

**UNITED STATES  
DEPARTMENT OF THE INTERIOR**

**ARCTIC NATIONAL WILDLIFE REFUGE, ALASKA,  
COASTAL PLAIN RESOURCE ASSESSMENT**

**APRIL 1987**

**Recommendation of the Secretary of the Interior**

**to**

**The Congress of the United States**



**In accordance with Section 1002 of the  
Alaska National Interest Lands Conservation Act**

## SECRETARY'S RECOMMENDATION

### INTRODUCTION

The Arctic National Wildlife Refuge in Northeastern Alaska is a 19-million-acre unit of the National Wildlife Refuge System. Section 1002(h) of the Alaska National Interest Lands Conservation Act (ANILCA) of 1980 directed the Secretary of the Interior to:

- o conduct biological and geological studies of the 1.5-million-acre coastal plain portion of the Arctic Refuge (the "1002 area");
- o report the results of those studies to the Congress; and
- o recommend to the Congress whether the 1002 area should be made available for oil and gas exploration and development.

During Congressional deliberations in 1977-80 about management of lands in Alaska, the Congress expressed particular interest in the possibility of significant oil and gas deposits in the 1002 area and in the effect of development of such resources on the area's fish, wildlife, and wilderness resources. The Congress set forth a deliberate process for the Department of the Interior to study, analyze and report on all of these resources and to provide a recommendation on future management of the 1002 area.

### DISCUSSION

#### 1002 Area Oil and Gas Resources

The 1002 area is the Nation's best single opportunity to increase significantly domestic oil production over the next 40 years. It is rated by geologists as the most

outstanding petroleum exploration target in the onshore United States. Data from nearby wells in the Prudhoe Bay area and in the Canadian Beaufort Sea and Mackenzie Delta, combined with promising seismic data gathered on the 1002 area, indicate extensions of producing trends and other geologic conditions exceptionally favorable for discovery of one or more supergiant fields (larger than 500 million barrels).

The area could contain potentially recoverable oil resources of more than 9.2 billion barrels, an amount nearly equal to the Prudhoe Bay oil field, which currently provides almost one-fifth of U.S. domestic production. If this estimate proves to be correct, development of the 1002 area resources would add significantly to domestic reserves.

Production from the 1002 area could begin at a time when a decline in production is expected at Prudhoe Bay. Alaska North Slope crude oil production, mostly from Prudhoe Bay, currently averages 1.8 million barrels per day. But, Prudhoe Bay production is expected to peak this year and decline to 680,000 barrels per day in the year 2000, and to 250,000 barrels per day in 2010. Production of the 1002 area's potential resources could substantially offset this significant and certain decline.

The proximity of the 1002 area to Prudhoe Bay and the Trans-Alaska Pipeline System also is an important factor. Prudhoe Bay provides a fully developed staging area to support exploration and development activities in the 1002 area. Technologies employed at Prudhoe Bay are readily applicable for the 1002 area. The Trans-Alaska Pipeline System provides a ready means for bringing 1002 area oil to U.S. markets. In addition, transportation of 1002 area oil likely would prolong the useful life of the pipeline system and permit continued production from North Slope fields which otherwise would be uneconomical.

Based on the mean conditional recoverable oil estimate of 3.2 billion barrels, 1002 area production by the year 2005 could provide 4 percent of total U.S. demand; provide 8 percent of U.S. production (about 660,000 barrels per day); and reduce imports by nearly 9 percent (table below). This production could provide net national economic benefits of \$79.4 billion, including Federal revenues of \$38.0 billion.

Discovery of 9.2 billion barrels of oil could yield production of more than 1.5 million barrels per day. Estimates of net national economic benefits based on 9.2 billion barrels of oil production, and other economic assumptions, are as high as \$325 billion.

### The 1002 area's potential contribution to U.S. oil demand, production, and imports.

[In thousands of barrels per day. U.S. demand, production, and import data from U.S. Department of Energy, 1985, table 3-10.]

Year.....	2000	2005	2010
U.S. OIL DEMAND <sup>1</sup> .....	16,400	16,000	15,900
1002 AREA OIL PRODUCTION			
Full leasing.....	147	659	404
Percent of U.S. total demand .....	.9	4.0	2.5
U.S. OIL PRODUCTION <sup>2</sup> .....	9,000	8,400	7,600
1002 AREA OIL PRODUCTION			
Full leasing.....	147	659	404
Percent of U.S. total production .....	1.6	7.9	5.3
U.S. OIL IMPORTS (net) .....	7,400	7,600	8,300
1002 AREA OIL PRODUCTION			
Full leasing.....	147	659	404
Percent of U.S. total imports.....	2.0	8.7	4.9

<sup>1</sup>Excludes refinery gains.

<sup>2</sup>Includes natural gas liquids, enhanced oil recovery, and shale oil. Figures for 1002 area production not included in DOE data.

Oil production from the 1002 area would reduce not only the need for imported oil but also the amount of foreign exchange required to pay for petroleum imports, thereby bringing about a more favorable balance of trade. In 1984, the gross cost of importing crude oil and refined petroleum products was more than \$59 billion, an amount approximately equal to 50 percent of the U.S. trade deficit. The cost of imports in 1986 was \$28 billion as a result of lower oil prices. However, the Department of Energy has predicted that by 1995, oil imports may cost the equivalent of \$80 billion.

Production from the 1002 area also would reduce U.S. vulnerability to disruptions in the world oil market and contribute to our national security, particularly in light of the following trends highlighted in the March 1987 Department of Energy report to the President on Energy Security:

- o U.S. oil reserves and production capacity are declining and are expected to decline further over the next decade. The domestic production rate fell about 800,000 barrels per day (9-10 percent drop) in 1986 and is expected to decline an additional 400,000 barrels per day (drop of 4-5 percent more) in 1987. Clearly, should prices continue to fall, production will drop further.
- o U.S. oil consumption, which has exceeded U.S. production since the 1960's, is expected to increase.
- o U.S. oil imports increased almost 1 million barrels per day, to an average of 5.3 million barrels per day for 1986. Between 1990 and 1995, imports are projected to increase to 50 percent of consumption, reaching 8 million to 10 million barrels per day.
- o Persian Gulf countries are expected to supply 30-45 percent of the world's oil by 1995, at which time all OPEC countries combined are projected to provide 45-60 percent of world oil supplies.
- o Reduced U.S. oil exploration and production will increase U.S. reliance on oil from the unstable Persian Gulf region.

America's growing reliance on imported oil for the rest of the century could have potentially serious implications for our national security.

The economic and political consequences of such trends are adverse to U.S. interests. Because the 1002 area is the best domestic opportunity to help reverse or reduce the decline in U.S. oil reserves and production, the public interest demands that the area be made available for oil and gas exploration and development, conducted in an orderly and sensitive manner to avoid unnecessary adverse effects on the environment.

## Environmental Consequences of Development

The 1002 area provides a variety of outstanding arctic habitats which support fish and wildlife species of national and international significance, including muskoxen (reintroduced), snow geese, and the Porcupine caribou herd--the sixth largest caribou herd in North America.

More than 50 separate biological studies conducted in the 1002 area since 1980 have been documented in a series of biological baseline studies. These data have been synthesized in the final report and legislative environmental impact statement (final report/LEIS) and used to provide the best assessment of the potential environmental consequences of oil development in the 1002 area.

Potential impacts were assessed at three stages of oil activity: exploration, development drilling, and production. The impact analyses predicted that exploration and development drilling activities would generate only minor or negligible effects on all wildlife resources on the 1002 area. Therefore, the focus of potential impacts is on production and assumes the discovery of 3.2 billion barrels of producible oil (mean conditional recoverable estimate). The impact analyses concluded that in fact more than 9.2 billion barrels could be produced with no significant additional environmental impacts than would result from production of 3.2 billion barrels.

Production of billions of barrels of oil is expected to directly affect only 12,650 acres or 0.8 percent of the 1002 area. The consequences of this level of production on important species such as brown bears, snow geese, wolves, and moose, as well as the Central Arctic caribou herd, are expected to be negligible, minor, or moderate.

The only potential "major" effects are attendant to oil production and are limited to the Porcupine caribou herd and the reintroduced muskox herd. "Major biological effects," for purposes of the analysis, were defined as: "widespread, long-term change in habitat availability or quality which would likely modify natural abundance or distribution of species. Modification will persist at least as long as modifying influences exist." Therefore, "major" is not synonymous with adverse. Either of two conditions, change in species distribution or population dynamics, would result in a rating of "major."

### PORCUPINE AND CENTRAL ARCTIC CARIBOU HERDS

Although comparing the effects of Prudhoe Bay development on the Central Arctic caribou herd with the potential effects of similar activities in the 1002 area on the Porcupine caribou herd must be done with caution, experiences at Prudhoe Bay provide a strong measure of assurance that caribou can coexist successfully with oil development.

Substantial empirical evidence has been gathered over the years regarding the interaction of the Central Arctic herd with the Prudhoe Bay complex. Although that herd has had a considerable portion of its range, including calving areas, occupied by oil-production facilities, the herd has prospered and, in fact, tripled in size since oil activities began in the area in 1968.

The fact that billions of barrels of oil have been produced and transported from Prudhoe Bay while the area's fish and wildlife resources continue to thrive indicates that effective environmental techniques and technologies are available for use in the 1002 area, a short distance to the east.

Biological studies have found that the Porcupine caribou herd calves in different areas each year--throughout the 1002 area, elsewhere in the Arctic Refuge, and in Canada--on an area totaling approximately 8.9 million acres. Moreover, the Porcupine caribou herd is present in the 1002 area for calving, postcalving, and insect-relief activities only 6 to 8 weeks annually, primarily from mid-May to mid-July.

The Porcupine caribou herd has shown some preference for calving on the Arctic Refuge coastal plain, including the upper Jago River area (84,000 acres or 5.4 percent of the 1002 area) where portions of the herd have calved in approximately half of the last 15 years. Thus, a potential "major" consequence would be the displacement of those portions of the herd seeking to calve in the upper Jago River area. This would be the case only if the area were the site of a major producing oil field. It is unlikely, though possible, that such displacement would result in any appreciable decline in herd size.

It is important to note that this issue of displacement is a primary matter of concern regarding the Porcupine caribou herd. Although it is not known whether development, including roads and oil pipelines, could affect the migratory habits of the herd, it already encounters the Dempster Highway in Canada during its annual migrations and crosses the road with no measured adverse effects. Similarly, other caribou herds in Alaska and Canada (i.e., Nelchina, Fortymile, and Central Arctic) routinely cross highway and road systems. Both the Central Arctic and Nelchina herds also routinely cross the Trans-Alaska Pipeline with no adverse effects. This pattern of successful interaction with roads and pipelines during migration is expected for the Porcupine caribou herd.

In addition, the Porcupine caribou herd should not be affected adversely during the short-term period (6 to 10 days) that they use 1002 area habitats for insect relief following calving. The ability of the herd to move to insect-relief areas along the coast is unlikely to be significantly affected by pipeline/road corridors crossing the 1002 area.

Furthermore, the long period of time required to bring commercial fields into production would provide ample opportunity to develop any additional mitigation measures as may be needed to address unexpected impacts.

Biological predictions necessarily are cautious. In the 1972 environmental evaluation for the Trans-Alaska Pipeline System, the following possible effects on the Central Arctic herd were predicted: "The combined barrier effects of the highway and pipeline might very well reduce the number of animals using the winter range east of the highway." As events have demonstrated, however, these concerns subsequently were resolved completely with environmentally sensitive techniques and technologies. Biological predictions in the final report/LEIS for the 1002 area naturally are cautious as well.

#### MUSKOXEN

Muskoxen disappeared from the 1002 area at the turn of the century. Those that now occupy the area are the result of a successful reintroduction program. The potential effects of oil and gas activities on the area's muskoxen also are unknown, although biologists predict that "major" effects could be: (1) substantial displacement from currently used habitat and (2) a slowing of the herd's growth rate, as distinguished from a diminution in herd size.

#### Environmental Safeguards and the Leasing Process

The potential effects predicted above have been considered fully throughout the final report/LEIS and in the development of my recommendations. I also have recognized that site-specific measures can be taken to avoid unnecessary adverse effects on the environment from oil production in the 1002 area.

The step-by-step environmental planning, review, and evaluation procedures included in a leasing program provide the best opportunity for the Department of the Interior to make decisions based on the most accurate and advanced information available at each step of the process.

The following steps might be included in such a leasing program, although the exact process would depend upon the leasing program established by the Congress:

- o Compliance with the National Environmental Policy Act (NEPA) for each lease sale. Lease stipulations and mitigation measures are identified at this stage and are in effect for the entire term of the specified lease.
- o Compliance with NEPA for each exploration plan.

- o Compliance by each operator/lessee, or the Department of the Interior, as appropriate with such laws as NEPA, the Clean Air Act, Clean Water Act, Endangered Species Act, National Historic Preservation Act, and ANILCA. The lease also would be governed by Departmental regulations.
- o Compliance with NEPA for each operator/lessee development and production plan.

#### SECRETARY'S RECOMMENDATION

I recommend that the Congress direct the Secretary of the Interior (Secretary) to conduct an orderly oil and gas leasing program for the entire 1.5-million-acre 1002 area at such pace and in such circumstances as he determines will avoid unnecessary adverse effects on the environment.

- o The Secretary should be given authority to establish requirements for oil and gas operations that allow them to proceed in an economically reasonable manner but avoid unnecessary adverse effects on the 1002 area's wildlife, habitat, and environment.
- o Competitive leasing authority should be granted to the Secretary to delegate as he believes proper, and should be similar to that used to lease the National Petroleum Reserve in Alaska. The Secretary should also have authority to decide such issues as unitization, drainage, diligence, and lease terms and management.
- o The Secretary should be granted authority to suspend or terminate any leases in the 1002 area at any time, in the same manner prescribed by the Outer Continental Shelf Lands Act as amended. If leases are terminated for reasons beyond the control of the operators/lessees, operators/lessees should be compensated in a manner similar to that prescribed by the Outer Continental Shelf Lands Act as amended.
- o The Secretary should have the authority to require lessees to restore the leased tract to protect environmental values to the extent reasonably possible and desirable.
- o The Secretary should be granted authority, which supersedes ANILCA Title XI, to grant rights-of-way and easements across 1002 area lands for oil- and gas-related activities and facilities. This authority must allow the Secretary to require siting and modifications of proposed facilities to avoid unnecessary duplication of roads and pipelines.
- o All geological and geophysical data acquired with respect to the 1002 area should be shared, upon request, with the Secretary who should ensure its confidentiality.

In light of the extensive environmental analysis done to prepare the final report/LEIS, I recommend that it be adopted statutorily as the programmatic EIS for a leasing program for the 1002 area.

Because Section 1002(i) of ANILCA withdrew the 1002 area from operation of the mineral leasing laws, and Section 1003 prohibited "leasing or other development leading to the production of oil and gas" in the area "until authorized by an Act of Congress," specific legislation must be enacted to implement my recommendations.

In recommending that Congress enact legislation to open the 1002 area for oil and gas leasing, I also recommend that Congress enact legislation to open the Kaktovik Inupiat Corporation (KIC)/Arctic Slope Regional Corporation (ASRC) lands within the Arctic Refuge to similar activities.

The ASRC's right to develop and produce any oil and gas which may underlie the KIC/ASRC lands within the Arctic Refuge is, by virtue of the 1983 Chandler Lake Exchange Agreement, expressly contingent upon Congressional authorization of oil and gas leasing or development and production within the 1002 area, or on the KIC/ASRC lands specifically.<sup>1</sup>

### **Selection Of Preferred Alternative (Alternative A)**

I have selected Alternative A, Full Leasing, as my preferred alternative for management of the 1002 area, after evaluating carefully the five alternatives in Chapter V of the final report/LEIS, pursuant to the requirements of the National Environmental Policy Act. I believe that Alternative A best meets the Nation's goals and responsibilities.

Before selecting this alternative, I considered the information presented in the final report/LEIS, the draft recommendation of the Assistant Secretary for Fish and Wildlife and Parks, comments and information received during the public-comment period, and consultations with the Government of Canada.

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<sup>1</sup>KIC selected and received conveyance of surface estate in these lands pursuant to the Alaska Native Claims Settlement Act (ANCSA) and ANILCA. In passing ANILCA, Congress gave ASRC the option of acquiring subsurface estate in these lands if, in the future, it opened the 1002 area to commercial oil and gas development. By entering into the Chandler Lake Agreement pursuant to ANILCA and ANCSA, the Department of the Interior in effect allowed ASRC to accelerate exercising this option in return for conveying to the Federal government valuable ASRC park inholdings the Department would not have obtained otherwise. ASRC also agreed that development and production of oil and gas on the Arctic Refuge lands would be contingent upon a subsequent act of the Congress.

I have considered the 1002 area's unique opportunity to provide potentially enormous quantities of domestic oil, in light of America's increasing dependence on imports. Oil production from the 1002 area could begin at a time when America's largest producing field, Prudhoe Bay, will be diminishing. I also have considered the potential \$79 billion to \$325 billion contribution to the Nation's economy from development of the 1002 area's estimated oil resources, as well as the favorable effects on our balance of trade and national security.

In addition, I evaluated the potential effects of developing these potential hydrocarbon resources on the wilderness, wildlife, and subsistence values of the coastal plain. Many commenters indicated the need and desire to conserve the significant environmental values of the 1002 area. Public comment also overwhelmingly supported opening the area for oil and gas development. My recommendation reflects my firm belief, based on demonstrated success at Prudhoe Bay and elsewhere, that oil and gas activities can be conducted in the 1002 area in a manner consistent with the need and desire to conserve the area's significant environmental values.

Our ability to conduct oil exploration, development, and production in a careful and environmentally sound manner is a factor leading me to designate Alternative A as the environmentally preferred alternative. This conclusion is based on the environmental impacts of substitute sources of energy. The Department of the Interior's analysis of these impacts, described in Chapter VI of the final report/LEIS, concludes that each of the available substitute possibilities involves a large measure of environmental harm. Also, in the event of a future energy crisis, there would be strong pressure to develop rapidly, promising areas like the 1002 area, without regard for environmental factors.

### **Alternative E--Wilderness Designation**

Several commenters supported Alternative E, which calls for designation of the 1002 area as wilderness<sup>2</sup> pursuant to the 1964 Wilderness Act and ANILCA. I am persuaded that such designation is not necessary to protect the 1002 area environment and is not in the best interest of the Nation.

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<sup>2</sup>The Wilderness Act provides that "there shall be no commercial enterprise and no permanent road within any wilderness area and, except as necessary to meet minimum requirements for the administration of the area \* \* \* there shall be no temporary roads, no use of motor vehicles, motorized equipment, or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area" 16 U.S.C. 113(c). Congress has recognized some special uses allowable in Alaskan wilderness areas which are described in Chapter V of the final report/LEIS.

A criterion used in determining whether certain lands should be designated wilderness is uniqueness. In Alaska, there are approximately 55 million acres of Federal land set aside by statute as wilderness and another 80 million acres managed as national parks, preserves, wildlife refuges, wild and scenic rivers, and conservation or recreation areas. In addition, there are millions of acres in Alaska which constitute nonstatutory wilderness. Moreover, the 1.5-million-acre 1002 area (about 8 percent of the Arctic Refuge) is bordered to the south and east by more than 8 million acres of designated wilderness. (For reference, 8 million acres is equal to the combined size of the States of Connecticut and Massachusetts; 55 million acres is equal to the combined acreage of the six New England States, Delaware, Maryland, and New Jersey.) To the east of the 1002 area is Canada's 3-million-acre Northern Yukon National Park.

Given the existence of extensive lands set aside for wilderness and other preservation purposes in this area and in Alaska, the 1002 area's value as statutory wilderness is not unique.

On the other hand, the enormous oil potential of the 1002 area, believed to be America's last onshore area with such potential, provides a unique opportunity to contribute to the Nation's energy, economic, and national security. Because environmentally sensitive management techniques and technologies are available and can be employed to protect the important fish and wildlife values of the coastal plain, we need not forgo the opportunity to develop the 1002 area's potential energy resources.

The fish and wildlife species that might be affected by oil and gas activities in the 1002 area are very important but are neither threatened nor endangered. In fact, they are relatively abundant in Alaska and North America. As noted earlier, the Porcupine caribou herd is the sixth largest caribou herd in North America. The muskox reintroduction effort has been so successful that some hunting is now permitted. Once again, the potential effects of oil production on other wildlife values are expected to be moderate to negligible. Constant monitoring of oil activities is likely to ensure that this continues to be the case. Most effects of any development would disappear with time, once activities cease and reclamation requirements are fulfilled.

With regard to subsistence, potential effects of 1002 area oil production fall into two categories: effects on the village of Kaktovik and effects on villages far removed from the 1002 area. In the case of Kaktovik, it is possible that a "major" restriction of subsistence activities could occur. These consequences would not likely result from reduced wildlife resources but rather could result from the physical changes proximate to Kaktovik which could interfere with traditional activities. Moreover, distribution patterns of wildlife resources likely to be affected by oil production would necessitate some alterations in traditional subsistence patterns.

The Department of the Interior is committed to working with the village of Kaktovik, the North Slope Borough, and the State of Alaska to minimize the effects of oil activities on the subsistence activities of Kaktovik residents.

Subsistence effects on villages outside the 1002 area, including those in Canada, are expected to be minimal. Because it is most probable that oil activities will not create adverse population changes in the Porcupine caribou herd, other villages which annually use these caribou resources should not be affected. Migratory patterns of the herd also are likely to be unaffected by oil activities. Accordingly, the herd is expected to adhere to its traditional patterns which make it available annually to these villages.

I recognize the importance of ensuring the continued customary and traditional use of this internationally shared resource. I am committed to efforts that will conserve the Porcupine caribou herd for future generations of people who rely on this resource for nutritional, cultural, and other essential needs. The Porcupine caribou agreement we are pursuing with Canada will enhance international cooperation and coordination on management of the Porcupine caribou herd so that both countries can effectively secure the availability of this resource.

Some proponents of Alternative E have suggested that the 1-in-5 probability of finding economically recoverable oil resources in the 1002 area does not outweigh the potential environmental risks.

First, the chances of finding oil in the 1002 area are rated by geologists to be excellent compared to other frontier regions. Second, biological assessments have concluded that exploratory drilling following leasing would have minor or negligible environmental effects. Finally, if no oil is discovered, effects on the 1002 area environment would be negligible and the area would not likely be an exploration target in the event of future oil-supply disruptions.

### **Alternative D--No Action**

For many of the reasons described above, Alternative D, No Action, is also not the preferable choice.

Authority to lease the 1002 area is needed now in order to determine whether economically recoverable reserves exist and to produce those resources for America's future. Even if exploration resulted in commercial finds today, it could be as long as 10 to 15 years before those resources would be brought into production. If we delay, our inaction would serve to blindfold America to its ability to increase domestic production. It also would send a dangerous signal to the world oil market that America is not willing to help itself avoid increased dependence on the Middle East's substantial concentration of world oil supply.

## **Alternative C--Further Exploration**

Alternative C, which would provide for further exploration before the Congress enacts leasing authority, was rejected for several reasons.

Without authorization for a leasing program, the private sector cannot be expected to invest financial resources in exploring the 1002 area. Incentive for additional exploration can be provided only by expected returns if commercially producible oil is discovered. This incentive exists only when leases can be acquired and subsequently developed.

Lacking proper economic incentives, Alternative C could necessitate a Federal exploration program for the 1002 area. Such an approach has serious disadvantages. A federally funded exploration program would require substantial outlays at a time of severe Federal budget constraint. Moreover, history shows that it is unlikely that the Federal government could conduct an effective and timely exploration program. Government agencies are not geared to make large, high-risk investment decisions. The Federal government has been harshly criticized for its lack of success in managing a federal exploration program for the National Petroleum Reserve in Alaska.

## **Alternative B--Limited Leasing**

Alternative B would limit the amount of the 1002 area available for exploration and development by excluding the upper Jago River area. This alternative would lower the oil resource estimate for the 1002 area by 25 percent and reduce the mean expected net national economic benefits by about 30 percent.

The primary difference in environmental concerns between Alternatives A and B is the unlikely but potential risk to the Porcupine caribou herd from oil production activities in the upper Jago River area.

Such activities are likely to displace portions of the Porcupine caribou herd from that area, but it is probable that such displacement would take place without consequential adverse population effects. The mere presence of such a risk makes no compelling case for forgoing the potential for billions of barrels of oil and the attendant national economic and energy security benefits. In addition, as noted earlier, the long period of time required to bring oil into production provides ample opportunity to develop any additional mitigation measures as may be necessary to address unexpected impacts.

Given the proven record that potential environmental effects of oil production can be avoided substantially, and given America's need for additional domestic energy resources, it is essential that the Congress enact legislation to authorize the Secretary of the Interior to conduct an orderly oil and gas leasing program for the entire 1002 area.

## **CONSULTATIONS WITH CANADA**

In conducting biological studies for the 1002 area related to the Porcupine caribou herd, the U.S. Fish and Wildlife Service worked closely with biologists from the State of Alaska and the Canadian Wildlife Service. The Canadian Wildlife Service and its Yukon Wildlife Branch conducted independent studies of the Porcupine caribou herd during 1978-81 relative to potential oil and gas development in Canada's Yukon and Northwest Territories. Prior to assessing potential environmental consequences of oil and gas development in the 1002 area, the Fish and Wildlife Service conducted a Caribou Impact Analysis Workshop in which Canadian biologists participated at our invitation.

In addition to these technical consultations, representatives of the Fish and Wildlife Service and Canadian Wildlife Service for the past several years have been negotiating a separate Porcupine caribou herd agreement. The final draft agreement, now being reviewed by the Department of the Interior, calls for both countries to take appropriate steps to ensure international cooperation and coordination of actions that might affect the Porcupine caribou herd in order to conserve the species and its habitat. The agreement would establish an advisory board to make recommendations and provide advice to each government to assist in this management effort. Such an agreement will enhance the consultative mechanisms between Canada and the United States on future activities that may be conducted on either side of the border.

When the draft 1002(h) report was made available to the Congress and public for review in November 1986, the Department of the Interior's Assistant Secretary for Fish and Wildlife and Parks also invited the Government of Canada to comment on the draft. To date, three consultation sessions have been held, two in Ottawa and one in Washington, D.C. These sessions provided both countries the opportunity to discuss the biological and geological data upon which this final report/LEIS is based and to address the assessment of impacts on the Porcupine caribou herd and other wildlife resources by possible development activities. Consultations will continue upon request by either country, and the Department of the Interior looks forward to future opportunities to discuss with Canada resource issues of mutual concern.

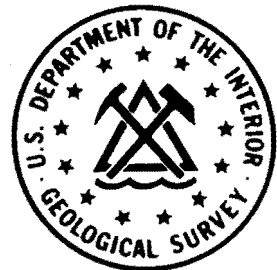
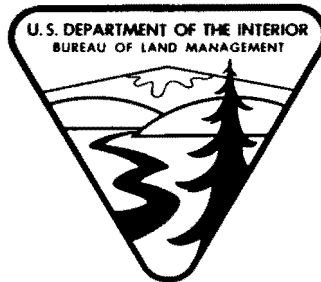


## **CONCLUSION**

The Secretary of the Interior should seek both to protect the Nation's wildlife resources and to enhance America's ability to meet its energy needs with domestic energy resources on Federal lands. For the Arctic National Wildlife Refuge coastal plain, these goals affect not only the State of Alaska but also all 240 million American citizens to whom the 1002 area belongs.

This Nation has proven that it need not choose between an improving environment on the one hand, and exploration and development of the energy resources required for growth and survival on the other. We can have both. It is my firm belief that an orderly oil and gas leasing program for the entire 1002 area can be conducted in concert with America's environmental goals.

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.



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