

## **Comments from State and Local Governments (S)**

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February 6, 1987

Mr. Robert Gilmore  
Regional Director  
U.S. Department of the Interior  
U.S. Fish and Wildlife Service  
1011 East Tudor Road  
Anchorage, AK 99503

FEB 6 1987

Dear Mr. Gilmore:

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The state has reviewed the Draft Arctic National Wildlife Refuge (ANWR), Alaska, Coastal Plain Resource Assessment 1002(h) Report. We appreciate the additional time granted the state to review this important report. Based on our review of the substantial amount of information contained in the draft 1002(h) report, we strongly support the conclusion that oil and gas exploration be allowed in ANWR consistent with the chief purpose of the refuge to preserve its unique wildlife values.

The State of Alaska recommends that Congress immediately open the 1002 area to oil and gas leasing, with the exception of the area described by U.S. Fish and Wildlife Service (USFWS) as the "core" caribou calving area. The state strongly recommends that leasing in the "core" calving area be deferred for a ten-year period. During this ten-year period, the Department of the Interior (DOI) should establish an ANWR Caribou Impact Assessment Study Group composed of federal, state, university, and private researchers to further study the potential impacts of oil and gas activities in the calving area on the Porcupine Caribou Herd. The study should be conducted over a seven-year period following commencement of the first exploratory well and result in a report to the Secretary of the Interior and Governor of Alaska. The report would seek to document the biological importance of the core calving area, the effects of oil and gas activities in the 1002 area on the Porcupine Caribou Herd, and the effectiveness of mitigation measures employed in the 1002 area to minimize adverse impacts to caribou. Based on the report findings, the Governor and Secretary would recommend to Congress to extend the deferral or open the core calving area to oil and gas leasing. If

Congress failed to act on the recommendations within the ten-year period, the recommendation of the Secretary and Governor would be implemented.

It is imperative that the recommendations from the Governor of Alaska be included with those of the Secretary of the Interior given the significant interests of the state involved in both the leasing and protection of resources in the 1002 area. Not only is the state a sovereign steward of natural resources with regulatory responsibilities in the area, it is the principle owner of lands which any ANWR production transportation system must cross.

This recommendation is based on several salient facts. First, Congress has mandated that fish and wildlife populations in ANWR receive a very high level of protection. Because of this mandate, USFWS is required to take a conservative approach when making decisions regarding the impact of development activity on the refuge's fish and wildlife populations. Second, while a sizable amount of information has been collected on the impact of oil and gas activity on the Central Arctic Caribou Herd, questions remain regarding the potential impact of the oil and gas activity on the Porcupine Caribou Herd population because of its larger size, distribution and movement patterns, and population dynamics. Contrary to the statements made on page 112 of the draft 1002(h) report, at this point in time there is inadequate information to predict what population impacts would occur if oil and gas development were to take place in the core calving area. Third, protection of the herd and its habitat is of great concern to our Canadian neighbors, and the deferral and studies will respect those concerns.

#### Special Values of ANWR

We predicated our review on two fundamental facts inherent to ANWR. First, the fish and wildlife resources of ANWR are of significant state, national, and international importance. The Porcupine Caribou Herd, which numbers some 180,000 animals, annually migrates between Canada's Northwest Territories and Alaska's arctic coastal plain where it spends a portion of each summer. These animals are of great importance to both the people of Alaska and Canada. The Porcupine Caribou Herd and other fish and wildlife of the ANWR coastal plain are the foundation of the subsistence way of life to the residents of Kaktovik, Arctic Village, Venetie, and Fort Yukon in Alaska and Old Crow in the Yukon Territory of Canada. Furthermore, within the refuge, "The 1002 area is the most biologically productive part of the Arctic Refuge for wildlife and is the center of wildlife activity on the refuge." (Draft 1002(h) report, page 46.) The Alaska Department of Fish and Game has conducted an extensive review of ANWR fish and wildlife information which is available on request to USFWS

and other interested parties. The department's data on distribution and abundance of fish and wildlife and areas of special concern confirm the great importance of ANWR's renewable resource base.

The second intrinsic feature of ANWR is that it has high oil and gas potential. The state concurs with the draft 1002(h) report findings on page 1 that the 1002 area, ". . . is clearly the most outstanding oil and gas frontier remaining in the United States, and could contribute substantially to domestic energy supplies." As you know, the Alaska Department of Natural Resources has recently made public a preliminary appraisal it conducted of petroleum resource potential in ANWR's coastal plain. Alaska's report confirms DOI's conclusion that ANWR's coastal plain has the potential for an unusually large accumulation of oil.

#### Past Lessons Learned from Oil and Gas Activities in Alaska

As indicated in the draft 1002(h) report, development of ANWR's coastal plain will alter the existing environment and to some degree affect the Porcupine Caribou Herd. It is critical that appropriate and effective measures be taken to minimize the potential adverse effects of oil and gas activities on ANWR's coastal plain. Alaska has nearly two decades of experience in dealing with oil exploration, and lessons of the past will serve as a guideline for development in the future. In the event Congress permits exploration, the state would encourage that the best and latest technology be used.

The state assumes the draft 1002(h) report was not intended to be all inclusive, and that more detailed performance standards would be developed in concert with the state prior to any lease sales or any transfer of subsurface rights. Clearly, additional time will be needed in order to develop an adequate set of terms and conditions designed to ensure protection of air and water quality and fish and wildlife resources. With this understanding, our general comments on the proposed mitigation measures summarized in the draft 1002(h) report are included in Enclosure A.

#### Federal/State Consultation and Resolution of Issues

The state is encouraged to read on page 97 of the 1002(h) report that "The FWS would emphasize early and continuous consultation and coordination with leaseholders, permittees, and state and federal agencies at the start of planning." Consistent with this federal intent, the state feels it is essential that DOI establish a formal consultation process with the state and other parties in order to clearly establish at what points in the process and what level of detail different issues and authorities will be addressed. This process would also allow the opportunity for the parties to clarify their respective authorities,

permitting, and field procedures to avoid duplication or conflicting efforts. These consultations should identify or acknowledge existing regulatory requirements and authorizations at federal, state, and local levels. At a minimum, it should address different agencies' review times and public notice requirements. Issues that should be addressed are the timing of the various phases of review for specific projects; the level of detail to be addressed at each; and the coordination of permitting, review of plans of operations, field surveillance, and field approvals. Experiences associated with the development of the Trans-Alaska Pipeline System (TAPS) and the proposed Alaska Natural Gas Transportation System (ANGTS) from Prudhoe Bay to the Canadian border could provide useful models for cooperative management programs.

A coordinated interagency process for planning, design review, permitting, field surveillance, compliance and enforcement, and reclamation would serve the state, DOI, and industry well. The state's existing coastal management consistency process as well as the jurisdiction of state agencies such as the Departments of Fish and Game, Environmental Conservation, Natural Resources and the Alaska Oil and Gas Conservation Commission need to be acknowledged and effectively implemented in the review and permitting of each stage of the overall project. Lack of sufficient and effective coordination could lead to each agency dealing independently with applicants and could result in permitting inefficiencies with duplicative and inconsistent compliance and enforcement actions.

#### Topics Needing Further Discussion in the Final 1002(h) Report

Overall, the State finds that USFWS did an excellent job in compiling and summarizing a large amount of biological and geological information in the draft 1002(h) report. Considerably more work needs to be directed to the following eight issues of major importance to the state.

##### 1. Standards for Air and Water Quality Protection

The draft 1002(h) document focuses primarily on a discussion of habitat and wildlife issues and petroleum potential. The document is considerably weaker with respect to air, land, and water quality issues. DOI must acknowledge and accurately reflect in the final 1002(h) report state authority in this area and the body of regulations and requirements associated with sound environmental practices. A list of pertinent state authorities is included in Enclosure B for your reference.

##### a) Air Quality Management

Particular attention should be paid to emissions associated with start-up and upset flaring, emissions of nitrogen oxides, and the best available technology review process associated with "prevention of significant deterioration" review.

b) Drilling Wastes and Solid Waste Management

Major waste streams include garbage, drilling wastes, metal wastes, and oily wastes. Our experiences on the north slope verify that it is very important that proper management of all these wastes be addressed from the beginning.

Drilling wastes are of particular concern. Improper management of drilling wastes can result in the contamination of adjacent habitats with potential negative effects to the vegetation and fish and wildlife species. Management of drilling wastes should involve development of best practices to minimize waste generation and to ensure total containment or injection of all produced wastes. Best practices should be based in part on a thorough evaluation of the effectiveness of past practices of drilling waste disposal in Alaska. Recent efforts by the Alaska Department of Environmental Conservation to develop a workable set of regulations governing these activities are nearing completion and should be viewed as the framework for developing specific requirements. In addition, the U.S. Environmental Protection Agency is currently studying the issue of proper drilling waste disposal and should soon have a report available.

Provisions for pickup of windblown litter and other debris must be addressed by stipulation. Early planning for sound disposal of each waste stream will lead to the best environmental results.

c) Liquid Waste Management

Possible liquid waste discharges include domestic wastewater, reserve pit fluids, produced water discharges, hydrostatic test discharges, vessel rinsates and radiographic wastes. Each needs to be identified and provisions made for proper disposal. The existing local, state and federal regulatory structure, ranging from plan review to the use of the best practicable technology, needs to be addressed. Reinjection of produced waters and non Resource Conservation and Recovery Act (RCRA) regulated liquid wastes is routinely practiced on state lands on the north slope.

## d) Hazardous Waste Management

No discussion of hazardous waste management is included in the draft 1002(h) report. Hazardous waste management is governed by stringent requirements under the federal RCRA. Transportation of hazardous materials is regulated by the federal Department of Transportation. Proper management must be addressed.

## e) Oil Spill Prevention and Response

The draft 1002(h) report refers to the need to address oil spill control requirements at page 84. More detailed plans will be required under the cited state and federal statutes. Provision for a coordinated response capability should be provided by stipulation.

## 2. Provisions for Offshore Support Facilities

It is important that the final 1002(h) report and management alternatives address the siting in ANWR of oil and gas facilities needed to support offshore oil and gas development occurring adjacent to ANWR on state-owned submerged lands and on the federal Outer Continental Shelf. As written, none of the alternatives specifically state that support facilities, if needed, would be permitted.

## 3. Alternative Development and Transportation Scenarios

Statements in the draft 1002(h) report refer to a transportation corridor (road and pipeline) between ANWR and TAPS Pump Station 1 in Prudhoe Bay. The state recognizes that the scenario which was analyzed is only one of many potential alternatives. The actual alignment of transportation facilities if, in fact, discoveries are made and any facilities are required, will be dependent upon many factors including the location and size of any reserves discovered, the need to accommodate delivery of any additional nearby reserves, terrain constraints, habitat considerations, and project economics. We suggest that the final report reflect the interrelationship of these factors in determining the size and location of needed transportation facilities. In addition, we suggest that the report describe the level of any review that will proceed these decisions. Interagency and public reviews of TAPS and ANGTS projects provide a good model of the scope of analysis which accompanies the review and approval of a major transportation project.

## 4. Subsistence ANILCA 810 Analysis

The draft 1002(h) report does not address the process by which the impacts of oil and gas development on subsistence activities will be identified and mitigated. Such an analysis is required by Section 810 of the Alaska National Interest Lands Conservation Act (ANILCA).

Impacts of oil and gas activity in the 1002 area on fish and wildlife resources can adversely affect human uses of these resources. This is true both in the 1002 area and in other Canadian and Alaskan communities that rely on wildlife which use the 1002 area, most notably the Porcupine Caribou Herd. The draft 1002(h) report does not present a complete picture of subsistence uses in the area. The discussion focuses principally on subsistence uses in the community of Kaktovik, and makes only passing reference to some but not all other communities that use the Porcupine Caribou Herd. A more comprehensive discussion of subsistence uses by communities that use Porcupine Caribou Herd is required in order to better assess the future impacts of development in the coastal plain. The potential impacts associated with oil and gas exploration and development in the 1002 area, like the siting and design of transportation facilities, cannot be addressed with certainty until exploration has confirmed the existence and location of potential oil and gas fields and some understanding of the scope of development is known. Enclosure C describes the basic requirements of ANILCA 810, and provides a recommended approach for meeting these requirements.

#### 5. Water Availability and Use

The draft 1002(h) report correctly notes that water resources in the 1002 area are very limited and confined to the surface. Most of these water sources freeze solid by late winter. Given the paucity of fresh water for industrial use within the 1002 area, the draft report concludes that adjacent marine waters must be viewed as a water resource. Little attention is given to other alternatives used elsewhere on the north slope, such as snow melters and deep thaw lake reservoirs.

Fresh water for use in the Prudhoe Bay oilfield was taken from the Sagavanirktok River adjacent to the Deadhorse industrial area during the early years of that field's development. This removal of water from the Sagavanirktok River resulted in dewatering of fish overwintering habitats with documented mortality of large numbers of fish. As a consequence, the state no longer allows the use of water from this and similar sources. Currently, in order to provide fresh water for industrial uses in the Prudhoe Bay area, the state requires the use of several large surface



water reservoirs that have been developed. The majority of these reservoir sites are depleted deep gravel mine sites that have been flooded with surface water. Other sites are shallow tundra lakes that have been deepened to provide winter water supplies. These water reservoirs are filled either passively or actively from nearby drainages during the spring breakup period and are, in general, isolated from river and stream systems during the remainder of the year. DOI should initiate a more thorough analysis of similar alternatives for industrial water use in the 1002 area.

#### 6. Gravel Use

Gravel sites in ANWR should be sited, developed, and re-claimed in such a manner that overall impacts to water quality and fish and wildlife resources are mitigated. Plans for gravel removal should include detailed plans for the reclamation of the site to be conducted in phases concurrent with the removal of gravel. Gravel sites may also be developed in such a manner that they can be used as water sources for both exploration and development.

#### 7. Disputed Acreage

Although the draft report references the submerged lands ownership dispute between the state and federal government regarding the coastal lagoons between the mainland and offshore barrier islands, it does not address the ownership status of the beds of nontidal navigable waters. The state asserts ownership of the submerged lands underlying the Aichilik, Jago, Okpilak, Hulahula, Salerochit, Staines, and Canning rivers within the 1002 area.

#### 8. Decision Rules and Mitigation Policy

The terms "avoidable adverse impacts" and "unnecessary adverse effects" are not defined and do not appear in USFWS Mitigation Policy (Federal Register, Vol. 46, No. 15). Adding further to the confusion is a list of "unavoidable effects" on page 101 that includes a mix of those that are truly unavoidable (e.g., loss of habitat by gravel overlay for roads and pads) with many that are avoidable with proper design (e.g., erosion and ponding along roads, water storage pits in streambeds).

There also appear to be discrepancies between the explanation regarding Resource Category 1 and 2 in the draft 1002(h) report and the explanation for both of these categories in the federal mitigation policy regulations. Further, the draft 1002(h) report makes no mention of the requirement for "no significant adverse affect" as provided

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under Section 1002(h) of ANILCA. DOI should address these apparent inconsistencies with USFWS mitigation policy in the final 1002(h) report.

As discussed earlier in our comments, the Alaska Coastal Management Program standards and review procedures need to be addressed in the final 1002(h) report. In particular, reference should be made to the Habitat Standard (6 AAC 80.130) which requires habitats to be managed so as to maintain or enhance their characteristics and that uses and activities which will not conform to this standard may be allowed if there is a significant public need and there is no feasible and prudent alternative to meet the public need.

### Conclusion

Recognizing the important renewable and nonrenewable resource values found in ANWR, the state fully supports the opening of the coastal plain to oil and gas leasing subject to appropriate and effective mitigation based on our firm belief that exploration, development, and production can occur in a manner consistent with the established purposes of ANWR. We look forward to reviewing the final 1002(h) report and actively pursuing a joint consultation process in the near future to resolve specific aspects of concern to the State of Alaska.

Sincerely,



Robert L. Grogan  
Director

Enclosure

cc: Lieutenant Governor Steve McAlpine  
Commissioner Don Collinsworth, DFG, Juneau  
Commissioner Judy Brady, DNR, Juneau  
Commissioner Dennis Kelso, DEC, Juneau  
John Katz, Office of the Governor, Washington DC  
Rod Swope, Office of the Governor, Juneau  
Mayor George Ahmaogak, North Slope Borough, Barrow  
Mayor Loren Ahlers, Kaktovik

S-5

bcc's continue:

Bob Arnold, DNR, Juneau  
Tom Hawkins, DNR, Anchorage  
Jim Eason, DNR, Anchorage  
Bob Butts, DNR, Juneau  
Gary Gustafson, DNR, Anchorage  
Norman Cohen, DFG, Juneau  
Bruce Baker, DFG, Juneau  
Al Ott, DFG, Fairbanks  
Lance Trasky, DFG, Anchorage  
Amy Kyle, DEC, Juneau  
Keith Kelton, DEC, Juneau  
Doug Redburn, DEC, Juneau  
Larry Diedrick, DEC, Fairbanks  
Bob Martin, DEC, Juneau  
Mike Wheeler, DEC, Anchorage

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ENCLOSURE A  
State Comments on Summary of Recommended  
Mitigation for the 1002 Area

The following comments are provided within the context of the federally proposed stipulation package summarized on pages 145-147 of the draft 1002(h) report. Our comments represent the state's position in response to the specific federal proposal and do not represent the state's total concern regarding mitigation requirements. The state reserves the right to comment further on stipulations not yet included or discussed with DOI. In addition to the following major comments on the specific stipulations, there are a number of terms and conditions which should be added.

First, there are mitigative measures for certain "non evaluation" species mentioned in the species discussions in the "Environmental Consequences" chapter of the draft 1002(h) report that are not contained in the summary section. These mitigative measures should be added to the summary section. Second, there are a number of factors which are either not addressed or not handled in sufficient detail in order to provide for an overall effective mitigation program. Examples include the following: coordinated state/federal process for design review, permitting, field surveillance, compliance, and enforcement; rehabilitation; maintenance of public fish and wildlife resource use; material exploration, extraction, and rehabilitation; solid waste management; timing restrictions on activities, and setbacks required for the use of explosives; liquid waste management; hazardous waste management; stream crossings and fish passage; water management; bonding and financial responsibility; right of access; erosion control; oil spill contingency planning; penalty provisions for non-compliance; definitions of key terms; identification of information needs; design criteria and compliance plans; quality assurance/quality control; air quality; and support service industries. These subjects need to be addressed in a comprehensive manner and appropriate mitigative measures described.

In addition, the DOI stipulations do not clearly differentiate between stipulations or restrictions applied to exploration versus development. The state suggests that the DOI reorganize the entire mitigation section into two distinct components: exploration, and development. Implementation of the stipulations should be tied to the type of activity proposed. Stipulations referring to area specific closures may be effective forms of mitigation during exploratory activities but may be ineffective or inappropriate during development. For example, the stipulation on no activity within 1/2 mile of a documented polar bear den could be useful and effective during exploration, but it is unclear how it would be implemented during development when facilities are fixed and certain activity levels are required. There are other stipulations that fall into a similar category

and clarification is needed in order to interpret how and when they will be used and implemented.

Stipulation 1 - Sensitive Habitats and Species:

As written it is unclear how this stipulation would be enforced. DOI should define what is included in the term "non essential facilities."

Stipulation 2 - Road and Drainage Designs:

Roads and other facilities should be designed, constructed, and maintained in such a manner that the following performance standards are achieved: natural drainage is maintained; free passage of fish is provided; gravel fills are stable; upslope ponding and downslope dewatering is prevented; the number of stream crossings is minimized; natural floodplains and flow patterns are maintained; spring areas are avoided; and road alignments are perpendicular to stream flows and sited in areas of minimal floodplain width. Design criteria and specifications to satisfy these performance standards should be developed by the industry and should be approved by the appropriate federal and state agencies.

Stipulation 3 - Exploration Pad Construction:

The state strongly supports the objective of this stipulation to minimize gravel requirements for exploration activities.

Stipulation 4 - Rehabilitation Plan:

The need for rehabilitation plans is clear, but the timing of their submittal and definition of measures necessary to ensure that they will be implemented needs further consideration. Separate rehabilitation plans for exploration and development, including abandonment should be required. Also, requirements for conducting necessary research to develop techniques and measures for the rehabilitation of specific sites (e.g., gravel pads, seismic lines, material sites, etc.) should be addressed.

Stipulation 5 - Off-Road vehicles:

Should be modified to prohibit off-road vehicle use, except for travel by snowmachines, unless otherwise specifically permitted.

Stipulation 6 - Limits on Oil Exploration:

While we agree in principle with this stipulation, as written it may be too restrictive. Exploration includes both surface disturbing and non surface disturbing activities. The stipulation should limit any surface disturbance activities to the winter months and allow only non surface disturbing activities during the summer, provided there are no area or timing restrictions that would dictate otherwise.

Stipulation 7 - Gravel and Water Removal:

The state recommends that DOI address gravel removal and water removal separately. In addition, DOI should prohibit winter water removal from fish-bearing waters, springs and tributaries. We also recommend that DOI modify summer/fall water removal language to read: "During summer and fall, water removal shall be restricted to those operations that will maintain instream flows at levels necessary to provide optimum fish passage and rearing habitat, and water quality. In addition, large surface water reservoirs should be created to provide an adequate supply of fresh water for oil and gas related industrial activity." Deep pit type excavations adjacent to active channels of the streams identified as lacking suitable fish overwintering habitat could provide a winter water source and provide overwintering fish habitat. These reservoir sites should incorporate features that will enhance their value as fish and wildlife habitat (e.g., areas of shallow water, varying shoreline, provide for free movement of fish in and out of sites).

With respect to gravel removal, prohibit removal in all fall spawning fish and overwintering areas. Additionally, prohibit gravel removal from all fish-bearing rivers/streams unless approved on site-specific basis. Plans for gravel removal should include detailed plans for the rehabilitation

of the site and rehabilitation must be conducted in phases concurrent with the removal of gravel. The importance of rehabilitation cannot be overemphasized. At a minimum, any gravel site, whether upland and/or floodplain, should be sited and designed to conform to the guidelines as defined in the Gravel Removal Guidelines Manual for Arctic and Subarctic Floodplains (USFWS, Woodward-Clyde Consultants, 1980).

Stipulation 8 - Pipeline Elevation:

We recommend this stipulation be modified by adding a general statement of intent and then incorporate stipulations 8 thru 11 under that statement, and add an additional item regarding traffic control. Suggested language is as follows:

- (a) Include language as proposed in stipulation No. 9.
- (b) Include language as proposed in stipulation No. 10 except pipelines should be buried where "feasible and prudent" not just where "possible."
- (c) Roads and pipelines should be separated. Offset distances shall be optimum for preventing the synergistic effect of roads and pipelines on caribou movement, based on most current relevant research.
- (d) A surface traffic control plan should be prepared, approved by the Regional Director, and implemented. The plan should consider such measures as convoying, pulsed traffic, and seasonal or daily restrictions.

Stipulation 12 - Restrict Surface Occupancy within 3 Miles of Coastline:

The blanket 3-mile buffer for facilities adjacent to the coast is too stringent as written. Provisions must be made to allow drill pads, flow stations, and other

essential support facilities for offshore development, in this buffer strip. In addition, measures must be taken to ensure free passage of caribou along the coast. Criteria must be established to determine which facilities will be allowed in the buffer area.

Stipulation 13 - Monitoring and Research Requirements:

Modify to make two separate terms. One that states: "The DOI should be responsible for ensuring appropriate monitoring of populations, productivity, movements, and general health of key species in relation to overall oil and gas activities in ANWR." Then add a separate requirement to read: Where there is a possibility that an activity could adversely affect fish and wildlife, "Lessees and permittees may be required to monitor the impacts of the activity on selected species, their habitats, and human uses; to evaluate impact hypotheses and the effectiveness of specific mitigation measures employed; and to develop corrective actions, including improved mitigative techniques, as necessary."

Stipulation 14 - Watercourse Setbacks:

The blanket 3/4-mile buffer for all permanent facilities is too stringent as written. Provisions must be made to allow drill pads, flow stations, and other essential facilities within this 3/4-mile buffer. Criteria must be established to determine which facilities will be allowed in the buffer area.

Stipulation 15 thru 18 - Peregrine Falcon and other Raptors Protection:

The state concurs with the need for special protection for the peregrine falcon, however, stipulations should be modified to incorporate language developed by the federal peregrine falcon recovery team. In addition, the same level of protection provided to the endangered peregrine falcon should not be provided to all raptors.

Stipulation 19 - Polar Bears:



This stipulation should be expanded to require an annual fall monitoring program to follow bears moving ashore and identify den site locations.

Stipulation 20 - Construction Near Coastal Bluffs:

Support language as proposed.

Stipulation 21 - Discharge of Firearms:

Restrictions on the discharge of firearms in the vicinity of structures is necessary to protect human safety and oil field operations, however, the five-mile prohibition may be excessive. Further discussion is needed on the subject and the potential effects on human use of resources in the 1002 area.

Stipulation 22 - Prohibit Surface Occupancy in Sadlerochit Spring Special Area:

In addition to the Sadlerochit Spring Special Area, surface occupancy should be prohibited in the area within 1/2 mile of the Fish Hole No. 1 spring outlet located in the Hulahula River, and extend for 1/4 mile on either side of mean high water for a distance of 3 miles downstream of the outlet.

Stipulation 23 - Protection of Thaspi arcticum:

It is not known how widespread this plant is, so it is impossible to determine how large an area will be placed off limits by this stipulation. Until the plant is placed on the endangered species list and more is known regarding its areal extent, it is premature to impose such a restriction.

Stipulation 24 - Causeways:

Based on the state's case-by-case review and experience in authorizing the Westdock, Endicott and Lisburne causeways, we recommend that the proposed stipulation be revised such that the construction of docks and causeways minimize nearshore hydrographic changes and avoid significant adverse effects on fish populations and movements.

Stipulation 25 - Time and Area Closures for Wildlife:

Although the state generally supports the language as proposed, it should be made clear that the stipulation applies only to exploratory activities, vehicle movements, and other activities that can reasonably be re-scheduled for another period of time.

Stipulation 26 - Overflight Restrictions:

Expand to include aircraft overflight restriction above barrier islands, lagoons, river deltas, and wetlands within one mile of coast between May 15 and September 30 (excluding take-offs and landings). Also make clear that human safety takes precedence over the restrictions.

Stipulation 27 - Reduction of Human/Bear Conflicts:

Modify to read, "Measures must be taken to minimize human/bear interaction and conflict. These measures may include, but not be limited to, the use of bear-proof fencing around certain facilities, special solid waste management plans (such as incineration of putrescible wastes), and employee education programs."

Stipulation 28 - Limit Use of Infrastructure to Official Business:

Support language as proposed.

Stipulation 29 - Inventory Areas for Cultural Resources:

Support language as proposed.

Stipulation 30 and 31 - Air and Water Quality Provisions:

As discussed in our cover letter, the proposed stipulations represent a very small step toward defining what will be needed to provide an appropriate level of air and water quality protection as leasing moves forward. Further consultation between DOI and the state is needed on this subject to jointly develop a workable package of specific measures. Such a process would better acquaint DOI with the extensive body of environmental regulation and provide appropriate forums for decisions about stipulations, plans of operations, and permits. It is crucial to ensure that exploration and

Enclosure A

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development is conducted in accordance with environmental standards appropriate for the coastal plain of ANWR.

Stipulation 32 - Environmental Orientation Programs:

Support the language as proposed.

Enclosure A/kfi

# ENCLOSURE B

## SUMMARY OF MAJOR STATE AUTHORITIES PERTINENT TO ANWR

The State of Alaska defines and regulates the following:

<u>Program</u>	<u>Statutes</u>	<u>Definitions</u>	<u>Regulations</u>	<u>Definitions</u>
1) SOLID WASTE	AS 46.03.100-120 800-810	AS 46.03.900 (24)	18 AAC 60 (draft)	18 AAC 60.910 (49)
Construction Waste				(Not defined)
Industrial Waste		AS 46.03.900 (10)		-- --
Other Wastes		AS 46.03.900 (16)		-- --
"Drilling Wastes"		AS 46.03.900 (31-32)		18 AAC 60.910 (16)
Putrescible Waste		-- --		18 AAC 60.910 (40)
Septage, Sewage Sludge Sludge		-- --		18 AAC 60.910 (46) to (48)
Sanitary Waste		-- --		-- --
2) LITTER	AS 46.06	AS 46.06.150 (4)		
3) HAZARDOUS	AS 46.03.296-308 830-833	AS 46.03.299 (a) - (b)	18 AAC 62	

	<u>Type of Waste</u>	<u>Statutes</u>	<u>Definitions</u>	<u>Regulations</u>	<u>Definitions</u>
4)	OIL and HAZARDOUS SUBSTANCES*	AS 46.03.740 758-760 780-790 822-826  AS 46.04		18 AAC 20 18 AAC 75	
	Oil		AS 46.03.758(6) AS 46.03.826(4) AS 46.04-120(9) AS 46.08.900(7)		
	Hazardous Substances	AS 46.03.826(3)	AS 46.08.900(6) AS 46.09.900(4)		
5)	WASTEWATER	AS 46.03.100-120		18 AAC 72	
	Domestic Wastewater		-- --		18 AAC 72.990(16)
	Graywater		-- --		18 AAC 72.990(24)
	Non-domestic Wastewater		-- --		18 AAC 72.990(29)
	Other Wastes		-- --		18 AAC 72.990(32)
	Septage		-- --		18 AAC 72.990(44)
	Sludge		-- --		18 AAC 72.990(50)
	Spoils		-- --		18 AAC 72.990(52)
*	Note new legislation adding AS 46.08, AS 46.09, and amending AS 46.03.745, 758(k), 760(a), 765, 780(a), 790(a) (b) (d) and AS 46.04.010 and 090(b).				

	<u>Type of Waste</u>	<u>Statutes</u>	<u>Definitions</u>	<u>Regulations</u>	<u>Definitions</u>
6)	TOXIC MATERIALS and WASTES are a "special class regulated under the Federal Toxic Substances Control Act and National Emission Standards for Hazardous Air Pollutants.				
7)	HABITAT PROTECTION				
	Fish Habitat Permit	AS 16.05.840 AS 16.05.870	-- --		
8)	COASTAL MANAGEMENT	AS 46.40		6 AAC 50 6 AAC 80 6 AAC 85	6 AAC 50.190 6 AAC 80.900 6 AAC 85.900
9)	WATER USE	AS 46.15		11 AAC 93	
10)	GRAVEL SALES			11 AAC 76	
	a. Near Shore	AS 38.05.110-120			
	b. Navigable Rivers	AS 38.05.110-120			
11)	PIPELINE RIGHT OF WAY LEASES			11 AAC 80	
	a. Near Shore	AS 38.35			
	b. Navigable Rivers	AS 38.35			
12)	OIL AND GAS LEASES			11 AAC 83	
	a. Near Shore	AS 38.05.180			
	b. Navigable Rivers	AS 38.05.180			

<u>Type of Waste</u>	<u>Statutes</u>	<u>Definitions</u>	<u>Regulations</u>	<u>Definitions</u>
13) SURFACE LEASES			11 AAC 62	
a. Near Shore	AS 38.05.070-075			
b. Navigable Rivers	AS 38.05.070-075			
14) LAND USE PERMITS				
a. Near Shore	AS 38.05.850		11 AAC 62	
b. Navigable Rivers	AS 38.05.850			
15) CLASSIFICATION				
a. Near Shore	AS 38.04.065-900		11 AAC 55	
b. Navigable Rivers	AS 38.04.065-900			
16) ACCESS ALONG HISTORIC TRAILS	RS 2477			

## ENCLOSURE C

### A Recommended Approach to Implementation of ANILCA §810

March 14, 1986

§810 of ANILCA requires federal agencies to consider the effects of proposed land actions upon people engaged in subsistence uses. Specifically, it requires agencies to:

1. Evaluate the effects of the proposed action on subsistence uses and needs;
2. Determine the availability of other lands for the purposes sought to be achieved and assess whether other alternatives are available which would reduce or eliminate the use, occupancy or disposition of public lands needed for subsistence purposes;
3. Determine whether the proposed action would "significantly restrict" subsistence uses;
4. If the proposed action would significantly restrict subsistence uses, to:
  - a. Meet certain public notice and hearing requirements.
  - b. Determine that such a restriction meets certain standards, including involving the minimum amount of public lands and minimizing adverse impacts upon subsistence uses and resources.

This paper describes the basic requirements of §810 and provides a systematic approach to meeting these requirements when making a decision on an OCS oil and gas lease sale.

#### Evaluating Effects on Subsistence Uses

ANILCA §810 provides, as a starting point, that "in determining whether to...lease...public lands...the head of the federal agency having primary jurisdiction over such lands...shall evaluate the effect of such use, occupancy, or disposition...on subsistence uses and needs...."

This section is clearly intended to require a specific assessment of impacts on subsistence uses. An adequate §810 evaluation must include complete and accurate information about the proposed action and about the subsistence uses of potentially affected wild resources.

Information about the wildlife populations, fish stocks, and geographic areas which could be affected by the proposed action



## Enclosure C

are needed to determine the scope of potential effects on subsistence. Information about the specific subsistence uses of, and needs related to, these resources and areas is required to identify and evaluate these effects. This includes data on:

1. Who uses the resources which could be affected;
2. Where, when, and how the resources are harvested;
3. How much they use; and,
4. The significance of the harvested resources for meeting socioeconomic and cultural needs.

Maps of community subsistence use areas can provide valuable data about which communities and groups of people use fish and wildlife that could be affected. Each §810 evaluation should include a map and list of communities that use the stocks and populations of resources potentially affected by a proposed action. The Alaska Department of Fish and Game routinely develops maps of subsistence use as it conducts community subsistence studies. The state welcomes opportunities to cooperate with federal agencies in improving the subsistence data base.

Once the area and communities which could be affected by an action are identified, an assessment must be made of the potential effects of the action on uses of fish and wildlife. The potential linkages between the proposed action, fish and wildlife resources, and subsistence uses need to be clearly described. This can be accomplished through developing hypothetical scenarios, and tracing their implications out through the biological system to the people who rely on subsistence uses.

The evaluation of effects should address potential positive, neutral, and negative effects, as well as direct and indirect impacts on subsistence uses resulting from a proposed lease sale. The guidelines for implementation of §810 developed by the Alaska Land Use Council are helpful in identifying several effects which would restrict subsistence uses:

1. A reduction in subsistence uses due to direct impacts on the resource, adverse impacts on habitat, increased competition for the resources, or other factors;
2. A reduction in the subsistence uses due to changes in availability of resources caused by an alteration in their distribution, migration, or location; and
3. A reduction in subsistence uses due to limitations

## Enclosure C

on the access to harvestable resources, such as by physical or legal barriers.

An adequate §810 assessment must consider the potential effects of the proposed action in each community which would be affected. In some circumstances, however, it may be necessary to examine effects on the subsistence uses of "typical" communities or groups of people within the affected zone.

Biological and socioeconomic data need to be at a level of detail which will allow a meaningful assessment of potential impacts on the people who use resources for subsistence. These effects can occur at the individual, household, community and regional level.

A working document has been developed by the Alaska Land Use Council which identifies minimum data standards for making an adequate §810 assessment. (Alaska Land Use Council, Working Group II; November 28, 1984, Draft Standards and Guidelines for the Collection, Analysis, and Presentation of Subsistence Use Information for ANILCA §810 Determination, pp. 5-6.) In some cases existing data on subsistence uses may not be adequate to conduct a §810 analysis. Agencies must anticipate these special data needs at the earliest stages in the EIS process. Public meetings may be useful in compiling additional data on subsistence uses and needs. Additional research may also be necessary to address particular data gaps. New studies should be closely coordinated with the State of Alaska as required by ANILCA §812.

The §810 evaluation must thoroughly describe and document data about subsistence resources and uses so that all concerned parties can ascertain which resources and subsistence uses could be affected by a proposed action.

### Identifying Alternatives

§810(a) also requires federal agencies to evaluate "...the availability of other lands for the purposes to be achieved, and other alternatives which would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes."

In ANILCA §802 Congress states its policy that the "...utilization of the public lands in Alaska is to cause the least adverse impact possible on rural residents who depend upon subsistence uses of the resources of such lands...." It is therefore important that §810 analyses fully identify and explore alternative areas and approaches which would minimize adverse impacts on rural residents.

Enclosure C

Determining Whether Actions Would "Significantly Restrict"  
Subsistence Use

Once the potential effects of the lease sale upon subsistence uses have been described, the next step required by §810 is to determine whether these effects could "significantly restrict subsistence uses...."

The legislative history of ANILCA gives no clue to the intended meaning of "significantly restrict." The closest parallel to the "significantly restrict" standard appears to be the requirement of the National Environmental Policy Act (NEPA) to analyze actions which may "significantly affect" the environment. Regulations of the Council on Environmental Quality (CEQ) for implementing NEPA state that both the context and intensity of impacts must be considered in deciding significance.

The people who would be affected, and the roles that the particular resources play in their lives provide the obvious context for evaluating significance in relation to restrictions on subsistence uses. The "intensity" of effects also has to be evaluated in relation to use of specific resources by people.

In §810 Congress recognized that subsistence uses are essential to many rural Alaskans, and intended federal land actions to have the least adverse impact possible upon them.

When considered in relation to this mandate, a "significant" restriction to subsistence uses is an effect which imposes a meaningful burden or hardship on particular people.

A determination of "significance" therefore requires discussion of such factors as socioeconomic circumstances, the degree to which harvest of particular resources could be reduced by the proposed action, and the consequences of the frequency, timing, and location of restrictive effects. These need to be evaluated in the context of the people who actually harvest and use the potentially affected resources, and in the context of what would constitute a meaningful burden to those people.

A hypothetical example may be useful in demonstrating the approach suggested above:

During an EIS study a proposed lease sale is determined potentially to affect local salmon stocks. The studies suggest that the activity will not have a major impact on regional salmon populations or regional harvest levels, but depending on its timing and precise location, it could reduce a particular stock or run. It is impossible, given uncertainty about where or when the activity will occur, to predict exactly which salmon stock might be affected. However, the EIS has identified 20 communities and groups of people who make subsistence use of the

salmon runs which migrate through the general impact area and could be affected. The §810 evaluation therefore identifies these communities and the potential risks. It then examines what effect a reduction in a local salmon run could have for households within typical communities, perhaps dividing the communities into four or five categories, based on location, degree of reliance on subsistence resources, and so forth.

In the hypothetical example, the FEIS concludes that the proposed action could substantially reduce local stocks of king salmon for one or more seasons. As subsistence uses have been shown to occur on these stocks the §810 analysis would then identify this as a potential restriction and then go on to determine whether the action would "significantly restrict" the subsistence use of king salmon. In this analysis king salmon are one of the first fresh foods available to particular households in early summer, and the loss of king salmon for one or more seasons would be a meaningful burden on families in the communities. The §810 analysis, after weighing the risks to subsistence use of king salmon against the important role of king salmon to the people, might conclude that the action could "significantly restrict" subsistence use of king salmon in several of the communities.

#### Meeting Notice and Hearing Requirements

§810(a) requires the head of each federal agency to meet certain notice and hearing requirements before allowing an action which would significantly restrict subsistence uses. The appropriate state agency and appropriate local committees and regional councils established under §805 must be notified, and a hearing must be held in the vicinity of the area involved.

In ANILCA §801 Congress clearly stated its intent that rural residents, who have knowledge of local conditions and subsistence requirements, should have a meaningful role in decisions affecting subsistence uses and needs. The specific requirements of §810 are intended to ensure that federal agencies have the best available information about the potential effects of proposed actions on rural residents. They also seem, when taken in conjunction with §810(a)(3), to be intended to ensure that local knowledge and experience is brought to bear on the requirement that adverse impacts on subsistence be minimized.

Again, a community focus in evaluating effects would simplify the notice and hearing requirements. Each §810 evaluation should include a map and list of the communities potentially affected, and identify those where subsistence uses could be significantly restricted. In this way §810 assessment itself would indicate many of the groups which should be notified.

## Enclosure C

It is desirable for agencies to follow the §810 procedures for public involvement in instances where a determination of significance is not clear or where there may be significant restriction even though certain data may not yet be available to support the finding.

Public notification of hearings following a determination of significant restriction should follow several avenues, including:

1. Notice published in local and regional newspapers;
2. Notice mailed to local fish and game advisory committees, regional councils, local governments, and Native organizations;
3. Notice aired on local radio and/or television broadcasts;
4. Notice posted in community halls and other local meeting places; and
5. Personal communications with individuals or groups known by the land manager to have an interest in the action.

### Minimizing unavoidable adverse impacts upon subsistence uses and resources

§810(a)(3) requires three findings before an action which would significantly restrict subsistence uses can proceed.

1. That such a significant restriction of subsistence uses is necessary, consistent with sound management principles, for the utilization of public lands.

This finding of necessity should be specific to the proposed action, and should be based upon an analysis of the potential impacts upon subsistence uses and the relative value of the proposed action in meeting the goals for the use of public lands.

2. That the proposed activity will involve the minimal amount of public land necessary to accomplish its purposes.

The finding of necessity should exclude all public lands that are not necessary to achieving the proposed purpose.

3. That reasonable steps will be taken to minimize adverse impacts upon subsistence uses and resources.

## Enclosure C

Identification and consideration of possible mitigation measures are required to minimize the adverse impacts to subsistence uses that could result from the proposal to use, occupy, or dispose public lands. These can take many forms, and as noted above, public involvement can play a key role in developing suitable mitigation measures.

The following categories represent a broad range of types of mitigation measures:

1. Alternatives for deleting public lands from the proposed action to reduce the risk of potential subsistence resource restriction.
2. Alternatives for reducing impact to seasonal camps and other harvest and use locations;
3. Alternatives for reducing habitat changes that may reduce species abundance and decrease harvest opportunity;
4. Alternatives for reducing numbers of people living in, working in, or passing through area;
5. Alternatives for reducing numbers of people competing for resources;
6. Alternatives for reducing disturbance, roads, noise, water quality degradation, etc., that may affect distribution of species;
7. Alternatives for reducing land classification and ownership changes;
8. Alternatives for reducing changes in access routes to use areas; or
9. Alternatives for compensating people for losses.

Time and area restrictions on activity may frequently be useful in mitigating effects on subsistence uses.

### Summary

Federal agencies can satisfy the requirements of ANILCA §810 by following the systematic approach outlined above. An adequate §810 evaluation for an OCS oil and gas lease sale would clearly meet the following standards:

Enclosure C

1. Identify the people who make subsistence use of all wild resources which would be affected by the proposed action;
2. Identify the nature of their subsistence uses and needs for these resources;
3. Describe the potential effects of the proposed action on wild resources and upon community subsistence uses and needs, and identify which of these effects could be restrictions;
4. Make a determination of whether potential restrictions would be "significant" in the context of the meaning of the affected resources to the people who use them, and the role the resources play in their lives;
5. Identify alternatives that would minimize adverse impacts on rural residents;
6. If the proposed action could significantly restrict particular subsistence uses:
  - a. meet notice and hearing requirements;
  - b. make findings that;
    1. the necessity for the proposed action outweighs the risks to subsistence;
    2. the proposed action will involve the minimal amount of public lands needed to accomplish its purpose;
    3. reasonable steps will be taken to minimize adverse impacts upon subsistence uses and needs.
7. Thoroughly document all data and findings so that concerned parties have access to them.

S-16





February 6, 1987

U.S. Fish and Wildlife Service  
ATTN: Division of Refuge Management  
2343 Main Interior Building  
18th and C Streets  
N.W. Washington, D.C. 20240

Dear U.S. Fish & Wildlife Service:

Speaking for the majority of Arctic Village people, we're opposed to the opening up of the ANWR land. However, if the oil development will take place, we need to know what is going to happen to the Arctic Village and Venetie people, the ones that are going to be affected by the oil development more than anybody in the U.S. The Fish & Wildlife Reports should say something about what will happen to Arctic Village and Venetie people, so that the Congress will have all of the information to base their decision on for this important decision.

The Fish & Wildlife reported that on the ANWR or Coastal Plain lands, there are certain areas that will affect the herd, but from our standpoint all the areas in ANWR and coastal plains are important to the herd. They (caribou) don't go to just one place, they're everywhere.

Some reports say that the development can be compatible with the Porcupine herd; we don't think it is possible, due to encroachment without care to what the herd eats. The bulls won't mind, but the cows and calves will be affected by the impact of the development. After the caribou have their young, they migrate to the Arctic Village area and sometimes stay all winter. Since there's no trapping, the people of Arctic Village depend more than anything on Porcupine herds. We don't have trapping which brings monies for our survivability; we have caribou to survive.

To drill on the caribou's only calving ground would keep the cows from calving where the conditions are good for calving. It would also destroy our way of life and culture if we don't have the adequate amount of caribou around. We depend on the caribou for food and the skins to make our things--things like Caribou legskin boots, etc.

My Village leaders asked me to remind you that caribou is our only source of meat. Meats always consist of dry meat, meat stew, caribou head stew or soup, fry meat, caribou hamburger, roast and meat soup. In our coffee shop a hamburger costs \$4.50. In the store it is \$4.50/lb. and a chicken fryer costs \$9.00. Other store meat is very expensive due to distance from other places to our village.

Caribou has been our source of food for many generations before us. Skin is very valuable, too. Drilling would keep caribou away from their calving ground (How would you like it if you were in labor in a delivery room and someone was drilling in the same room?).

Skin is a source of income for some--making linings, (dog) whips, dogsleds, boots, strings, etc.

Don't do to the caribou what your ancestors did to the buffalo.

ANWR stands for Arctic National Wildlife Refuge, doesn't it? Doesn't the name speak for itself? What is a Wildlife Refuge if you destroy the Wildlife's main calving grounds?

Sincerely,

Joseph J. Tritt  
for the Arctic Village Council

JJT/mb

## DEPARTMENT OF FISH AND GAME

1416 NINTH STREET  
SACRAMENTO, CA 95814  
(916) 445-3531



OFFICE OF THE INTERIOR

FEB 6 AM 11 32

February 2, 1987

ASST. SEC. OF THE DEPT.  
FISH AND WILDLIFE  
WASHINGTON

Mr. William P. Horn  
Assistant Secretary for Fish  
and Wildlife and Parks  
U.S. Fish and Wildlife Service  
Attn: Division of Refuge Management  
2343 Main Interior Bldg.  
18th and C Sts., N.W.  
Washington, D.C. 20240

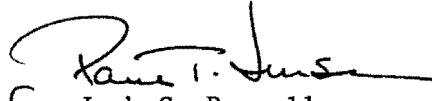
Dear Assistant Secretary Horn:

S-18 We have reviewed your decision to allow for full leasing of Section 1002 land of the coastal plains of the Arctic National Wildlife Refuge and would respectfully request a reconsideration of your position because of impacts on lesser snow geese. As a major staging area for the Banks Island lesser snow goose colony, the lands of Section 1002 contain critical habitat as documented in both the March 1985 and November 1986 "Arctic National Wildlife Refuge Coastal Plain Resource Assessments". We believe that full leasing activities in areas used by up to 350,000 geese during fall staging could have long term adverse effects on a large component of the Pacific Flyways total population of lesser snow geese.

As a further gesture of our concern over migratory waterfowl, we would also request that any land exchange programs associated with the 1002 project, receive the benefit of full public review. Parcels available for exchange should be selected in such a manner as to provide maximum value for migratory birds.

I would appreciate your consideration in this matter.

Sincerely,

  
for Jack C. Parnell  
Director





## City of Kaktovik

P.O. Box 27  
Kaktovik, Alaska 99747  
(907) 640-6313



January 6, 1987

U.S. Fish and Wildlife Service  
Attn: Division of Refuge Management  
2343 Main Interior Building  
18th and C Sts., N.W.  
Washington, D.C. 20240

The City Council of Kaktovik has, after much deliberation, decided to support alternative B, limited leasing of the ANWR 1002 lands.

This support comes with the understanding that certain stipulations be met towards the protection of wildlife, it's habitat, subsistence lifestyles, and the social economic future of Kaktovik.

Option B was selected because it offers the most protection to wildlife but still allows private owners of land to develop and utilize their lands to meet their economic needs.

The protection of habitat needed by the porcupine caribou herd and protection of the herd itself is of great concern. This concern is felt not only by us but other communities that use the porcupine caribou herd to meet their nutritional needs. We realize negative impacts will occur. We feel conditions can be implemented to control these impacts and ask that in the development of these controls the protection of wildlife be the priority and economics of the developers be secondary.

Subsistence rights must be looked at in a manner that keeps areas open to hunting that are important to people's needs. We do not agree with the stipulation that no trapping or discharging of firearms within 5 miles of any development is necessary. We ask that for local subsistence uses, a waiver would be considered from the 5 mile no hunting and trapping zone. On page 129, there is mention of section 810 of ANILCA and the requirement of the Secretary to determine the effects on subsistence. This was only mentioned under alternative A. It was also stated that Congress could exempt the Secretary from the requirements of Section 810 of ANILCA. We would strongly urge the Congress not to do this. To circumvent the requirements of ANILCA would not seem to be in the best interest of all subsistence users.

There was very little written about possible impacts to the Bowhead Whale. There are studies ongoing through the Minerals Management Service on the effects of noise and the

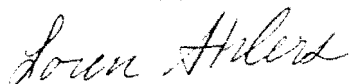
importance of offshore feeding in this area. The Alaska Eskimo Whaling Commission and the North Slope Borough may be doing whale studies that should be used to determine possible effects and in mitigating offshore activities. We would recommend using AEWC in formulating regulations to cover all offshore activities.

The social problems that will develop in Kaktovik were not covered very well by the report, and with good reason. It is probably the hardest and most emotional aspect of development of the area to mitigate. The social problems that will develop must be addressed now, prior to development. The North Slope Borough with its CIP Program is an example of what can happen. The North Slope Borough is trying to address and correct after the fact. We wish to do this prior to development and in a way that utilizes the unique lifestyle of the Kaktovik area. We ask that funds be made available for our use, as we believe necessary, to meet the needs of the community and develop programs to handle problems prior to any development or further exploration. Our primary objective would be to control alcohol and drug problems, and to enhance recreation and native arts. Kaktovik does not have the economic base nor the time to implement these programs without legislative action to create such a fund for our use. Again, prior to, instead of after, is essential.

The primary difference between alternative A and B, as we see it, is A allows the Secretary to open areas for leasing without further public comment. If the Secretary would recommend, at the minimum, involvement of all subsistence users of the Porcupine Caribou herd prior to leasing of the closed area, we would support Alternative A. If he cannot do this, we do not and will not support Alternative A. We ask Congress to consider this carefully, as we are sure they will.

If Congress so decides, we would support Alternative C or D but not E.

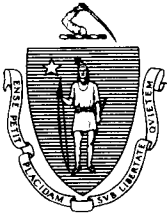
Sincerely,



Loren Ahlers, Mayor  
City of Kaktovik

LA:ms

cc2



# Department of Fisheries, Wildlife & Environmental Law Enforcement

Walter E. Bickford, *Commissioner*

January 21, 1987

William P. Horn  
Assistant Secretary for Fish, Wildlife and Parks  
United States Fish and Wildlife Service  
2343 Main Interior Building  
18th and C Street, N.W.  
Washington, D.C. 20240

Re: Proposed Oil and Gas Development in the  
Arctic National Wildlife Refuge

Dear Assistant Secretary Horn:

The Massachusetts Department of Fisheries, Wildlife and Environmental Law Enforcement has carefully studied your Draft Report and Recommendation to the Congress of the United States on the above subject. Because of the vital national importance of this issue, I am taking the liberty of submitting the Department's comments on your Recommendation to you directly as well as to the Division of Refuge Management.

Please be advised that the Massachusetts Department of Fisheries, Wildlife and Environmental Law Enforcement vigorously opposes your Recommendation, as set forth on pages 169-70 of the Report, to open the entire 1.55 million-acre 1002 area of the Refuge to oil and gas leasing and development. In contrast to your Recommendation, this Department very strongly supports Alternative E, under which the United States Congress would designate the 1002 area as wilderness within the meaning of the 1964 Wilderness Act (Public Law 88-577).

The Department's opposition to your Recommendation is based on the following reasons.



1. As you are well aware, the Arctic National Wildlife Refuge is incredibly rich in native arctic wildlife and is of immeasurable importance as breeding and nesting habitat for migratory birds from all over the Western Hemisphere. On these facts alone, the Department believes that the Refuge is eminently worthy of strict protection in its present pristine state. However, the Refuge is of far greater value than even this inherent inestimable worth suggests. North America was once overflowing with wildlife resources of tremendous abundance and diversity. However, our society has relentlessly plundered these resources in its ever more frantic search for energy and minerals to satiate its rapacious appetite for material goods. As a result, we have suffered devastating losses of wildlife habitat throughout the North American continent, and these losses continue. The Arctic National Wildlife Refuge represents, in this Department's opinion, the last truly great wildlife resource area on the North American continent. This incomparable area must be preserved undamaged by human action.

2. Your Recommendation is predicated almost entirely upon your assertion that this nation will continually need more and more oil and natural gas, and that as a result we must exploit every available domestic hydrocarbon resource. Your Report clearly reflects this attitude by focusing exclusively on projected increases in national demand for these energy resources and on how oil-and-gas development in the Refuge may help to partially satiate this ever increasing appetite for these energy fuels. However, this assertion misconstrues the real issue here.

This Department believes that the decision about whether to open the Arctic National Wildlife Refuge to oil-and-gas development is really a decision about what is wise use and proper stewardship of the great natural resources with which this nation has been blessed. The Department of Fisheries, Wildlife, and Environmental Law Enforcement agrees, as does practically everyone in the nation, that we need adequate reserves of oil and natural gas for economic well-being and national security purposes. However, our economic health and national security depend on the wise use of these reserves, not on the full-scale exploitation of them just to satisfy demand for these resources.

As I am certain that you are aware, vast quantities of energy are still being wasted in this country. Many studies have demonstrated that this nation's demand for energy can be substantially reduced through more efficient methods of production, heating, and transportation. In addition, alternative energy sources such as solar power, the conversion of coal into natural gas, and geothermal heating can replace a great deal of the oil and gas currently being consumed. Through the aggressive implementation of these approaches for eliminating energy waste and encouraging the development of alternative energy sources, the demand for oil and natural gas can be dramatically lowered from what it is today. As a result, not only would the alleged rationale for drilling in the refuge no longer be even remotely possible, but such a policy would in fact promote our economic

health and national security by reducing this nation's dependence on oil and natural gas as an energy source. I think that you will agree that it makes far more sense to more prudently use what oil and gas supplies we have that are readily available than to give our energy-addicted society yet another oil-and-gas fix for a couple of years. By being wise in our use of these fuels, we can strengthen our economic well-being and national security while at the same time preserving for future generations the irreplaceable national treasure that is the Arctic National Wildlife Refuge.

However, your Report totally fails to address this issue. Moreover, the Report fails to mention the role that the United States government has played in the last few years in inflating demand for oil and gas in this country by encouraging wasteful energy use via actions such as a) delaying deadlines for meeting automobile fuel mileage standards, and b) slashing funding and incentives for energy conservation and alternative energy source development. The complete lack of any discussion of the impact on oil and gas demand from the implementation of already proven policies and methods for greatly reducing oil and gas use in this country vitiates the rationale underlying the Report and Recommendation.

3. Other national wildlife refuges and similar federal lands of special or unique value may also contain marginally commercial deposits of oil and/or natural gas. Although we believe that the rationale set forth in the Report and Recommendation is fatally flawed, the pressure to use it to force these other lands to be opened to oil and gas development will rise dramatically if drilling is allowed to proceed in the Arctic National Wildlife Refuge. The Department of Fisheries, Wildlife and Environmental Law Enforcement is adamantly opposed to any such activity in these protected areas, and recommends instead that these special lands be permanently protected from commercial development of any kind.

For the above reasons, the Department vigorously opposes the Recommendation contained in the Report and strongly supports Alternative E. We face a critical decision for this nation. Through the choice we make here, we can set the stage for a country that either (a) has a clean, fuel efficient economy and abundant wildlife resources, or (b) is wasteful of and addicted to oil-and-gas and essentially devoid of most of its once vast and splendid wildlife heritage. The choice is ours. The Massachusetts Department of Fisheries, Wildlife and Environmental Law Enforcement votes for Option No. 1. We hope that you will join us by withdrawing the Recommendation and giving your full support to Alternative E. Thank you very much for this opportunity to comment on this vital national issue.

Sincerely yours,

*Walter E. Bickford*

Walter E. Bickford  
Commissioner

cc: Division of Refuge Management  
Honorable Senator Edward Kennedy  
Senator John Kerry  
All Congressional Representatives



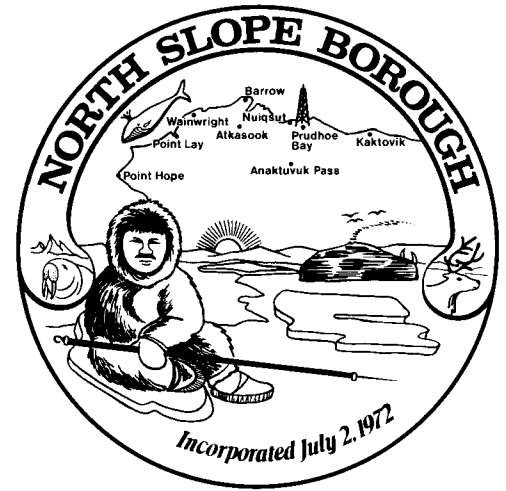
# NORTH SLOPE BOROUGH

## OFFICE OF THE MAYOR

P.O. Box 69  
Barrow, Alaska 99723

Phone: 907-852-2611

George N. Ahmaogak, Sr., Mayor



January 20, 1987

Director  
U.S. Fish and Wildlife Service  
Division of Refuges  
18th and "C" Streets, N.W.  
Room 2343, Main Interior Building  
Washington, D.C. 20240

Re: ANWR LEIS

Dear Sir:

These are the detailed comments of the North Slope Borough on your "Draft Arctic National Wildlife Refuge, Alaska, Coastal Plain Resource Assessment" and Legislative Environmental Impact Statement (LEIS). Incorporated herein by reference are the statements presented on my behalf by the Borough at the public hearings held in Kaktovik, Alaska and Washington, D.C. on January 6 and 9, 1987.

I believe that ANWR should be opened to oil and gas leasing, subject to stringent environmental, subsistence, local access, and public participation requirements. I also believe that if Congress adopts Alternative A in the LEIS, as recommended by Assistant Secretary Horn, the "core" calving area of the porcupine caribou herd--located in the south end of the Jago River area of ANWR--should be placed off limits to leasing for a period of time.

My views on the larger issues facing Congress, in deciding whether to open ANWR to leasing, were outlined in my statements at the hearings. I have attached comments on the specific strengths and weaknesses in the draft LEIS. I observe generally that the document is weak in the following general areas:

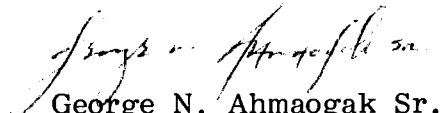
- 1) The effects on coastal resources (especially whales and fish) from development and shipping at port and waterflood sites;

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- 2) The cumulative effects that ANWR and other developments will have on fish and wildlife, on demands for Borough services, and on lifestyles and subsistence opportunities;
- 3) There is no description of the specific procedures that you will recommend to Congress to guarantee that local governments and residents will be involved in federal decision-making concerning exploration and development, mitigation, subsistence, and transportation and utility systems;
- 4) You propose no mitigation measures to avoid your projected loss of subsistence areas to (a) development and (b) hunting restrictions; and
- 5) There is no indication of how you propose to coordinate your administrative procedures with decision-making under the Borough's zoning jurisdiction.

Thank you for this opportunity to comment on the ANWR LEIS. Under separate cover, we are providing certain of the maps, previously provided to your staff in Anchorage, that we feel are especially informative as to human uses of ANWR.

Sincerely,

  
George N. Ahmaogak Sr.  
Mayor

cc: Senator Ted Stevens  
Senator Frank Murkowski  
Loren Ahlers, Mayor of Kaktovik  
Kaktovik Inupiat Corporation  
Jacob Adams, President, ASRC  
Robert Grogan, State of Alaska  
U.S. Fish & Wildlife Service, Anchorage  
North Slope Borough Assembly  
NSB Planning Commission  
William Garner  
Edward Itta, Director, NSB Planning Department  
Harold Curran, NSB Attorney  
Warren Matumeak, NSB Land Management Administrator  
Ben Nageak, Director, NSB Wildlife Management

COMMENTS OF THE  
NORTH SLOPE BOROUGH  
ON THE  
DRAFT ANWR LEIS  
JANUARY, 1987

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Generally speaking, we think that the Draft LEIS is concise, well written, and predicts well the impacts of potential oil and gas development on terrestrial wildlife. However, it discusses in far less detail the existing fishing, hunting, and whaling locations, and the needs of the various Native groups that use ANWR and the Porcupine Caribou Herd (PCH). It does not present alternative development scenarios for coastal and riparian zones that might be dictated by the need to protect subsistence sites.

We also feel that since neither developments nor mitigation stipulations can be predicted with precision until concrete exploration or development plans are presented, the LEIS should have devoted more attention to the procedures that the Secretary will recommend to Congress for involving the public in your Department's process for making zoning and mitigation decisions for ANWR. Those procedures should incorporate ANILCA Title VIII and XI procedures. They should emphasize coordination with local and State decision-making respecting similar or integral development of

Kaktovik Inupiat Corporation (KIC) lands, Native inholdings now being acquired, and State lands--both submerged lands within and offshore of ANWR, and those to the West of ANWR.

## I. ACCESS

The LEIS addresses access on pages 127-129. The LEIS does state that subsistence hunting would be restricted in the vicinity of oil and gas facilities. Mitigation stipulation No. 21, Page 146, proposes a five-mile restricted access area adjacent to oil and gas facilities, producing major adverse effects by limiting access to resources and areas traditionally harvested. As noted at p. 132, if there were to be no hunting or trapping within five miles of development areas, full leasing (Alternative A) would result in the loss of over one half of the hunting area within the 1002 lands. This would be a major impact on subsistence activities (see p. 9).

The restrictions of this type imposed in various Units on the North Slope, are inconsistent. A restriction similar to No. 21 currently exists only in Prudhoe Bay, with no discharge of firearms allowed in the Prudhoe Bay Unit at all. There are no such restrictions at Kuparuk. A five-mile restriction currently exists on either side of the Trans-Alaska Pipeline System, but only for the discharge of firearms. However, enforcing this restriction is difficult at best due to lack of adequate personnel and vehicular means to enforce the prohibition. Uncertainty of local residents

at Nuiqsut over what restrictions apply has itself tended to discourage subsistence activities.

Stipulation No. 21 is grossly overbroad. Hunting restrictions for property protection should be deferred until specific developments are proposed. Before leasing, we must enter into agreements regarding such questions as rifle calibers and types of development, etc., that could be used in the vicinity of oil and gas facilities.

Moreover, with traditional subsistence areas rendered unavailable, due both to potential displacement of wildlife and to hunting restrictions, you should consider mitigation of subsistence effects, in the form of sport hunting restrictions. Subsistence use by local residents is a priority use over other consumptive uses in ANWR. 50 C.F.R. 36.11(c) (1985). The haul road experience suggests that "sport" hunting is highly concentrated along roadways, and is largely unpoliced. This could well occur along roadways in ANWR, to the detriment of subsistence opportunity.

As proposed, industrial development (port construction) is likely to have a major impact on subsistence whaling if sea traffic is not controlled. (See Part III, below). The noise and traffic associated with 1 or 2 ports near Kaktovik will be a far different matter from the occasional disturbance now produced by passing vessels.

There is little mention of the ANILCA Section 810 process. Section



810 (a)(3) of ANILCA requires that, prior to leasing federal land under any provision of law, the responsible federal agency must determine, at a minimum--

- 1) that any significant restriction of subsistence use is necessary,
- 2) that the proposed action uses the minimal amount of land necessary to accomplish such use, and
- 3) that reasonable steps will be taken to minimize adverse impacts upon subsistence use.

In addition to the foregoing recommendations regarding hunting restrictions, we suggest that at least the following be considered:

- A) The LEIS should address and Congress should consider those factors outlined in ANILCA Section 810. This would require considerable further recitation of sociocultural research to satisfy Section 810 (a)(3). (See Attachment A)
- B) Since Kaktovik residents have stated that the biological studies associated with the ANWR evaluation process have been somewhat disruptive, measures must be taken to coordinate programs (such as the LGL bowhead feeding study) so as to not disrupt subsistence activities.
- C) There should be a full listing of the villages (U.S. & Canadian) that use the PCH.

- D) The LEIS must recommend to Secretary Hodel specific legislative language providing for full local government and resident participation in the federal processes for mitigating and approving (1) exploration or development plans, (2) transportation and utility systems, including roads, pipelines, docks and ports, (3) proposals to zone areas off-limits to development, (4) restrictions on subsistence and non-subsistence access. The subsistence users must be fully apprised well before development plans are decided. Such briefings should clearly explain the significance of the development for continued subsistence hunting, and for possible socioeconomic and cultural disruptions.
- E) The document should state how subsistence-related mitigation stipulations will be enforced and how the public can be involved in their enforcement.
- F) The government should be authorized to control seasonal sea traffic to and from the ANWR docking facility.
- G) The port alternative east of Kaktovik would be far more likely to interfere with whale feeding and hunting than would the alternative site near Camden Bay.
- H) The Borough provided your staff with maps, not used in the

LEIS, that describe stream reaches and the inland subsistence sites used for fishing. These should guide facility siting and water withdrawal decisions, just as caribou calving areas have, and more precise maps should be used in the Final LEIS.

## II. COMPARING CENTRAL ARCTIC AND PORCUPINE CARIBOU HERDS

Any attempt to extrapolate to the PCH as it may be impacted by ANWR leasing, the apparent success of the Central Arctic Herd (CAH) near Prudhoe Bay should note the following points.

- 1) The CAH has not had a population decline, in part, because a) the CAH has only been displaced from a part of its calving ground, b) there seems to be plenty of habitat for the CAH, and c) the density of the CAH on their calving ground is low (p. 108).
- 2) The density of the PCH on the calving grounds is about 14 times the density of the CAH calving grounds. (p. 108). This means that the very large PCH is "packed into" its calving area, while the very small CAH has "plenty of room" on its calving grounds .
- 3) Full ANWR development could potentially displace the PCH from 32% of their most critical core calving area (p 108).

- 4) Because of the much greater density of PCH on their calving grounds, the PCH will interact much more extensively with oil development in ANWR than has the CAH near Prudhoe Bay (p 106).

### III. IMPACTS ON WHALES AND FISH

Kaktovik whalers have voiced serious concerns regarding the adverse effects of marine traffic on their hunting success. The fundamental importance of subsistence activities to the proper functioning of the Inupiat family and community is not clearly stated or well referenced. See the Attachment A for a listing of pertinent sources.

The brief description at p. 119 of the "Impacts" to bowhead whales is inadequate and does not mention that the marine waters off ANWR appear to be a major bowhead feeding area. (See attached Figure 1). This section must also be strengthened to recognize that noise disturbance from one or more port facilities is likely to be much more significant than reactions of individual whales to noise sources reported in other studies. The conclusion (p. 119) that there would only be minor behavioral changes is premature and not supported.

Any discussion of potential ANWR impacts to bowhead whales must take into consideration how ANWR activities are likely to influence further development at Point Thomson and in the offshore area adjacent to ANWR.

If a pipeline and roads extend into ANWR, such "infrastructure" will make development of nearby offshore prospects much more likely. This is especially important since the nearshore area from Camden Bay to the Canadian border is already of great interest to the industry and the same waters appear to be important feeding habitat for the bowhead.

Disturbance studies have not shown conclusively that bowheads will habituate to vessel traffic. The statement on p. 119 that "long-term behavioral effects from noise and vessel disturbance have not been demonstrated or measured" may be an overstatement. Studies in the Canadian Beaufort have shown a steady decrease since 1980 in the use of the "industrial zone" during exploratory activities (Richardson, et al. 1985). Additionally, the effects of short term disturbances are not conclusive, as the authors point out on p. 119. A port facility may have considerable effects on whale distribution (avoidance of marine traffic) and certainly on hunting success, particularly if a major sea lift was delayed into late August or September because of bad ice conditions.

The areas used in subsistence whaling activities extend beyond those outlined in the LEIS. The region used extends west to 144°, east to 143° 30', and 25 nautical miles seaward.

In addition to the effects of causeways, recited at p. 125, you should note that several studies have documented causeway-induced (solid fill) changes to the nearshore temperature and salinity regimes (Moulton et al. 1985:, EnviroSphere 1985). Such changes reduce suitable feeding habitat

(Neil, et al. 1983). Numerous proposed or existing causeways used for docking facilities and accessing nearshore oil fields may have measurable effects on anadromous fish populations (Craig 1984). For instance, this may prevent the recruitment of young arctic cisco to the Colville River (Gallaway et al. 1983).

The effects of leasing the Coastal Plain must be considered cumulatively with the likely additional leasing of adjacent state, Native and federal lands. The Coastal Plain borders on three offshore State Lease Sales (50, 51, and 55), and Federal Lease Sale 97. If developed, these will effectively "seal off" the Village of Kaktovik and potentially industrialize the Eastern U.S. Beaufort coast. Also, marginal fields, (e.g., Point Thomson) may become economically viable once access is established into the Coastal Plain.

Accordingly, we recommend that the Final LEIS contain a more pointed analysis of the effects that docks, waterflood facilities, and related shipping traffic and industrial support facilities can have, in terms of obstruction and noise, on subsistence activities, fish, whales, the coastal environment, and Inupiat lifestyles and culture. There should be more specifics, at p. 125, on the design of causeways, docks and waterflood facilities to mitigate their cumulative effects.

Overwintering fish habitat deserves special attention. Water is very limited on 1002 lands and serious conflicts will most likely arise regarding

water usage for both exploration and development. As noted previously in the discussion, these areas of access should be better documented. The NSB provided your staff good maps for this purpose. Entire stream populations of arctic char or grayling could be destroyed by dewatering such areas, especially during winter months when many portions of a stream or river may be frozen completely to the stream bed.

There must be established a "Technical Review Committee", modeled after the Endicott T.R.C., to monitor local and cumulative impacts to fish, and to recommend mitigation when needed. Information from the most recent studies of the Endicott Environmental Monitoring Project, the West Dock Causeway, and the Lisburne Project should be incorporated continually into the design of mitigation measures outlined for this study.

#### IV. MITIGATION OF CONSTRUCTION ACTIVITIES

Wetland Loss To Leachates - Enforcement of wetland loss due to reserve pit contents leaching through or spilling over the pit dikes onto wetlands should be addressed in the LEIS.

Based on our experiences in the Prudhoe Bay, Kuparuk River and Milne Point oil and gas units, use and maintenance of reserve pits can and has caused concerns with respect to pit contents spilling onto the tundra.

For example, drill muds and cuttings placed into the pits as an

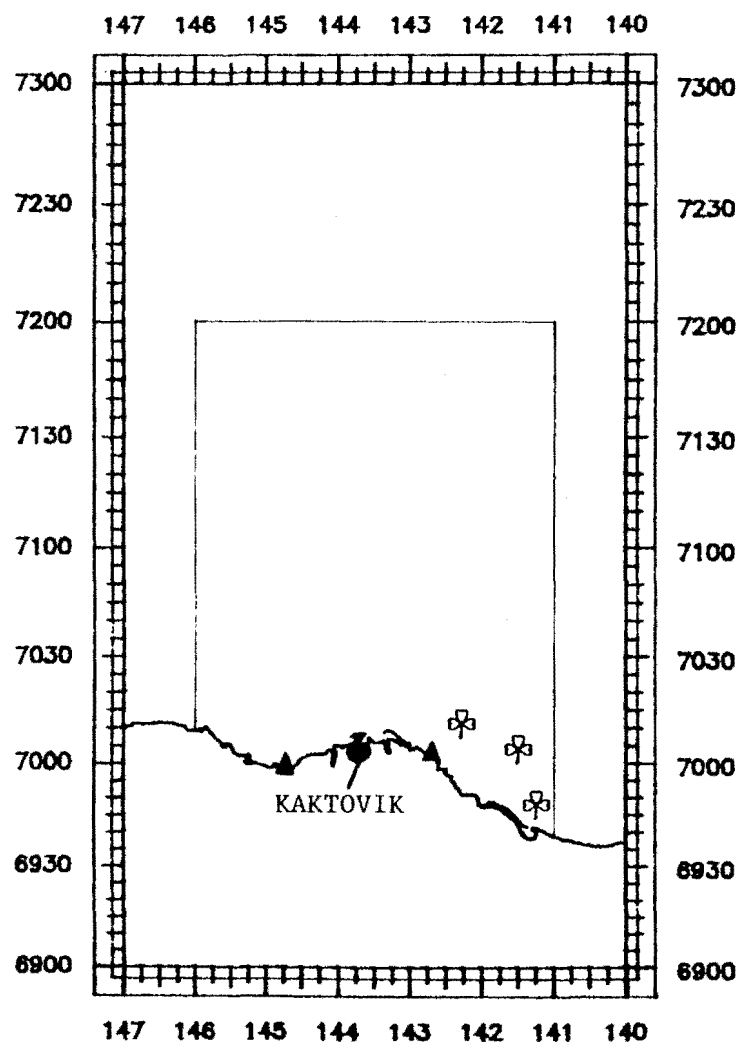
allowed practice provided that they are not contaminated with hydrocarbons. And yet not only hydrocarbons but crude oil has been discovered in the pits. And when they are allowed to overtop or are breached, the contents, including the hydrocarbons and crude oil escape onto the tundra.

Additionally, reserve pits are often used for the disposal of snow in the winter and if not managed so as to disperse the snow evenly in the pit, overtopping of the pit can occur in the spring when the snow melts and fills the pit. If flowlines and other pipelines are constructed around the pit such that pipeline construction prevents the maintenance of the pits with the use of machinery such as "cats", the walls of the pits can breach or be eroded out and spill their contents out onto the tundra. This is an issue that should be addressed in ANWR and proposed regulations.



FIGURE 1. Locations of bowhead whales feeding near ANWR. The source of these data are D. Ljungblad surveys<sup>1</sup> conducted for the Minerals Management Service.

## Bowhead Feeding Locations (1979-1983)



Note: These three sightings represent a total of 18 whales. They are the result of a limited number of surveys. Additional sightings have been noted by Kaktovik whalers and aerial surveys during subsequent years.

Prepared by the Department of Wildlife Management, North Slope Borough, Box 69, Barrow, AK

1. See references (Ljungblad et al. 1984)

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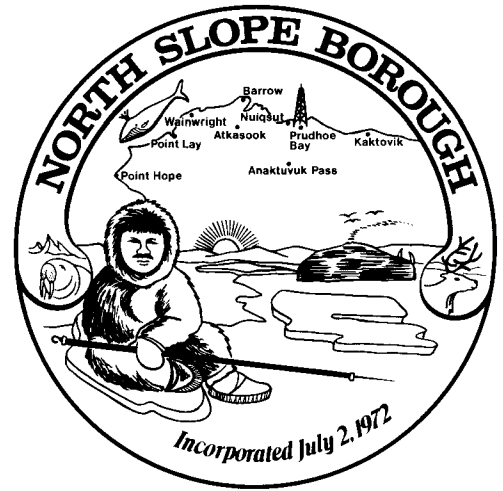
# NORTH SLOPE BOROUGH

## OFFICE OF THE MAYOR

P.O. Box 69  
Barrow, Alaska 99723

Phone: 907-852-2611

George N. Ahmaogak, Sr., Mayor



January 23, 1987

Director  
U.S. Fish & Wildlife Services  
Division of Refuge  
18th and C Streets, N.W.  
Room 2343 Main Interior Building  
Washington, D.C. 20240

Dear Sir:

In addition to the comments we submitted on January 20, 1987, I would also like to submit the following comments regarding Native allotments of the Kaktovik residents.

The main concern of the Kaktovik residents is to preserve the subsistence resources and availability of those resources. Development of the 1002 area, as far as the residents of Kaktovik are concerned, is a secondary priority behind subsistence.

Native allotments are an important factor in a subsistence way of life. There are approximately 43 Native allotments for which Kaktovik residents have applied. Most of the applicants have not received title to these allotments from BLM and are still waiting approval. Most of these applicants use their pending or approved allotment areas for subsistence campsites to allow them to harvest food for their winter supply. We urge the Secretary of the Interior to resolve the pending Native allotment applications prior to the opening of ANWR for oil exploration and development. (Please see the attached Native allotment map).

There are also a few subsistence campsites that have not been applied for that are currently used for harvesting fish and other animals. These campsites are traditionally used by individual Kaktovik residents and should also be protected.

Sincerely,

*Edward Itlu for*  
George N. Ahmaogak, Sr.  
Mayor

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U.S. Fish & Wildlife Services  
January 23, 1987  
Page 2

Attachment

cc: Senator Ted Stevens  
Senator Frank Murkowski  
Loren Ahlers, Mayor, Kaktovik  
Kaktovik Inupiat Corporation  
Jacob Adams, President, ASRC  
Robert Grogan, State of Alaska  
U.S. Fish & Wildlife Service, Anchorage  
North Slope Borough Assembly  
NSB Planning Commission  
William Garner  
Edward Itta, Director, NSB Planning Department  
Harold Curran, NSB Attorney  
Warren Matumeak, NSB Land Management Administrator  
Ben Nageak, Director, NSB Wildlife Management

STATEMENT OF WARREN O. MATUMEAK  
REPRESENTING THE NORTH SLOPE BOROUGH, ALASKA,  
BEFORE THE DEPARTMENT OF THE INTERIOR  
HEARINGS ON THE DRAFT ANWR LEIS  
JANUARY 9, 1987

ON BEHALF OF OUR NORTH SLOPE BOROUGH MAYOR, GEORGE M. AHMAOGAK, SR., I WOULD LIKE TO THANK THE INTERIOR DEPARTMENT FOR GIVING US THE OPPORTUNITY TO TESTIFY HERE TODAY. I AM WARREN MATUMEAK, DEPUTY DIRECTOR OF PERMITTING AND LAND MANAGEMENT ADMINISTRATOR FOR THE NORTH SLOPE BOROUGH.

THE QUESTION OF OIL AND GAS EXPLORATION AND DEVELOPMENT IN THE COASTAL PLAIN OF THE ARCTIC NATIONAL WILDLIFE REFUGE IS A MATTER OF CRITICAL IMPORTANCE TO THE CITIZENS OF THE NORTH SLOPE BOROUGH, ESPECIALLY TO THOSE IN THE VILLAGE OF KAKTOVIK, AND OTHER VILLAGES, THAT WOULD FEEL MOST IMMEDIATELY THE IMPACTS OF DEVELOPMENT.

OIL AND GAS RESERVES THAT MAY BE FOUND IN THE COASTAL PLAIN WOULD PLAY A CRITICAL ROLE IN THE FUTURE ENERGY SECURITY OF OUR NATION, AND IN ITS BALANCE OF TRADE. THEY WILL PROVE EQUALLY VITAL TO THE ECONOMIC STABILITY OF THE STATE OF ALASKA. RESIDENTS OF THE NORTH SLOPE BOROUGH HAVE ONLY RECENTLY BECOME ACCUSTOMED TO HAVING FINE SCHOOLS, MODERN HOUSING, POLICE AND FIRE PROTECTION, AND OTHER SERVICES AND FACILITIES LONG TAKEN FOR GRANTED BY MOST AMERICANS. RESPONSIBLE DEVELOPMENT OF ANWR WOULD HELP ENABLE US TO CONTINUE PROVIDING THESE SERVICES FAR INTO THE FUTURE. WE MUST ALSO CAREFULLY CONSIDER SUBSISTENCE, AND THE



WILDLIFE UPON WHICH OUR PEOPLE PRESENTLY DEPEND, AND WILL CONTINUE TO DEPEND IN THE FUTURE.

FOR OVER A DECADE NOW, NATIVE SHAREHOLDERS IN THE KAKTOVIK INUPIAT CORPORATION AND THE ARCTIC SLOPE REGIONAL CORPORATION HAVE WATCHED FROM THE SIDELINES AS BILLIONS OF DOLLARS WORTH OF OIL HAS BEEN EXTRACTED FROM THEIR ANCESTRAL LAND IN THE PRUDHOE BAY AREA. BOTH CORPORATIONS NOW HOLD TITLE TO LAND-HOLDINGS IN SOME OF THE MOST PROMISING OIL AND GAS STRUCTURES IDENTIFIED BY THE LEIS. A CONGRESSIONAL DECISION TO OPEN THE ANWR COASTAL PLAIN WOULD, AT LONG LAST, ALLOW THESE NATIVE SHAREHOLDERS TO BENEFIT DIRECTLY FROM OIL EXPLORATION AND DEVELOPMENT ON THEIR LANDS. THIS OPPORTUNITY FOR NATIVE CORPORATIONS MUST NOT BE DENIED.

BEING A WHALING CAPTAIN, AND THE HEAD OF A FAMILY WHICH CHERISHES THE SUBSISTENCE FOODS WHICH HAVE LONG NOURISHED THEIR HOUSEHOLD, MAYOR AHMAOGAK HOLDS STRONG FEELINGS ON THE QUESTION OF CONGRESS OPENING THE ANWR COASTAL PLAIN TO OIL AND GAS DEVELOPMENT. IN NOVEMBER OF LAST YEAR, HE STATED HIS OPINION THAT CONGRESS SHOULD OPEN THE ENTIRE COASTAL PLAIN OF ANWR TO OIL AND GAS EXPLORATION AND DEVELOPMENT, BUT THAT ALL DEVELOPMENTAL ACTIVITIES MUST BE SUBJECT TO STRICT ENVIRONMENTAL, SUBSISTENCE, CULTURAL AND LOCAL ACCESS REQUIREMENTS.

-- THE BOROUGH FAVORS ALTERNATIVE A IN THE LEIS. AS WE READ THE DESCRIPTION OF ALTERNATIVES AND THE SECRETARY'S RECOMMENDATION, PAGE 170, ALTERNATIVES A AND B DIFFER ONLY AS TO WHETHER CONGRESS OF THE DEPARTMENT OF THE INTERIOR WOULD PLACE CERTAIN AREAS OF ANWR OFF LIMITS TO LEASING.

WHILE WE AGREE WITH SECRETARY HORN THAT THE UPPER JAGO RIVER AREA SHOULD BE PLACED OFF LIMITS TO DEVELOPMENT WORK FOR A PERIOD OF TIME, WE THINK IT WOULD BE TOO INFLEXIBLE AN APPROACH FOR CONGRESS ITSELF TO DELINEATE ZONES IN ANWR THAT MUST BE KEPT FREE FROM ALL FORMS OF OIL AND GAS ACTIVITY. IT IS IMPORTANT TO RECOGNIZE THAT EXPLORATORY WORK, INCLUDING DRILLING, HAS BEEN AND CAN BE CONDUCTED DURING THE WINTER MONTHS ONLY, LEAVING NO APPRECIABLE EFFECT ON CARIBOU HABITAT. AND MITIGATION TECHNOLOGY IS IMPROVING.

WHEN KUPARUK AND PRUDHOE WERE INITIALLY PROPOSED, I PERSONALLY TOOK THE APPROACH THAT LARGE AREAS AROUND THESE FIELDS SHOULD BE ZONED OFF-LIMITS TO ANY DEVELOPMENT. BUT OUR CASE-BY-CASE REVIEW OF OIL COMPANY PLANS, AND THE STIPULATIONS THAT WE INSISTED UPON, HAVE SHOWN THAT WILDLIFE AND OIL DEVELOPMENT CAN CO-EXIST IN THE ARCTIC. PROPERLY STIPULATED ON THE BASIS OF EXTENSIVE EXPERIENCE, WE DON'T THINK THAT PIPELINES AND ROADS WILL RESTRICT CARIBOU MIGRATION ROUTES.

THE POTENTIAL IMPACTS TO OUR COMMUNITIES ARE ENORMOUS. OUR RESIDENTS, ESPECIALLY THOSE IN THE VILLAGE OF KAKTOVIK, MUST BE TREATED FAIRLY. THE BOROUGH AND ITS VILLAGES MUST HAVE ALL THE FINANCIAL, TECHNICAL, AND HUMAN RESOURCES POSSIBLE TO DEAL WITH THE IMPACTS OF DEVELOPMENT IN THEIR COMMUNITIES. THE FEDERAL LAW OPENING ANWR SHOULD ENSURE THAT FEDERAL REVENUE RECEIPTS ARE SHARED EQUITABLY WITH LOCAL GOVERNMENTS.

GENERALLY SPEAKING, WE FOUND THE LEIS TO BE WELL WRITTEN AND DOCUMENTED, CONCISE, AND HONEST IN ITS APPRAISAL OF THE EFFECTS THAT ANWR DEVELOPMENT WOULD HAVE ON WILDLIFE AND PEOPLE. WE

BELIEVE IT MUST BE IMPROVED BY A DISCUSSION OF OTHER NORTH SLOPE DEVELOPMENTS, SUCH AS THE ENDICOTT CAUSEWAY AND OFFSHORE LEASING IN THE BEAUFORT SEA, THAT WILL OCCUR BEFORE ANWR WOULD BE LEASED AND THAT COULD HAVE CUMULATIVE EFFECTS ON FISH AND WILDLIFE, NORTH SLOPE RESIDENTS, AND THE BOROUGH'S FINANCIAL RESOURCES.

WE HAVE SEEN AT NUIQSUT TRADITIONAL HUNTING ACTIVITIES BEING GRADUALLY DISPLACED BY RESTRICTIONS IMPOSED AT THE PRUDHOE BAY AND KUPARUK UNITS. THIS TYPE OF PROBLEM SHOULD BE LOOKED AT MORE CAREFULLY IN THE LEIS FOR DEVELOPMENTS IN AND AROUND ANWR.

FINALLY, THE LEIS SHOULD CONTAIN A MORE DETAILED DISCUSSION OF REGULATORY ALTERNATIVES FOR CONTROLLING USE OF ANWR BY NATIVE AND FEDERAL LESSEES, FOR COORDINATING THE SAME WITH THE BOROUGH AND THE CITY OF KAKTOVIK, AND FOR INVOLVING LOCAL RESIDENTS IN REVIEW OF EXPLORATION AND DEVELOPMENT PLANS.

AGAIN, LET ME EXPRESS MY APPRECIATION FOR THIS OPPORTUNITY TO TESTIFY ON BEHALF OF OUR NORTH SLOPE BOROUGH MAYOR, GEORGE AHMAOGAK.

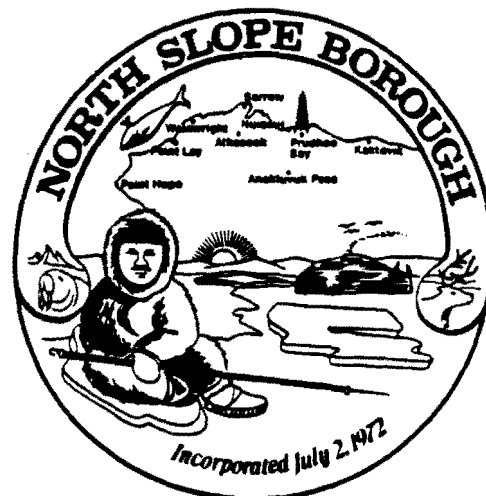
# **NORTH SLOPE BOROUGH**

## **OFFICE OF THE MAYOR**

P.O. Box 69  
Barrow, Alaska 99723

Phone: 907-852-2611

George N. Ahmaogak, Sr., Mayor



November 20, 1986

**Mr. Jacob Adams, President  
Arctic Slope Regional Corporation  
P.O. Box 129  
Barrow, Alaska 99723**

**Dear Mr. President:**

Rest assured that as Mayor of the North Slope Borough, I fully share your concern for the future of oil and gas development in the Coastal Plain of the Arctic National Wildlife Refuge. I believe, as you do, that the proposed legislation would indeed work a grave injustice on the Inupiat people. We have long witnessed massive oil development in an extremely wealthy portion of the traditional Inupiat homeland, now held under state title. Any legislation which would prevent private corporations owned and controlled by Native shareholders from finally savoring the benefits of oil development on their own lands strikes me as terribly wrong.

I also feel a strong sense of pride over the improvements our Borough government has brought to our communities. When you and I were children, we had to travel far from our families and loved ones--and the life which we cherish--just to attend school. Now we have fine schools in every village on the North Slope. We have good roads where there were none. We have modern, state-of-the-art fire houses which have resulted in the saving of many lives; we have water and plumbing piped into modern homes, we boast a first-rate Public Safety Department, and many other services which our people did not have in the past.

I want to see these improvements maintained in the future. I want to see them broadened, to fully benefit every citizen on the North Slope! This, of course, will require a solid tax base, even after Prudhoe Bay production drops off. Responsible development in the ANWR Coastal Plain could prove vital in this regard.

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I too am concerned about our Nation's growing dependence on insecure sources of foreign oil. As you have stated, the Coastal Plain offers the best hope of alleviating this dependence of any region in the United States.

Therefore, as Mayor, I am throwing the full weight of my office into the effort to ensure that oil development becomes a reality on the Coastal Plain of the ANWR. I will be right at your side as a leader in this fight.

As a whaling captain, and a father who relies upon caribou, ducks, geese, seal, fish and other wildlife to feed his family, I also share your strong concern for the well being of the wild creatures who live upon the Coastal Plain. I am confident that with our Borough permitting powers, and the concern of corporate leaders such as yourself and Oliver Leavitt, we can ensure development that is ecologically sound, and which will protect our resources.

Perhaps most importantly, I am concerned for our Borough citizens who actually live in the ANWR Coastal Plain, namely the people of Kaktovik. They are the ones whose everyday lives will be most affected. They are the ones who will feel the direct impacts of development. You, of course, are well aware of the difficulties we have had trying to secure a fair share of the NPR-A Impact funds for the North Slope villages hit hardest by exploration in the reserve. Even after a successful lawsuit, we still must fight to get what is rightfully ours.

With this in mind, I will be working to insure that an equitable method of revenue sharing from the federal mineral receipts for our local governments is enacted before any federal lease sales take place. This might involve a lobbying effort to convince Congress to make appropriations directly to our local governments. Any help you can give me here will be appreciated. The people of Kaktovik must be treated fairly, and beneficially! They must have all the financial, technical, and human resources possible to deal with the impacts of development in their community.


I note with satisfaction the leadership you have shown in the organization of the Coalition for American Energy Security. I am confident that this group will do much to educate Congress, and the public, of the importance development in the Coastal Plain of ANWR has for the entire nation.

After seeking the advice of, among many others, U.S. Senator Ted Stevens, Kaktovik Mayor Loren Ahlers, and our attorneys in Washington, I feel that it would not be appropriate for me to join this group. This will in no way diminish the effort I will give to make oil development on the ANWR Coastal Plain a reality. I would note that one of our Washington attorneys, Ronald G. Birch, will be attending the coalition meetings. He will keep us informed of coalition efforts, and he will inform the coalition

of what we are doing. This will insure that our efforts are mutual supportive.

If you have any questions, or more information to pass on, please not hesitate to contact me.

Sincerely,

  
George N. Ahmaogak, Sr.  
Mayor

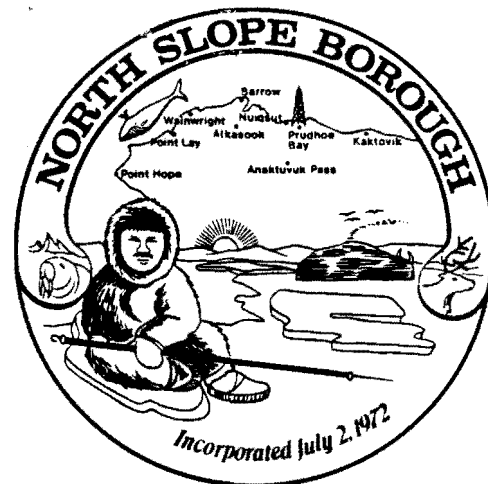
# NORTH SLOPE BOROUGH

## OFFICE OF THE MAYOR

P.O. Box 69  
Barrow, Alaska 99723

Phone: 907-852-2611

George N. Ahmaogak, Sr., Mayor



### Policy Statement From the North Slope Borough Mayor's Office On Oil Exploration and Development on the Coastal Plain of the Arctic National Wildlife Refuge

Legislation currently in the U.S. Congress would designate the 1.5 million acre Coastal Plain of the Arctic National Wildlife Refuge as wilderness. All oil and gas exploration and development activities would be prohibited. The Mayor of the North Slope Borough, George N. Ahmaogak, Sr., recognizes the potential economic and social benefits development in this region could bring to the North Slope Borough and its residents.

Based primarily upon tax revenues on property in the Prudhoe Bay, Kuparuk River, and other oil fields, the Borough has in the past decade built a comprehensive network of schools, roads, housing and facilities and services of many kinds in all of its villages. A strong, secure tax base is necessary to support these facilities in the future, including during that time when production at Prudhoe Bay begins to wind down. Oil exploration and development within the ANWR Coastal Plain would provide a significant portion of that tax base.

Many residents of the North Slope Borough are shareholders in Native regional and village corporations owning surface and subsurface rights within the ANWR Coastal Plain. Oil development within the ANWR Coastal Plain would provide these corporations with their first opportunity to profit from oil development of their own lands. The corporations and their individual shareholders stand to reap substantial benefits from such development, which would be positive for the Borough as a whole. It is the feeling of the North Slope Borough Mayor that legislation preventing the Native shareholders from developing their own lands and resources would constitute a grave injustice.

The State of Alaska has built an economy largely dependent upon oil, and stands to suffer when Prudhoe Bay goes into decline. The Coastal Plain of ANWR holds the only real potential for another oil and gas discovery of reserves comparable to Prudhoe Bay. The State and all of its citizens stand to benefit greatly from the finding and development of such reserves, and to suffer if these reserves are locked up.

Oil production in the United States has been declining even as oil consumption has risen. The percentage of oil produced domestically drops smaller and smaller, worsening the balance of trade, and placing the energy security of the Nation ever more into the hands of other nations, such as the member-states of OPEC. The Coastal Plain of ANWR has greater potential than does any other on-shore region in the United States. In fact, estimates of potential reserves in ANWR indicate they could exceed one third of all current U.S. reserves, and are likely greater than were the reserves at Prudhoe Bay when first discovered. The development of oil and gas reserves in the Coastal Plain is vital to U.S. energy security.

In light of all of this, it is the policy of Mayor George N. Ahmaogak, Sr., and his office, to fully support the future exploration and development of the Coastal Plain of ANWR.

The Mayor is deeply concerned that North Slope residents who will feel the impacts of this development most strongly, namely the residents of the village of Kaktovik on Barter Island, be fairly included in revenue sharing to offset these impacts and to enhance the quality of village life. The Mayor and his office will strive to see that an equitable method of sharing the pre-determined percentages of federal mineral receipts with affected local governments, and of allocating these funds to them, is in place prior to any federal lease sales. This will require close work with both State and federal governments.

The Mayor is also deeply concerned with the wildlife and natural resources of the Coastal Plain. The Borough will undertake whatever steps are necessary to ensure that development takes place in an ecologically sound manner, resulting in minimal effects upon the wild resources of the ANWR Coastal Plain.







January 19, 1987

Division of Refuge Management  
U. S. Fish & Wildlife Service  
Department of the Interior  
2343 Main Interior Building  
18th and C Streets, NW  
Washington, DC 20240

Re: Arctic National Wildlife Refuge

Dear Sir:

Poker Flat Research Range, Geophysical Institute, University of Alaska, submits the following comments with regard to the Department of Interior's recommendation that the Arctic National Wildlife Refuge (ANWR) be opened to oil and gas exploration.

Poker Flat is against opening the coastal plain of the ANWR to oil and gas exploration, as follows:

1. This area is an integral part of Flight Zone 3 Arctic Extension, one of the range's main flight zones for research sounding rockets (see map attached). This flight zone was established and is used under a Certificate of Waiver and Authorization as issued by the Federal Aviation Administration.
2. The lands lying beneath and immediately adjacent to this flight zone are used for the impact and recovery of research rocket motors and payloads under a U. S. Department of the Interior, Fish and Wildlife Service, Special Use Permit.
3. Safety is a prime concern of Poker Flat Research Range in the launching and the recovery of the rocket motors and payloads/instrumentation. Most of these research sounding rockets are for auroral research purposes and are launched at night during the winter months; however, launches are conducted during other times of the year for upper atmospheric research, such as ozone. The research sounding rockets launched from Poker Flat are unguided and do not carry destruct systems. Thus, the opening of the lands within or immediately adjacent to this flight zone to diverse groups for exploratory assessment, would effectively close the zone, which is vital to the continued research being conducted from Poker Flat.

Geophysical Institute, University of Alaska  
Fairbanks, Alaska 99775-0800

PHONE. 907-474-7282 TELEX: 35414 GEOPH INST FBK

Page 2

4. Poker Flat Research Range, while owned and operated by the Geophysical Institute, University of Alaska, is totally funded by and operates under the aegis of a federal government contract. It is considered a national asset as it is the only arctic/auroral zone research sounding rocket launch range on U. S. soil.

There is enclosed, besides the map referred to above, a document describing the range, its users and other data for your information.

Very truly yours,

A handwritten signature in black ink, appearing to read "Neal B. Brown". The signature is stylized with a large, looped "N" and "B".

Neal B. Brown, Director  
Poker Flat Research Range

Enclosures



## POKER FLAT RESEARCH RANGE

Poker Flat Research Range, primarily a sounding rocket launch facility dedicated to auroral and middle to upper atmospheric research, is located north of Fairbanks, Alaska, at 30 Mile Steese Highway. Owned and operated by the Geophysical Institute, University of Alaska, it is the only university owned launch range in the world. It is also the only high latitude and auroral zone rocket launch facility located on United States soil.

Self-supporting, Poker Flat is funded through contracts with the National Aeronautics and Space Administration (NASA), the Defense Nuclear Agency (DNA), the U.S. Air Force Geophysics Laboratory (AFGL), the National Science Foundation (NSF) and the National Oceanic and Atmospheric Administration. Seven university employees work year-round at the facility maintaining the physical plant and the various waivers, approvals and agreements necessary to the operation.

Scientists and technicians from many federal agencies and from universities throughout the United States and abroad visit Poker Flat to conduct auroral, ozone, solar proton, electric and magnetic field, ultraviolet and other atmospheric research. Ten to fifteen major sounding rockets, plus a number of meteorological rockets, are launched from the site each year. Other ongoing research projects are: An automated Umkehr measurement station, one of six worldwide stations called the Automated Dobson Network (ADN), for ozone measurements and observations; and an air sampling/monitoring station operated for the University of Alaska. The range also cooperates with and helps support the USDA Institute of Northern Forestry's Caribou-Poker Creeks watershed research project.

Support facilities include the Poker Optical Observatory which houses magnetometers, riometers, all-sky auroral cameras, scanning photometers and other observing instruments, and a low-light-level color television with video recorder for auroral research. The National Oceanic and Atmospheric Administration (NOAA) operates a Mesospheric-Stratospheric-Tropospheric (MST) radar at Poker Flat; this radar measures the direction and wind speeds at different atmospheric levels.

In addition to its importance to the scientific community, Poker Flat Research Range also contributes economically to Fairbanks and to Alaska: The annual budget for the operation and maintenance of Poker Flat is over \$1,000,000, with physical facilities valued at approximately \$15,000,000; the per diem paid annually to the user scientists and their support personnel amounts to approximately \$1,000,000, most of which is spent in the Fairbanks area; and each mission spends \$25,000 or more on air and truck freight.

Throughout its 17 year history, Poker Flat has enjoyed the support of a number of federal, state and military agencies. Permission to impact rockets' and payloads on some nine million acres of land is given by the Bureau of Land Management, the U. S. Fish and Wildlife Service, the State of Alaska Division of Lands and Doyon, Ltd. The land on which the site itself is located is owned by the University of Alaska. The U.S. Air Force provides aircraft and crews for payload recovery, some logistical support and, with the use of L-band transponders, can furnish radar tracking support. The Federal Aviation Administration approves requested rocket flight zones and coordinates air space during rocket launches, and the Alaska Department of Transportation gives the range permission to stop road traffic on the Steese Highway during launches.

PARTIAL LIST OF RANGE USERS  
(1969 - 1986)

United States:

Advanced Research Projects Agency  
Aerospace Corporation  
Air Force Geophysics Laboratory  
Cornell University  
Defense Nuclear Agency  
Florida Atlantic University  
Geophysical Corporation of America  
Geophysical Institute, Univ. of Alaska  
Lincoln Laboratory, MIT  
Los Alamos Scientific Laboratory  
National Aeronautics and Space Administration  
National Oceanic and Atmospheric Administration  
National Science Foundation  
Pennsylvania State University  
Sandia Corporation  
Science Applications, Inc.  
Space Data Corporation  
Rice University  
United States Air Force, Space Division  
United States Air Force, BMD  
United States Army, BMD  
University of California at Berkeley  
University of California at San Diego  
University of Colorado  
University of Denver  
University of Michigan  
University of Minnesota  
University of New Hampshire  
University of Rhode Island  
University of Texas at Houston  
University of Washington  
University of Wisconsin  
Utah State University

Foreign:

Denmark  
Japan  
Sweden  
United Kingdom

POKER FLAT RESEARCH RANGE

PERFORMANCE 1969 - 1986

o 217 major high-altitude rocket experiments:

GEOPHYSICAL INSTITUTE 1

NASA:

University 66

NASA Center 44

NATIONAL SCIENCE FOUNDATION 7

DEFENSE NUCLEAR AGENCY 66

AIR FORCE GEOPHYSICS LABORATORY 6

OTHER 27

o 1700 Meteorological rocket launchings

(1971-1979 thrice-weekly data base to 65 km)

o Range Records:

Altitude - 1400 km

Loft - 5985 lbs. to 113 km

RESEARCH SOUNDING ROCKET VEHICLE SYSTEMS  
LAUNCHED FROM  
POKER FLAT RESEARCH RANGE, 1969 - 1985

<u>Vehicle</u>	<u>Number of Launches</u>
Astrobee D	8
Black Brant IVB	2
Black Brant VA	1
Black Brant VC	7
Black Brant IX	2
Black Brant X	7
Bullpup-Apache	4
Castor	1
Honest John-Hydac	3
Honest John-Javelin	1
Honest John-Nike-Hydac	2
Honest John-Nike-Javelin	3
Honest John-Tomahawk	5
Nike-Apache	3
Nike-Hydac	13
Nike-Javelin	4
Nike-Orion	8
Nike-Tomahawk	61
Orion	4
Paiute-Apache	1
Paiute-Tomahawk	8
Sandhawk-Tomahawk	5
Sergeant	11
Sergeant-Hydac	6
Stryf	2
Talos-Sergeant-Hydac	5
Talos-Castor	6
Taurus-Nike-Tomahawk	1
Taurus-Orion	9
Taurus-Tomahawk	5
Terrier-Malemute	10
Terrier-Sandhawk	4
Terrier-Tomahawk	1
Ute-Apache	1
Ute-Tomahawk	3

# CURVE

Red line  
Blue line  
Black line  
Green line  
Yellow line  
Orange line  
Brown line  
Grey line  
White line

## ATTENTION

THESE ARE THE ONLY MAPS  
AVAILABLE IN THE AREA

125

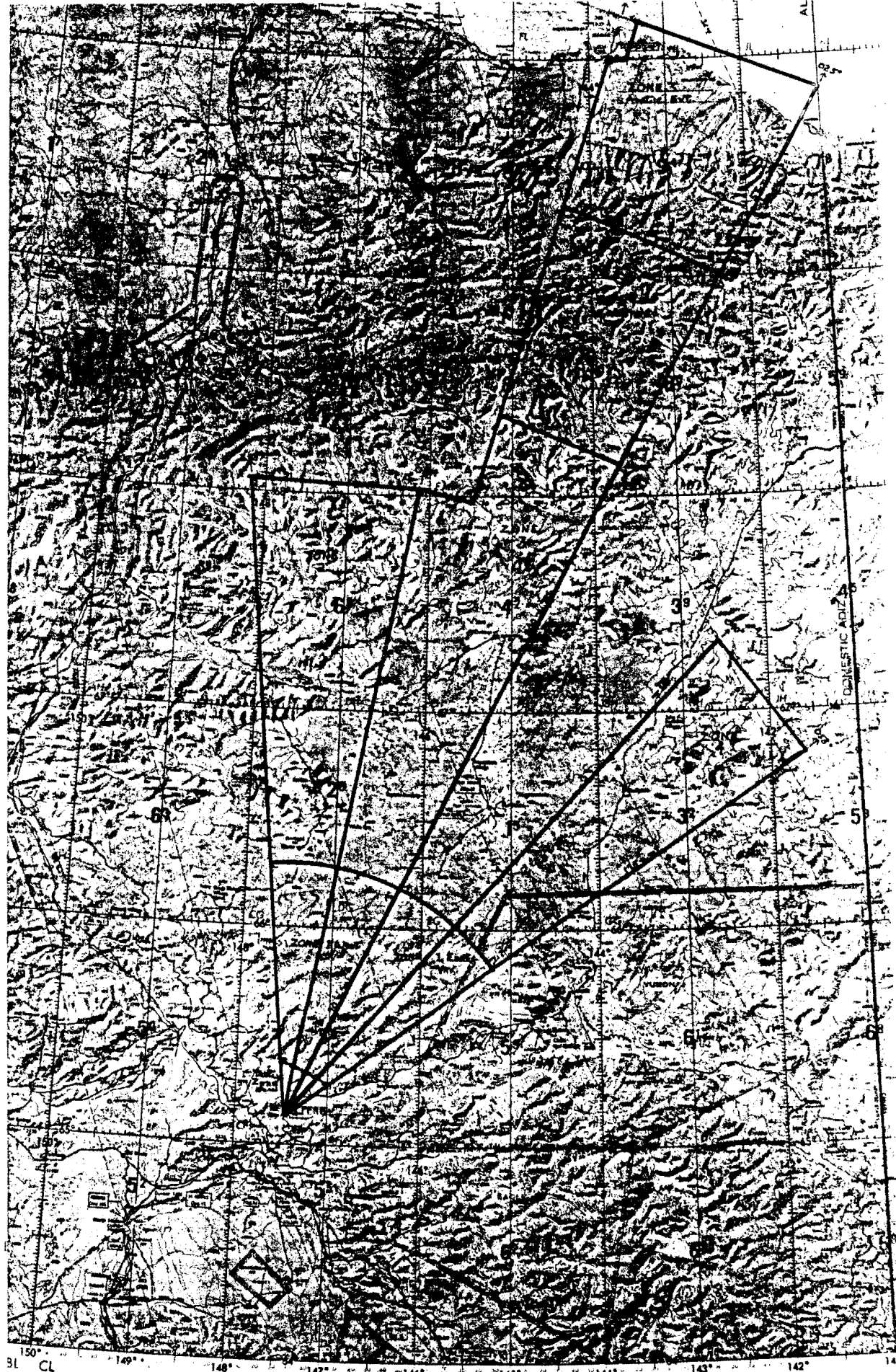
## INFORMATION

THESE ARE THE ONLY MAPS  
AVAILABLE IN THE AREA

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## NOTES

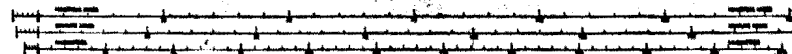
These are the only maps  
available in the area



ONC C-9

CANADA, UNITED STATES

SCALE 1:1,000,000



ELEVATIONS IN FEET

OPERATIONAL NAVIGATION CHART





Venetie Village Council  
Venetie, Alaska 99781

February 6, 1987

U.S. Fish and Wildlife Service  
ATTN: Division of Refuge Management  
2343 Main Interior Building  
18th and C Streets  
N.W. Washington, D.C. 20240

Dear U.S. Fish & Wildlife Service:

We are writing our comments on the Draft Report about whether to allow oil and gas development in the Arctic National Wildlife Refuge. The people of the Village of Venetie are opposed to allowing this development, because it will harm the Porcupine Caribou Herd.

The Draft Report does not discuss the importance of caribou to Venetie or to Arctic Village. Caribou are important here--to lose them would be to lose an important source of food and an important part of our culture. The Report should discuss these impacts on Venetie and Arctic Village to the same extent as it talks about effects on Kaktovik.

The Report talks about the "core" calving area, which makes it sound like only that region is critical to the caribou. We believe that the entire coastal plain is critical and should be "category 1" habitat.

We are opposed to any exploration and development. But if you are going to allow development, your standard of "unnecessary adverse effects" is wrong--development should be allowed only if it is compatible with the protection of subsistence and subsistence resources. And there should be no development until all Native allotments have been completely given to those who should have received them long ago.

You should have held hearings here and in Arctic Village. If you had come here, you would have heard people tell you about how vital caribou are to our people here. They would have asked you whether 20 days worth of oil is worth the destruction of our culture.

Thank you for your attention to the comments.

Sincerely,

Venetie Village Council  
1st Chief - MacArthur Tritt  
2nd Chief - Jim Christian  
Council Members:  
Eddie Frank  
Neil Sam  
Pete Peter  
John Titus  
Larry Williams

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