into private ownership if not disposed then it can qualify for other natural area classification or for resource development 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 development 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, new remote outback. Finally, with the three cooperating Management Areas at Mt. McKinley, Gates of the Arctic, and Izembek Lake Basins 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 of the existing State highway system have been turned over to the State Division of Parks.
A. National Park System

Alaska is a vast land in terms of acreage and natural scenery. In its more than 3.5 million acres are temperate rain forests, frozen tundra, glacial mountain peaks, plains, warm hot springs, steaming volcanoes, rugged coastlines, smooth beaches, roaring rivers, deep valleys, barren sand dunes, and fertile lowlands. 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 come 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 area where many of the local and out-of-state recreational users will come from and merit their consideration by great natural scenery that is present at family low loss to other types of resource uses.

A minimum objective National Park System in Alaska should encompass

Lake Clark NP (3.88 million acres), Kenai Fjords NM (0.55 million acres), Katmai HP (4.73 million acres), Mt. McKinley NP (5.12 million acres), Gates of the Arctic NP (5.13 million acres), Cape Krusenstern NM (0.38 million acres), and hopefully soon a Chugach NP (2.80 million acres). An Aniakchak Crater NM of 0.436 million acres would also pose few conflicts as to resource use patterns now in the area, but it is no accessible and far distant by any future road or air access from Anchorage, which presumably would be the starting point for most of its potential visitors. Besides Katmai HP, Lake Clark NP, Wrangell-St. Elias NP, and McKinley NP will draw the most visitors. It would therefore be wise to give these proposals boundaries that enclose the "scenic preserve" otherwise so appealing and will be fought for later when the Alaska Federal Trust Fund studies prove to many Park advocates to be "inadequate." These Parks plus the 6.5 or so million acres of remote park which protects a cross-section of northern Alaska's tundra and the Brooks Range near Bethel, comprise the core of the Alaska National Order. They should be regarded as national areas free from most of man's influence and

Conflict with lumbering and mining interests are to be expected in the area for the Katmai Valley NM (1.95 million acres), Wrangell-St. Elias NP (2.3 million acres) and the Charley National River Park (2.23 million acres) under the remaining proposals (as well as in all the other Park units mentioned before) will make settlement very difficult for the three Park units in this particular area. Some mining was 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 sparing development of their resources.
Cape Krusenstern National Monument sets aside coastal arctic hunting and archaeological sites, the archeological sites at Cape Krusenstern and other points along the coast depict the development of Eskimo culture from the time of the first prehistoric hunters to the present day.

Other than hunting and gathering by Eskimo, the National Monument will be managed as a natural area of the NPS. The coastal tundra is too fragile to be scarred by a road. Access will therefore be by float plane from Kotzebue, the Monument headquarters during the summer or by tracked vehicle during the winter over the Winter Haul Trail. Visitors' centers will be located at Kotzebue and on the site of the archeological site at Cape Krusenstern.
 RESPONSE TO COMMENTS BY  
 DAVID WILLIAMSON  

227. Your resource and land use planning ideas are very interesting and they obviously represent a great deal of research and effort. Since the letter does not address directly the environmental impacts of this proposal, the NPS will not undertake a point-by-point response. However, your letter will appear in Chapter IX of the FEIS. Thank you for your interest.
Theodor R. Swem
Chairman, Alaska Planning Group
Room 1245
U.S. Department of the Interior
Washington, D.C., 20240

Dear Mr. Swem:

This is a comment on DES 73-87 Proposed: Cape Krusenstern National Monument, Alaska.

The following alternatives should be considered more completely:

1) Automatic addition of lands to the east and northeast which are not selected by native villages.

2) Addition of some of the lands which would be added in alternative C (all those lands which have been recommended for National Historic Landmark Designation). For example, the d-2 lands to the north and coastal waters to the south and west could be added with little more adverse impact than the proposal itself.

Sincerely,

Ken Zafren
228. Please refer to comment 226 for a full discussion of the possible future of these lands.

229. Additions were made to Alternative "B" of this proposal. The proposal now covers the entire watershed of rivers and streams draining through the proposal area.
## APPENDIX A: FAUNA OF THE CAPE KRUSENSTERN AREA

Some Common Birds and Their Occurrence (adapted from Williamson, et al., 1966)

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Habitats</th>
<th>Nesting</th>
<th>Migrant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Coastal waters</td>
<td>Lowland tundra</td>
<td>Upland tundra</td>
</tr>
<tr>
<td>Gavia spp.</td>
<td>Loons (three species)</td>
<td>x x x</td>
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<td></td>
</tr>
<tr>
<td>Branta nigricans</td>
<td>Black brant</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chen hyperborea</td>
<td>Snow goose</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anas acuta</td>
<td>Pintail</td>
<td>x x x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anas carolinensis</td>
<td>Green-winged teal</td>
<td>x x x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Histrionicus histrionicus</td>
<td>Harlequin duck</td>
<td>x x x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polysticta stelleri</td>
<td>Stellers</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Somateria mollissima</td>
<td>Common</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Somateria spectabilis</td>
<td>King</td>
<td>x</td>
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<td>Lampronetta fischeri</td>
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<td>Falco rusticolus</td>
<td>Gyrfalcon</td>
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<td></td>
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<tr>
<td></td>
<td>Ptarmigans:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lagopus mutus</td>
<td>Rock</td>
<td>x x x</td>
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</tr>
<tr>
<td>Lagopus lagopus</td>
<td>Willow</td>
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<td></td>
<td></td>
</tr>
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<td>Grus canadensis</td>
<td>Sandhill crane</td>
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</tr>
<tr>
<td>Charadrius semipalmatus</td>
<td>Semi-palmated</td>
<td>x x x</td>
<td></td>
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</tr>
<tr>
<td>Pluvalis dominica</td>
<td>American golden</td>
<td>x x x</td>
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</tr>
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<td></td>
<td>Sandpipers:</td>
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<tr>
<td>Ereunetes pusillus</td>
<td>Semi-palmated</td>
<td>x x x</td>
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</tr>
<tr>
<td>Ereunetes mauri</td>
<td>Western</td>
<td>x x x</td>
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</tr>
<tr>
<td></td>
<td>Jaegers:</td>
<td></td>
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</tr>
<tr>
<td>Stercorarius parasiticus</td>
<td>Parasitic</td>
<td>x x x x x x x x</td>
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</tr>
<tr>
<td>Stercorarius longicaudus</td>
<td>Long-tailed</td>
<td>x x x x x x x x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Larus Hyperboreus</td>
<td>Glaucous gull</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nyctea scandiaca</td>
<td>Snowy owl</td>
<td>x x x</td>
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<td></td>
</tr>
<tr>
<td>Corvus conax</td>
<td>Raven</td>
<td>x x x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motacilla flava</td>
<td>Yellow wagtail</td>
<td>x x x</td>
<td></td>
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<tr>
<td>Anthus spinoletta</td>
<td>Water pipit</td>
<td>x x x</td>
<td></td>
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</tr>
<tr>
<td>Acanthis flammea</td>
<td>Common redpoll</td>
<td>x x x</td>
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377
<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Habits</th>
<th>Nesting</th>
<th>Migrant</th>
</tr>
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<tr>
<td><em>Zonotrichia leucophrys</em></td>
<td>Sparrows: White-crowned</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<tr>
<td><em>Passerculus sandwichensis</em></td>
<td>Savannah</td>
<td>x</td>
<td>x</td>
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<tr>
<td><em>Calcarius lapponicus</em></td>
<td>Lapland longspur</td>
<td>x</td>
<td>x</td>
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Terrestrial Mammals Expected to Occur, and Their Preferred Habitats
(adapted from Pruitt, 1966)

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Habitats</th>
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<tbody>
<tr>
<td>Sorex tundrensis</td>
<td>Tundra shrew</td>
<td>x</td>
</tr>
<tr>
<td>Sorex cinereus</td>
<td>Masked shrew</td>
<td>x</td>
</tr>
<tr>
<td>Ursus arctos</td>
<td>Grizzly bear</td>
<td>x</td>
</tr>
<tr>
<td>Thalarctos maritimus</td>
<td>Polar bear (Rare)</td>
<td>x</td>
</tr>
<tr>
<td>Canis Lupus</td>
<td>Wolf</td>
<td>x</td>
</tr>
<tr>
<td>Alopex lagopus</td>
<td>Arctic fox</td>
<td>x</td>
</tr>
<tr>
<td>Vulpes fulva</td>
<td>Red fox</td>
<td>x</td>
</tr>
<tr>
<td>Mustela ermina</td>
<td>Ermine</td>
<td>x</td>
</tr>
<tr>
<td>Mustela rixosa</td>
<td>Least weasel</td>
<td>x</td>
</tr>
<tr>
<td>Gulo gulo</td>
<td>Wolverine</td>
<td>x</td>
</tr>
<tr>
<td>Citellus parryi</td>
<td>Arctic ground squirrel</td>
<td>x x</td>
</tr>
<tr>
<td>Marmota caligata</td>
<td>Hoary marmot</td>
<td>x</td>
</tr>
<tr>
<td>Clethrionomys rutilus</td>
<td>Red-backed vole</td>
<td>x</td>
</tr>
<tr>
<td>Microtus oeconomus</td>
<td>Tundra vole</td>
<td>x</td>
</tr>
<tr>
<td>Ondatra zibethicus</td>
<td>Muskrat</td>
<td>x</td>
</tr>
<tr>
<td>Lemmus trimucronatus</td>
<td>Brown lemming</td>
<td>x</td>
</tr>
<tr>
<td>Dicrostonyx groenlandicus</td>
<td>Collared lemming</td>
<td>x</td>
</tr>
<tr>
<td>Alces alces</td>
<td>Moose</td>
<td>x</td>
</tr>
<tr>
<td>Rangifer arcticus</td>
<td>Caribou</td>
<td>x</td>
</tr>
<tr>
<td>Ovis dalli</td>
<td>Dall sheep</td>
<td>x</td>
</tr>
<tr>
<td>Ovibus moschatus</td>
<td>Musk ox (introduced)</td>
<td>x</td>
</tr>
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<table>
<thead>
<tr>
<th>Scientific Name</th>
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<th>Occurrence</th>
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<tbody>
<tr>
<td><strong>Order PINNIPEDIA</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pusa hispida</td>
<td>Ringed seal</td>
<td>Abundant year around</td>
</tr>
<tr>
<td>Erignathus barbatus</td>
<td>Bearded seal</td>
<td>Abundant year around</td>
</tr>
<tr>
<td>Phoca vitulina</td>
<td>Harbor seal</td>
<td>Abundant seasonally</td>
</tr>
<tr>
<td>Histriophoca fasciata</td>
<td>Ribbon seal</td>
<td>Common seasonally</td>
</tr>
<tr>
<td>Phoca groenlandica</td>
<td>Hooded seal</td>
<td>Accidental</td>
</tr>
<tr>
<td>Eumetopias jubata</td>
<td>Harp seal</td>
<td>Accidental</td>
</tr>
<tr>
<td><strong>Callorhinus ursinus</strong></td>
<td>Alaska fur seal</td>
<td>Rare north of Bering Strait</td>
</tr>
<tr>
<td>Odobenus rosmarus</td>
<td>Walrus</td>
<td>Sight record from Herschel Island</td>
</tr>
<tr>
<td><strong>Order CETACEA</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balaena mysticetus</td>
<td>Bowhead whale</td>
<td>Abundant seasonally</td>
</tr>
<tr>
<td>Balaenoptera physalus</td>
<td>Finback whale</td>
<td>Common seasonally</td>
</tr>
<tr>
<td>Eschrichtius glaucus</td>
<td>Grey Whale</td>
<td>Common seasonally</td>
</tr>
<tr>
<td>Megaptera novaangliae</td>
<td>Humpback whale</td>
<td>Common seasonally</td>
</tr>
<tr>
<td>Balaenoptera borealis</td>
<td>Sea whale</td>
<td>Rare though reported</td>
</tr>
<tr>
<td>Balaenoptera acutorostrata</td>
<td>Little piked</td>
<td>Rare but reported</td>
</tr>
<tr>
<td>Delphinapterus leucas</td>
<td>Beluga</td>
<td>Abundant seasonally</td>
</tr>
<tr>
<td>Monodon monoceros</td>
<td>Narwhal</td>
<td>Rare</td>
</tr>
<tr>
<td>Grampus rectipinna</td>
<td>Killer whale</td>
<td>Common seasonally</td>
</tr>
<tr>
<td>Phocoena vomerina</td>
<td>Harbor porpoise</td>
<td>Rare</td>
</tr>
<tr>
<td><strong>Order CARNIVORA</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thalarctos maritimus</td>
<td>Polar bear</td>
<td>Common year around</td>
</tr>
<tr>
<td>Alopex lagopus</td>
<td>Arctic fox</td>
<td>Abundant seasonally, range coincides with polar bear</td>
</tr>
</tbody>
</table>
APPENDIX B: SUBSISTENCE RESOURCES HARVESTED IN THE NORTHWEST ALASKA NATIVE ASSOCIATION REGION

The data in this table were obtained in 1972 from a survey of individual households in each village by NANA representatives. The estimates represent an annual average per village over a period of years. The proportion of any catch obtained from the proposal area is undetermined, but for many items will be none and for others small.

<table>
<thead>
<tr>
<th>Resources Harvested</th>
<th>Kivalina</th>
<th>Noatak</th>
<th>Kotzebue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black bear</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Grizzly bear</td>
<td>-</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>Polar bear</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Beaver</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Caribou</td>
<td>513</td>
<td>1,214</td>
<td>5,000</td>
</tr>
<tr>
<td>Coyote</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Reindeer</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Arctic fox *</td>
<td>13</td>
<td>-</td>
<td>18</td>
</tr>
<tr>
<td>Red fox *</td>
<td>6</td>
<td>20</td>
<td>50</td>
</tr>
<tr>
<td>Goat</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Hare (arctic &amp; snowshoe)</td>
<td>-</td>
<td>150</td>
<td>350</td>
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<td>Land otter *</td>
<td>-</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Lynx *</td>
<td>6</td>
<td>6</td>
<td>-</td>
</tr>
<tr>
<td>Marmot</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Marten *</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mink *</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Moose</td>
<td>-</td>
<td>20</td>
<td>60</td>
</tr>
<tr>
<td>Muskrat</td>
<td>9</td>
<td>1,100</td>
<td>350</td>
</tr>
<tr>
<td>Porcupine</td>
<td>-</td>
<td>27</td>
<td>10</td>
</tr>
<tr>
<td>Sheep (Dall)</td>
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<td>13</td>
</tr>
<tr>
<td>Squirrel (tree)</td>
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<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Squirrel (ground)</td>
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<td>-</td>
<td>18</td>
</tr>
<tr>
<td>Weasel *</td>
<td>-</td>
<td>-</td>
<td>3</td>
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<tr>
<td>Wolverine *</td>
<td>9</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>Wolf *</td>
<td>3</td>
<td>7</td>
<td>29</td>
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<td>Resource Harvested</td>
<td>Kivalina</td>
<td>Noatak</td>
<td>Kotzebue</td>
</tr>
<tr>
<td>--------------------------</td>
<td>----------</td>
<td>--------</td>
<td>----------</td>
</tr>
<tr>
<td>Bearded seal</td>
<td>125</td>
<td>12</td>
<td>260</td>
</tr>
<tr>
<td>Hair seal (ringed &amp; harbor)</td>
<td>500</td>
<td>10</td>
<td>90</td>
</tr>
<tr>
<td>Sea lion</td>
<td>-</td>
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<tr>
<td>Walrus</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Beluga whale</td>
<td>10</td>
<td>10</td>
<td>50</td>
</tr>
<tr>
<td>Bowhead whale</td>
<td>-</td>
<td>-</td>
<td>(2,144)</td>
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</table>

*Fur bearers - not used for human consumption.

( ) Reindeer/bowhead whale - generally purchased, some barter/trade.

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<tr>
<th></th>
<th>Arctic cod</th>
<th>Blackfish</th>
<th>Burbot</th>
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<tr>
<td></td>
<td>1,200</td>
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</tr>
<tr>
<td></td>
<td>Burbot</td>
<td>-</td>
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</tr>
<tr>
<td></td>
<td>Char/pike</td>
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<tr>
<td></td>
<td>Flounder</td>
<td>-</td>
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</tr>
<tr>
<td></td>
<td>Grayling</td>
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<tr>
<td></td>
<td>Halibut</td>
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<tr>
<td></td>
<td>Herring</td>
<td>-</td>
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<tr>
<td></td>
<td>Ling cod</td>
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<td>Needlefish</td>
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<td>Coho silver</td>
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<td>Chum/dog</td>
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<td></td>
<td>King/chinook</td>
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<td></td>
<td>Sockeye/red</td>
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<td></td>
<td>Shark (mud)</td>
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<td>95,950</td>
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<td>Whitefish, small</td>
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<tr>
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<td></td>
<td>Auk/murre/puffin</td>
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<td>400</td>
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<tr>
<td></td>
<td>Swan</td>
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<tr>
<td></td>
<td>Ptarmigan</td>
<td>-</td>
<td>300</td>
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<tr>
<td></td>
<td>Spruce grouse</td>
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382
<table>
<thead>
<tr>
<th>Resources Harvested</th>
<th>Kivalina</th>
<th>Noatak</th>
<th>Kotzebue</th>
</tr>
</thead>
<tbody>
<tr>
<td>White (snowy) owl</td>
<td>98</td>
<td>-</td>
<td>8</td>
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<tr>
<td>Harvest eggs</td>
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<tr>
<td>Blueberries (Pounds)</td>
<td>90</td>
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<td>3,262</td>
</tr>
<tr>
<td>Blackberries &quot;</td>
<td>1,200</td>
<td>60</td>
<td>7,175</td>
</tr>
<tr>
<td>Cranberries &quot;</td>
<td>60</td>
<td>-</td>
<td>1,571</td>
</tr>
<tr>
<td>Crowberries &quot;</td>
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<td>-</td>
</tr>
<tr>
<td>Currants &quot;</td>
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</tr>
<tr>
<td>Gooseberries &quot;</td>
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<tr>
<td>Salmonberries &quot;</td>
<td>130</td>
<td>200</td>
<td>2,857</td>
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<tr>
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</tr>
<tr>
<td>Fireweed &quot;</td>
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<td>18</td>
</tr>
<tr>
<td>Grass roots &quot;</td>
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<td>19</td>
</tr>
<tr>
<td>Rose hips &quot;</td>
<td>-</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>Sourdock &quot;</td>
<td>-</td>
<td>360</td>
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</tr>
<tr>
<td>Tundra/Alaska tea &quot;</td>
<td>-</td>
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</tr>
<tr>
<td>Willow leaves &quot;</td>
<td>12</td>
<td>-</td>
<td>99</td>
</tr>
<tr>
<td>Wild roots &quot;</td>
<td>-</td>
<td>-</td>
<td>25</td>
</tr>
<tr>
<td>Suidkroak &quot;</td>
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<td>18</td>
</tr>
<tr>
<td>Tinnik &quot;</td>
<td>-</td>
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</tr>
<tr>
<td>Tree gum &quot;</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>Celery &quot;</td>
<td>10</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Eskimo potato (musse) &quot;</td>
<td>300</td>
<td>200</td>
<td>88</td>
</tr>
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<td>Mushroom &quot;</td>
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<tr>
<td>Onions &quot;</td>
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</tr>
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<td>Rhubarb &quot;</td>
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<tr>
<td>Spinach &quot;</td>
<td>780</td>
<td>-</td>
<td>-</td>
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</tbody>
</table>

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APPENDIX C

TRANSPORTATION AND UTILITY CORRIDOR HEARINGS - KOTZEBU

April 30, 1974

Road access from interior Alaska would impact very heavily on the lifestyle of the residents. Competition between the sports hunter and the subsistence hunter would greatly increase. This could have an adverse effect on the game and the lifestyle of the residents.

Migration of the Northwest Alaska Arctic caribou herd would be affected by the pipeline road and railroad.

Pollution of the area in the form of garbage—trash, junk, cars—would increase with access being provided by road or railroad.

Surface access by road would present hazards to the users during the winter months. Roads would be impossible to maintain because of climatic conditions during winter months. Maintenance costs would be very high.

Present programs do not warrant corridors. Greater need was expressed for roads at the local level, both inter- and intra-village.

Strong opposition was expressed to any connection with roads to this region. They expressed an interest in strengthening the air transportation; perhaps subsidizing this mode to reduce freight rates.

Oil and gas corridors should be connected to the Alyeska corridor for the North Slope (PET 4).

Lack of surface transportation—reason for no mining of the minerals in the Upper Kobuk on a large scale basis. Air transportation—feasible, but would lead to high grading and lack of complete utilization of the resource. Surface transportation to a reasonable ice-free port—necessary for large scale production. Availability of energy from pipeline would be of value in development of the mineral belt.

Opposition was expressed to the corridors because of the lack of development at this time. Should development occur in the future, they would be willing to consider the proposals at that time.

Representatives from 10 of the 11 villages in the region presented testimony, and did a good job in expressing the view of the communities.

Burton M. Silcock
APPENDIX D

APPENDIX: FISH AND WILDLIFE MANAGEMENT POLICY

The National Park Service policy on fish and wildlife management is set forth in Administrative 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; except the National Parks, the National Monuments, and historic areas of the National Park System, the Secretary shall-

"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 there to 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 overabundant 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.
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 recognition 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 accommodate 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(a)(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 0.07 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 1.10
7. Togiak National Wildlife Refuge 2.74
8. Yukon Delta National Wildlife Refuge 5.16
9. Yukon Flats National Refuge 3.59

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) 0.50

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 0.20 million acres
2. Birch Creek 0.20
3. Fortymile 0.32
4. Unalakleet 0.10

The total acreage added is 83.47 million acres.
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 established by the title. The agreements may be made, for example, with federal 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 Timayguk — 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 1.87 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 devastated 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 calderas (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, moraines, 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 11½ 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 myriad 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 Kalaspina 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; killer whales; 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 be 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 inhabit 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 arctic 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 redesignated as part of the Selawik National Wildlife Refuge and added to the refuge.

The proposal, located on the Arctic Circle, is 200 miles west-northwest 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 Varden, 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 Varden, 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 encompassing 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 Peninsula 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.
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 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,

Secretary of the Interior

Hon. Gerald R. Ford
President of the Senate
Washington, D.C. 20510

Enclosure
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 Representatives of the United States of America in Congress assembled,

2 That, having reviewed the recommendations of the Secretary of the Interior made pursuant to sections 17 (d) (1) and 17 (d) (2) of the Alaska Native Claims Settlement Act (85 Stat. 688) for addition of certain lands in Alaska to the National Park, Forest, Wildlife Refuge, and Wild and Scenic Rivers Systems, the Congress designates and estab-
lishes new units and additions to existing units of those sys-

tems, subject to the provisions of the following titles.

Sec. 2. This Act may be cited as the "Alaska Conserva-

Title I—National Park System

Part A—Additions to Existing Areas

Mount McKinley National Park

Sec. 101. (a) In order to include within Mount Mc-

Kinley National Park (hereinafter referred to in this section

as the "park") certain areas needed to provide a diversity of

habitat, insure the preservation of animal ecosystems, and

protect and interpret associated scenic resources and glacial

features, the boundary of the park is hereby revised to in-

clude, subject to valid existing rights, the lands, waters, and

interests therein depicted as within the proposed boundary

of the park on the map entitled "Mount McKinley National

Park", numbered 126-90-001, and dated December 1973, and

one hundred and eighty thousand acres.

(b) Section 4 of the Act of February 26, 1917 (39

Stat. 938; 16 U.S.C. 350), is repealed. Section 2 of the Act

of January 26, 1931 (46 Stat. 1043; 16 U.S.C. 350a), is

revised to read as follows: "The Secretary of the Interior

shall have authority to prescribe regulations for the surface
use of any valid mining locations made within the boundaries
of Mount McKinley National Park.”.

(c) Section 6 of the Act of February 26, 1917 (39
Stat. 939), as amended (16 U.S.C. 352), is further amended
by changing the period at the end thereof to a comma, and
adding the following: “or for subsistence uses in areas added
to the park by the Alaska Conservation Act of 1974 pursu-
ant to section 108 of that Act.”.

(d) In furtherance of the purposes set forth in subsec-
tion (a) of this section, the area adjacent to the south and
east boundary of the park generally depicted on the map re-
ferred to in subsection (a) as “Cooperative Planning and
Management Zone” is hereby designated as a zone within
which resource use and development are critical to the
proper protection, management, and interpretation of the
park. Not later than three years from the date of enactment
of this title, the Secretary of the Interior (hereinafter re-
ferred to as the “Secretary”) shall submit a report to the
Congress as to whether land-use controls needed for the
proper protection, management, and interpretation of the
park have been instituted effectively with respect to the
designated zone by the State of Alaska or an appropriate
political subdivision thereof. The Secretary shall solicit the
views of the Governor of the State of Alaska and of the Joint
Federal-State Land Use Planning Commission for Alaska
on his report, and he shall submit any such views to the Congress at the time the report is submitted.

KATMAI NATIONAL PARK

Sec. 102. (a) In order to include therein certain areas needed for the protection of critical animal habitat, including a watershed necessary for the perpetuation of red salmon and a habitat to protect a population of brown bear, and for the interpretation and preservation of outstanding scenic and scientific values associated with such habitats, the boundary of Katmai National Monument, as established by Proclamation Numbered 1487 of September 24, 1918 (40 Stat. 1855), and revised by Proclamation Numbered 1949 of April 24, 1931 (47 Stat. 2453), Proclamation Numbered 2564 of August 4, 1942 (56 Stat. 1972), and Proclamation Numbered 3890 of January 20, 1969 (83 Stat. 926) is hereby revised to include, subject to valid existing rights, the lands, waters, and interests therein depicted as within the proposed boundary of the park on the map entitled “Katmai National Park”, numbered 127-90-001, and dated December 1973, which additional area comprises approximately one million eight hundred and seventy thousand acres.

(b) The Katmai National Monument is hereby redesignated as Katmai National Park.
PART B—ESTABLISHMENT OF NEW AREAS

SEC. 103. (a) In order to protect and interpret for the benefit, inspiration, and education of present and future generations the scenic, scientific, biological, archeological, and historical values associated therewith, there are hereby established, subject to valid existing rights—

(1) Aniakchak Caldera National Monument, the boundary of which shall include the lands, waters, and interests therein depicted as within the proposed boundary of the national monument on the map entitled "Aniakchak Caldera National Monument", numbered NM-AC-90,001, and dated December 1973, which area comprises approximately four hundred and forty thousand acres;

(2) Harding Ice Field-Kenai Fjords National Monument, the boundary of which shall include the lands, waters, and interests therein depicted as within the proposed boundary of the national monument on the map entitled "Harding Ice Field-Kenai Fjords National Monument", numbered NM-HI/KF-90,001 and dated December 1973, which area comprises approximately three hundred thousand acres: Provided, That the Secretary may revise the monument boundary to include any lands,
waters, and interests therein depicted on such map as
within the area marked "Potential additions" if such
lands, waters, and interests therein are not selected by
native corporations pursuant to the Alaska Native Claims
Settlement Act;

(3) Cape Krusenstern National Monument, the
boundary of which shall include the lands, waters, and
interests therein depicted as within the proposed bound­
ary of the national monument on the map entitled “Cape
Krusenstern National Monument”, numbered NM-CK-
90,001, and dated December 1973, which area comprises
approximately three hundred and fifty thousand acres;

(4) Kobuk Valley National Monument, the bound­
ary of which shall include the lands, waters, and inter­
est therein depicted as within the proposed boundary of
the national monument on the map entitled “Kobuk
Valley National Monument”, numbered NM-KV-
90,001, and dated December 1973, which area com­
prises approximately one million eight hundred and fifty
thousand acres: Provided, That, any lands within the
Onion Portage Archeological District, as depicted on
such map, not selected by a Native corporation pursuant
to the Alaska Native Claims Settlement Act shall become
part of the national monument;
(5) Lake Clark National Park, the boundary of which shall include the lands, waters, and interests therein depicted as within the proposed boundary of the national park on the map entitled "Lake Clark National Park", numbered NP-LC-90,001, and dated December 1973, which area comprises approximately two million six hundred and ten thousand acres;

(6) Wrangell-Saint Elias National Park, the boundary of which shall include the lands, waters, and interests therein depicted as within the proposed boundary of the national park on the map entitled "Wrangell-Saint Elias National Park", numbered NP-WSE-90,001, and dated December 1973, which area comprises approximately eight million six hundred and forty thousand acres;

(7) Gates of the Arctic National Park, the boundaries of which shall include the lands, waters, and interests therein depicted as within the proposed boundaries of the park on the map entitled "Gates of the Arctic National Park", numbered NP-GA-90,001 and dated December 1973, which park comprises approximately eight million three hundred and sixty thousand acres;

(8) Yukon-Charley National Rivers, the boundary of which shall include the lands, waters, and interests
therein depicted as within the proposed boundary of the national rivers on the map entitled "Yukon-Charley National Rivers", numbered NR-YC-90,001, and dated December 1973, which area comprises approximately one million nine hundred and seventy thousand acres.

(9) Chukchi-Imuruk National Reserve, the boundary of which shall include the lands, waters, and interests therein depicted as within the proposed boundary of the national reserve on the map entitled "Chukchi-Imuruk National Reserve", numbered NR-CI-90,001, and dated December 1973, which area comprises approximately two million six hundred and ninety thousand acres.

(b) The boundary maps referred to in part A of this title and this part shall be on file and available for public inspection in the offices of the National Park Service, Department of the Interior; the maps entitled "Chukchi-Imuruk National Reserve" and "Harding Ice Field-Kenai Fjords National Monument" shall also be on file at the Bureau of Sport Fisheries and Wildlife, Department of the Interior.

In no event shall the boundary of any area added to existing areas or established by part A of this title or this part extend beyond the territorial sea.
SEC. 104. (a) The Secretary shall administer the lands, waters, and interests therein added to existing areas or established by the foregoing sections of this title as areas of the national park system, subject to the applicable provisions of this title and the Act of August 25, 1916 (39 Stat. 535 et seq.), as amended and supplemented (16 U.S.C. 1 et seq.).

(b) 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-Saint Elias National Park to achieve the fullest possible coordination and cooperation. In addition, the Secretary of Agriculture shall, in cooperation with the Secretary of the Interior, select and develop one or more areas along the Alaska Highway between the Canadian border and the village of Northway, Alaska, together with other interested public agencies, for public use, administration, interpretation, and other provision of facilities. Funds appropriated for purposes of this title shall be available for the development and operation of such facilities.

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BOUNDARIES, ACQUISITION OF PROPERTY

SEC. 105. Following reasonable notice in writing to the Committees on Interior and Insular Affairs of the Senate and House of Representatives, and after publication of notice in the Federal Register, the Secretary may make minor revisions in the boundaries of the areas added to existing areas or established by parts A and B of this title, including revisions to include within the boundaries such additional lands as are necessary for administrative sites but such administrative sites shall not exceed eighty acres for any one area added to existing areas or established by parts A and B. Within the boundaries of the areas added to existing units or established by parts A and B of this title, or as such boundaries may be revised pursuant to this section, 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.

APPLICABILITY OF MINING AND MINERAL LEASING LAWS

SEC. 106. (a) Except as provided in subsection (b) of this section, Federal lands within the boundaries of the areas added to existing units or established by parts A and B
of this title, or as such boundaries may be revised pursuant to section 105 of this part, as well as Federal lands within the boundaries of Mount McKinley National Park as of the date of enactment of this title, are, subject to valid existing rights, hereby withdrawn from location, entry, and patent under the public land laws of the United States, including from all forms of appropriation under the United States mining laws, and from operation of the mineral leasing laws including, in both cases, amendments thereto. Any mining claims located under the mining laws of the United States within the boundaries of those areas withdrawn pursuant to this subsection must be recorded with the Secretary under regulations established by the Secretary within one year after the effective date of such regulations. Any mining claim not so recorded shall be conclusively presumed to be abandoned and shall be void. Such recordation will not render valid any claim which was not valid on the effective date of this title, or which becomes invalid thereafter. Any claim recorded pursuant to the regulations promulgated under this subsection, for which the claimant has not made application for a patent within three years from the date of recordation, shall be presumed to be invalid unless the claimant presents to the Secretary clear evidence of its validity.

(b) Lands outside the Charley River watershed which are within the Yukon-Charley National Rivers, are not with-
drawn from operation of the mineral leasing laws, including amendments thereto, and the Mineral Leasing Act of February 25, 1920, as amended and supplemented (30 U.S.C. 181–263), shall apply to them: Provided, That, the Secretary may administratively cancel any lease or prospecting permit for violations of the terms of the lease or permit or of regulations issued pursuant to the Mineral Leasing Act of February 25, 1920, without regard to the requirements of section 31 of such Act (30 U.S.C. 188), after thirty days' notice to the lessee or permittee and failure of the lessee or permittee to correct the condition giving rise to the breach.

With respect to mineral deposits located within such lands normally subject to location, entry, and patent under the mining laws and withdrawn pursuant to subsection (a) of this section, the Secretary may issue permits for the exploration and development of said deposits pursuant to regulations establishing procedures, terms, and conditions under which such activity may be conducted, but with right of occupation and use of only so much of the surface of the land as is immediately and directly necessary to the exploration and development of said deposits.

SPORT HUNTING

Sec. 107. (a) Subject to subsection (b) of this section, and except as may otherwise be prohibited by Federal or State law, the Secretary shall permit sport hunting on
lands and waters under his jurisdiction within the areas est-
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.
Township 41 south, range 51 west.
Township 41 south, range 52 west.
Township 41 south, range 53 west.
Township 41 south, range 54 west.

(c) Not later than ten years from the date of enactment of this title, and continuing at intervals of not more than five years after the submission of the first such report, the Secretary shall report to the Congress on the effect of all hunting, fishing, and trapping, including subsistence uses, on the flora and fauna within each area added to existing units or established by parts A and B of this title, and shall recommend whether any or all of such uses shall be continued.

SUBSISTENCE USES

SEC. 108. Except as may otherwise be prohibited by Federal or State law, the Secretary shall permit the continuation of such subsistence uses of the fish, wildlife, and plant resources within the areas added to existing units or established by parts A and B of this title to the extent that such uses were in effect on the date of enactment of the Alaska Native Claims Settlement Act. Such uses shall continue unless the Secretary determines that particular uses are materially and negatively affecting the fish, wildlife, or plant resources of such areas: Provided, That, for such reasons as public safety, administration, fish and wildlife management, or public use and enjoyment, the Secretary may, by regula-
tion, prescribe conditions under which such subsistence uses
shall be conducted including, but not limited to, prohibitions
on takings, and the establishment of limits on the number
and type of resources taken, and the season when and area
within such areas where subsistence activities can be under-
taken. Regulations promulgated pursuant to this section shall
be put into effect only after consultation with the appropri-
ate fish and game agency of the State of Alaska.

COOPERATIVE AGREEMENTS

SEC. 109. (a) The Secretary is authorized to cooperate
and seek agreements with the heads of other Federal agen-
cies and the owners of lands and waters within, adjacent to,
or related to each area added to existing units or established
by parts A and B of this title, including, without limitation,
the State of Alaska or any political subdivision thereof, any
Native corporation, village, or group having traditional cul-
tural or resource-based affinities for such areas, and, with the
concurrence of the Secretary of State, the governments of
foreign nations. Such agreements shall have as their purpose
the assurance that resources will be used, managed, and de-
veloped in such a manner as to be consistent with the pres-
ervation of the environmental quality of such areas. The
agreements may also provide for access by visitors to the
park system units to and across the lands which are the
subject of the agreements.
(b) The head of any Federal agency, other than agencies that are parties to cooperative agreements pursuant to subsection (a) of this section, having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking in the lands and waters within, adjacent to, or related to areas added to existing units or established by parts A and B of this title, and the head of any Federal department or interdepartmental agency, other than parties to such agreements, having authority to license any undertaking in such lands and waters shall, prior to the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license, as the case may be, afford the Secretary a reasonable opportunity to comment with regard to such undertaking.

WILDERNESS REVIEW

Sec. 110. Within three years from the date of enactment of this title, the Secretary shall report to the President, in accordance with subsections 3 (c) and 3 (d) of the Wilderness Act (78 Stat. 892; 16 U.S.C. 1132 (c) and (d)), his recommendations as to the suitability or nonsuitability of any area added to existing units or established by parts A and B of this title for preservation as wilderness; any designation of any such area as wilderness shall be accomplished in accordance with said subsection of the Wilderness Act. Notwithstanding anything to the contrary in the Wilderness Act,
the Secretary shall, with respect to Mount McKinley Na-
tional Park, report to the President his recommendations as
to the suitability of any area within the entire park within
three years and from the date of enactment of this title.

PART D—WILD AND SCENIC RIVERS

DESIGNATION

SEC. 111. Section 3 (a) of the Wild and Scenic Rivers Act (82 Stat. 907), as amended (16 U.S.C. 1274 (a)), is
further amended by adding the following new paragraphs:

" . ALATNA, ALASKA. The seventy-five mile portion
of the main stem within the Gates of the Arctic National
Park; to be administered by the Secretary of the Interior.

" . ANIAKCHAK ALASKA.—The entire river, includ-
ing its major tributaries, Hidden Creek, Mystery Creek, Al-
bert Johnson Creek, and North Fork Aniakchak River,
within the Aniakchak Caldera National Monument; to be
administered by the Secretary of the Interior.

" . CHARLEY, ALASKA.—The entire river, including
its major tributaries, Copper Creek, Bonanza Creek, Hos-
ford Creek, Derwent Creek, Flat-Orthmer Creek, Crescent
Creek, and Moraine Creek, within the Yukon-Charley Na-
tional Rivers; to be administered by the Secretary of the
Interior.

" . KILLIK, ALASKA.—The entire river, including its
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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 admin-
istered 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.
TITLE II—NATIONAL WILDLIFE REFUGE SYSTEM

PART A—ESTABLISHMENT OF REFUGES AND RANGES

Sec. 201. There are hereby established, subject to valid existing rights, twelve national wildlife refuges (hereinafter referred to as the "refuges"), one national arctic range and one national resource range (hereinafter referred to as the "ranges").

Sec. 202. (a) The boundary of each refuge and each range shall include the area generally depicted on the applicable map as herein described: Provided, however, That in no case shall the boundary of a refuge or range extend beyond the territorial sea. Such maps shall be on file and available for public inspection in the office of the Bureau of Sport Fisheries and Wildlife, Department of the Interior, and, with respect to the ranges, the maps shall also be available for public inspection in the office of the Bureau of Land Management:

(1) As herein established, the (A) Barren Islands National Wildlife Refuge, (B) Chukchi Sea National Wildlife Refuge, (C) Shumagin Islands National Wildlife Refuge, (D) additions to the Kodiak National Wildlife Refuge, and (E) additions to the Bering Sea National Wildlife Refuge shall be comprised of approximately .05 million acres of lands, waters, and interests therein within the area generally...
deemed as the “proposed boundary” on the maps entitled “Alaska Coastal National Wildlife Refuges”, and dated December 1973. The Kodiak National Wildlife Refuge as designated in Executive Order Numbered 8857 of August 19, 1941, and modified by Public Land Order Numbered 1634 of May 9, 1958, and the additions designated in this subsection are hereby established as the “Kodiak National Wildlife Refuge”; and the Bering Sea National Wildlife Refuge as designated in Proclamation Numbered 2416 of July 15, 1940, amending Executive Order Numbered 1037 of February 27, 1909, and the additions designated in this subsection are hereby established as the “Bering Sea National Wildlife Refuge”.

(2) The Arctic National Wildlife Refuge as herein established shall be comprised of approximately 3.76 million acres of lands, waters, and interests therein within the area generally depicted as the “proposed boundary” on the map entitled “Arctic National Wildlife Refuge”, and dated December 1973, and the Arctic National Wildlife Range, established by Public Land Order Numbered 2214 of December 6, 1960, issued pursuant to Executive Order Numbered 10355 of May 26, 1952, is hereby redesignated as part of the Arctic National Wildlife Refuge and added to said refuge.

(3) The Iliamna National Resource Range as herein established shall be comprised of approximately 2.85 million
acres of lands, waters, and interests therein within the area
generally depicted as the “proposed boundary” on the map
entitled “Iliamna National Resource Range”, and dated

(4) The Koyukuk National Wildlife Refuge as herein
established shall be comprised of approximately 4.43 mil-
lion acres of lands, waters, and interests therein within the
area generally depicted as the “Proposed Boundary” on the
map entitled “Koyukuk National Wildlife Refuge”, and

(5) The Noatak National Arctic Range as herein es-
tablished shall be comprised of approximately 7.59 million
acres of lands, waters, and interests therein within the area
generally depicted as the “Proposed Boundary” on the map
entitled “Noatak National Arctic Range”, and dated De-

(6) The Selawik National Wildlife Refuge as herein
established shall be comprised of approximately 1.4 million
acres of lands, waters, and interests therein within the area
generally depicted as the “Proposed Boundary” on the map
entitled “Selawik National Wildlife Refuge”, and dated
December 1973, and the Chamisso National Wildlife Refuge
established by Proclamation Numbered 2416 of July 15,
1940, amending Executive Order Numbered 1658 of Decem-
ber 7, 1912, is hereby redesignated as part of the Selawik
National Wildlife Refuge and added to said refuge.
(7) The Togiak National Wildlife Refuge as herein es-
tablished shall be comprised of approximately 2.74 million
acres of lands, waters, and interests therein within the area
generally depicted as the "Proposed Boundary" on the map
entitled "Togiak National Wildlife Refuge", and dated De-
cember 1973, and the Cape Newenham National Wildlife
Refuge, established by Public Land Order Numbered 4583
of January 20, 1969, is hereby redesignated as part of the
Togiak National Wildlife Refuge and added to said refuge.
(8) The Yukon Delta National Wildlife Refuge as here-
in established shall be comprised of approximately 5.16 mil-
lion acres of lands, waters, and interests therein within the
area generally depicted as the "Proposed Boundary" on the
map entitled "Yukon Delta National Wildlife Refuge", and
dated December 1973, and the Clarence Rhode National
Wildlife Refuge, established by Public Land Order Numbered
4581 of January 20, 1969, amending Public Land Order
Numbered 2253 of January 23, 1961, amending Public
Land Order Numbered 2213 of December 8, 1960, issued
pursuant to Executive Order Numbered 10355, is hereby re-
designated as a unit of the Yukon Delta National Wildlife
Refuge to be administered as part of said refuge, and the
Hazen Bay National Wildlife Refuge, as established by
Proclamation Numbered 2416 of July 15, 1946, amending Executive Order Numbered 7770 of December 14, 1937, is hereby redesignated as part of the Yukon Delta National Wildlife Refuge and added to said refuge.

(9) The Yukon Flats National Wildlife Refuge as here-in established shall be comprised of approximately 3.59 million acres of lands, waters, and interests therein within the area generally depicted as the “Proposed Boundary” on the map entitled “Yukon Flats National Wildlife Refuge”, and dated December 1973.

(b) The Secretary of the Interior (hereinafter referred to as “the Secretary”) may make minor revisions in the boundary of each refuge and each range by publication of a revised map or other boundary description in the Federal Register.

PART B—GENERAL ADMINISTRATIVE PROVISIONS

ACQUISITION OF PROPERTY

Sec. 203. Within the boundary of each refuge and each range the Secretary is authorized to acquire by purchase, donation, or exchange, lands, waters, and interests therein, except that lands, waters, and interests therein owned by the State of Alaska or any political subdivision thereof may be acquired only with agreement of the said State or political subdivision and property owned by any Native village or
corporation may be acquired only with the concurrence of
such owner.

COOPERATIVE AGREEMENTS

Sec. 204. (a) The Secretary is authorized to cooperate
and seek agreements with the heads of other Federal agen-
cies and the owners of lands and waters within, adjacent to
or related to each area added to existing units or established
by section 202 of this title, including, without limitation, the
State of Alaska or any political subdivision thereof, any
Native corporation, village, or group having traditional cul-
tural or resource-based affinities for such areas. Such agree-
ments shall have as their purpose the assurance that resources
will be used, managed and developed in such a manner as to
be consistent with the preservation of the environmental
quality of such areas.

(b) The head of any Federal agency, other than agen-
cies that are parties to cooperative agreements pursuant to
subsection (a) of this section, having direct or indirect juris-
diction over a proposed Federal or federally assisted under-
taking in the lands and waters within, adjacent to or related
to areas added to existing units or established by section 202
of this title, and the head of any Federal department or
interdepartmental agency, other than parties to such agree-
ments, having authority to license any undertaking in such
lands and waters shall, prior to the approval of the expendi-

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ture of any Federal funds on the undertaking or prior to the issuance of any license, as the case may be, afford the Secretary a reasonable opportunity to comment with regard to such undertaking. Nothing in subsection (c) of this section shall be construed as superceding or limiting the authorities and responsibilities of the Secretary under the Fish and Wildlife Coordination Act, as amended (60 Stat. 1080; 16 U.S.C. 661-667e).

(c) The Secretary may seek, with the concurrence of the Secretary of State, and enter into bilateral or multilateral agreements with foreign countries in order to provide for the protection, preservation, and enhancement of the fish and wildlife of international significance.

ADMINISTRATION

SEC. 205. (a) (1) The Secretary shall administer the refuges and the ranges pursuant to the provisions of the National Wildlife Refuge Administration Act of 1966, as amended (80 Stat. 927; 16 U.S.C. 668dd-668ee), and the provisions of this title, as part of the National Wildlife Refuge System. The Secretary may also utilize such additional authorities as may be available to him for the management and protection of the resources within, adjacent to or related to the refuges and the ranges, including but not limited to the preservation and enhancement of nationally and internationally significant fish and wildlife species, the
development of fish and wildlife-oriented outdoor recreation
opportunities, interpretive education programs and scientific
research, the conservation, protection, restoration, and propa-
gation of endangered and threatened species, and the preser-
vation of cultural, historical, and archeological resources.

(2) The Illiamna National Resource Range shall be
administered as a unit of the National Wildlife Refuge Sys-
tem pursuant to paragraph (1) of this subsection and in
accordance with plans, to be developed by the Secretary,
which will permit activities, in accordance with the principles
of multiple use and sustained yield, which the Secretary
determines will not significantly impair the nationally and
internationally significant fish and wildlife resources of the
range and Bristol Bay.

(3) The Noatak National Arctic Range shall be ad-
ministered as a unit of the National Wildlife Refuge System
pursuant to paragraph (1) of this subsection and in accord-
ance with plans, to be developed by the Secretary, which
will provide for the protection of the natural features of the
range, permit appropriate scientific research and other ac-
tivities which will not significantly impair the environment.

For a period of twenty years following the enactment of this
title, any developmental activities or uses are, subject to valid
existing rights, prohibited on the range. The Secretary shall
conduct a review and report to the Congress within twenty

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years of the date of enactment of this title his findings and
recommendations for the future administration and manage-
ment of the range.

(b) (1) The lands within the refuges and the Iliamna
National Resource Range are, subject to valid existing rights,
hereby withdrawn from location, entry, and patent under
the public land laws of the United States, including all forms
of appropriation under the United States mining laws, but
not including the Mineral Leasing Act of February 25, 1920,
as amended and supplemented (30 U.S.C. 181–263), ex-
cpt that, with respect to mineral deposits normally subject
to location, entry, and patent pursuant to the mining laws,
the Secretary may issue permits for the exploration and
development of said deposits pursuant to regulations estab-
ishing procedures, terms, and conditions under which such
activity may be conducted, but with right of occupation and
use of only so much of the surface of the land as is immedi-
ately and directly necessary to the exploration and develop-
ment of said deposits. Any mining claims located under the
mining laws of the United States within the boundaries of
those areas withdrawn pursuant to this subsection, must be
recorded with the Secretary under regulations established by
the Secretary within one year after the effective date of such
regulations. Any mining claim not so recorded shall be con-
clusively presumed to be abandoned and shall be void. Such
recording will not render valid any claim which was not valid on the effective date of this title, or which becomes invalid thereafter. Any claim recorded pursuant to the regulations promulgated under this subsection, for which the claimant has not made application for a patent within three years from the date of recordation, shall be presumed to be invalid unless the claimant presents to the Secretary clear evidence of its validity.

(2) The Secretary may administratively cancel any lease or prospecting permit for violations of the terms of the lease or permit or of regulations issued pursuant to the Mineral Leasing Act of February 25, 1920, without regard to the requirements of section 31 of such Act (30 U.S.C. 188), after thirty days' notice to the lessee or permittee and failure of the lessee or permittee to correct the condition giving rise to the breach.

(c) The lands within the Noatak National Arctic Range are, subject to valid existing rights, withdrawn from location, entry, and patent under the public land laws of the United States, including all forms of appropriation under the mining laws of the United States and from the operation of the Mineral Leasing Act of February 25, 1920, as amended and supplemented.

(d) Except as may otherwise be prohibited by Federal or State law, the Secretary shall permit the continuation of
such subsistence uses of the fish, wildlife, and plant resources
within the refuges and the ranges to the extent that such uses
were in effect on the date of enactment of the Alaska Native
Claims Settlement Act. Such uses shall continue unless the
Secretary determines that particular uses are materially and
negatively affecting the fish, wildlife, or plant resources of
the refuges and the ranges: Provided, That, for such rea-
sons as public safety, administration, fish and wildlife man-
agement, or public use and enjoyment, the Secretary may,
by regulation, prescribe conditions under which such sub-
sistence uses shall be conducted including, but not limited
to, prohibitions on taking, the establishment of limits on the
number and type of resources taken, and the season when
and area within the refuges and the ranges where subsist-
ence activities can be undertaken. Regulations promulgated
pursuant to this section shall be put into effect only after
consultation with the appropriate fish and game agency of
the State of Alaska.

WILDERNESS REVIEW

Sec. 206. (a) Within three years from the date of en-
actment of this title, the Secretary shall report to the Presi-
dent, in accordance with subsections 3 (c) and 3 (d) of the
Wilderness Act (78 Stat. 890; 16 U.S.C. 1132 (c) and
(d) ), his recommendations as to the suitability or nonsuit-
ability of any area within the refuges and the Iliamna Na-
tional Resource Range for preservation as wilderness, and any designation of any such areas as wilderness shall be ac-
complished in accordance with said subsections of the Wilderness Act, except that this section shall not apply to that portion of the Bering Sea National Wildlife Refuge designated as wilderness pursuant to the Act of October 23, 1970 (84 Stat. 1104; 16 U.S.C. 1132 note). Notwithstanding anything to the contrary in the Wilderness Act, the Secretary shall, with respect to any existing refuge added to the refuges herein established by paragraphs (1)(D), (2), and (8) of section 202(a) of this title, report to the President his recommendations as to the suitability of any area within the entire refuge within three years from the date of enactment of this title.

(b) With regard to the Noatak National Arctic Range such a wilderness report as is required in subsection (a) of this section shall be included in the Secretary's report to the Congress pursuant to section 205(a)(3) of this title.

PART C—WILD AND SCENIC RIVERS

Sec. 207. (a) Section 3(a) of the Wild and Scenic Rivers Act (82 Stat. 907) as amended (16 U.S.C. 1274(a)), is further amended by adding the following new paragraphs.

". ALAGNAK, ALASKA.—The entire river within the boundary of the Iliamna National Resource Range
from a point approximately eight miles below its source, to a point twenty miles above the mouth, including the Nonvianuk River, to be administered by the Secretary of the Interior;

" . ANDREAFSKY, ALASKA.—From its source, including all headwaters, downstream for two hundred and forty miles, including the East Fork, all within the boundary of the Yukon Delta National Wildlife Refuge, to be administered by the Secretary of the Interior;

" . IVISHAK, ALASKA.—From its source, including all headwaters and an unnamed tributary to Porcupine Lake, downstream to a point near Flood Creek, all within the boundary of Arctic National Wildlife Refuge, to be administered by the Secretary of the Interior;

" . KANektOK, ALASKA.—The entire river within the boundary of Togiak National Wildlife Refuge, Kagati Lake to a point sixteen miles above the mouth, to be administered by the Secretary of the Interior;

" . NOatak, ALASKA.—From the east boundary of the Noatak National Arctic Range to its confluence with the Kelly River, to be administered by the Secretary of the Interior; and

" . WIND, ALASKA.—From its source, including all headwaters and one unnamed tributary in Township T13S, downstream for sixty-five miles, within the
boundaries of the Arctic National Wildlife Refuge, to be administered by the Secretary of the Interior.”

(b) The river segments designated in subsection (a) of this section are hereby classified and designated and shall be administered as wild river areas.

(c) Notwithstanding any provisions to the contrary of the Wild and Scenic Rivers Act (82 Stat. 907; 16 U.S.C. 1271) the boundaries of the river segments referred to in subsection (a) of this section may include an area extending up to two miles from the mean high water level on either side of the river segments. Notwithstanding the provisions of section 3 (b) of such Act, the Secretary shall establish boundaries for the river segments referred to in subsection (a) of this section within three years after the date of enactment of this title.

(d) The provisions of section 6 of the Wild and Scenic Rivers Act shall not apply to the river segments referred to in subsection (a) of this section.

PART D—REGULATIONS

Sec. 208. (a) The Secretary may issue such rules and regulations as may be necessary to carry out the provisions of this title.

(b) Any regulations heretofore prescribed by the Secretary for any existing refuge added to the refuges herein established as referred to in paragraphs (1), (2), (6),
(7), and (8) of section 202 (a) of this title shall remain in effect until republished in total or in part by the Secretary.

PART E—APPROPRIATION AUTHORIZATION

SEC. 209. There are hereby authorized to be appropriated such sums as may be necessary to carry out the provisions of this title.

TITLE III—NATIONAL FOREST SYSTEM

NEW ALASKA NATIONAL FORESTS

SEC. 301. For the purpose of providing for the protection, conservation, and management of the multiple resource values of certain public lands in the State of Alaska as part of the National Forest System, the areas described in subsections (a) through (c) of this section, as generally depicted on maps appropriately referenced, dated December 1973, and on file and available for public inspection in the Office of the Chief, Forest Service, Department of Agriculture, are hereby established as the Wrangell Mountains, Porcupine, and Yukon-Kuskokwim National Forests, respectively. The Wrangell Mountains, Porcupine, and Yukon-Kuskokwim National Forests shall, subject to valid existing rights, be administered by the Secretary of Agriculture in accordance with the laws, rules, and regulations applicable to the national forests.

(a) The Porcupine National Forest shall include the area generally depicted on a map entitled, "Proposed Porcu-
pine National Forest", comprising approximately 5.5 million acres.

(b) The Wrangell Mountains National Forest shall include the area generally depicted on a map entitled, "Proposed Wrangell Mountains National Forest", comprising approximately 5.5 million acres.

c) The Yukon-Kuskokwim National Forest shall include the area generally depicted on a map entitled, "Proposed Yukon-Kuskokwim National Forest", comprising approximately 7.3 million acres.

ADDITION TO CHUGACH NATIONAL FOREST

Sec. 302. Within sixty days following enactment of this title, the Secretary of the Interior shall, by public land order, provide for addition to the Chugach National Forest of the area comprising approximately five hundred thousand acres generally depicted on a map entitled "Proposed Chugach National Forest Addition" which is on file and available for public inspection in the Office of the Chief, Forest Service, Department of Agriculture. Subject to valid existing rights, the Chugach National Forest Addition shall be administered as a part of the Chugach National Forest in accordance with the laws, rules, and regulations applicable to national forests.

WILD AND SCENIC RIVERS WITHIN ALASKA NATIONAL FORESTS

Sec. 303. (a) Section 3 (a) of the Wild and Scenic
Rivers Act (82 Stat. 907, 16 U.S.C. 1274 (a)) , as amended is further amended by adding the following new paragraphs:

" . Bremner, Alaska.—The entire river, from its origin to its confluence with the Copper River, to be administered by the Secretary of Agriculture.

" . Nowitna, Alaska.—The segment from the point where the river crosses the west boundary of section 6, township 17 south, range 22 east, Fairbanks principal meridian, downstream to its confluence with the Yukon River, to be administered by the Secretary of Agriculture.

" . Porcupine, Alaska.—The segment from the Canadian border downstream to the point where the river crosses the north boundary of section 2, township 23 north, range 18 east, Fairbanks principal meridian, to be administered by the Secretary of Agriculture.

" . Sheenjek, Alaska.—The segment from the point where the river crosses the north boundary of section 1, township 32 north, range 16 east, Fairbanks principal meridian, downstream to its confluence with the Porcupine River, to be administered by the Secretary of Agriculture."

(b) The Bremner and Sheenjek River segments designated in subsection (a) of this section are hereby classified and designated and shall be administered as wild river areas. The Porcupine and Nowitna River segments designated in
subsection (a) of this section are hereby classified and designated and shall be administered as scenic river areas.

(c) Notwithstanding the provisions of subsection 3 (b) of the Wild and Scenic Rivers Act (82 Stat. 907, 16 U.S.C. 1274 (b)), the Secretary of Agriculture shall establish boundaries for the Wild and Scenic Rivers referred to in section 303 of this title within three years after the date of enactment of this title.

Sec. 304. The Secretary of Agriculture shall, as soon as practicable after the date of enactment of this title, publish in the Federal Register a detailed description and map showing the boundaries of the Wrangell Mountains, Porcupine, and Yukon-Kuskokwim National Forests, and the addition to the Chugach National Forest.

Sec. 305. There are hereby authorized to be appropriated such sums as may be necessary to carry out the provisions of this title.

Title IV—Additions to National Wild and Scenic Rivers System Located Outside National Parks, National Wildlife Refuges, and National Forests

Sec. 401. Section 3 (a) of the Wild and Scenic Rivers Act (82 Stat. 907), as amended (16 U.S.C. 1274 (a)), is further amended by adding the following new paragraphs:
"BEAVER CREEK, ALASKA.—The segment of the main stem from the vicinity of the confluence of Bear and Champion Creeks downstream one hundred and thirty-five miles to a point approximately fifteen miles downstream from the mouth of Victoria Creek, the segment not to exceed two hundred thousand acres; to be administered by the Secretary of the Interior.

"BIRCH CREEK, ALASKA.—The segment of the main stem from the vicinity of the confluence of North Fork downstream one hundred and thirty-five miles to the vicinity of Jumpoff Creek, the segment not to exceed two hundred thousand acres; to be administered by the Secretary of the Interior.

"FORTYMILE, ALASKA.—The main stem within the State of Alaska; O'Brien Creek; South Fork; Napoleon Creek; Franklin Creek; Uhler Creek, Walker Fork downstream from the confluence of Liberty Creek; Wade Creek; Mosquito Fork downstream from the vicinity of Kechumstuk; West Fork Dennison Fork downstream from the confluence of Logging Cabin Creek; Dennison Fork downstream from the confluence of West Fork Dennison Fork; Logging Cabin Creek; North Fork; Hutchinson Creek; Champion Creek; the Middle Fork downstream from the confluence of Joseph Creek; and Joseph Creek, the segments not to
exceed three hundred and twenty thousand acres; to be administered by the Secretary of the Interior.

UNALAKLEET, ALASKA.—The segment of the main stem beginning at 159 degrees 21 minutes 06.156 seconds west longitude approximately six miles from the headwaters extending downstream sixty miles to 160 degrees 19 minutes 15.031 seconds west longitude in the vicinity of confluence of the Chiroskey River, the segment not to exceed one hundred and four thousand acres; to be administered by the Secretary of the Interior.”

ADMINISTRATIVE PROVISIONS

SEC. 402. (a) The Beaver Creek, Birch Creek, and Unalakleet components, as well as Mosquito Fork downstream from the vicinity of Kechumstuk to Ingle Creek, North Fork, Champion Creek, Middle Fork downstream from the confluence of Joseph Creek, and Joseph Creek units of the Fortymile component, designated in section 401 of this title, are hereby classified and designated and shall be administered as wild river areas pursuant to the Wild and Scenic Rivers Act. The Wade Creek unit of the Fortymile component is classified and designated and shall be administered as a recreational river area, pursuant to such Act. The remaining units of the Fortymile component are classified and designated and shall be administered as scenic river areas, pursuant to such Act. The classification as wild river
areas of certain segments of the Fortymile by this subsection
shall not preclude such access across those river segments
as the Secretary of the Interior determines to be necessary
to permit commercial development of asbestos deposits in the
North Fork drainage.

(b) The Secretary of the Interior shall take such action
as is provided for under section 3 (b) of the Wild and Scenic
Rivers Act to establish detailed boundaries and formulate
detailed development and management plans within three
years after the date of enactment of this title with respect
to the Beaver Creek component, within two years with
respect to the Birch Creek component, within one year with
respect to the Fortymile component, and within four years
with respect to the Unalakleet component.

(c) The provisions of section 401 of this title specifying
maximum permissible acreages for individual components
shall supersede any provisions to the contrary of the Wild
and Scenic Rivers Act.

(d) Notwithstanding the provisions of section 9 (a) (iii)
of the Wild and Scenic Rivers Act, the minerals in all Federal
lands included in any component or part of a component
designated by this section as a wild river area are hereby
withdrawn, subject to valid existing rights, from all forms of
appropriation under the mining laws and from operation of
1 the mineral leasing laws including, in both cases, amendments thereto.

2

APPROPRIATION AUTHORIZATION

4 Sec. 403. There is hereby authorized to be appropriated such sums as may be necessary for the purposes of this title.

A BILL

To provide for the addition of certain lands in the State of Alaska to the National Park, National Wildlife Refuge, National Forests, 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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REFERENCES

Alaska Department of Economic Development
1972 *Alaska Industrial Directory of Employers, 1972-73*

Alaska Department of Education
1972 *Alaska Educational Directory, 1972-73*

Alaska Department of Fish and Game
Annual Management Reports.

Alaska Department of Health and Welfare
Statistics on "Location and total Amounts of Assistance in Active Cases -- October 1967 to October 1972."

Alaska Department of Labor

Alaska Rural Development Council.

Allen, P.W., and R.O. Weedfall

Alverson, Dayton L. and Normon J. Wilimovsky.

American Association of Petroleum Geologists
Petroleum Geologist Memoir 15.
*Future Petroleum Provinces of America.*

Bandi, Hans-Georg

Black, Robert F.
1966 "Late Pleistocene to Recent History of the Bering Sea-Alaska Coast and Man." *Arctic Anthropology*, III,w.

Bloom, Joseph D. (M.D.)
Campbell, Russell H.

Creager, Joe S., and Dean A. McManus

Federal State Land Use Planning Commission for Alaska

Foote, D.C., and H.A. Williamson

Giddings, J. Louis
1961 "Cultural Continuities of Eskimos." American Antiquity, XXVII.

Giddings, J. Louis, Paul M.F. Schumacher, and Charles W. Snell

Guber, Nicholas J.

Hall, Edwin S., Jr.
1971 "Kangigukusu: A Cultural Reconstruction of a Sixteenth Century Eskimo Site in Northern Alaska." Arctic Anthropology VIII.

Heller, Christine A., and Edward M. Scott
Hippler, Arthur E.
1970 *From Village to Town: An Intermediate Step in the Acculturation of Alaskan Eskimos.* University of Minnesota, Training Center for Community Programs in coordination with the Office of Community Programs, Center for Urban and Regional Affairs.

Hopkins, David M.

Johnson, Albert W., et al.

Josephson, Karla

Kachadoorian, Reuben

Khabarovsk
1973 All Union Symposium on the Bering Land Bridge, U.S.S.R.

Larson, Helge

Laughlin, W.S.

Linn, P.C.


LaResche, R.E., and R.A. Hinan
1973 *Alaska's Wildlife and Habitat.* Alaska Department of Fish and Game, Juneau.

Maclean, Bryan, Robert Weeden, et al.
1971 *Point Hope Project Report.* University of Alaska. (National Science Foundation, Division of Student Originated Studies, Grant)
McPhail and Lindsey
1970 *Freshwater Fishes of Northwestern Canada and Alaska*. Fisheries Research Board of Canada, Bull. #173

Michaelson, Neil E.
1974a *Soils and Watershed Resources. Resources Inventory, Northwest Region*. Federal-State Land Use Planning Commission, Anchorage. Unpub. preliminary draft, subject to change.

1974b *Soils and Watershed Resources. Resources Inventory, Arctic Region*. Federal-State Land Use Planning Commission, Anchorage. Unpub. preliminary draft, subject to change.

Moore, George W.

Muller-Bech, Hansjurgen

Nelson, Richard K.

Northwest Alaska Native Association
1973 *Survey of Resources Harvested in the NANA Region*.

Orth, Donald J.

Pruitt, William O., Jr.

Saario, Doris J., and Brina Kessel

Smith, H.D., A.H. Seymour, and L.R. Donaldson

Smith, Valene L.
Tussing, Arlon, et al.

U.S. Department of Commerce

U.S. Department of the Interior, National Park Service


1968 Administration Policies for Historical Areas of the National Park Service. Washington, D.C.

Wahrhaftig, Clyde

Willey, Gordon R.

Williamson, Francis S.L., et al.