

ANWR-

BACKGROUND

HISTORY

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The Juneau Report is published by Standard Alaska Production Company (SAPC) Government Affairs Department to provide an overview of issues and legislation as they relate to the petroleum industry. Opinions of authors expressed here do not necessarily reflect the opinions of the company. The Juneau Report is edited by Jim Palmer. Inquiries should be directed to him or Bob Straub, SAPC Government Affairs, 564-5403 or 564-5537.

#### In This Issue:

- *Commentary, Page 2*
- *Caribou in ANWR, Page 3*

### Arctic National Wildlife Refuge (ANWR):

# Congress will consider opening coastal plain for exploration

*With domestic production falling sharply, nation will need major new oil discoveries*

By Tim Bradner

*Editor's Note: This issue of Juneau Report is devoted entirely to the Arctic National Wildlife Refuge (ANWR) and the question of opening a small part of the refuge to oil exploration. It is an issue of major importance to the nation, the State of Alaska and the petroleum industry.*

Sometime in 1987, Congress will begin consideration of the opening of 1.5 million acres in the northernmost section of the 19-million-acre Arctic National Wildlife Refuge (ANWR) to oil and gas exploration. The Department of the Interior, in a formal report to be submitted to Congress this spring, will recommend allowing exploration in the coastal plain of ANWR, a stretch of gently rolling tundra extending from the foothills of the Brooks Range north to the Arctic Ocean. It will involve about 8% of the Arctic refuge area, which is itself about half the size of the State of Washington.

This will set off another major Alaska environmental controversy in the nation's capital, as environmental groups fight to keep the refuge closed. It will be a battle reminiscent of fights over the Alaska National Interest Lands Legislation (ANILCA) in 1980 when conservation groups

If oil is eventually found in the coastal plain, actual production facilities will take up a very small area. As examples, the Prudhoe Bay unit area involves 242,000 acres of leased acreage. The Kuparuk River unit, which many geologists believe to be more typical of what might be found in ANWR, covers about 150,000 acres of leases. *But in both these huge oilfields, including the smaller Milne Point field, only 8,000 acres are actually occupied by production pads, roads, pipelines or other facilities according to 1983 State Fish and Game surveys.*

By the time any discoveries in the coastal plain are developed, technological progress within the industry will allow development to take place taking even less space, through new "directional drilling" techniques and smaller, more compact field production facilities.

This is demonstrated in the new Milne Point, Endicott and Lisburne fields near Prudhoe Bay, where industry's experience in Prudhoe Bay and Kuparuk has resulted in the design of smaller production modules.

#### Congress Ordered Assessment

When Congress passed the Alaska National Interest



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- *Commentary, Page 2*
- *Caribou in ANWR, Page 3*
- *ANWR geologic potential, Page 5*

### A look at the statistics

## ANWR oil is vital to U.S. energy security

It was 1973, the eve of OPEC's first oil embargo. Congress faced an important national policy choice over northern Alaska and the nation's energy security.

The decision was made: Congress approved legislation cutting through a complex web of environmental litigation that had blocked construction of the trans-Alaska pipeline for four years.

It was prophetic: Four years later a new oil shortage loomed when oil production was cut in Iran's 1978 revolution. But by then the Alaska pipeline was finished and the Prudhoe Bay field was in production. The United States — and the world generally, analysts now agree — escaped any actual disruption of oil supplies.

Oil prices were affected, to be sure. But that occurred because panic-stricken oil buyers, fearing shortages in Japan and Europe, bid up prices. *But the shortfall never really appeared, mainly due to new U. S. production in northern Alaska.*

In 1986 Congress faces another decision, similar in some ways, yet different in others, to that in 1973: Opening the coastal plain of the Arctic National Wildlife Refuge (ANWR) is an important environmental decision affecting Alaska, just as was approving the pipeline in 1973.

It is also an important energy-security decision with broad ramifications for the nation's economy. But this seems less evident today, amid a worldwide oil glut, than it was in 1973.

Most thoughtful observers, with ample data and statistics readily at hand, see beyond today's temporary oil surplus and low prices to the emergence of more shortages and a new OPEC, this time dominated by Persian Gulf producers, some clearly hostile to the U.S. It may come sooner than we think.

If Congress allows exploration in ANWR, new production could be coming out of Alaska by the year 2000, just about the time oil shortages may be reappearing. It would dampen the shortfall, just as did Prudhoe Bay during Iran's revolution in 1978.

*Continued on page 6*

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This will set off another major Alaska environmental controversy in the nation's capital, as environmental groups fight to keep the refuge closed. It will be a battle reminiscent of fights over the Alaska National Interest Lands Legislation (ANILCA) in 1980, when conservation groups tried to extend wilderness designation to two-thirds of Alaska's land area, and the effort by conservationists in the early 1970s to stop construction of the trans-Alaska pipeline, which now supplies one fifth of the nation's oil.

In geologists' opinion, ANWR's coastal plain has the best potential of any frontier region in the U.S. for major new oil discoveries — some, possibly, of the magnitude of Prudhoe Bay. By the turn of the century — 13 years from now — U.S. domestic oil reserves will be seriously depleted and imports of foreign oil sharply increased, with serious consequences for U.S. energy security, the nation's economy and the balance of trade. New domestic oil discoveries can reduce those effects. But so far, exploration in other U.S. frontier areas has been disappointing. ANWR may be the nation's best hope for large new oil finds, the kind needed to make substantial contributions to domestic reserves.

#### Exploration in Refuges: Nothing New

Oil exploration and production in national wildlife refuges is nothing new, and federal law now allows these activities in many refuges.

If oil is eventually found in the coastal plain, actual production facilities will take up a very small area. As examples, the Prudhoe Bay unit area involves 242,000 acres of leased acreage. The Kuparuk River unit, which many geologists believe to be more typical of what might be found in ANWR, covers about 150,000 acres of leases. *But in both these huge oilfields, including the smaller Milne Point field, only 8,000 acres are actually occupied by production pads, roads, pipelines or other facilities according to 1983 State Fish and Game surveys.*

By the time any discoveries in the coastal plain are developed, technological progress within the industry will allow development to take place taking even less space, through new "directional drilling" techniques and smaller, more compact field production facilities.

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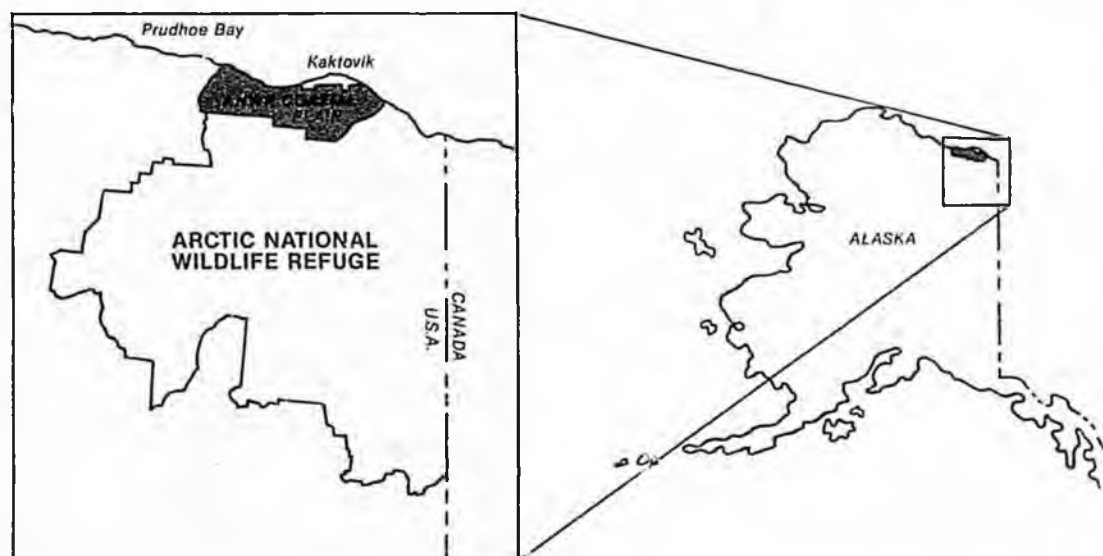
#### Congress Ordered Assessment

When Congress passed the Alaska National Interest Conservation Lands Act of 1980, it recognized the coastal plain's strategic importance. ANILCA formally established the Arctic refuge (it had been a wildlife range before, a federal administrative land unit) and also designated half the refuge as a wilderness area, the most restrictive of federal land classifications.

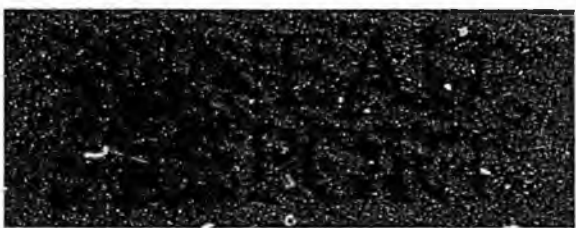
Congress then ordered the Department of the Interior, in Section 1002(h) of ANILCA, to assess the petroleum potential of the coastal plain and to make a formal recommendation to Congress in the fall of 1986. Extensive assessments of the area's petroleum potential and wildlife have been carried out, but environmental litigation has delayed submission of the final report to Congress. Conservation groups sued, claiming Interior's report should require a formal Environmental Impact Statement, a lengthy procedure that would delay the report. In late November, Interior released a draft of the report and its recommendations, which were to open the coastal plain to exploration. Public hearings are scheduled, and unless the environmental lawsuits result in more delay, a final report and recommendations will go to Congress sometime this spring.

*Continued on page 5*

### Area proposed for oil and gas exploration



*The coastal plain of ANWR, shown in dark brown, comprises 1.5 million acres . . . about eight percent of the total area.*



Commentary

## ANWR's oil is needed to carry us into the 21st century



By George N. Nelson  
President, Standard Alaska  
Production Company

The Coastal Plain of the Arctic National Wildlife Refuge is of critical importance to the State of Alaska and to the oil companies doing business here. But the ANWR Coastal Plain is also very important to the residents of the other 49 states, who depend on Alaska North Slope crude for 20 percent of domestic crude supplies.

The fact is that existing North Slope oilfields — Prudhoe Bay — Kuparuk — Milne Point — Lisburne — and Endicott — will be producing at a combined rate of only about 600,000 barrels a day by the year 2000. That is a little more than a quarter of current North Slope production levels.

At the same point in time, just 14 years down the road, production from currently developed U.S. oilfields will drop from almost 9 million barrels a day to less than 4 million barrels a day, as oil producing fields become depleted. Unless we find new oil reserves, and a lot of them, we will have no alternative but to increase crude oil imports.

Realistically speaking, we will have no choice. Only an extreme optimist would expect to explore and find 5 million barrels a day of new production in the next 13 years — especially at today's crude prices. But we may be able to control the extent of those increases in imports.

The best way to do that is to look first where you have the best chance of finding large deposits of oil.

One such project, and one which is every bit as exciting as Prudhoe Bay itself, is the Coastal Plain of the Arctic National Wildlife Refuge.

The Arctic National Wildlife refuge, or ANWR, as it is called, is located on the eastern end of Alaska's North Slope. The State of Alaska, the Federal Government, and the oil industry agree that the Coastal Plain of ANWR is the best opportunity on the entire North American Continent for finding a super giant or giant oilfield.

The hopes of finding a large oilfield on the Coastal Plain at this point are based solely on the results of geological and geophysical data. ANWR is sandwiched between the world class oilfields of the Prudhoe Bay area, and the recent large discoveries in the Mackenzie Delta area in the Canadian Beaufort Sea. There are oil stained rock outcroppings visible on the surface in the Coastal Plain, and we have done some important seismic work there.

There is every reason to explore this area, and no reason to delay this work, especially in light of the 10 to 15 years it will take to bring any discovery into production. But none of this will occur unless Congress is persuaded to open the Coastal Plain for leasing.

You would think this would not be a difficult decision as the Coastal Plain represents less than 8 percent of the refuge, and 44 percent of the refuge is *already* permanently locked away in wilderness status. But ANWR, the badly needed economic activity on Alaska's North Slope, and the oil we will need to carry us into the 21st century, are being held hostage.

Special interest groups are already hard at work lobbying Congressmen from all 50 states, to deny access to that 8 percent of the refuge. This despite our excellent environmental record in the North Slope oil fields which we have already developed.

# Standard Alaskans Speak Out

Differing views on issues important to our state

EDITOR'S NOTE: For this special issue on the Arctic National Wildlife Refuge (ANWR) we addressed our question exclusively to Standard Alaska employees in the environmental, engineering, and construction disciplines. The question: As professionals who have been involved in petroleum development on the North Slope for more than 10 years, can you tell us why you believe the oil industry can develop the Arctic National Wildlife Refuge without adverse effects to the environment?



Sharon Hillman

### Sharon Hillman Senior Environmental Engineer

The Arctic National Wildlife Refuge is an intriguing and beautiful extension of the arctic coastal plain. My work has covered the entire arctic coast and has focused on pollution control, including oil and chemical spill response, solid and hazardous waste management, and assuring company compliance with regulatory requirements. Federal and Alaska State regulations require that we be very careful operators, especially in the arctic environment. Our success can be observed in our clean operations. In the longstanding Prudhoe Bay Field, the new Endicott Development and the numerous onshore and offshore exploration operations, there have been no major oil or chemical spills, nor has there been an oil blowout offshore. The industry has developed one of the most active oil spill response cooperative groups to assist with spill contingency work and to maintain a large and specialized spill response equipment inventory. This cooperative group has developed arctic response tools such as the *Alaska Beaufort Sea Coastal Resources Manual* showing biological and social resources, shoreline types, and logistical response considerations for the entire coastline from Barrow to the Canadian border. Our spill response capability, considered one of the foremost in the world, is directly applicable to the ANWR area, and our active research and development activities continue to provide improvements.

All of these planning and field tools are important to our ability to work in harmony with ANWR's arctic environment. Equally important are the individual facility supervisors and project managers in our field locations. The attitudes and priorities of our field people to protect the environment and prevent problems are paramount. These attitudes and work ethics are the real reasons we have clean operations. SAPC supports the philosophy that it is good business to work in harmony with the Alaskan environment. Our operations show it.

### Mark A. Fraker Environmental Scientist



Mark A. Fraker

We all know about the success story at Prudhoe Bay — a growing caribou population, birds nesting in the oilfield, and a good record of care for the physical environment. I would like to approach the question from a couple of other perspectives.

First, the plants and animals of the North Slope are tough organisms that are at home in the Arctic. Many people have the impression that animals like the caribou and snow geese are on the brink of disaster and that any disturbance will push them past their limits. This is a natural thing for us tropical animals to think, because we are not adapted either physiologically or culturally to the Arctic. The organisms that have evolved in the Arctic for millions of years have developed special adaptations that permit them to live there, just as comfortably as tropical animals, like monkeys and parrots, live in the tropics.

Second, the Arctic environment is not a particularly fragile place. The plants and animals that live there have formed ecosystems that are just as resilient and persistent as those found in more temperate regions. The reputation that Arctic areas have for fragility and sensitivity seems to be based entirely on the fact that disturbance to the surface layer of the tundra can remove the insulation that keeps the permafrost from melting. If this type of damage oc-

curs, there can be unsightly erosion. However, the lessons about how and why to protect the insulative layer of vegetative mat were learned years ago and proper precautions are now taken as a matter of routine. Agencies ensure that these measures are employed.

There is no doubt that the oil industry has the skills and sensitivity to explore and develop the Arctic National Wildlife Refuge in a way that will enable caribou, muskoxen, and other wildlife to coexist and even prosper alongside petroleum development, just as they have near Prudhoe Bay.

### Dan B. Huxley Manager, Development Planning



Dan B. Huxley

I look at Prudhoe Bay and TAPS as the key indicators of industry performance to date, and they clearly show that impacts, in terms of wildlife population trends, have been minimal. The environmental setting on the ANWR coast is quite similar, a surprise to many visitors who expect something along the lines of Yosemite. In reality, the place is an arctic desert covered with ice and snow and largely uninhabitable nine months of the year.

From an engineer's perspective, we've come a long way since the early 1970s in understanding how best to build and operate arctic facilities. Looking at the more recent developments at Kuparuk, Milne Point, Lisburne, and now Endicott, you can see continued improvements in arctic design based on our increased understanding of the environment. For example, facilities are now being shared among units, pipelines and roads are being consolidated in corridors, and drill pads are made more compact through reduced well spacing. At ANWR, there's no doubt that we'll see further improvements.



Deb Slaybaugh

### Deb Slaybaugh Environmental Scientist

The scientific record speaks for itself. The caribou population that uses the Prudhoe Bay area is increasing between 15-18% annually, even though there is more development within its range than for any North American caribou herd. Birds continue to use the Prudhoe Bay oil field, which has been in existence for over 10 years. A visitor to Prudhoe during the summer usually is not disappointed in terms of wildlife viewing opportunities. This is in marked contrast to those who would have you believe that oil field development and wildlife use are mutually exclusive.

The Alaska Oil and Gas Association (AOGA) has funded LGL Alaska Research Associates to conduct a systematic study of bird use, in the Prudhoe Bay oilfield, the more developed with the less developed areas within the field. Preliminary results show that oil development has not significantly modified the bird use of the area.

There are other site-specific research projects we have sponsored such as the banding and neck-collaring of the Howe Island Snow Geese (Endicott Project), the effects of industrial activity on nesting eiders at Thetis Island (Mukluk Project), and bird use of the area adjacent to the West Dock road (Prudhoe Bay Waterflood Project), these efforts do not document significant impacts to birds. Our history and its accompanying scientific record produce the confidence I have in knowing that the much-needed oil reserves in ANWR can be developed with little or no impact to the biological resources of the refuge.

# Caribou in ANWR: The key issue

## Caribou adapt well to oil elsewhere on North Slope: Is the Porcupine Herd Different?

Are caribou in the Porcupine Herd in northeast Alaska really different from caribou in the Central Arctic Herd just to the west? Or, for that matter, the Nelchina Herd in Interior Alaska?

Some biologists think so. Others say no.

This is the crux of one controversial question that faces Congress as it considers whether to open the coastal plain of the Arctic National Wildlife Refuge (ANWR) in northeast Alaska to oil and gas exploration.

Environmental groups and some state and federal game officials argue that oil development in coastal parts of the refuge could harm the Porcupine Herd, which numbers 180,000 animals and migrates yearly to the North Slope from wintering grounds south of the Brooks Range. To protect this herd, exploration should be barred from the coastal plain, they argue.

Others disagree: Fifteen years of experience with the Alaskan Central Arctic and Nelchina caribou herds, whose ranges are bisected by present oilfields and pipelines, show that drilling can have a negligible effect, if any at all.

Not only are those animals suffering no apparent ill effects, but herd populations are booming, contrary to dire predictions by environmental groups who tried to stop pipeline construction in the early 1970s. The Central Arctic Herd, which now numbers about 18,000, has more than quadrupled in size since oil activity began. The Nelchina Herd, which must migrate directly across the trans-Alaska pipeline in Interior Alaska, has also enjoyed a healthy population gain, during the years of pipeline construction and continuing afterward.

### Is The Porcupine Herd Different?

Opponents to ANWR exploration have a reply to this: What's different is that the Porcupine Herd is much larger and that its animals are not as accustomed to human activity as the Central Arctic and Nelchina herds. Also, the coastal plain of the refuge, where exploration would take place, is the main calving ground for the Porcupine Herd. Calving is the most sensitive time for female caribou, and disturbances in summer could prove very disruptive, they argue.

But the Central Arctic Herd now uses parts of the Kuparuk oilfield for calving. With the Central Arctic population rapidly growing, there seems no serious adverse effect created by the presence of oil production installations in the calving areas.

Furthermore, the Porcupine Herd itself isn't free of man-created disturbances. The Dempster Highway in Yukon Territory cuts across one major winter range of the herd. Porcupine caribou cross the highway twice yearly, with no apparent ill effects.

As for Porcupine caribou calving: Oil exploration, which is all that would be authorized if Congress opened the coastal plain, takes place in winter when the caribou are far to the south.

And in any event, Porcupine Herd calving only takes place part of the time in the area that would be opened. The animals calve across a wide area of uplands along the northern side of the Brooks Range. The region extends from the western boundary of ANWR some 200 miles east, to the Western Mackenzie Bay area in Canada's Yukon Territory, an area exceeding 6,500 square miles. Actual calving areas vary from place to place across this huge region, depending on seasonal weather and snow conditions.

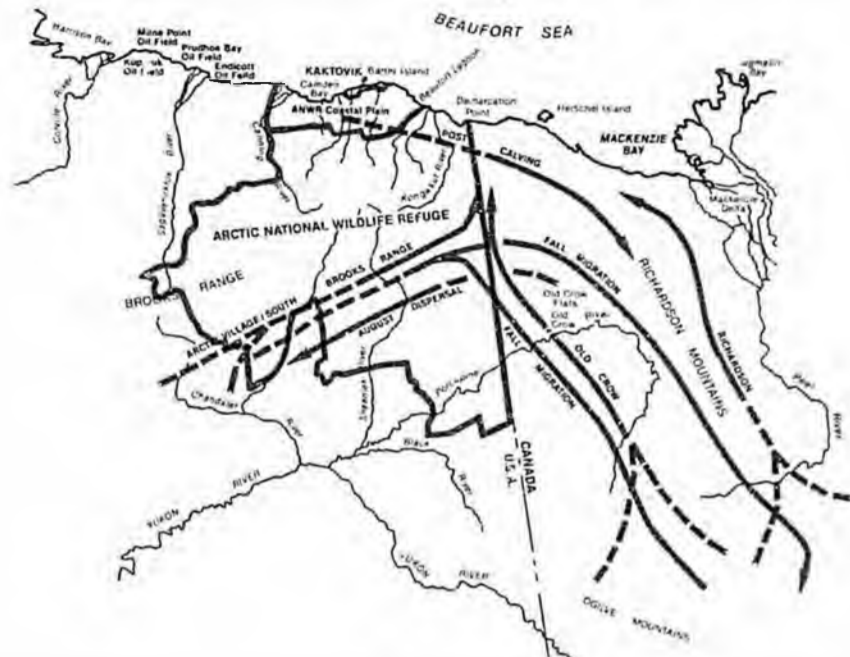
Fish and Wildlife investigators have identified a 2.1 million-acre area of coastal plain along the northwestern coast of Canada's Yukon Territory and northeastern Alaska as potential calving area. Less than half of this calving area, 934,000 acres, is in the area of coastal plain that would be opened.

Studies show that from 1972 through 1985, Porcupine caribou used parts of the Alaskan coastal plain in only nine of the 14 years. In 1982, for example, practically the en-



Although caribou use gravel ramps over pipelines at Prudhoe, studies have shown the ramps are not necessary.

## Porcupine herd migration routes



The Porcupine caribou herd spends winters south of Alaska's Brooks Range, in the Old Crow flats in northern Yukon Territory, Canada, and in the southern foothills of the Brooks Range in northeastern Alaska. In early March, the caribou begin moving north. They follow three main routes: an eastern route through the Richardson Mountains in Yukon Territory to the Arctic Coastal Plain of the Yukon, a more westerly route across the Porcupine River and over the British Mountains and through the Firth River valley to the coast, and a third, westerly route up through northeastern Alaska to join the eastern group from Old Crow. Caribou segregate themselves into groups to migrate at different times: Pregnant females, barren cows and some yearlings migrate first; bulls and remaining juveniles follow later. Calving takes place in May and early June in the foothills and coastal plain between the Hulahula River in Alaska and the Babbage River in Canada, in locations that vary from year to year with snow cover. The 1002h area covers approximately 20 percent of the Porcupine Herd calving area.

tire herd calved east of the U.S.-Canada border, in Yukon Territory. In 1985, by contrast, over 80% of the cows did use areas in the Section 1002h study area. There's no evidence to show they would be excluded from an area if an oilfield were developed there. But even if they were, there would seem to be plenty of alternative acreage available.

Further west, Central Arctic Herd calving occurs in both concentrated and broadly dispersed areas between the Canning and Colville Rivers, an area that also contains the Prudhoe Bay and Kuparuk River oilfields. While animals have not used the Prudhoe field area for calving (there is no evidence that they ever have, government and industry biologists now agree), they do use parts of the Kuparuk field. To get to calving areas in Kuparuk, pregnant cows and cows with young calves have to cross the Kuparuk oilfield road system. Recent monitoring studies with one radio-collared cow, transmitting via satellite, showed that the cow and calf crossed oilfield roads and production pads several times during the summer, with no apparent effect.

"It simply doesn't make sense to argue that the Central Arctic herd is "different" from the Porcupine herd because one has supposedly habituated to oilfield structures while the other hasn't encountered them yet," says Debra Slaybaugh, Senior Environmental Scientist for Standard Alaska Production Company.

"Both herds consist of the same species and genetically are probably virtually identical. If the Central Arctic herd is able to maintain productivity and increase in size with oilfield structures located within a small portion of its range, there is no known reason why the Porcupine Herd should not also continue to increase with oilfield structures located within a far smaller portion of its range."

### Industry Has Learned

There was concern in the early 1970s within government agencies and industry that North Slope oilfields, the trans-Alaska pipeline and the Dalton Highway (which follows a route generally parallel to the pipeline) might split and disrupt the Central Arctic Herd.

Caribou studies conducted at the time allowed design elements to be incorporated into the pipeline and oilfield gathering lines. These included buried and elevated pipeline sections for the animals to use as crossings. But only experience would tell how these increases would work.

While the crossings have helped, biologists were surprised at how adaptable the animals turned out to be, compared to what was thought 15 years ago. For example, in Interior Alaska the Nelchina Herd migrates east and west in their annual migration right across the trans-Alaska pipeline, which follows a north-south route. Because the pipeline is built above ground through this area, this provided a good test of the ability of caribou to cross a major structure, like a pipeline, during migration.

Studies by Renewable Resources Consulting Services, Ltd., a biological research group, found that the special caribou crossings built by the companies were actually used by less than a third of the animals. Over two-thirds chose to cross the above-ground pipeline at other places.

On the North Slope, small groups of caribou moving through the oilfields in summer have shown both that they can navigate both roads and field gathering lines. Although

caribou do use gravel ramps over pipelines in the North Slope oilfields, the ramps are not necessary. Where ramps are not present, caribou pass beneath the elevated pipelines, so long as the lines are at least five feet above the ground.

Biologists have also found that roads or pipelines by themselves are not serious barriers to movement, but in combinations, particularly with moving traffic, can at times create problems. One solution has been to separate roads from pipelines for short distances, in key locations.

"Caribou become accustomed to things that aren't a threat to their survival," says Slaybaugh. "They would have to, or they would spend their lives reacting to different kinds of non-threatening stimuli."

An extreme example of caribou adaptability is the Delta Herd in Interior Alaska, which calves on a military bombing range, an area frequently subjected to bombing, strafing and low level aircraft flights. The herd has also experienced severe habitat alteration by wildfires, which covered large parts of their core calving areas. Despite these disturbances, the herd has increased at an annual rate of 19-22% and its now at its largest population level in history.

## What are the real issues?

Here are several questions biologists are debating . . .

- **CARIBOU AND PEOPLE:** Even if individual caribou show local reactions to human industrial activity, (like road traffic) does that really matter if the overall herd remains healthy and stable in population? Most biologists now agree that Central Arctic caribou have demonstrated an adaptation to oilfield and pipeline activity. Yet, some argue the Porcupine Herd is still "unique."

- **WHAT REALLY AFFECTS CARIBOU:** Some biologists feel that habitat alteration or denial, arguably threatened by oil exploration, could threaten caribou. Others disagree, arguing that predator pressures, mainly wolves, are far more important than habitat.

- **"BIOENERGETICS," A NEW BELIEF:** Recently, some biologists have come to believe that Arctic caribou are threatened if they have to spend time and energy circumventing drill pads or short distances of pipeline. Others disagree: Walking around natural obstructions is a part of everyday life for North Slope caribou. Man-made obstacles, puny by comparison to nature's, pose no real threat.

- **DO WE KNOW ENOUGH?** We'll probably never really know enough about caribou, but biologists agree it would be useful to have more site-specific assessments of impact. This comes, however, after initial exploration shows where oil deposits actually are and where they aren't. Available research funds can then be concentrated on the more important areas, disregarding parts of the coastal plain where exploration drilling shows little oil potential.

# What really affects caribou populations?

## Despite extensive studies, biologists in disagreement

How well caribou and oil can co-exist in the Arctic centers on two contrary theories. That is whether it is the amount of habitat available or predator pressures (including hunting) that is the more important influence on survival of the herds.

Environmental groups and some biologists base their objections to oil exploration in the coastal plain of the Arctic National Wildlife Refuge (ANWR) on the notion that loss of some habitat will threaten survival of the Porcupine Herd. In other words, oil facilities on the tundra will deny caribou access to traditional rangeland.

The contrary theory, which has now attracted a considerable following, is that habitat is not in short supply, and that predators, primarily wolves, exert the main influence on growth and overall status of caribou populations. There is ample range and food supply available in the north to support Porcupine caribou populations two or even three times the size of the present herd, many biologists think.

**“... caribou populations in Interior and northern Alaska have been experiencing vigorous growth...”**

In fact, there has never been a case of a caribou herd, with access to space and mobility, starving due to lack of range, except in artificial situations such as occurred when caribou were transplanted to St. Matthew Island in the Bering Sea, overgrazed their range and starved. Under normal circumstances, caribou populations never get too large for their environment.

Caribou in northern Alaska, in the Porcupine, Central Arctic and Western Arctic herds, typically have less than two individual animals for each square mile of the area over which they range. In caribou herds elsewhere, population densities may be many times greater. Biologists have computed that the caribou density in the Alaskan arctic would have to increase by more than 10-fold for food depletion to be a problem.

Even if access to habitat were a problem, the actual loss of terrain to caribou grazing caused by oil development will be very small. For example, the actual habitat “loss” created by the Prudhoe Bay and Kuparuk oilfields is less than 8,000 acres, according to Alaska Department of Fish and Game studies, in an available North Slope coastal plain that encompasses thousands of square miles.

But if the predation theory is correct, and it is supported by several field studies, then this major argument against oil activity in ANWR’s coastal plain lacks scientific foundation.

### Booming Growth in Caribou

The biggest embarrassment for opponents of oil development is that caribou populations in Interior and Northern Alaska, which should have been impacted by oil activity, have instead been experiencing vigorous growth. In fact, the Central Arctic Herd on the North Slope, which uses areas occupied by the Prudhoe Bay, Kuparuk and Milne Point oilfields, has more than quadrupled in size since oil activity began in the early 1970s.

Biologists have done field studies which do show cases of localized avoidance behavior by caribou, in that animals sometimes move away from vehicle traffic on oilfield roads, or react to low-flying aircraft.

“But some observers assume these affects harm the animals, a judgement not supported by evidence,” says Mark Fraker, Senior Environmental Scientist for Standard Alaska Production Company.

“What is worse is that some people ‘extrapolate’ these individual observations to whole populations, arguing that entire herds will be endangered because individual animals show reactions to road traffic. This doesn’t make sense when the herds are growing fast and are obviously healthy in the presence of oilfield activity.”

In any event, Fraker said, there is now general agreement among government and industry biologists that caribou do eventually adapt to human presence and industrial activity.

What really does effect caribou herds are predation and hunting, the studies are showing. Wolves, which prey on caribou, have been under control in Alaska since the early 1970s. This explains why caribou numbers have been increasing so fast. Compared to this, any effect of oil activity is minor.

## Caribou studies are extensive

Editor’s Note: The list of caribou studies below represents a small portion of the research conducted in northern Alaska and Canada.

Banfield, A.W.F. 1954. Preliminary investigation of the barren-ground caribou. Part I: Former and present distribution, migration and status.

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### The Protection of Open Space

Biologist Tom Bergerud of the University of Victoria, a respected Canadian caribou biologist, maintains that what caribou really need for calving is open space, in which predators like wolves or bears can be spotted at some distance, and bare ground that is free of snow, which provides camouflage for newborn calves.

This may explain why caribou seem to prefer certain locales for calving over other areas. Perhaps snow melts earlier in the preferred areas than elsewhere. This would also explain why caribou cows calve in different areas from year to year, motivated by a late spring and snow melt.

In terms of overall impact on populations, the available research seems to overwhelmingly back the predator theory.

Bergerud says that caribou can adapt to economic development in the Arctic if they have space for mobility

to cope with predators.

Bergerud has reviewed the supposed adverse impacts on caribou caused by human activity, construction of roads, pipelines or rail lines, on eight caribou herds, seven in North America and one in Norway. In each case he found that a variety of factors, including population changes, range use, predator and hunting pressures, offered more convincing explanations for changes in behavior than the presumed cause, the road, railroad or pipeline. Predators, mainly wolves, were by far the major influences.

In contrast, there is no case where a caribou herd population has declined because of some industrial activity. In the case of a poorly designed gas pipeline in the Soviet Union, which excluded a large number of animals from the area, no overall population level impact was recorded, Richard T. Shideler of Alaska’s Department of Fish and Game has written.

Bergerud, on the other hand, was able to document severe effects of predation on herds.

### Eight Herds: “Case Histories”

Bergerud examined data from the Porcupine, Central Arctic, Nelchina and Fortymile herds in Alaska, several herds in British Columbia, the Kaminuriak Herd in Manitoba and herds in Newfoundland and Norway. All had been cited in literature and in testimony before government panels as examples of various disturbances to animals by industrial activity.

These offered a variety of test situations: In some, there was heavy, unregulated hunting. In others, hunting was banned. Some had control programs for wolves and other predators, and others did not. All had their ranges crossed by highways, roads, railroads or pipelines.

One documented impact in several of the case studies was an increase in calf survival due to wolf control. The second documented impact was an increase in mortality due to improved access for hunters from road or railroads.

“We believe that some biologists, in their concern for disturbances at the individual level, may have overlooked the major population regulation factors of hunting and predation,” Bergerud writes. “When herds have stopped crossing transportation corridors, it has generally been because numbers have declined and ranges contracted. The evidence shows such contractions to be independent of the presence of transportation corridors.”

### Predators, Not Habitat

Meanwhile, other studies undertaken by Bergerud have reinforced the notion that predation, mainly by wolves, is the major influence on caribou populations, and that other mortality factors, like starvation and disease, are not important for caribou populations that are in open terrain and free to disperse.

With five herds in Alaska and Canada, wolf-control programs were instituted. Before wolves were controlled, calf survival rates were about five percent, Bergerud found, a rate at which the herd would be stable or in slight decline. After wolf-control, but not complete removal, calf-survival rates jumped, some to over 20%, a rate that will result in rapid population growth.

In the open plains of the Alaskan and Canadian Arctic, wolves have been actively hunted in recent years and wolf densities are now below 6.5 animals per thousand square kilometers, Bergerud writes. This is a level that will result in low predation and rising caribou populations. This is, in fact, happening.

Woodland caribou, further south, face a different situation. In forest, caribou have less space to escape predators. Human hunting pressure on wolves is also less, as wolves have more natural cover to escape. As a consequence, wolf densities are higher, calf survival lower, and therefore, populations of caribou are on the decline.

### The “Habitat” Theory

Where did the “habitat” theory get started? Why does it have a following, in spite of an apparent lack of scientific support?

Some observers think it springs from an unconscious, distinctly human bias in our view of the Arctic. Humans are creatures of the temperate and tropical zones. We view the Arctic as harsh and forbidding. We find it difficult to accept the notion, deep inside ourselves, that the Arctic can be bountiful to a species adapted to it, as caribou are.

The notion persists, despite ample evidence to the contrary, that caribou are somehow on the edge of extinction in a forbidding, barren environment, and that the smallest disturbances are a threat to the species. We are constantly surprised when field research demonstrates the vitality, strength and durability of these animals that have adapted so well to their environment.

In fact, caribou populations throughout northern North America continue to grow rapidly, and are now beginning to approach historical levels.

# ANWR's geologic potential promising

Geologists regard the coastal plain of the Arctic National Wildlife Refuge as the most promising area for major new discoveries of oil and gas in the United States.

All of the geologic ingredients are there: Source rocks to generate oil and gas, thick sequences of reservoir rocks that allow petroleum to accumulate, large geologic structures to act as "traps" for oil and gas, and the fact that large petroleum discoveries have been made nearby, in the same types of geologic strata.

The initial assessments of the area's potential, carried out as a part of the Interior Department's "Section 1002h" study, bear this out. Twenty-six major oil and gas prospects, including two that could rival Prudhoe Bay, have been identified by seismic mapping and geologic investigation.

"The area is clearly the most outstanding oil and gas frontier remaining in the United States, and could contribute substantially to our domestic energy supplies," Interior's report, still in draft, says.

It is all the more important because exploration in other U.S. frontier areas, where there were high hopes for new discoveries, have been disappointing. These include offshore Atlantic coast, the Gulf of Alaska, Bering Sea, Lower Cook Inlet and, so far at least, the Alaskan Beaufort Sea.

But only exploratory drilling can confirm ANWR's potential. Too often, geologists have been painfully surprised when surface geology and seismic profiling have indicated the presence of a possible huge oil formation, until the drill-stem came up dry. A recent example is Mukluk, the \$150 million dry hole in the Beaufort Sea, northwest of Prudhoe.

## ANWR's Geology

The area involved in the "1002h" study lies along the foothills and coastal plain of the wildlife refuge; it is underlain by tens of thousands of feet of sedimentary rocks, the type needed for oil to accumulate. The nearby Brooks Range and its foothills indicates that the kind of geologic actions needed to form underground structures, or traps, for oil and gas, have indeed occurred.

Generally, there are two types of sedimentary rocks under ANWR's coastal plain: There is a relatively younger group of rocks which are also present at Point Thompson, just west of ANWR, where oil and gas discoveries have been made. They also extend east to the Canadian Beaufort Sea, where discoveries have also been made. Then there is a deeper set of older rocks, that are of a strata that extends to the west, where very large oil discoveries have been made at Prudhoe Bay, Kuparuk, Endicott, Lisburne, Seal Island and Mima Point. Both groups of rocks have great potential, but it is the older, deeper rocks that have the greater promise.

**“. . . There is a 95 percent chance of at least 4.8 billion barrels of in-place reserves . . .”**

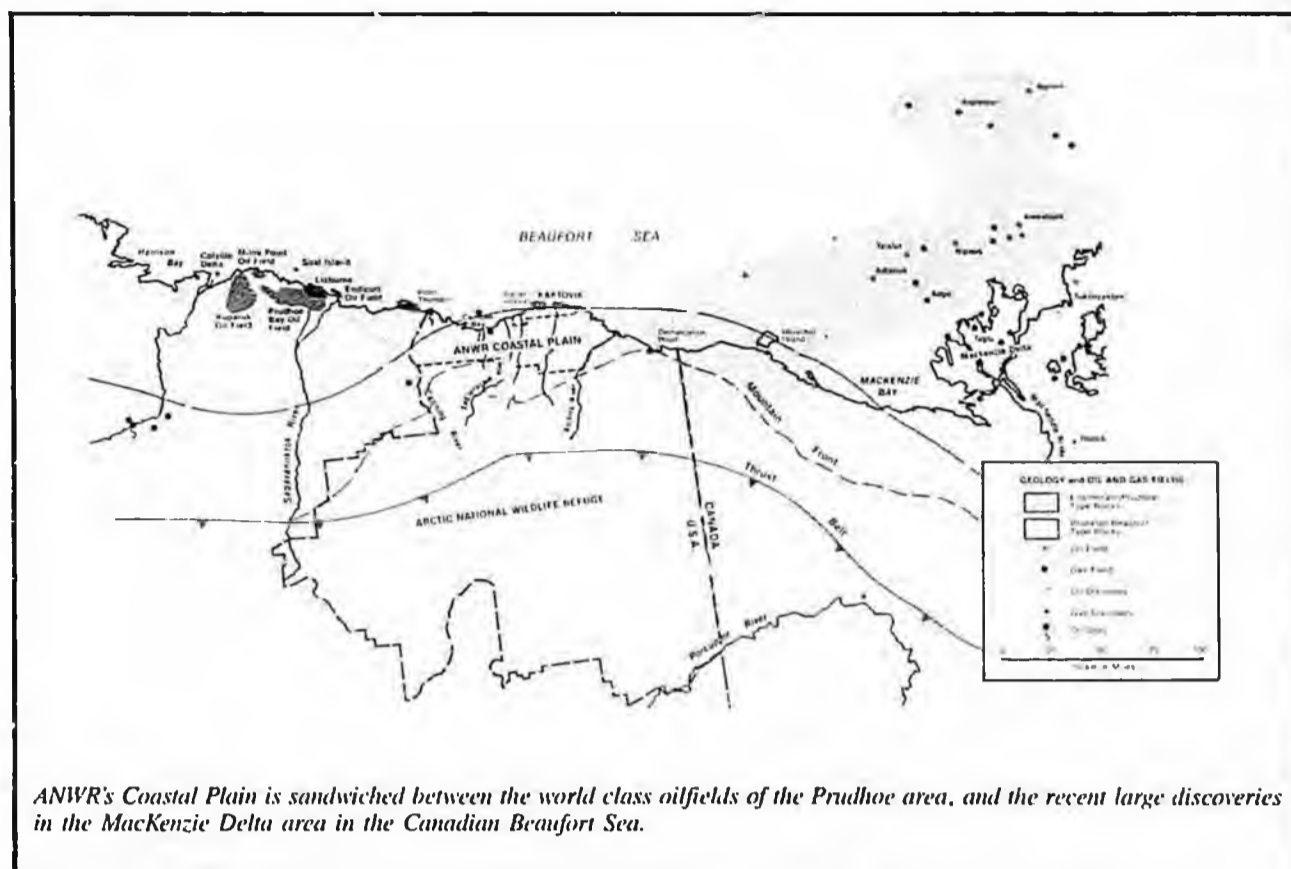
Seven different geological "plays," or regions of promising geology, were identified in the 1002h assessment, each with characteristics favorable for oil and gas. In-place resource potentials were calculated: There is a 95% chance of at least 4.8 billion barrels of in-place reserves, and a 5% chance of in-place reserves of 29.4 billion barrels.

But what is important is the amount of this resource that might be recoverable, since current oil-producing technology allows only a percentage of the oil actually "in place" in the rock to be extracted. Interior judged "recoverable resources" this way: A 95% chance of a discovery of 600,000 barrels of recoverable reserves, and a 5% chance of 9.2 billion barrels of recoverable resources.

What may be more meaningful are assessments of particular prospects. The two largest geologic formations investigated could contain recoverable oil in amounts similar to Prudhoe Bay; the next two largest prospects could be about half the size of Prudhoe, each with an amount of oil equal to the East Texas field; the next four prospects could contain recoverable oil in amounts equal to Kuparuk, about 1.5 million in size.

The eastern part of the coastal plain seems to have the most potential; it is here that 63% of estimated recoverable resources in the area could be found in four large structures, according to Interior's draft 1002h document.

The southern part of the 1002h study area seems also to have considerable potential, again mostly in a few very large geologic formations. Interior assigned this region 25% of the estimated recoverable reserves in five potential structures. But this area also has the greatest potential land-use conflicts; it is here that most of the caribou "core calving" is concentrated. The central part of the study area was given a lower ranking, with an estimated three per-



ANWR's Coastal Plain is sandwiched between the world class oilfields of the Prudhoe area, and the recent large discoveries in the MacKenzie Delta area in the Canadian Beaufort Sea.

cent of recoverable reserves in three geologic prospects.

The western area of the plain was given a very high ranking in terms of overall reserve potential, with about half of the overall estimated in-place resources in the study area. But here the sizes of potential structures were much smaller, some mapped only with great difficulty according to the report. So in terms of recoverable reserves, this area is assigned a probability of only 9% recoverable resources scattered through 14 potential oil formations.

## Other North Slope Development

If commercial discoveries are made in ANWR's coastal plain, it also has important implications for other North Slope oil development: The infrastructure built to accommodate one or more oilfields on the coastal plain

could also support exploration and development in state and federal offshore acreage just north of ANWR, which has favorable geology.

Also, several large oil and gas accumulations have been discovered east of Prudhoe, on state lands between that field and the boundary of ANWR. These are not economic today, but if a pipeline were built to serve larger discoveries on ANWR's coastal plain, some of these might become economic.

Finally, new oil discoveries in ANWR would lead to greater long-term utilization of the trans-Alaska pipeline, which would lower costs for all oil moved through the pipeline. By lowering costs, the economic life of those fields now producing on the North Slope, particularly Prudhoe and Kuparuk, will be extended some years into the future.

## ANWR — An historical perspective *Continued from page 1*

### Federal Policy Decisions — All Linked

Exploration in the Arctic National Wildlife Refuge in northern Alaska is only the latest in a series of major congressional policy decisions affecting federal lands in Alaska. They are all linked, directly and indirectly.

The Alaska Statehood Act in 1959 started the process of formally designating Alaska lands, which led indirectly to the Alaska Native Claims Settlement Act in 1971, a major land action that settled the long-standing legal question of aboriginal land claims that cleared land title in Alaska. This also cleared the way for the trans-Alaska pipeline, although a separate piece of legislation was ultimately needed to clear away environmental litigation and authorize the pipeline. But the Native Claims Settlement Act did set the stage for the Alaska National Interest Conservation Lands Act of 1980 (ANILCA).

ANILCA formally created the Arctic National Wildlife Refuge, but it also created 35 other national parks, forests and wildlife units in Alaska, involving a total of 103 million acres, with 32.4 million acres of this designated as wilderness. Conservation groups had pushed for far more wilderness. One proposal (Udall-Anderson) would have involved 67 million acres, about a third of Alaska, going into wilderness status.

### An Historical Perspective

Conservation issues have been involved in federal land decisions since the turn of the century. As a territory, Congress wrote Alaska's laws and established land designations. Even then, conservationists saw the value of protecting large tracts of Alaska lands. Early on, coalfields on federal lands were barred from entry. Large land tracts like St. Lawrence Island and Nunivak Island were set aside as "reindeer" reservations. Other wildlife refuges were created. Tongass and Chugach National Forests, and McKinley National Park, were created. Just before Alaska statehood in 1959, the Arctic National Wildlife Range, then 8.9 million acres, was signed into existence by the Secretary of the Interior.

Passage of the Alaska Statehood Act in 1959, however,

set the stage for major Alaska land decisions. Until then, most lands across Alaska's sprawling 586,000 square miles were "public domain" under federal public land laws. They were open to homesteading, mining claims and other forms of "entry." But because Alaska had a tiny, scattered population and an economy based mainly on defense installations in Anchorage and Fairbanks and fishing in coastal communities, most of Alaska was, in fact, wilderness.

Statehood was to change things. Not the wilderness character of Alaska (which exists even now), but the process of formally designating land jurisdictions. Congress gave Alaska a land grant of 103 million acres, about 28% of the state, to encourage economic development.

**"ANILCA formally created the Arctic Wildlife Refuge . . ."**

But this action aroused two other, "sleeping" issues: one was the undefined claim of aboriginal Native land rights that Congress had resolved to settle early in the century, but had never done so. As long as it was unresolved, it constituted a legal cloud on land title in Alaska. Then in 1966, a "land freeze" was imposed on Alaska, which was to halt transfer of federal lands for homesteading and to the state under its land selection program. This was also a major impediment to getting a right-of-way for the trans-Alaska pipeline across federal lands.

The second issue involved conservation and protection of Alaska lands, which was then under the old public domain land laws. National conservation groups saw the opportunity to set aside under new kinds of land systems from the millions of acres of undesignated federal lands in Alaska. They would comprise huge additions to the nation's national parks, wildlife refuges and forests.

The two issues were linked. Influential eastern and midwest congressional delegations, who had constituents with an interest in Alaska conservation issues, supported

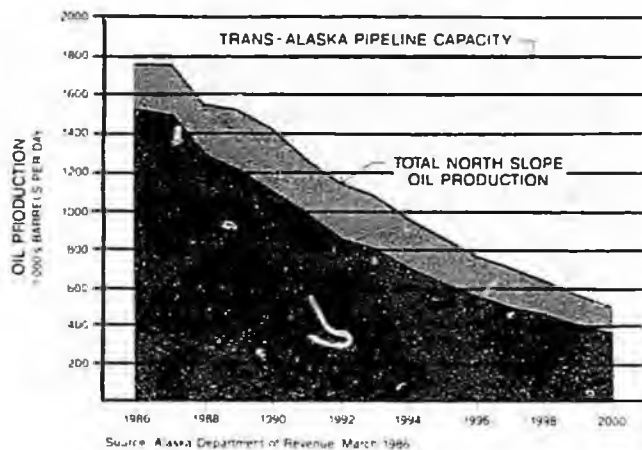
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# ANWR critical to U.S. energy security

Continued from page 1

In fact, ANWR itself might constitute 20-27% of the nation's oil reserves by 2000, according to Interior Department estimates.

## PRUDHOE BAY AND OTHER NORTH SLOPE OIL PRODUCTION



By the year 2000, oil production from North Slope oil fields will drop to less than 600,000 barrels per day.

## The Grim Statistics

It's not hard to see the coming shortage, and today's low oil prices will just accelerate it. In 1986, the U.S. is using about 16 million barrels of oil per day, and producing about 8.9 million barrels daily from domestic fields. One fifth of this comes from northern Alaska.

U.S. oil production, most of it in mature producing areas at or past their peak, is now declining. Even Alaska North Slope production will begin declining sometime in 1987 or 1988.

If oil prices remain at \$15/barrel (in 1985 dollars), domestic crude oil production will fall from 8.9 million barrels/day to 6.2 million barrels/day in 1991, an American Petroleum Institute (API) survey of its member oil companies indicates. The drop could also be occurring faster than many think. API President Charles DiBona says U.S. domestic production has dropped 333,000 barrels/day so far this year, and without an increase of 70,000 barrels/day in Alaskan production, the production drop (from U.S. "lower 48" producing areas) would have been about 400,000 barrels/day. If low prices persist, domestic output could be below three million barrels/day by 2000, only 13 years from now, DiBona warns.

Other groups come to similar conclusions: The Independent Petroleum Association of America predicts domestic production will decline 2.3% in 1986, and three percent in 1987, while oil demand will increase by 2.6% yearly. Even somewhat higher prices may not help. The Energy Information Administration, a federal agency, estimates that at \$17 oil in 1990 and \$20 oil in 1995 (in 1985 dollars), somewhat higher real prices than those assumed in the API survey, U.S. production would decline from 8.9 million barrels/day to 7.2 million in 1990, to 5 million in 1995.

Low oil prices are accelerating that decline. Below a certain price many small fields and "stripper" wells become uneconomic. Today about 14% of U.S. production comes from stripper wells. Once they are shut in, it

will be uneconomic to reopen many of them under almost any oil price scenario reasonably conceivable.

## Demand is Increasing

Low prices also brings increased demand. U.S. gasoline consumption this year is running about three percent above the level during the comparable period of 1985, according to the API. Demand for all petroleum products was up an average of 2.5% for the first three quarters of 1986, but the alarming thing was the acceleration of demand during the year.

Demand for all petroleum products was up 1.5% in the first quarter, but climbed to 2.5% the second quarter and to 3.9% in the third quarter. DiBona told the Resources Development Council, an Alaska development group, in late November.

This suggests that if low oil prices persist, U.S. oil imports will grow substantially, from about 5 million barrels daily in this year to as much as 15 million barrels/day in 1995, API studies indicate.

## New Exploration Falling

Another indication of the worsening U.S. domestic energy picture is in the nation's declining reserves/production ratio. Even in 1985, before the worst of oil price declines were felt, addition of new oil reserves had dropped by 30% compared to levels a year before. Additions of new natural gas reserves dropped also, by almost 27%.

**"... about 27,000 small fields would have to be discovered to sustain current production."**

New drilling in 1985 replaced only 59% of oil production and 69% of gas production, according to a new study by Arthur Anderson & Co. The reserves/production ratio for 1986 is sure to be far worse.

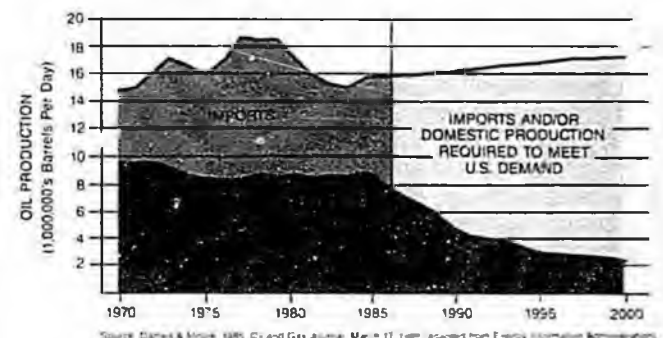
The problem is that most U.S. oil producing areas are now mature, with many fields past their peak and in stages of gradual decline. There will be, undoubtedly, new oil discovered, both in extensions to existing fields and in new oilfields. But because most parts of the continental U.S. have been explored, the chances of finding large fields, where most of the nation's oil has come from, are increasingly remote.

Except in Alaska: Today Alaska is considered the last remaining region where large fields, with major additions to U.S. reserves, might still be discovered. Within Alaska, ANWR offers the best potential for these discoveries.

## Why Large Fields Needed

Of all the oil produced in the U.S. in 120 years, two thirds have come from large fields of 50 million barrels or more, a Congressional Research Service study finds. Yet, these large fields represented only three percent of all the oilfields discovered. The vast bulk of U.S. discoveries — 97%, in fact — were smaller fields. But all

## U.S. OIL SUPPLY AND DEMAND



Graph depicts expected fall of domestic crude oil production and increasing reliance on imports or other domestic production.

of these held only one-third of all the oil discovered in the last 120 years.

More important: in recent years it has become more difficult to find larger fields. Only five of these have been discovered since 1951, three in Alaska (McArthur River, 1986; Prudhoe Bay, 1968; Kuparuk, 1969). Except for Prudhoe Bay and Kuparuk, no oilfield with reserves over one billion barrels recoverable has been discovered since 1949. And of the previously discovered giant fields, all of them except Prudhoe and Kuparuk are 75% depleted. Even Prudhoe is now half depleted.

In looking at future production, Congressional Research Service found that even assuming improved oil prices, 76 new fields of 50 million barrels or more must be discovered in the next 15 years to avoid large declines in U.S. domestic production. If these large fields are not discovered, either because the resources area actually distributed among smaller fields of access to lands where large fields have the best chance of being discovered is denied, then about 27,000 small fields would have to be discovered to sustain current production. Such a rate of discoveries seems almost impossible, in both cases.

What could make a significant impact is if truly large fields similar to several discovered already in northern Alaska — Prudhoe Bay, Kuparuk, Endicott, Lisburne & Seal Island — could be located. ANWR represents great potential.

## The OPEC "Gap"

OPEC now produces about 16-18 million barrels/day and has an estimated capacity for production in the 26-30 million barrels/day range. A 10 million barrel/day increase in U.S. requirements for imports, because of declining domestic production and increased demand, could itself absorb most or all of OPEC's excess capacity. Oil demand is also increasing in other countries, though not as fast as in the U.S.

In reality, long before OPEC's production capacity is actually consumed, there will again be upward pressure on oil prices. Past experience indicates that when 80% of OPEC's total capacity is used (or about 21 to 24 million barrels/day) prices will rise. We are already using about 60% of OPEC's capacity, so demand for OPEC oil need only rise by about 4.7 million barrels/day for this point to be reached. The U.S. alone could be absorbing that within three to five years.

## ANWR — An historical perspective Continued from page 5

the 1971 Native claims act partly because they saw the opportunity to use the act as a vehicle for resolving long-range federal land policy in Alaska.

Section 17(d)2 of the act required the Secretary of the Interior to withdraw 80 million acres of Alaska lands from public domain. The land was to be studied for designation as parks, refuges, national forests and wild and scenic rivers. These were the "d-2" lands. What is often forgotten is that an additional 60 million acres of lands were also withdrawn under Section 17(d)1 (and called, appropriately, the "d-1 lands" for an indefinite period of time. Parks, refuges, forests and wild and scenic rivers must be created by Congress, and so the Secretary's recommendations required by the 1971 claims act were to eventually result in ANILCA, in 1980.

## The Land Exchanges

Alaska's statehood and Native claims settlement acts provided historical linkage, but also created another interesting issue to the question of opening ANWR's coastal plain to oil exploration. Alaska Native corporations created under the 1971 settlement act as well as the State of Alaska could, if the federal government desired, wind up with

mineral estate "inholdings" within the coastal plain — if Congress decides to allow exploration. In fact, it has already happened with a 92,000-acre tract on the northern edge of the coastal plain.

This comes about through possible land exchanges between several Native corporations and the federal government, in addition to, possibly, the State of Alaska. In the case that has already occurred, Arctic Slope Regional Corporation (ASRC) (the Barrow-based corporation covering northern Alaska) in 1983 negotiated an exchange of lands that it owned, under the claims act, in the northern Brooks Range within the new Gates of the Arctic National Park, one of the new federal units created by ANILCA. Interior felt the exchange worthwhile. The national park system gained a 101,000-acre scenic addition, which included pristine Chandler Lake, in the Gates of the Arctic Park. In exchange, ASRC received 92,000 acres of mineral rights along the northern edge of ANWR.

Although mineral rights belong to ASRC, the tract is still a part of the refuge in terms of overall land management. Exploration in this area is allowed, and one well has been drilled. However, no development can proceed until Congress opens the rest of the coastal plain to exploration. Also, any exploration and development must

be done under environmental stipulations imposed by the U.S. Fish and Wildlife Service.

Several of the Native corporations are now negotiating similar land exchanges with Interior, all contingent on congressional approval of exploration. If they are concluded, the Interior Department would gain valuable additions of Native-owned inholdings or lands adjacent to refuges and parks in other parts of Alaska. The acreages involved in these negotiations are unknown except to the parties involved, but they are likely to be much smaller than the ASRC land exchange.

The State of Alaska also has lands adjacent to federal refuges and parks that it is willing to exchange for mineral tracts within the coastal plain. Under existing federal law, Alaska would receive 90% of federal royalties from any oil production of ANWR. But since this percentage can be changed by Congress, State officials feel it would be better to actually own the mineral rights outright for a negotiated amount of acreage. The State has made an offer in this regard, but no actual negotiations are underway at this point.

Tim Bradner is the editor of the Alaska Economic Report, published in Anchorage.

THE FOLLOWING DOCUMENT HAS  
NOT BEEN FILMED BUT IS  
AVAILABLE IN THE ORIGINAL  
FILE



MINERALS MANAGEMENT SERVICE  
ALASKA OCS REGION

BEAUFORT SEA (Sale 97)

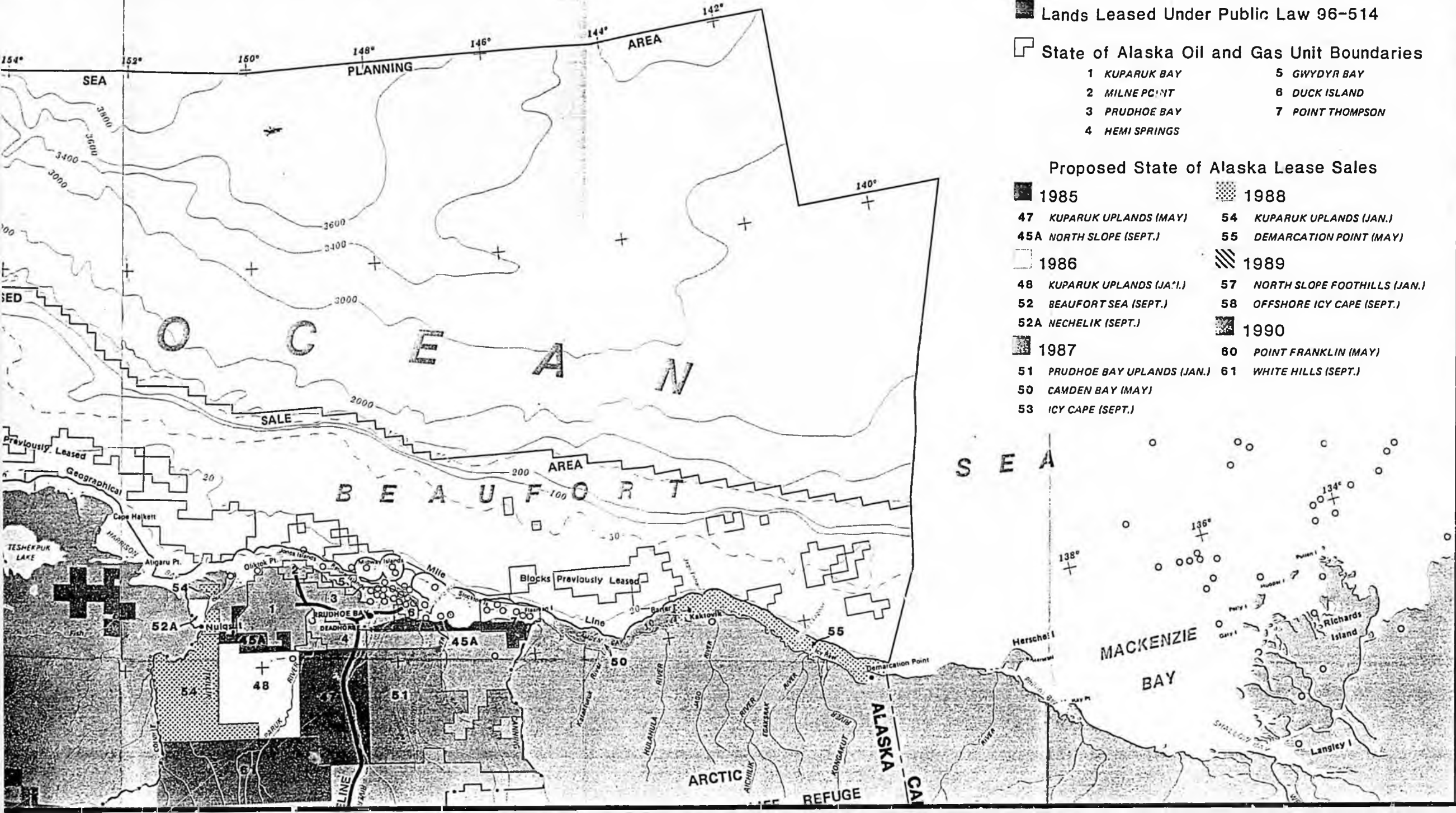
GRAPHIC 6

MAJOR PROJECTS INCLUDED IN  
THE CUMULATIVE ASSESSMENT

- ▲ Potential Mine
  - Exploratory Well
  - Lands Leased Under Public Law 96-514
  - State of Alaska Oil and Gas Unit Boundaries
- |                |                  |
|----------------|------------------|
| 1 KUPARUK BAY  | 5 GWYDYR BAY     |
| 2 MILNE POINT  | 6 DUCK ISLAND    |
| 3 PRUDHOE BAY  | 7 POINT THOMPSON |
| 4 HEMI SPRINGS |                  |

Proposed State of Alaska Lease Sales

- |                               |                                 |
|-------------------------------|---------------------------------|
| ■ 1985                        | ▨ 1988                          |
| 47 KUPARUK UPLANDS (MAY)      | 54 KUPARUK UPLANDS (JAN.)       |
| 45A NORTH SLOPE (SEPT.)       | 55 DEMARCATION POINT (MAY)      |
| □ 1986                        | ▧ 1989                          |
| 48 KUPARUK UPLANDS (JAN.)     | 57 NORTH SLOPE FOOTHILLS (JAN.) |
| 52 BEAUFORT SEA (SEPT.)       | 58 OFFSHORE ICY CAPE (SEPT.)    |
| 52A NECHELIK (SEPT.)          | ■ 1990                          |
| ■ 1987                        | 60 POINT FRANKLIN (MAY)         |
| 51 PRUDHOE BAY UPLANDS (JAN.) | 61 WHITE HILLS (SEPT.)          |
| 50 CAMDEN BAY (MAY)           |                                 |
| 53 ICY CAPE (SEPT.)           |                                 |





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THE FOLLOWING DOCUMENT HAS  
NOT BEEN FILMED BUT IS  
AVAILABLE IN THE ORIGINAL  
FILE



# THE ARCTIC NATIONAL WILDLIFE REFUGE

Its People, Wildlife Resources, and Oil and Gas Potential

THE FOLLOWING PAGES WERE TREATED AS  
A UNIT IN THE ORIGINAL FILE.

Notes for Commissioner Wunnicke  
Anchorage Public Policy Forum  
August 5, 1986

The State of Alaska's position  
regarding Oil and Gas Exploration and Development  
in the Arctic National Wildlife Refuge

As most of you have likely heard, Governor Sheffield recently announced that the State of Alaska supports oil and gas leasing in ANWR.

In the next ten minutes, I would like to briefly outline the state's position on this important issue, and review the major findings of the state which led us to the conclusion that the coastal plain should be made available to oil and gas exploration and development.

In February, Governor Sheffield directed state agencies to provide him with detailed information regarding the state's interests that will be affected by Congress's decision on whether or not to open up the coastal plain of ANWR for oil and gas development.

Based on this information, it became evident that it is in the state's best interest to support leasing in ANWR. Geological studies have indicated that the likelihood of discovering reserves of oil and gas is high, and if oil is discovered and produced, the economic benefits to Alaska could range in the billions of dollars.

The Governor also recognized that the habitat, wildlife, and subsistence values of the coastal plain are extremely high.

Based upon experience, however, he knew he could be reasonably confident that measures could be taken to minimize adverse impacts to these fish and wildlife populations and subsistence resources, and that the State of Alaska has the legal authority to ensure that adequate measures are taken to protect these important resources.

For your information, I think it would be worthwhile to briefly summarize the major geologic, economic, and environmental factors that were considered prior to reaching our decision.

#### RESOURCE POTENTIAL

The ANWR coastal plain has a very high potential for substantial oil and gas deposits, and has been cited by analysts and industry officials as having the highest oil and gas potential of any

unleased area on the North American continent. A USGS report that was completed in 1980 estimated that there may be .8 to 17.6 billion barrels of undiscovered oil in place. Estimates of undiscovered gas in place ranged from 1.4 to 28.1 trillion cubic feet. My department has completed a more recent analysis that supports earlier conclusions that the resource potential of the region is very high.

#### PROSPECTIVE ECONOMIC BENEFITS

As many of you know, the State of Alaska is entitled to 90 percent of all federal revenues from oil and gas leasing in ANWR, and it would be able to collect severance taxes from produced oil.

It is impossible to predict how many barrels of oil might be discovered and produced in ANWR if it is opened for oil and gas leasing, or what the price of oil will be in the 1990's. However, given available resource estimates it is not unreasonable to expect that a field, or several fields, the size of the Kuparuk River Field might be discovered. (approximately 1.5 billion barrels recoverable). If such a field is found and developed, the state's portion of federal revenues and state severance taxes would range from \$1.5 to \$3.3 billion, with the price of oil at \$20 and \$25 per barrel, respectively.

Although not likely, it also is possible that a field comparable to Prudhoe Bay in reserves may be found and produced (approximately 10 billion barrels recoverable), in which case \$22 billion dollars in direct state revenues would be generated assuming the oil sells for \$25 a barrel.

Thus, the state's share of federal revenues and income from severance taxes could range into the billions of dollars.

One caveat, however.

At oil prices less than \$20 barrel, it may be economically feasible to develop only the very largest reserves.

While some members of Congress have suggested that there be a reduction in Alaska's 90 per cent share of federal revenues, we believe there are strong and compelling legal and policy arguments the state can make against such a reduction.

States other than Alaska receive only 50 percent of public domain land mineral revenues. However, an additional 40 percent of those revenues are paid into the Reclamation Fund established under the Reclamation Act of 1902. Those funds, in turn, are

used to fund reclamation projects in those states. However, Alaska is not covered by the Reclamation Act and receives no benefits under it. At the time of statehood, Congress considered it only fair that the additional 40 percent share of public domain land revenues be paid to Alaska in return for Alaska not being covered by the Reclamation Act of 1902.

Obviously, oil and gas activity in ANWR also would likely create employment opportunities for Alaskans in the oil and support service industry. The precise number of jobs that would be created is dependent on a large number of factors that cannot be predicted at this time. However, if we assume a field comparable to the Kuparuk River Field is found and produced, an average of 1,000 to 2,000 jobs in oil and gas and support service companies would be created over the twenty-five year life of the field. Also, it is likely that additional jobs would be created through the secondary and tertiary effects of the oil industry employment and expenditures.

In addition, the commercial viability and amount of state revenues generated from state-owned acreage north and west of ANWR will likely be significantly enhanced if ANWR is made available for oil and gas leasing. Due to the distance of ANWR and adjacent state-owned acreage from the Trans-Alaska Pipeline and the resulting high costs of transporting the oil, a very large discovery or several moderate-size discoveries would have to be made in the region to justify construction of a pipeline. Since the state owns only a small share of prospective acreage in the eastern Beaufort Sea and ANWR region, it is important to the state that ANWR be developed along with the infrastructure to transport oil from the region.

North Slope oil production is projected to begin declining in 1987, which will result in excess capacity in the TAPS line and additional reductions in state revenues. Assuming that ANWR is opened to oil and gas leasing, it will likely take at least ten years between a lease sale and when production could commence. During this period, the Department of Revenue projects that the price of oil will rise to \$20/barrel. Thus, early leasing and exploration could supplement lower state revenues in the late-1990's.

#### ENVIRONMENTAL VALUES, POTENTIAL IMPACTS, AND MITIGATION MEASURES

On the other side of the equation, the state's analysis indicated that the coastal plain of the ANWR hosts a diversity and abundance of fish and wildlife unequalled elsewhere in arctic North America. Those resources and habitats include the Porcupine and Central Arctic caribou herds, muskox, major stream

,systems, and coastal tundra habitats utilized by geese, swans, and other waterfowl.

The Porcupine caribou herd, numbering 170,000 animals, is the second largest herd in the United States and is an important subsistence resource for Alaskans and Canadians. In addition, the Central Arctic caribou herd range includes the coastal plain and foothills between the Canning and Colville River drainages.

The second largest herd of muskox in the United States resides in ANWR.

Tundra swans and snow geese represent two of the more important waterfowl species utilizing ANWR. The nesting density for tundra swans is equal to or higher in ANWR than for other areas on the North Slope. Up to half of the entire snow goose population of the United States and Canada may use ANWR in any given year.

Twelve species of fish are present in ten major streams within ANWR. Important habitat areas include the estuarine environment and natural spring areas located in the upper portion of some of the major river systems.

It was recognized that oil and gas development and transportation corridors can adversely affect fish and wildlife to varying degrees. These impacts are highly dependent the size and location of facilities required for development, the timing and severity of disturbance, and effectiveness of mitigating measures.

Possible mitigation measures to reduce impacts to animal populations could include area deferrals, seasonal use or activity restrictions, provisions for fish passage, and wildlife access requirements.

In addition, air and water quality in ANWR may be an issue of concern if new production facilities are developed, but these consequences could be mitigated in large part by consolidating facilities and by measures to contain and dispose of liquid and solid wastes.

Another impact considered was that of subsistence. Such activity in the Village of Kaktovik, and the current wilderness character, could be affected by oil and gas development.

#### THE STATE'S ROLE IN DECISIONS AFFECTING ANWR

After reviewing these impacts -- and the measures that can be taken to minimize them -- we explored whether the state has the legal authority to ensure that appropriate measures are

taken to protect the air, land, water, habitat and subsistence resources of ANWR.

Our conclusion was yes.

The commissioners of the Departments of Fish and Game, Natural Resources, and Environmental Conservation have responsibilities and the authority to protect or regulate activity in the refuge.

Also the Alaska Coastal Management Act requires that all activities within or directly affecting the coastal zone of ANWR be reviewed and approved by the state against the standards of the Alaska Coastal Management Program.

Lastly, the Fish and Wildlife Coordination Act specifies that the Secretary of the Interior shall ensure that the rules and regulations developed for the conservation, maintenance, and management of wildlife resources and their habitat are not inconsistent with the laws for the protection of fish and game of the state.

#### LAND EXCHANGE .

On a related issue, as many of you know, the U.S. Fish and Wildlife Service has discussed with several Native corporations the possibility of a land exchange of ANWR lands. The State also has expressed interest in exchanging some of its lands for ANWR acreage. The USFWS has indicated that it is willing to discuss land exchange proposals that would help to consolidate refuge lands in ANWR or in other refuges, but that no proposed land exchange will occur unless authorized by Congress. Furthermore, a decision has been made that no ANWR land exchange proposal will be sent to Congress for approval prior to the submission to Congress of the Section 1002(h) report.

In the event of a land exchange between the US Fish and Wildlife Service and a Native Corporation, the state will strive to ensure that the benefits that could be received by the state if exploration in ANWR is authorized by congress are not jeopardized by the agreement.

The U.S. Department of the Interior has assured us we will be kept apprised of any proposed land exchange under consideration, and will be consulted before any final decision is made.

#### CONCLUSION

Once the 1002 report is issued, if its conclusions are as we expect, the state will be evaluating and advocating exploration and development approaches which will protect the other resource

values of the coastal plain while allowing exploration and development to proceed.

Governor Sheffield has concluded that oil and gas exploration and development in ANWR would be beneficial to the State of Alaska, and if carried out in an environmentally sensitive manner, can occur in the refuge without adversely affecting the wildlife populations for which the refuge was created and without adversely affecting the people of the area.

August 4, 1986  
Memo: Grogan to  
Governor

State of Alaska Position on  
Management of the Arctic National Wildlife Refuge

Background Information

During its consideration of the Alaska National Interest Lands Conservation Act (ANILCA), the U.S. Congress recognized that there is a high potential for discovering oil and gas deposits on the coastal plain of the Arctic National Wildlife Refuge (ANWR). Under provisions of the Alaska Statehood Act and other federal laws, any revenue generated from oil and gas development in ANWR must be shared by the federal government with the State of Alaska. Therefore, a decision by the Congress whether or not to open the refuge to oil and gas exploration could have important consequences both for the state's economic future and for the nation's energy needs.

Given the high oil and gas resource potential contained within the coastal plain of ANWR, the Congress, pursuant to Section 1001 of ANILCA, directed the Secretary of the Interior to: (1) assess ANWR for potential oil and gas resources and make recommendations concerning future use and management of those resources including an evaluation of alternative transportation routes needed for oil and gas development; (2) review the wilderness characteristics and make recommendations for wilderness designation of these lands; and (3) study and make recommendations for protection of the wildlife resources of ANWR.

7 | Section 1002 of ANILCA requires that the Secretary, in consultation with the Governor, conduct a continuing inventory and study of the fish and wildlife of the coastal plain of ANWR and submit a final report, known as the 1002(h) report, to Congress. The 1002(h) report is required to be submitted to Congress on September 2, 1986; and will contain information on: (1) the geological potential of the area; (2) a description of fish and wildlife resources and their habitats; (3) an assessment of the potential effects of oil and gas development on fish and wildlife resources and their habitats; (4) a discussion of potential transportation and processing facilities; and (5) recommendations as to whether oil and gas leasing should occur in ANWR.

Although the Secretary has been preparing the 1002(h) report over the past several years, the document has not yet been made available for state and public review. The state has, however, provided to the Secretary its analysis of the probable oil and gas resources on ANWR, prepared pursuant to a 1985 Memorandum of Understanding (MOU). That MOU recognized that the U.S. and Alaska have important and distinct interests that will be affected by congressional decisions and that both interests will be best served by development of a comprehensive data base.

In order to be as informed and knowledgeable as possible in

anticipation of the 1002(h) report being submitted to Congress and in order to be prepared for the congressional debate that may begin as early as this fall, Governor Bill Sheffield directed state agencies to provide him with detailed information on several aspects of the state's interests which will be affected by Congress's decision on whether or not to open up the coastal plain of ANWR for oil and gas development. This information was developed taking into consideration that significant additional information will become available upon the release of the Secretary's 1002(h) report.

The state also supports and is prepared to develop an MOU with the U.S. Fish and Wildlife Service that would formalize our efforts under Section 1002 to evaluate and recommend specific mitigating measures to ensure protection to fish and wildlife resources and their habitat in the event of oil and gas development.

#### Policy Statements

- ° Based upon the information developed to date, most of which is confidential, the state believes that the coastal plain of ANWR holds great promise for oil and gas exploration which can provide significant benefits both to the state and to the nation. The state is entitled to 90 percent of the governmental share of royalties, bonuses, and rentals derived from any oil and gas produced in ANWR. If Congress opens the area to oil and gas development, it is essential that this benefit to the people of Alaska be maintained.
- ° The state does not support Representative Udall's bill (H.R. 4922) to designate the coastal plain of ANWR as wilderness. No wilderness proposals should be considered prior to the 1002(h) report to Congress. The state must ensure that important options are not foreclosed by hasty land classifications.
- ° The coastal plain of ANWR hosts a diversity and abundance of fish and wildlife unequalled elsewhere in arctic North America. These resources are extremely important to Alaskans, and management of ANWR must ensure that fish, wildlife, and their habitats are protected. Resources of primary concern in ANWR include the Porcupine and Central Arctic caribou herds, musk oxen, major stream systems and nearshore estuarine habitats critical to spawning and overwintering fish, and coastal tundra habitats utilized by geese, swans, and other waterfowl. The Porcupine caribou herd, numbering 170,000 animals, is the widest ranging herd in Alaska and is an important subsistence and recreational resource for Alaskans and Canadians.

- ° At the urging of the state, the U.S. Department of the Interior has assured us that the state will be kept apprised of any proposed land exchange under consideration and will be consulted before any final decision is made. The state will work to ensure that the benefits which could be received by the state if exploration in ANWR is authorized by Congress are not jeopardized by any land exchange agreements.
- ° Based on the information now available, the state does support the concept of leasing in ANWR. Once the 1002(h) report has been completed and made available for review, the state will conduct an extensive analysis of any proposals to allow leasing in ANWR. The purpose of the state's analysis will be to identify areas where petroleum leasing would have the least impact on fish, wildlife, and their habitats and to evaluate and advocate exploration approaches which, in appropriate areas and under proper environmental conditions, will protect the other resource values in or adjacent to the coastal plain while allowing exploration to proceed. The state recognizes that the potential development of ANWR is a major public policy issue and encourages maximum public participation, especially from Alaskans, during the congressional debate.

tg86070801rse

The Honorable Bill Sheffield  
Governor  
State of Alaska

August 4, 1986

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465-3562

Robert L. Grogan, Director  
Division of Governmental  
Coordination  
Office of the Governor

ANWR Information  
Summary

As you have requested, the Division of Governmental Coordination has coordinated preparation of an analysis of factors relevant to a state position on oil and gas leasing in the Arctic National Wildlife Refuge (ANWR). This analysis has been reviewed and approved by the Departments of Environmental Conservation, Natural Resources, and Fish and Game.

Issues addressed include: 1) the resource potential of ANWR; 2) the potential direct and indirect economic benefits to Alaska of oil and gas leasing in ANWR; 3) the fish and wildlife habitat and subsistence values of the refuge; 4) mitigation measures available to protect resource and habitat values if oil and gas leasing is permitted; 5) mechanisms ensuring state participation in decisions regarding oil and gas activity in the refuge; 6) proposed land exchanges between the federal government, Native corporations, and the State of Alaska; and 7) the proposed Porcupine Caribou Treaty.

#### RESOURCE POTENTIAL

° The ANWR coastal plain has a very high potential for substantial oil and gas deposits, and has been cited by analysts and industry officials as having the highest oil and gas potential of any unleased area on the North American continent. A U.S. Geological Survey report that was completed in 1980 estimated that there are .8 to 17.6 billion barrels of undiscovered oil in place at the 95 percent and 5 percent probability levels, respectively. Estimates of undiscovered gas in place ranged from 1.4 to 28.1 trillion cubic feet. The Alaska Department of Natural Resources has completed a more recent analysis that supports earlier conclusions that the resource potential of the region is very high.

## PROSPECTIVE ECONOMIC BENEFITS

° The potential economic benefits to Alaska and to the state treasury of a congressional decision to allow oil and gas leasing in ANWR could be substantial. The State of Alaska is entitled to 90 percent of all federal revenues from oil and gas leasing in ANWR and it would be able to collect severance taxes from the produced oil. In addition, oil and gas activity in the refuge would likely enhance the value of adjacent state-owned lands with oil and gas potential. These benefits could be increased if the restriction on the export of Alaska crude oil was removed. Removing the export ban could result in lower transportation costs, an increase in the well head value of the oil, and make marginal fields more economical to develop.

° The state's share of federal revenues and income from severance taxes could range into the billions of dollars. It is impossible to predict how many barrels of oil might be discovered and produced in ANWR if it is opened for oil and gas leasing, or what the price of oil will be in the 1990's. However, given available resource estimates it is not unreasonable to expect that a field, or several fields, the size of the Kuparuk River Field might be discovered (approximately 1.5 billion barrels recoverable). If such a field is found and developed, the state's portion of federal revenues and state severance taxes would range from \$1.5 to \$3.3 billion, with the price of oil at \$20 and \$25 per barrel, respectively. Although not likely, it also is possible that a field comparable to Prudhoe Bay in reserves may be found and produced (approximately 10 billion barrels recoverable), in which case \$22 billion dollars in direct state revenues would be generated assuming the oil sells for \$25 a barrel. At oil prices less than \$20 barrel, however, it would be economically feasible to develop only the very largest reserves.

While some members of Congress have suggested a reduction in Alaska's share of federal revenues, there are strong and compelling legal and policy arguments the state can make against a reduction of the state's share. States other than Alaska receive only 50 percent of public domain land mineral revenues. However, an additional 40 percent of those revenues are paid into the Reclamation Fund established under the Reclamation Act of 1902. Those funds, in turn, are used to fund reclamation projects in those states. Alaska is not covered by the Reclamation Act and receives no benefits under it. Congress considered it only fair that the additional 40 percent share of public domain land revenues be paid to Alaska in return for Alaska not being covered by the Reclamation Act of 1902.

° The revenues accruing to the state from ANWR would likely increase employment opportunities and disposable incomes for Alaskans. The revenues generated by the State would likely be

used in large part to increase the principal of the Permanent Fund, pay salaries of state and local government employees, and fund capital improvement projects.

° In addition, oil and gas activity in ANWR would likely create employment opportunities for Alaskans in the oil and support service industry. The precise number of jobs that would be created is dependent on a large number of factors that cannot be predicted at this time. However, if we assume a field comparable to the Kuparuk River Field is found and produced, an average of 1,000 to 2,000 jobs in oil and gas and support service companies would be created over the 25-year life of the field. Also, it is likely that additional jobs would be created through the secondary and tertiary effects of the oil industry employment and expenditures.

° The commercial viability and amount of state revenues generated from state-owned acreage north and west of ANWR will likely be significantly enhanced if ANWR is made available for oil and gas leasing. Due to the distance of ANWR and adjacent state-owned acreage from the Trans-Alaska Pipeline and the resulting high costs of transporting the oil, a very large discovery or several moderate-size discoveries would have to be made in the region to justify construction of a pipeline. Since the state owns only a small share of prospective acreage in the eastern Beaufort Sea and ANWR region, it is important to the state that ANWR be developed along with the infrastructure to transport oil from the region.

Furthermore, the cost per barrel of transporting the oil to the Trans-Alaska Pipeline would be reduced if greater amounts of recoverable reserves were found and produced. This would result in lower pipeline tariffs, which would in turn increase the wellhead prices and state revenues. In addition, leasing and development of ANWR acreage will enhance the commercial value of known discoveries on adjacent state acreage such as the Point Thomson field near Flaxman Island.

° If a discovery is made on state-owned land north of ANWR, it will likely be necessary to have an onshore pipeline sited through ANWR. If Congress decides that pipelines cannot be sited in ANWR and a discovery is made on state-owned lands north of ANWR, it will be necessary to construct a buried offshore pipeline. Unless the discovery is sizable, it is likely that the added costs of constructing an offshore pipeline could preclude a pipeline from being built, and thus preclude development and production of the field.

° If large amounts of natural gas are discovered in ANWR, development of ANWR could increase the feasibility of a gas pipeline. The Japanese and Koreans are beginning to give favorable consideration to the possibility of using North Slope natural gas in the mid-1990's and beyond. During recent meetings, the Japanese and the Koreans indicated a possible need for an additional 7 million tons and 5.6 million tons of liquified natural gas, respectively, by the mid-1990's.

In January 1986, the Yukon-Pacific Corporation requested the Bureau of Land Management to resume processing of a May 1984 application to construct a large diameter gas pipeline from Prudhoe Bay to a liquified natural gas facility in Cook Inlet or Valdez. Congress previously authorized a similar request from the Northwest Alaska Pipeline Company, which has received a grant of right-of-way from BLM to construct a gas pipeline from Prudhoe Bay, through Alaska and Canada to the lower U.S.

° North Slope oil production is projected to begin declining in 1987, which will result in excess capacity in the TAPS line and additional reductions in state revenues. Assuming that ANWR is opened to oil and gas leasing, it will likely take at least ten years between a lease sale and when production could commence. During this period, the Department of Revenue projects that the price of oil will rise to \$20/barrel. Thus, early leasing and exploration could supplement lower state revenues in the late-1990's. Also, generally speaking, it is preferable for the state to receive revenues sooner rather than later.

#### ENVIRONMENTAL VALUES, POTENTIAL IMPACTS, AND MITIGATION MEASURES

° The coastal plain of the ANWR hosts a diversity and abundance of fish, wildlife, and habitat unequalled elsewhere in arctic North America. Those resources and habitats of primary concern in the refuge include the Porcupine and Central Arctic caribou herds, muskox, major stream systems and nearshore estuarine habitats critical to spawning and overwintering fish, and coastal tundra habitats utilized by geese, swans, and other waterfowl.

The Porcupine caribou herd, numbering 170,000 animals, is the second largest herd in the U.S. and is an important subsistence resource for Alaskans and Canadians. The herd spends a portion of the summer in ANWR for calving and insect relief, often with the entire calving portion of the herd in the refuge. The Central Arctic caribou herd range includes the coastal plain and foothills between the Canning and Colville river drainages. In addition to insect relief habitat, one of two major calving areas for this herd is located just west of the Canning River.

The second largest herd of muskox in the U.S. resides in ANWR. Muskox use riparian habitats for most of the year. Winter and summer range, including calving habitat, are restricted to the major river systems (e.g., Sadlerochit, Okerokovik, and Tamayariak).

Tundra swans and snow geese represent two of the more important waterfowl species utilizing ANWR. The nesting density for tundra swans is equal to or higher in ANWR than for other areas on the North Slope. Snow geese utilize ANWR extensively during the fall to feed and gather food reserves for the flight south. Up to half of the entire snow goose population of the U.S. and Canada may use ANWR in any given year. They concentrate in all areas of the coastal plain of ANWR east of the Hulahula River and are extremely sensitive to disturbance. Nonsubsistence uses also occur and include both nonconsumptive (e.g., wildlife viewing by hikers and backpackers) and consumptive uses (e.g., moose and caribou hunting).

Twelve species of fish are present in ten major streams within ANWR. Important habitat areas include the estuarine environment (i.e., nearshore brackish water habitats) and natural spring areas located in the upper portion of some of the major river systems (e.g., Canning, Sadlerochit, Hulahula, Aichilik) which provide overwintering and spawning habitat.

° Oil and gas development and transportation corridors can adversely impact fish and wildlife to varying degrees as a result of human activity and the physical presence of structures associated with the development. Impacts can include disruption of feeding, reproduction, staging, movement, and other behavior essential to population survival. Impacts are highly dependent upon reservoir size, areal extent, facilities required for development, location of facilities, and the need for waterflooding, pumping facilities, gravel removal, etc. An additional causeway and dock facility may be required in order to bring modules and equipment onshore. If waterflooding is an integral part of development, then water withdrawals, a seawater treatment plant, and attendant discharges can be expected. Impacts of these aspects of development and production would be similar to those expected at Oliktok Point for Kuparuk and Westdock for Prudhoe Bay, if similar hydrologic and morphologic conditions prevail. Access roads and construction pads interrupt surface drainage patterns of the wetland tundra and may result in secondary loss of habitat other than that directly lost by placement of fill material. Fish habitat can be negatively affected if adequate drainage and fish passage, as well as clean water and stream substrates, are not available.

Monitoring studies from previous North Slope oil and gas development projects have shown that improperly engineered or constructed roads, pipeline corridors, and other linear facilities may affect wetlands by altering the natural waterflow regime. Such changes have been correlated with altered use of wetland habitat by birds in the Prudhoe Bay area.

° The extent of impact would depend on the timing and severity of disturbance, location of habitat loss, and effectiveness of required mitigating measures. Possible mitigation measures could include area deferrals, seasonal use or activity restrictions, provisions for fish passage and wildlife access requirements, protection of riparian zones, etc. A coordinated state review of these recommendations will take place once the 1002 report is released. Generally, impacts associated with exploration are more likely to be successfully mitigated than impacts associated with development activities.

° Air quality in ANWR may be an issue of concern if new production facilities are developed. Sulfur dioxide, total suspended particulate matter, carbon monoxide, and nitrogen oxides would be the principal air pollutants discharged into the air by oil and gas development. Concentrations of these four compounds would depend, in part, on the type and volume of fuel burned in the turbines, generators, and other internal combustion engines used in the refuge and on the amount of flaring that occurs in the region.

° The development and production phases constitute the phases of greatest concern from a water quality standpoint. With these phases come long-term, continuous, and generally low-level sources of waste materials over the 20- to 30-year life of a field. Waste materials produced during production include produced waters, drilling muds and cuttings, waste chemicals/additives, and potential oil and hazardous substance spills.

° Potential water quality impacts during exploration and production can be mitigated by consolidating facilities and material sites and by measures to contain and dispose of liquid and solid wastes. The question of the relative ability of a particular environment to accommodate discharged wastes is integral to any analysis of the effects of oil and gas development on water quality. The rate and volume of pollutant input is weighed against the assimilative capacity of the land or water and the specified identified uses of that particular receiving environment. If the assimilative capacity is inadequate, measures can be taken to ensure that the pollutant is contained or transported to a safe disposal site.

Based on such considerations and operating experience with other North Slope oil fields, a number of practices have proven to be successful in mitigating impacts of oil and gas operations. These include: 1) subsurface reinjection of produced water; 2) alternative disposal methods to reserve pit dewatering to the tundra; and 3) accurate assessment and management of all liquid and solid waste streams generated from new production facilities.

Solid waste and hazardous waste management in arctic environments have been key issues and have historically required extensive attention. New regulations recently proposed by the Department of Environmental Conservation provide guidance and allowable options to operators with regard to the disposal of muds and cuttings. New pit designs will require consideration of fluids management (i.e., leaching), closeout and capping, and prevention of water movement through the pit. Methods to minimize the areas impacted, such as reinjection of mud, are being seriously considered. The feasibility of reinjection of crushed cuttings is also being evaluated. Additionally, the inventory and disposal of drums of chemical wastes must be carefully monitored. Management requirements will typically include provisions for recycling and backhaul of scrap metal, vehicles, tires, drums, and batteries.

Development plans should consider consolidation of production and support facilities, optimize the layouts of roads and pipelines, and provide for a number of intensive use material sites. Site rehabilitation and restoration should also be considered in early planning and mitigation phases.

#### SUBSISTENCE CONSIDERATIONS

° The proximity of the Village of Kaktovik to ANWR is such that oil and gas development will likely impact community subsistence activities. Fish, wildlife, and marine resources of ANWR and adjacent habitats also provide a reliable economic base for the residents of Nuiqsut, Venetie, and Arctic Village. Fish and wildlife resources used for subsistence include bowhead whales, caribou, Dall sheep, waterfowl, grizzly bears, wolves, and fishes (i.e., primarily Arctic char, whitefish, burbot, and Arctic grayling). Other communities located in Canada and south of the Brooks Range in Alaska use, to some extent, caribou from the Porcupine caribou herd.

## THE STATE'S ROLE IN DECISIONS AFFECTING ANWR

° Legal authority exists to ensure state participation in the development and review of mitigation measures and tract selection decisions developed to protect the air, land, water, habitat, and subsistence resources of ANWR. The commissioner of the Department of Fish and Game has the authority to specify and ensure protection of the various rivers, lakes, and streams or parts of them that are important for the spawning, rearing, or migration of anadromous fish as well as the responsibility to ensure that fish passage is maintained (Title 16). The Department of Environmental Conservation has broad regulatory authority in the areas of water quality control, water supply, air quality control, solid waste management, tanker and oil terminal facilities, oil spill prevention, hazardous substance control, and land and subsurface pollution prevention (Title 46). The Department of Natural Resources has management authority over any water appropriations for navigable or nonnavigable water in ANWR (AS 46.03).

The Alaska Coastal Management Act requires that all activities within or directly affecting the coastal zone of ANWR be reviewed and approved by the state against the standards of the Alaska Coastal Management Program (AS 46.40).

The Fish and Wildlife Coordination Act specifies that the Secretary of the Interior shall ensure that the rules and regulations developed for the conservation, maintenance, and management of wildlife resources and their habitat are not inconsistent with the laws for the protection of fish and game of the state in which such area (i.e., ANWR) is situated.

° To ensure that the state's concerns are incorporated into the decision-making process, a cooperative agreement would be valuable to specify the timing, process, and procedures by which the Secretary would work with the state to develop guidelines and protective measures for oil and gas activities. The state has maintained a good relationship with the U.S. Fish and Wildlife Service (USFWS), particularly with regard to other activities on refuges and other federal lands in the state. Although formal cooperative agreements have not been developed between the state and the USFWS for other areas, Department of Fish and Game and the Division of Governmental Coordination do have existing memoranda of agreements with the USFWS. When contacted, USFWS officials did not believe there would be any problem or reluctance on their part to enter into a cooperative agreement with the state if desired. The Division of Governmental Coordination intends to pursue this approach with USFWS.

## PROPOSED LAND EXCHANGES

° The USFWS has been discussing with several Native corporations the possibility of a land exchange of ANWR lands. The state also has expressed interest in exchanging some of its lands for ANWR acreage. The USFWS has identified lands owned or selected by Native corporations and the state within various national wildlife refuges in Alaska. The Native corporation inholdings have been ranked according to fish and wildlife values, amount of public use, potential threats to habitat, and the degree to which acquisition would facilitate refuge management. State lands have not been ranked as yet. The USFWS has indicated that it would be willing to discuss any land exchange proposal that would help to consolidate refuge lands in ANWR or other refuges. The USFWS has also stated that no proposed land exchange will occur unless authorized by Congress. Furthermore, a decision has been made that no proposal for any land exchange involving ANWR will be sent to Congress for approval prior to the submission to Congress of the report required by Section 1002(h) of Alaska National Interest Lands Conservation Act.

° Unless specifically provided for in a land trade agreement between the U.S. and third parties, the 90 percent revenue share of production would be lost. In the event of a land exchange, the state will ensure that the benefits, which could be received by the state if exploration in ANWR is authorized by Congress, are not jeopardized by any land exchange agreement.

## PORCUPINE CARIBOU TREATY

° Formal negotiations with Canada are scheduled to begin later this summer regarding a treaty to protect the Porcupine caribou herd and its habitat. The U.S. participants view the agreement and the decision on whether to allow oil and gas exploration in ANWR as separate issues. Once the U.S. federal government formulates its position, formal negotiations will begin with Canada. It is not anticipated that the provisions being discussed would have a significant impact on the decision whether to allow oil and gas exploration in ANWR. In addition, the USFWS has the lead for both the ANWR exploration decision and the development of the U.S. negotiating position. Consequently, the two documents are likely to be compatible. The state position, which does not address oil and gas exploration in ANWR, was recently transmitted to the USFWS.

tg36070801rse

Jonathan Sperber  
PO Box 74642  
Fairbanks, AK 99707  
456-8161/8172

November 11, 1986

Ms. Sharman Piper  
c/o Rep. Sam Cotten  
Town Square Professional Building  
PO Box 296  
Eagle River, AK 99577

Dear Sharman,

Enclosed is a more recent draft of materials that I have written regarding ANWR. I hope you find the information useful, but I would ask that the material not be distributed at this time.

Sincerely,



Jonathan Sperber

DRAFT

Confidential - LBA  
J. Sperber 11/11/86

Chapter IV  
ARCTIC NATIONAL WILDLIFE REFUGE

The Arctic National Wildlife Refuge (ANWR) was established in 1980 under the Alaska National Interest Lands Conservation Act (ANILCA). Congress designated 8 million acres of the 19 million acre refuge as wilderness, but deferred for five years a decision as to whether the 1.5 million acre coastal plain should be opened to commercial oil and gas development or protected as wilderness.

A congressional vote on the land designation of the coastal plain will take place after Congress studies a report on the subject being drafted by the U.S. Department of the Interior. This report, required under Section 1002(h) of ANILCA, is not expected to be made available until early in 1987. In addition to recommending whether or not oil and gas leasing should occur in ANWR, the Sec. 1002(h) report will also contain information regarding the geological potential of the area, fish and wildlife resources and their habitats, an assessment of the potential effects of oil and gas development on these resources and habitats, and a discussion of potential transportation and processing facilities.

Controversy over proposed development along the coastal plain derives from the extremely diverse and abundant fish, wildlife, and habitat in the area. The wildlife refuge serves as a summer calving ground for the 170,000 caribou in the Porcupine caribou herd, as a major nesting site for tundra swans, snow geese, and other waterfowl, and as overwintering and spawning habitat for twelve fish species.

The State of Alaska formally supports oil and gas development in the refuge, while emphasizing the need for protecting environmental values. The state has therefore spoken in opposition to H.R. 4922, which was introduced in 1986 by Rep.

Udall, since the bill would designate the ANWR coastal plain as wilderness.<sup>1</sup> Independently of the state's actions, the Arctic Slope Regional Corporation has submitted a report to Congress requesting that the coastal plain be opened to oil and gas development.<sup>2</sup>

Policy aside, H.R. 4922 was introduced prematurely in that the Sec. 1002(h) report, which is intended to serve as the information base for congressional decision-making, has yet to be released. Other activities taking place in advance of the report are negotiations between the U.S. Fish and Wildlife Service and other parties to trade land within wildlife refuges elsewhere in Alaska for land on the ANWR coastal plain. Ten U.S. senators, in a letter written by the Senate Committee on Energy and Natural Resources, objected to such negotiations taking place at this time, stating that these actions may jeopardize the objectivity of the Sec. 1002(h) report when it is presented to Congress.<sup>3</sup>

A related problem has been the state administration's policy during the past three years to dismantle the resource inventorying function of the Division of Geological and Geophysical Surveys (DGGS). Although DGGS has conducted extensive analyses in ANWR under a memorandum of understanding with the U.S. Department of the Interior, the state's ability to further increase its geological and geophysical knowledge of the refuge will decrease severely as a result of budget reductions. The state may therefore find itself handicapped in its attempt to make informed decisions as to which lands should be retained in state ownership, sought for eventual state ownership, or offered in trade to the federal government or private interests.

#### Recoverable Reserves Potential

The Department of Natural Resources, the U.S. Geological Survey (USGS), and the petroleum industry concur that the

Arctic National Wildlife Refuge coastal plain may have the highest oil and gas potential of any unleased area in North America. The USGS estimated in 1980 that the coastal plain contains between 0.8 and 17.6 billion barrels of undiscovered oil in place, based on the respective probability levels of 95% and 5%. The USGS has also estimated that reserves of undiscovered gas in the area range from 1.4 to 28.1 trillion cubic feet at the same probability levels.<sup>4</sup> The Alaska Oil and Gas Association has estimated an average mean potential for the coastal plain of 6.9 billion barrels of oil.<sup>5</sup>

The probability of developing oil and gas in this area is enhanced by the proximity of the coastal plain to the infrastructure established for Prudhoe Bay and other North Slope fields, including roads, construction facilities, and the Trans-Alaska Pipeline. Development of the coastal plain would, in turn, improve the likelihood that reserves on adjacent state-owned lands, such as the known discoveries in the Point Thomson field near Flaxman Island, will eventually be developed.

From an economic standpoint, the recoverable reserves of the coastal plain would be increased by a projected price for oil of \$20 per barrel by the late 1990s, which is the earliest time that oil would be produced from the area. The volume of economically recoverable reserves would also be increased if Congress were to allow the foreign export of Alaska North Slope oil. Lower transportation costs to foreign markets would increase the wellhead value of the oil, thereby increasing profit margins and improving the possibility that further development and production will take place.

#### Federal-State Revenue Sharing

The State of Alaska is entitled by federal law<sup>6</sup> to a 90% share of all royalties, bonuses, and rentals derived from oil and gas produced on federal land in the Arctic National

Wildlife Refuge. The state also has the authority to receive severance taxes from oil produced on this land. Estimates are that if an oilfield the size of Kuparuk (about 1.5 billion barrels recoverable) were to be developed in ANWR, revenues earned by the state through severance taxes and the state's share of federal revenues would range from \$1.5 to \$3.3 billion based on oil prices of \$20 and \$25 per barrel, respectively.<sup>7</sup>

The provisions of AS 37.13.010(a)(2) require that 50% of all bonuses and federal mineral revenue sharing payments received by the state from mineral leases in the refuge be placed in the Alaska permanent fund. In the event that oil and gas are produced on refuge lands that have been transferred by the federal government to private interests, however, direct financial benefits to the state will be limited to tax revenues and no money will accrue directly to the Alaska permanent fund.

Another consequence of transferring these lands to the private sector would be the inapplicability of a statutory local hire provision for work conducted on oil and gas lease lands. The Alaska chapter of the AFL-CIO passed a resolution in 1986 seeking the passage of a local hire requirement for state-owned oil and gas lease lands,<sup>8</sup> and the legislature failed by one vote to approve an amendment to S.B. 367 (ch. 33, SLA 66) that would have provided such a requirement.

The Mineral Leasing Act of 1920 provides that the State of Alaska shall receive a 90% share of all sales, bonuses, and royalties from public domain lands within the state's boundaries, and that other states shall receive a 50% share of the revenues from public domain lands within their respective boundaries.<sup>9</sup> The decision by Congress to provide Alaska with a higher revenue share is balanced by another provision of the act which stipulates that, for states other than Alaska, an additional 40% of the federal revenues shall be placed into a reclamation fund.<sup>10</sup> The fund, which was established under the

Reclamation Act of 1902, is to be used for irrigation projects for the reclamation of arid and semi-arid lands.<sup>11</sup> Congress also provided in Section 28 of the Alaska Statehood Act that the state shall receive 90% of the mineral revenues produced from public domain lands in Alaska.

A concern exists that certain members of Congress may wish to reduce Alaska's revenue share below the current 90% level. In 1983, for example, Congressman Breaux introduced an initiative that would have amended Sec. 28 of the Alaska Statehood Act by providing a 75% revenue share to the federal government for wetlands protection, a 25% revenue share to local government, and no revenues to the state government.<sup>12</sup> Unlike most federal laws, however, a statehood act represents a solemn compact between the people of a territory and the federal government. The state has therefore argued in the past that an amendment to the Alaska Statehood Act would be a violation of this compact.

Under a provision of the Reclamation Act, Alaska received a 50% share of mineral revenues from the 1982 sale of federal leases in the National Petroleum Reserve in Alaska (NPR-A). This share was established in a 1980 amendment to the Reclamation Act,<sup>13</sup> which had previously been amended in 1976 in order to redesignate the "Naval Petroleum Reserve Numbered 4, Alaska" as the "National Petroleum Reserve in Alaska."<sup>14</sup> Prior to the 1980 amendment, federal law prohibited Alaska from receiving any shared revenues from the reserve.

A related concern is that, even if the ANWR coastal plain were to be developed and the state's revenue share were to remain at 90%, the state might encounter difficulties in attempting to recover its full share of federal revenues. This situation occurred in regard to the Kenai National Moose Refuge, in which the state had to appeal to the U.S. Supreme Court in order to receive its 90% revenue share from oil and gas development in that area.<sup>15</sup>

The potential revenue base at stake in ANWR warrants that Alaska's congressional delegation attempt to ensure that the state's revenue share from the refuge is not reduced below the current 90% level. The 1987 legislature has the opportunity to assist the congressional delegation in this regard by passing a resolution seeking to maintain the current revenue share. A reduction below this level would result in the state receiving a disproportionately small share of federal revenues from a revenue base that may prove to be extremely significant.

The legislature should also be aware that the Mineral Leasing Act, in language that is similar to but less restrictive than that contained in the Reclamation Act, provides a directive regarding the expenditure of the state's revenue share. The Mineral Leasing Act states that "[T]he legislature of the State may direct giving priority to those subdivisions of the State socially or economically impacted by development of minerals leased under this chapter, for (i) planning, (ii) construction and maintenance of public facilities, and (iii) provision of public service[;]"<sup>16</sup>

The Reclamation Act provides that the state's 50% share of oil and gas revenues received from NPR-A be used "for (a) planning, (b) construction, maintenance, and operation of essential public facilities, and (c) other necessary provisions of public service: Provided further, That in the allocation of such funds, the State shall give priority to use by subdivisions of the State most directly or severely impacted by development of oil and gas leased under this section."<sup>17</sup>

In March 1986, the Juneau Superior Court ruled that the state, in spending its revenue share from the 1982 NPR-A lease sale, had failed to follow the provisions of the Reclamation Act. In response to the ruling, the legislature passed H.B. 491 (ch. 53, SLA 1986) in order to make funds that had previously been received from the lease sale available to impacted communities. Under the provisions of H.B. 491, \$24.3 million

was transferred from the Alaska permanent fund to the Department of Community and Regional Affairs (C&RA).

In addition to granting the commissioner of C&RA the authority to recommend how much money to appropriate to impacted communities, the legislature also granted the commissioner the power to appropriate these funds. Soon after H.B. 491 was enacted, the commissioner of C&RA issued emergency regulations providing for the disbursement of these funds. The cause of the "emergency" was a decrease in available state municipal grants and state-local revenue sharing funds.

The directive provided in the Reclamation Act is mandatory, whereas the directive in the Mineral Leasing Act is discretionary. However, communities that have benefited under the language of the Reclamation Act may attempt to pressure either Congress or the state legislature in an attempt to receive the same share of local revenues from the development of ANWR as was received from the development of NPR-A.

#### Land Exchanges

Virtually all surface and subsurface lands within the Arctic National Wildlife Refuge are owned by the federal government. The state's landholdings along the coastal plain are limited to offshore waters in the Beaufort Sea that are within the state's three-mile territorial limit, and to lands that the state may claim under the Submerged Lands Act of 1953.<sup>18</sup> A major inholding within the refuge, however, is a 92,160 acre tract of land underlying the village of Kaktovik that is owned by the Arctic Slope Regional Corporation (ASRC).

ASRC gained title to the subsurface land through a 1983 land exchange with the U.S. Department of the Interior. In return, the National Park Service received approximately 100,000 acres of ASRC subsurface lands near Chandler Lake, which is within the boundaries of the Gates of the Arctic National Park. Although ASRC acquired the subsurface land in

ANWR through this exchange, the Native corporation could also have obtained the land through Section 1431(o) of ANILCA. This section permits a Native regional corporation to exchange subsurface lands in ANWR or NPR-A if such action is taken within 40 years of the enactment of ANILCA, and if the land sought is within 75 miles of lands previously selected by the village corporation. The village corporation in this case is the Kaktovik Inupiat Corporation.

The intention of the U.S. Fish and Wildlife Service (USFWS) has been to exchange land on the coastal plain with a high oil and gas potential for important habitat land within the boundaries of other wildlife refuges in Alaska. Although the Fish and Wildlife Service has insisted that no land exchanges will take place on the coastal plain unless Congress opens this area to commercial oil and gas development, the agency has been conducting preliminary negotiations with several Native corporations. One example of such negotiations is a draft land exchange that has been written and circulated by the Kodiak-based Native corporation, Koniag Inc.<sup>19</sup>

Several Native regional corporations have also joined forces with the oil industry in an effort to negotiate land exchanges with the federal government. The most visible of these corporations is Cook Inlet Region, Inc., which has previously received assistance from ARCO in effectuating land exchanges elsewhere in the state.<sup>20</sup> CIRI has also developed a consortium arrangement with its village corporations for the purpose of receiving lands on the ANWR coastal plain. At the same time, both ARCO and Exxon have been taking an active role in promoting the proposed 1991 ANCSA amendments.<sup>21</sup>

Related activities include the recent and on-going appraisals by the Bureau of Land Management of ANWR lands, and the appraisal by USFWS of Native corporations lands. These appraisals are expected to facilitate land exchanges between the federal government and the Native corporations, and it is

also expected that a tentative agreement will be reached between the U.S. Department of the Interior and the Native corporations prior to the coastal plain being opened to development. However, Interior has stated its intention to not exchange any lands in the refuge without congressional approval.

The state has received assurances from the Department of the Interior that the state will be kept apprised of the federal agency's activities regarding land exchange proposals with Native corporations, and Interior has also promised the state a decision-making role in this regard. Although it is in the state's best interest to monitor these activities, the governor's office has yet to receive copies of any of these land exchange proposals.

The State of Alaska has had little success in its negotiations with the Fish and Wildlife Service, and several state officials believe the agency is not seriously interested in dealing with the state. On the basis of state lands offered for consideration, however, USFWS appears to also doubt the state's sincerity in seeking a land exchange. These problems emanate, in part, from the state's difficulty in ascertaining what Alaska's eventual federal-state revenue share will be. This lack of certainty has influenced the state's position in regard to possible land exchanges, since the state's incentive to exchange lands with the federal government decreases as the degree of certainty that the state's revenue share will remain at 90% increases.

Of 12 million acres in 17 different areas considered for possible exchange by the state in February 1986,<sup>22</sup> the Fish and Wildlife Service expressed interest only in state inholdings within the Tetlin National Wildlife Refuge.<sup>23</sup> The federal agency also mentioned its interest in receiving state lands within the Izembek Lagoon,<sup>24</sup> although such an exchange is unlikely due to the location of the land within a state critical habitat area established under AS 16.20.230.

Legislative approval would likely be required in any ANWR-related land exchange between the state and federal governments, since AS 38.50.020(a) requires legislative approval if lands involved in the proposed exchange are of unequal value, or if the proposed exchange includes state land having an appraised or estimated value of more than \$5 million.

#### Endnotes

1. Office of Management and Budget, State of Alaska Position on Management of the Arctic National Wildlife Refuge, August 4, 1986, p. 2.
2. Oil and Gas Journal, "Alaskan Group Backs Drilling on Wildlife Refuge," August 4, 1986, p. 24.
3. Anchorage Daily News, "Senators Would Halt Arctic Swap," August 22, 1986.
4. Division of Governmental Coordination memorandum from Director Robert Grogan to Governor Bill Sheffield, August 4, 1986, p. 1.
5. Anchorage Daily News, "Battle Over Arctic Refuge Pits Oil Against Wildlife," August 3, 1986, p. C1.
6. Alaska Petroleum Revenues: The Influence of Federal Policy, University of Alaska, Institute of Social and Economic Research, October 1984, p. 138-151.
7. Division of Governmental Coordination memorandum from Director Robert Grogan to Governor Bill Sheffield, August 4, 1986, p. 2.
8. Resolution I, Alaska State AFL-CIO Convention, September 17-18, 1986.
9. 30 U.S.C. 191
10. 30 U.S.C. 191
11. 43 U.S.C. 391
12. Director of State/Federal Relations and Special Counsel to the Governor John Katz memorandum to Governor Bill Sheffield, Legislative Issues in the 99th Congress,

December 21, 1984, p. 7.

13. 42 U.S.C. 6508
14. 42 U.S.C. 6502
15. 451 U.S. 271
16. 30 U.S.C. 391
17. 42 U.S.C. 6508
18. 43 U.S.C. 1301
19. Anchorage Daily News, "Natives May Join to Seek Refuge Swap," September 17, 1986.  
  
Prudhoe Bay Journal, "Around the State," July 24, 1986, p. 10.
20. Anchorage Daily News, "Natives May Join to Seek Refuge Swap," September 17, 1986.
21. AFN [Alaska Federation of Natives, Inc.] Newsletter, "1991 Amendments Move Forward," July 1986, p. 1.
22. Department of Natural Resources memorandum from Division of Land and Water Management Director Tom Hawkins to U.S. Fish and Wildlife Service Regional Director Robert Gilmore, February 5, 1986.
23. U.S. Fish and Wildlife Service memorandum from Regional Director Robert Gilmore to Division of Land and Water Management Director Tom Hawkins, March 12, 1986.
24. Testimony by Division of Land and Water Management Director Tom Hawkins to the House Special Committee on Oil and Gas, September 16, 1986.

# MEMORANDUM

# State of Alaska

TO: Distribution

DATE: July 8, 1986

FILE NO: tg86070801rse

TELEPHONE NO: 465-3562

FROM: <sup>RLC</sup> Robert L. Grogan, Director  
Division of Governmental  
Coordination  
Office of Management and Budget

SUBJECT: ANWR Executive Summary

Attached for your information is the final version of the state's policy regarding management of the Arctic National Wildlife Refuge (ANWR).

Also attached is the latest version of the draft executive summary which is intended to provide the necessary background material to support the state's policy regarding management of the ANWR. We will be discussing the adequacy and accuracy of the material contained in the executive summary at the July 10 meeting of the resources cabinet.

## Attachments

### Distribution

Commissioner Wunnicke, DNR, Juneau  
Commissioner Collinsworth, DFG, Juneau  
Commissioner Ross, DEC, Juneau  
John Katz, Office of the Governor, Washington, DC  
Molly McCammon, Office of the Governor, Juneau  
Vincent Wright, Revenue, Juneau

RECEIVED

JUL 9 1986

Petroleum Research

EXECUTIVE SUMMARY

DRAFT

As part of an overall analysis of potential oil and gas leasing in the Arctic National Wildlife Refuge (ANWR), the following is a summary of information regarding the resource potential of ANWR, the fish and wildlife values of the refuge, mechanisms available for state participation in ANWR leasing decisions, and mitigation available to protect resource values of the area if opened to exploration and possible development and production.

DEPARTMENT OF REVENUE

Analyze the potential direct and indirect financial benefits to the State of Alaska of oil and gas production, both in ANWR and on adjacent state-owned lands that could be affected by decisions on ANWR.

Although estimated reserves of ANWR and the financial impact to the state cannot be quantified with any degree of accuracy until an exploratory drilling program is completed, the following table provides an estimate of potential petroleum revenues to the state from ANWR under different world oil price scenarios:

Estimated State Petroleum Revenues from the ANWR  
for Different World Oil Prices  
(1986\$)

<u>World Price</u>	<u>Wellhead Price</u>	<u>Severance Tax</u>	<sup>90%</sup> <u>Royalties</u>	<u>Total</u>
\$15/bbl	\$ 2.30/bbl	Production not	economically	feasible
20	7.30	\$35.42MM	\$ 59.96MM	\$ 95.38MM
25	12.30	59.68	56.12	160.88
30	17.30	83.94	142.07	226.01

Identify the potential financial impacts of early development versus later development if exploration and production are allowed.

The information presented in the table above is laid out in constant dollars. Therefore, the question of when development occurs (i.e., earlier versus later) has no bearing on the figures in the table. It should be noted that the economic feasibility of producing oil found in and adjacent to ANWR is very dependent on the price of oil. Oil prices will need to rise to at least \$20 a barrel before it will be economically feasible to develop all but the very largest reserves. Current Department of Revenue forecasts project a world price of \$20 a barrel (1986 dollars) in the late 1990's, which is when production would likely come on-line if leasing and exploration is allowed to commence in ANWR in the next several years. The late 1990's is also a time when it is projected that the Trans-Alaska Pipeline will have surplus capacity.

# STATE OF ALASKA

## DEPARTMENT OF NATURAL RESOURCES

### OFFICE OF THE COMMISSIONER

BILL SHEFFIELD, GOVERNOR

P.O. BOX 7005  
ANCHORAGE, ALASKA 99510-7005  
PHONE: (907) 561-2020

October 29, 1986

Resolutions Committee  
Interstate Oil Compact Commission  
P. O. Box 53127  
Oklahoma City, Oklahoma 73152

Dear Members of the Resolution Committee:

On behalf of the State of Alaska, I would like to request that the Resolutions Committee accept the attached resolution for consideration by the Interstate Compact Commission at the Commission's upcoming December meeting.

The resolution urges the United States Congress to allow environmentally responsible oil and gas development in the Arctic National Wildlife Refuge. The refuge is considered to have the highest oil and gas potential of any unexplored area on the North American continent, and the State of Alaska believes that opening the refuge to environmentally responsible oil and gas development would be in the state and national interest.

I appreciate your consideration of this matter. Please contact me if you would like any additional information.

Sincerely,



Esther C. Wurnicke  
Commissioner

cc: Timothy Dowd, Interstate Oil Compact Commission  
Molly McCammon, Special Assistant to the Governor  
Chat Chatterton, Alaska Oil and Gas Conservation Commission  
James Eason, Alaska Department of Natural Resources

Attachment

0445E

*by  
State of  
Alaska*

PROPOSED  
Resolution of the Interstate Oil Compact Commission  
regarding the  
Arctic National Wildlife Refuge

WHEREAS, the U. S. Congress has reserved the right to permit further exploration for, and development and production of, oil and gas within the coastal plain of the Arctic National Wildlife Refuge, Alaska; and

WHEREAS, the oil industry, the State of Alaska, and the Department of the Interior consider the coastal plain to have the highest potential for discovery of very large oil and gas accumulations on the North American continent; and

WHEREAS, a decision to permit oil and gas exploration development and production on the coastal plain will increase the value and facilitate development of highly prospective state owned tidelands and federally owned OCS lands offshore of the Refuge; and

WHEREAS, facilities developed to transport petroleum resources discovered on the coastal plain to the Trans-Alaska Pipeline System (TAPS) may allow marginal discoveries located between the Refuge and TAPS to be developed and produced and may prolong the economic life of TAPS; and

WHEREAS, oil and gas exploration and development of the coastal plain and adjacent lands could result in major discoveries that could reduce our nation's future needs for imported oil, help balance our trade deficit, and significantly increase the national security; and

WHEREAS, the 1.5 million acre coastal plain comprises only eight percent of the 19 million acre Refuge, and development of any oil and gas reserves subsequently discovered will affect an even smaller percentage of the coastal plain; and

WHEREAS, the oil industry has shown at Prudhoe Bay, as well as at other locations along the Arctic coastal plain, that it can safely conduct oil and gas activity without adversely affecting the environment or wildlife populations;

NOW, THEREFORE, BE IT RESOLVED that the Interstate Oil Compact Commission urges the Congress of the United States to open the Arctic National Wildlife Refuge (ANWR) Coastal Plain to environmentally responsible oil and gas exploration, development and production.

BE IT FURTHER RESOLVED that the Interstate Oil Compact Commission recommends that each of the member states urge their Congressional delegations to support the opening of ANWR.

BE IT FURTHER RESOLVED that the Executive Director is hereby directed to furnish a duly certified copy of this resolution to the Secretary of Interior, the Chairman and ranking member of the Committee on Energy and Natural Resources of the Senate, and the Chairman and ranking member of the Committee on Interior and Insular Affairs of the House of Representatives, and the Governors of the Compacting States.

MEMORANDUM

State of Alaska

To: Esther C. Wunnicke  
Commissioner

Date: November 12, 1986

File no: 9105

From: Gary Gustafson, Chief  
Land Management  
Land and Water Management

Telephone no: 762-4346

Subject: ANWR Trade

THE ISSUE

You have asked for an update on the status of proposed land exchanges involving the Arctic National Wildlife Refuge (ANWR) as well as recommendations to outline those actions and finances necessary for the state to participate in exchanges. Accordingly, I have included a background and summary report of these exchange negotiations and recommend the immediate appointment of an ANWR Exchange Team to advance state interests.

The 1.5 million acre Coastal Plain of ANWR is considered highly prospective for oil and gas by knowledgeable observers. As a result, Section 1002(h) of the Alaska National Interest Lands Conservation Act (ANILCA) directed the Secretary of the Department of Interior (DOI) to prepare a report together with his recommendations "... with respect to whether further exploration for, and the development and production of, oil and gas within the Coastal Plain should be permitted ..."

In anticipation of the release of this report and a subsequent decision by Congress to open the Coastal Plain to oil and gas exploration and development, DOI has been engaged in land exchange negotiations with several Native corporations formed pursuant to the Alaska Native Claims Settlement Act (ANCSA). More particularly, the U.S. Fish and Wildlife Service (USFWS) proposes to trade oil and gas rights within ANWR's Coastal Plain for ANCSA village and regional corporation lands (surface and subsurface estate) within or adjacent to components of the national wildlife refuge system in Alaska.

Land exchange negotiations between the DOI and several ANCSA corporations have progressed to the point that values for the proposed trade lands have been established and the ANCSA corporations will soon be allowed to make oil and gas right tract selections in the Coastal Plain. Although there will likely be opportunity future trades, the ANCSA corporations (armed with

industry expertise) can be expected to acquire the most valuable prospective tracts in the first round of any exchanges. Given the advanced status of these negotiations, the state must act quickly if it is to interject itself as a viable player in the initial ANWR land exchange efforts.

## BACKGROUND REPORT

### DOI Exchange Team

The ANILCA Section 1002(h) report referenced above was originally scheduled to be submitted by the Secretary of the DOI to Congress by September 2, 1986. However, environmentalist-sponsored litigation, dealing with whether the report requires public input and a revised Environmental Impact Statement pursuant to the National Environmental Policy Act (NEPA), has delayed release of the report. The Secretary is expected to release the report on November 24, 1986. Once released, Congress will review the report and decide the future management regime to govern activities on ANWR's Coastal Plain.

At the same time the ANILCA Section 1002(h) report was being prepared, DOI began land trade negotiations with ANCSA corporations. Informal discussions occurred over two years ago and soon progressed to the point that many ANCSA lands were identified and appraised. Most of these discussions occurred in Washington, D.C. and involved Bill Horn, DOI Assistant Secretary for Parks and Refuges. In an effort to standardize negotiations among the interested corporations as well as to better define federal land management objectives, DOI has appointed an ANWR Land Exchange Team made up of the following five individuals:

Sharon Allender, USFWS Solicitor, Washington, D.C.  
Jim Gillette, USFWS Realty Chief, Washington, D.C.  
Ted Stephenson, BLM, Alaska Program Staff, Washington, D.C.  
Paul Kirton, Solicitors Office, Washington, D.C.  
John Doebel, USFWS, Asst. Secretary's Liaison, Anchorage

In addition, the USFWS Alaska State Office in Anchorage had been actively involved, particularly Bob Gilmore, State Director and John Rogers, Director Gilmore's Assistant. Mr. Doebel is responsible for keeping Assistant DOI Secretary Bill Horn abreast of all negotiations.

### ANWR Oil and Gas Valuation

In 1980, prior to the acquisition of seismic and other geophysical data and other information on the Coastal Plain, the U.S. Geological Survey (USGS) estimated that there was a five percent probability that the Coastal Plain could contribute up to 17 billion barrels of crude oil and 34 trillion cubic feet of

natural gas. USGS also estimated there was a mean probability that the Coastal Plain could contain up to 4.85 billion barrels of crude oil and 12 trillion cubic feet of natural gas.

Under terms of ANILCA, geophysical surveys of the Coastal Plain had to be completed before December 2, 1985. Approximately 600 line miles of geophysical data were acquired during the winter of 1983-84, with another 580 lines miles run during the winter of 1984-85. These data and their subsequent analysis will form the basis of the ANILCA Section 1002(h) report to Congress.

According to oil industry, state and federal estimates, ANWR is considered to have potential oil and gas resources in excess of one-third of the current U.S. oil reserves and probably more than the initial reserves at Prudhoe Bay. Specific federal estimates should be included in the ANILCA 1002(h) report.

However, prior to the completion and release of the 1002(h) report, the DOI has assigned preliminary values (based upon oil and gas potential) to lands within the Coastal Plain. For purposes of the proposed land trades, DOI has divided the Coastal Plain into tracts of 2,560 acres each. These tract sizes were derived by dividing each township (23,040 acres) in nine equal component parts. Each tract, therefore, consists of four sections (640 acres x 4 = 2,560 acres). This parcelization is similar to that used for federal oil and gas lease sales. Using the above described tract grid, DOI has numbered and assigned a prospective value to each 2,560 acre tract. These values will be kept confidential until the proposed exchanges actually occur.

It appears to be DOI's intent to allow the corporation's to use the appraised value of their lands to select and acquire Coastal Plain oil and gas tracts. The method of acquisition would be similar to a Monte Carlo game, in that oil and gas tracts would be selected and acquired without prior knowledge of their estimated value. Thus, armed with oil company exploration knowledge, the corporation's are likely to select the most promising tracts.

The department's Division of Mining and Geology has also completed a report concerning the subsurface resources and prospective value of the ANWR Coastal Plain. This state report was completed some time ago and has remained confidential, pending release of the ANILCA Section 1002(h) report. The 1002(h) report was partially based upon information obtained from the state.

### ANWR Land Status

Originally established in 1960 as the 8.9 million acre Arctic National Wildlife Range, ANWR now includes about 19 million acres. The Coastal Plain consists of 1.5 million acres (approximately eight percent of ANWR's total acreage). Managed by the USFWS, the Coastal Plain has only one in-holding, the large surface and subsurface estate owned by the Village of Kaktovik and the Arctic Slope Regional Corporation (ASRC) respectively.

Pursuant to Section 12(a) of ANCSA, the Kaktovik Inupiat Corporation on Barter Island in ANWR, selected 92,160 acres along the Beaufort Sea. However, a provision of ANCSA required ASRC, which normally would have acquired the subsurface estate under Kaktovik's surface estate, to select in-lieu subsurface acreage outside ANWR and NPRA. In August, 1983, ASRC exchanged about 100,000 acres of this in-lieu subsurface entitlement near Chandler Lake in the Gates of the Arctic National Park for 92,000 acres of subsurface rights in ANWR under the Kaktovik Inupiat Corporation land. The land trade preempted another process established by Section 1431(o) of ANILCA, whereby ASRC could have obtained these same lands at a later date, provided Congress opened the Coastal Plain to commercial oil and gas development within 40 years and ASRC selected land within 75 miles of Kaktovik's land. The attached map depicts the Kaktovik and ASRC ownership on the Coastal Plain.

### Native Exchange Efforts

At the present time, there are four groups of Native interests involved in ANWR land exchange efforts. Koniag, the Kodiak-based village/regional corporation merger, has been involved in trade discussions with the USFWS for almost two years. Koniag owns several areas of land (e.g. Karluk River) of great interest to USFWS due to their location within the Kodiak National Wildlife Refuge. The Koniag ANWR Team is headed by Bill Timme, Art Kennedy and Bob Putz (former USFWS Alaska Director). A draft exchange agreement has been drafted and Koniag's lands were appraised last winter by a team of DOI appraisers. The initial exchange agreement has now been redrafted following recent meetings in Washington, D.C.

Another ANWR trade package has been assembled by DOYON, Ltd., based in Fairbanks. I have been unable to obtain much information concerning this proposal. Presumably, however, most or all of DOYON's land was also appraised last winter by the USFWS. The Akhiokaguyak Corporation, located on the south end of Kodiak Island (not part of Koniag), has also advanced a proposal to trade up to 100,000 acres to the USFWS.

The newest and largest ANWR trade package has been assembled by a Native corporation consortium headed by Cook Inlet Region, Inc. (CIRI) the Anchorage based regional corporation. Consisting of village corporation lands from the Bristol Bay, Calista and DOYON regional areas, as well as CIRI land holdings within the Kenai National Wildlife Refuge, this consortium has moved rapidly to present a very attractive trade package to the USFWS.

The CIRI ANWR Team is headed by three experienced land traders, Margie Sagerser, Mark Rindner and Michael C. T. Smith. Ms. Sagerser is a CIRI Board member and former CIRI vice-president for land management. Mark Rindner is a private attorney who has handled land use matters for CIRI. Michael C. T. Smith is a former DNR Deputy Commissioner and current land use consultant, often retained by CIRI. Ms. Sagerser and Mr. Smith were previously the principals in the 1976 Cook Inlet Land Trade.

Certainly in the case of the Koniag and CIRI, and probably that of DOYON, oil company money is a driving force and interest. Those companies rumored to be helping finance corporation trade efforts include ARCO, Texaco and Exxon.

It is evident that the corporations are well organized, financed and on the verge of consummating preliminary land exchange agreements with the USFWS. Thus far the corporations view the state as a possible competitor for key ANWR lands and have been reluctant to provide the state with much information. In addition, they undoubtedly fear the state might choose to oppose ANCSA trades in ANWR due to the loss of our 90 percent royalty share from federal leasing.

With the exception of some of the CIRI Team lands, the USFWS has appraised all ANCSA lands proposed for exchange. However, these federal appraisals must still be adjusted to account for public interest values. These adjustments are part of the on-going negotiations.

#### State Exchange Efforts

After learning of possible land trades between ANCSA corporations and the USFWS involving ANWR, you asked the department to initiate the trade discussions with the USFWS in late 1985. In February, 1986, Tom Hawkins, director of the department's Division of Land and Water Management, wrote Bob Gilmore, USFWS State Director to formally propose a state/federal land trade involving ANWR.

At that time, the department offered 12 million acres of state land holdings within or adjacent to national parks or refuges in Alaska as candidates for trade. Included were very important

habitat areas such as the Shearwater Peninsula and Marmot Island at Kodiak, the Black Hills caribou calving grounds on the Alaska Peninsula, trumpeter swan nesting area in the Copper River basin and state inholdings near McCarthy in the Wrangell-St. Elias National Park.

Mr. Gilmore responded in March, 1986, claiming that only the state lands within the Tetlin National Wildlife Refuge merited high priority for USFWS acquisition by trade. The remaining state lands were referenced as having only low to moderate USFWS acquisition interest.

In October of 1986 during a trip to Washington, D.C., you discussed the ANWR trade matter with Bill Horn, DOI's Assistant Secretary for Parks and Refuges. Mr. Horn apparently relayed that DOI was interested in a state/federal ANWR trade, and that state lands in national park units were acceptable trade candidate areas. This prompted the state to reassemble its ANWR trade package, expanding the list of candidate state lands to include numerous areas of interest to the NPS. Mr. Horn also continued to assure you and John Katz that DOI would keep the state informed of the progress of DOI/ANCSA Corporation trade efforts. Unfortunately, it is now evident that much has occurred without state consultation.

On the basis of the Washington, D.C. discussions, Director Hawkins once again wrote Mr. Gilmore of the USFWS to try and solidify a state land trade proposal. Included in this revised state trade proposal were in-holdings within national parks for which the NPS has a long-standing interest (e.g. McCarthy, Wolf townships, Kamishak, etc.). We have not yet received a response to this latest state trade proposal.

#### RECOMMENDATION

The advanced status of the DOI/ANCSA Corporation land exchange negotiations requires an immediate and accelerated response from the State of Alaska. Assuming the Coastal Plain of ANWR is opened to oil and gas development by Congress in the near future, the State may assume two postures in order to protect or enhance its interests.

First, the State must seek proforma to preserve its 90 percent royalty interest from federal oil and gas lease sales, pursuant to the Mineral Leasing Act. Although some may suggest our 90 percent royalty is an excessive state benefit in this time of federal budget austerity, the State should do everything within its means to avert the loss of revenue which might accrue to the state.

Second, and coincident to attempts to maintain the State's current federal lease royalty percentage, the State should immediately advance its own land trade proposal and join the ANCSA corporations at the starting gate of the ANWR selection race. This means the State has to quickly identify a trade package of state lands and proceed to have them appraised in time for submission of a trade proposal to the legislature. Because state land appraisals will likely be completed later than the normal legislative exchange submission deadline established by AS 38.50, the governor will have to submit the exchange at a later date, following a finding of exigent circumstances.

The following timeframe should be closely followed if the State is to be in position to join the ANCSA corporations in the initial ANWR tract selection process (estimated by March-April, 1987).

1. Brief Governor Bill Sheffield, Governor-elect Cowper and key legislators on the conceptual state exchange proposal and designate a state ANWR Exchange Team (November, 1986).
2. Finalize state land pool to be included in exchange (December 1, 1986).
3. Conduct fair market value appraisals of state lands proposed for exchange (February 15, 1987).
4. Submit proposed trade to Legislature for approval (February 20, 1987).
5. Enter into Preliminary or Conceptual Exchange Agreement with DOI (April, 1987).

The unique nature of this exchange will necessitate variances in the normal AS 38.50 process. These variances must be approved by the legislature as part of their final review of the proposal.

Obviously, there is a tremendous amount of work to be done between now and mid-March. The only way the State can hope to successfully assemble, market and deliver this exchange is to immediately identify and appoint a qualified multi-disciplinary ANWR Exchange Team and provide them with sufficient support (both administrative and financial) to complete the assignment. I have proposed below a rough outline of the personnel and funding necessary to accomplish the task. It is essential that Team members be the most experienced and capable staff members within their realm of expertise. Team members should be available for the project on a full-time basis for a three month period from November, 1986, to February, 1987, and at least part-time thereafter.

Personnel and Responsibilities

1. Governor's Office, Washington, D.C. -  
Congressional delegation liaison, coordination with  
DOI representatives in Washington, D.C., represent  
Governor's interests.
2. Staff member, Division of Mining and Geology -  
responsible for ANWR subsurface evaluation,  
coordination with government, industry interests  
related to resource information, legislative briefings.
3. Assistant Attorney General, Department of Law -  
preparation of legislation and exchange agreements,  
legal support, coordination with Solicitors Office.
4. Staff member, Division of Land and Water Management -  
responsible for assemblage of state exchange land,  
coordination of state agency involvement, appraisal  
process, legislative briefings, negotiations.

In addition, it is essential to involve other affected state agencies (e.g. ADF&G, DEC) regarding those issues within their responsibility or expertise.

Financial

Primary costs are for appraisals and travel. Appraisals will likely be needed for substantial acreage of state land, and costs will be reduced if DNR uses in-house staff appraisers. Travel costs include several trips to Washington, D.C. for negotiations with DOI officials as well as several Juneau trips for legislative briefings.

Travel (2 team trips to Washington, D.C., 5 team trips to Juneau)	\$15,000
Appraisal (charter flights, etc.)	\$25,000
Other contractual (maps, aerial photos, printing, postage copy)	\$9,300
Equipment (filing cabinet)	\$200
 Total Estimated Project Budget	 \$50,000

Finally, because the Secretary is expected to release the 1002(h) report on November 24, 1986, it would be advantageous to publicly announce the formation of a state ANWR Exchange Team no later than November 21, 1986.

GG/jlh

ATTACHMENT

cc: Jim Eason, DO&G

Laurel Murphy, DM&G

Rich Kornbrath, DM&G

John Katz, Gov. Office, Washington, D.C.

Bob Arnold, CO

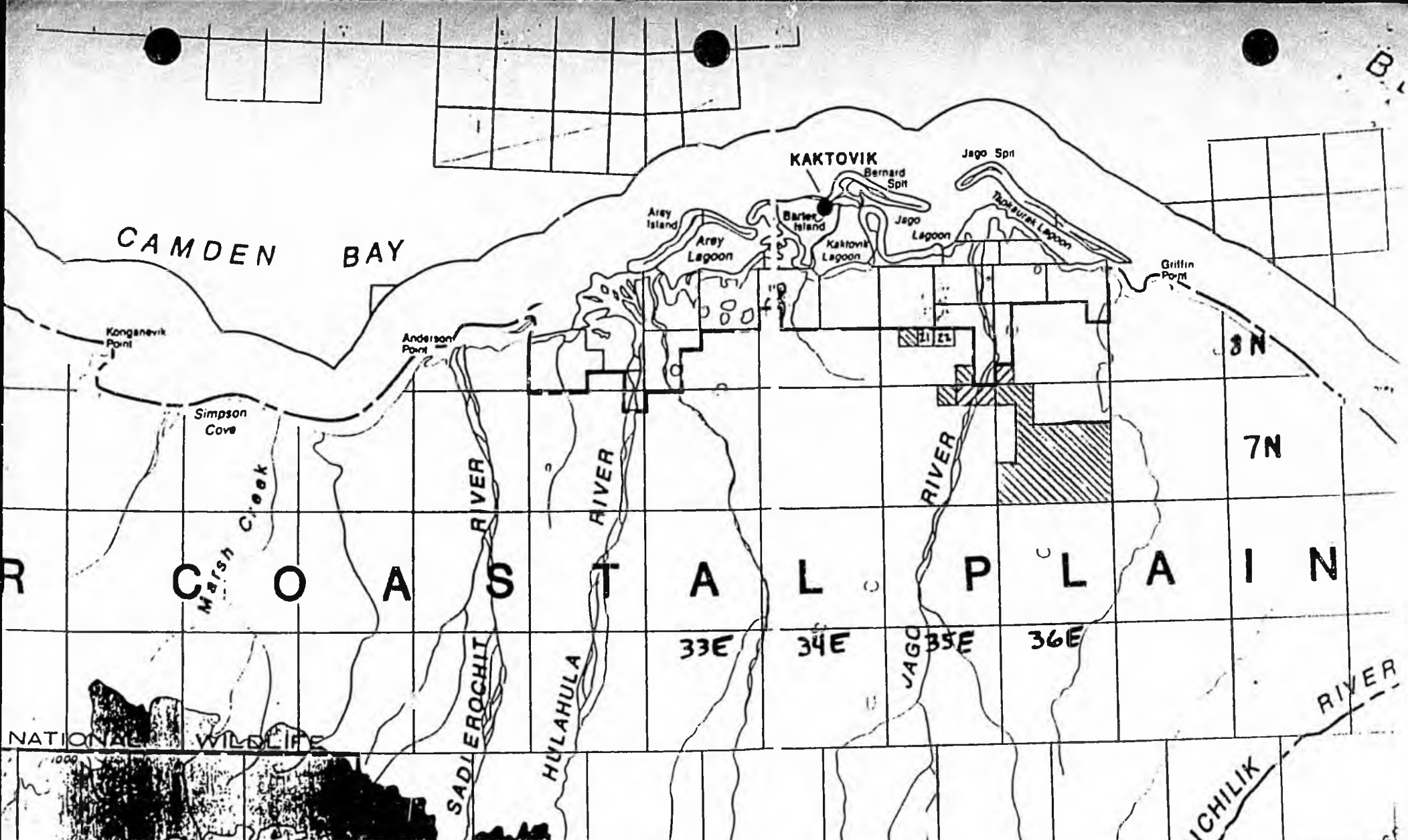
Jim Barnett, CO

Ned Farquhar, CO




Tom Koester, AGO

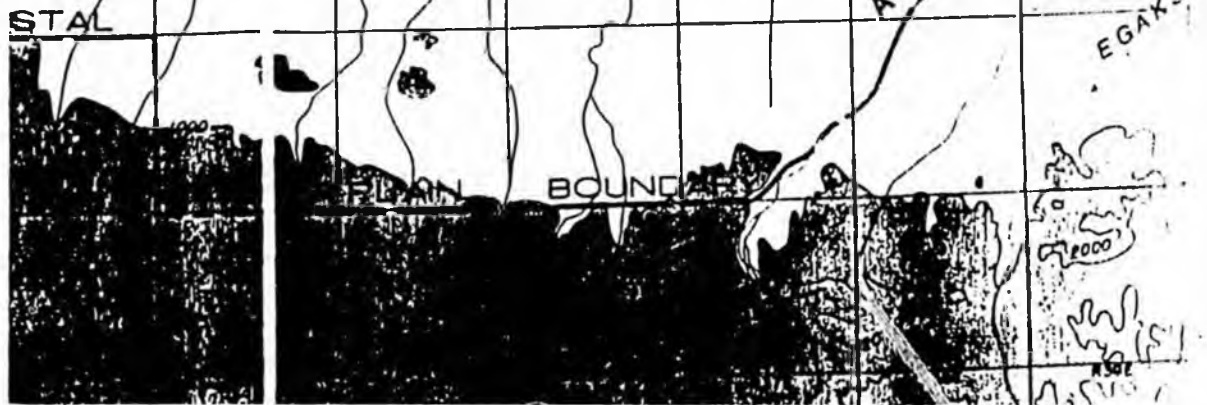
Norm Cohen, ADF&G

Tom Hawkins, DLWM



**KAKTOVIK 1431(g)(3) LAND**

- 
**IC 1209 (8-8-86)** 17,806 ac.
- 
**DIC 6-23-86 Under Appeal** 1,782 ac.  
 (Jago River Navigability)
- 
**Remaining Entitlement** 495 ac.  
 (Priority order is SE, NE,  
 SW, NW of Sec. 21, then SE,  
 NE, SW, NW of Sec. 22, T8N,





# REPRESENTATIVE DON CLOCKSIN

Alaska House of Representatives

MAJORITY LEADER

1024 WEST SIXTH AVENUE  
ANCHORAGE, ALASKA 99501  
(907) 274-4031

WHILE IN JUNEAU:  
POUCH V  
JUNEAU, ALASKA 99811  
(907) 465-3704

## MEMORANDUM

TO: Representative Sam Cotten  
FROM: Representative Don Clocksin (DC) (mb)  
DATE: October 23, 1986

RE: Briefing on ANWR issues by Commissioner Wunnicke

I have made an appointment with Commissioner Wunnicke for a full briefing on issues regarding the Arctic National Wildlife Refuge - including the specifics on possible land trades and subsurface rights, and impacts on Alaska's future revenues (see letters to and from the Commissioner, enclosed).

Our meeting is now scheduled for <sup>Thurs</sup> ~~Tuesday~~, October <sup>30</sup> ~~28~~, <sup>9:00</sup> ~~3:00~~ pm in Commissioner Wunnicke's Anchorage office on the 12th floor of the Frontier Building.

I suggest you join us at this briefing, if your schedule permits.

Please let me know.



# REPRESENTATIVE DON CLOCKSIN

Alaska House of Representatives

MAJORITY LEADER

1024 WEST SIXTH AVENUE  
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(907) 274-4031

WHILE IN JUNEAU:  
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JUNEAU, ALASKA 99811  
(907) 465-3704

Ms. Esther Wurnicke  
Commissioner  
Department of Natural Resources  
Pouch M  
Juneau, Alaska 99811

September 26, 1986

Dear Commissioner Wurnicke:

It has come to my attention that there are several complex issues involving the status of lands and petroleum reserves in the Arctic National Wildlife Refuge (ANWR). More particularly, I have been told that there are proposed trades of lands and subsurface rights involving the federal government, several Native corporations and the State of Alaska. I understand that much rides on the outcomes of these proposed trades, including the ability of the State of Alaska to have access to future revenue sources from the development of petroleum reserves in the ANWR.

I would very much appreciate a full briefing from appropriate people in your Department on these issues, including explanation of the particulars of the overall issues, the posture of the State with respect to them and the specifics of any and all trades of lands and subsurface rights being proposed by the federal government, the State of Alaska and every involved Native corporation. In addition, I am especially interested in knowing what impacts the outcomes of all proposed combinations of actions will have on the ability of the State of Alaska to have access to future revenues from petroleum development in the ANWR.

I appreciate your attention to this matter and look forward to hearing from you soon. Thanks very much.

Sincerely,

A handwritten signature in cursive script, appearing to read "D. Clocksin".

Representative Don Clocksin  
House Majority Leader

# STATE OF ALASKA

## DEPARTMENT OF NATURAL RESOURCES

OFFICE OF THE COMMISSIONER

BILL SHEFFIELD, GOVERNOR

400 WILLOUGHBY AVE.  
JUNEAU, ALASKA 99801  
PHONE: (907) 465-2400

October 7, 1986

The Honorable Don Clocksin  
House Majority Leader  
Alaska House of Representatives  
1024 West Sixth Avenue  
Anchorage, AK 99501

Dear Representative Clocksin:

Thank you for writing to me about your interest in the land status and petroleum reserves of the Arctic National Wildlife Refuge (ANWR). I would be happy to meet with you to discuss ANWR issues as well as to bring you up-to-date on the status of proposed ANWR land trades.

I suggest that we meet on October 27 at 2:00 p.m. in my Anchorage office (12th Floor, Frontier Building). Land and Water Management Director Tom Hawkins will join us at this meeting and other staff will be available as necessary to provide appropriate information.

Please let me know if the October 27 meeting date is convenient. I have enclosed a copy of the state's position regarding oil and gas development in ANWR, as background information for our meeting.

Sincerely,

*BN Amrd*  
Esther C. Wunnicke  
Commissioner

Enclosure

cc: Tom Hawkins  
Jim Eason

# STATE OF ALASKA

BILL SHEFFIELD, GOVERNOR

## DEPARTMENT OF NATURAL RESOURCES

### DIVISION OF LAND AND WATER MANAGEMENT

February 5, 1986

555 CORDOVA STREET  
POUCH 7-005  
ANCHORAGE, ALASKA 99510-7005  
PHONE: (907) 278-2653

Robert E. Gilmore, Regional Director  
U.S. Fish and Wildlife Service  
1011 E. Tudor Road  
Anchorage, Alaska 99503

Dear Mr. Gilmore:

I appreciate the opportunity to meet with you to discuss state involvement in any land exchange involving the Arctic National Wildlife Refuge (ANWR). My purpose in arranging this meeting is twofold. Consistent with the governor's recent letter to you on this subject, I would like to learn more about the details of your on-going land exchange negotiations with several ANCSA regional corporations involving the coastal plain of ANWR. Secondly, I have consulted with state agencies to assemble a large pool of state land available for preliminary exchange consideration by your office (attachment).

As you may be aware, the state owns a substantial amount of habitat land surrounded by, or immediately adjacent to, components of the national refuge system (and other conservation system units). We have examined these areas and have identified almost 12 million acres of state land which we believe possess attributes worthy of exchange consideration by your office. You may conclude that acquisition and management of these lands by the Fish and Wildlife Service would further federal interests as well as serve to reduce unwieldy state/federal land ownership patterns.

The pool of state land presented for exchange consideration includes a wide variety of fish and wildlife habitat types in many geographic locations. Specifically included are such significant areas as the Copper River Basin trumpeter swan nesting areas, key brown bear and seabird habitat on the Shearwater Peninsula of Kodiak Island, calving grounds for the lower Alaska Peninsula caribou herd in the Black Hills, the Kisaralik River region between Togiak and Yukon Delta NWR's, state inholdings within the Tetlin NWR and Redoubt Bay on the west side of Cook Inlet (nesting and staging area for tule geese and trumpeter swans). Both the existing Bristol Bay Cooperative Management Plan and several of your draft refuge plans already recommend that much of this state land be acquired by the FWS through exchange.

Robert E. Gilmore  
Page 2  
February 5, 1986

State land exchanges must occur in accord with AS 38.50 and 11 AAC 67. These applicable statute and regulatory authorities provide authorization for the exchange of state land or interests, provided the exchange serves the public interest and there are thorough opportunities for public and agency involvement in the process. Specifically, the department must provide widespread public notice of a proposed exchange, hold public hearings, provide for public comment and prepare and distribute a report on the proposed exchange. In addition, if the proposed exchange is of unequal value, or includes state land having an appraised or estimated value greater than \$5,000,000, legislative review is required. These requirements are specifically designed to safeguard the public interest.

I urge your careful review of this state pool of possible exchange land. The state is sincerely interested in participating in any discussion of land pattern adjustments which would benefit state and national interests. I await your timely response and remain prepared to meet or otherwise discuss this matter in greater detail. Please give me a call at 762-4355 should you have any questions.

Sincerely,

*Tom Hawkins*  
Tom Hawkins  
Director

Attachment

## Attachment

### State Lands Available for Exchange Consideration With USFWS February 5, 1986

#### SOUTHCENTRAL ALASKA

Area 1 - Trumpeter Swan Nesting Area: In the Gulkana Basin approximately 500,000 acres of state land are available, including important trumpeter swan nesting and rearing areas. The Gulkana Unit has the highest density of nesting swans in the state and contains 27 percent of the world population.

Area 2 - Redoubt Bay: This area constitutes approximately 176,000 acres of state land on the west side of Cook Inlet. This area is used extensively by whitefronted geese (tule) for nesting and staging. The tule goose was listed as a subspecies of concern by the International Council for Bird Preservation. They also recommended to the U.S. Fish and Wildlife Service that the tule goose be listed as an endangered species. The area is also important for other waterfowl nesting, feeding and migration, moose calving, spring and fall bear feeding, and salmon spawning and rearing.

Area 3 - McCarthy: Surrounded by the Wrangell St. Elias National Park and Preserve are approximately 18,000 acres of state land in the heart of the park. These lands have development potential which could be precluded through federal acquisition.

#### SOUTHWEST ALASKA

##### KODIAK ARCHEPELAGO

Area 4 - Marmot Island: Marmot Island is located east of Afognak Island and is surrounded by Maritime National Wildlife Refuge (NWR). The island contains important Steller sea lion rookeries. The state owns the entire island which contains approximately 12,000 acres. The eastern shore of Marmot Island contains one of the largest Steller sea lion rookeries in Alaska and is critical habitat for this species. A 1982 survey reported approximately 8,000 individuals utilizing this area. Marmot Island also supports four seabird colonies totalling about 3,500 breeding birds. The largest percentage of these birds are black-legged kittiwakes.

Area 5 - Raspberry Island: Raspberry Island is located across Onion Bay from Kodiak NWR. The western half, or approximately 26,000 acres, of the island is under state ownership. Raspberry Island contains the only free roaming elk herd remaining on public land in the Kodiak Archipelago and the State of Alaska. The valley between Driver Bay and Onion Bay is critical habitat for elk and is used year round. Raspberry Island also supports populations of Sitka black-tailed deer and brown bear. The abundant wet meadows in Driver Bay contain sedges and grasses that provide critical brown bear spring feeding areas.

Area 6 - Shearwater Peninsula: The State of Alaska owns approximately 123,000 acres on the Shearwater Peninsula located adjacent to the eastern border of the Kodiak NWR. This portion of Kodiak Island was originally

contained within the Kodiak NWR. The Shearwater Peninsula provides excellent brown bear habitat and contains key spring feeding areas and numerous streams that are heavily fished by brown bears. Several coastal areas are used as haul-out sites by harbor seals and Gull Point is a documented northern sea lion haulout area. The Peninsula also contains three large seabird colonies consisting of approximately 4,000 birds, comprised primarily of red-faced cormorants, black-legged kittiwakes, and tufted puffins.

Area 7 - Tugidak Island: Tugidak Island is located about 15 miles south of Kodiak NWR and is surrounded by the Maritime NWR. The state has full ownership of this island, which contains approximately 55,000 acres. It is extremely valuable habitat for harbor seals and a variety of birds including waterfowl, raptors, and shorebirds. Tugidak Island is the most important single breeding ground for harbor seals in Alaska. It has the largest known population of harbor seals in the world, estimated to be between 15,000 to 20,000 animals with concentrations of hauled-out seals reaching 14,000. In past years, this population has produced in excess of 5,500 pups annually.

#### BRISTOL BAY REGION

Area 8 - Kisaralik River: This area consists of approximately 278,600 acres immediately adjacent to the Yukon Delta and Togiak National Wildlife Refuges. The upper reaches of the Kisaralik River system, which is one of the major salmon producing rivers in the Kuskokwim region, flow through this area. Brown bear, caribou, and moose are also found throughout the Kisaralik River vicinity. This river has high recreational potential and, in 1984, the National Park Service was studying the Kisaralik River for possible inclusion in the National Wild and Scenic River System.

Area 9 - Nushagak/Iliamna Area: Approximately 6,996,400 acres are included in this area. A substantial proportion of this acreage is immediately adjacent to the Lake Clark and Katmai National Parks and Preserves. Additionally, about 13,844 acres are surrounded by the Lake Clark National Park and Preserve. This area encompasses highly valuable habitat for a variety of species such as salmon, caribou, moose, and brown bear. For example, a large portion of the salmon resources harvested by commercial, recreational, and subsistence users in the Bristol Bay region originate in the Iliamna Lake and drainage system. Other rivers, such as the Nushagak River, also support large salmon runs utilized intensively by recreationists. Large game species are abundant in the area, and some of the acreage encompasses habitat critical to these species including caribou calving grounds, moose calving and winter concentration areas, and brown bear concentrations along salmon streams.

Area 10 - Alaska Peninsula: This area is comprised of several large tracts of state land between the Naknek River and Hereendeen Bay. This area contains approximately 2,869,800 acres, which are contiguous to the Becharof National Wildlife Refuge, the Alaska Peninsula Wildlife Refuge, Katmai National Park, and Aniakchak National Monument and encompasses much of the productive coastal plain of the Alaska Peninsula. Brown bear populations in this area are among the largest in the state, and the coastal plain provides critical fall and spring feeding areas for this species. This area also contains portions of several of the most important

sport fishing streams. The area contains extensive wetlands and some very important waterfowl habitat. The state lands adjacent to the Cinder River state Critical Habitat Area have been recently identified by the U.S. Fish and Wildlife Service (USFWS) as providing essential habitat for cackling Canada geese. The area also contains substantial state inholdings within the Alaska Peninsula Wildlife Refuge at Mother Goose Lake, as well as other locations on the peninsula.

Area 11 - Black Hills: This area consists of approximately 460,800 acres contiguous to the Izembek National Wildlife Refuge. The Black Hills contain the major calving area for the lower Alaska Peninsula caribou herd, as well as the drainages of several important salmon streams including the Caribou and Sapsuch rivers. This area contains extensive wetlands, and is adjacent to the Port Moller State Critical Habitat Area, which contains critical habitat for many species of waterfowl. The Black Hills area also supports a large brown bear population. The Bristol Bay Area Plan recommends this area for consideration for an exchange or cooperative agreement with the USFWS.

Area 12 - Kamishak: This area consists of approximately 76,000 acres of state land between the McNeil River State Game Sanctuary and Katmai National Park and Preserve. The area includes important brown bear, moose and seabird habitat, including much of the range used by brown bears frequenting the adjacent McNeil River area.

#### NORTHERN ALASKA

Area 13 - Kokrine Hills/Melozitna River: This land, composed mostly of patented state lands with a surrounding ring of selected lands, lies north of the Yukon River between the Nowitna NWR (to the south) and the Koyukuk NWR (to the west). The "Melozitna" is a valuable wildlife production area, supporting good populations of moose and grizzlies. Black bears occur on the lower river near the canyon. A small population of caribou use the Kokrines Hills. The river is an important summer chum spawning stream, and both grayling and Dolly Varden occur commonly in the lower river. At least two peregrine falcon eyrie sites occur along the river (active in 1980). The upper Melozitna meanders through substantial wetlands, which are used by waterfowl and furbearers.

Area 14 - Lower John/Alatna Rivers: This mixed block of patented and selected state lands lies between the Kanuti NWR (to the south) and Gates of the Arctic National Park (to the north and west). Wildlife values include moose, caribou, and Dall sheep. Lake trout is an important fish species in lakes and both king and chum salmon use the Alatna River. Chum salmon also spawn in the lower John River. This would expand the values of Kanuti NWR substantially.

Area 15 - Tetlin NWR Consolidation: Several townships of state patented or selected lands lie within the Tetlin NWR south of the Alaska Highway. Consolidating these areas into the refuge would eliminate unwieldy land ownership patterns.

Area 16 - Wolf Townships: This area, composed of approximately 62,000 acres, is surrounded on three sides by Denali National Park and Preserve. It is an important wintering area for moose and would provide additional

habitat protection for caribou, sheep and wolves.

Area 17 - Reed River: Approximately 110,000 acres of state land in this area is surrounded on three sides by Gates of the Arctic National Park and Preserve. This area contains bear and moose habitat and is used by the Western Arctic caribou herd.



# United States Department of the Interior

original to Tom -  
copy to Gus  
(K)

FISH AND WILDLIFE SERVICE  
1011 E. TUDOR RD.  
ANCHORAGE, ALASKA 99503

IN REPLY REFER TO:

RE/4377e

Tom Hawkins, Director  
Division of Land and Water Management  
Alaska Department of Natural Resources  
555 Cordova Street  
Pouch 7-063  
Anchorage, Alaska 99510-7005

MAR 12 1986

Dear Mr. Hawkins:

Thank you very much for your 5 February 1986 letter regarding State participation in land exchanges involving Arctic National Wildlife Refuge (NWR).

We reviewed the pool of 17 parcels of State land made available for preliminary exchange consideration and listed the areas in order of acquisition priority. Area 15, "Tetlin NWR Consolidation," was identified as a high priority for acquisition by the Fish and Wildlife Service (FWS). This area contains high density waterfowl nesting habitat and is entirely within the boundary of Tetlin NWR. We believe acquisition of the area would enhance management of the refuge as a whole and would be in the best interest of the State and Federal governments. We would also like to note that other State-owned lands within Tetlin NWR and elsewhere are a higher priority for acquisition than those presently offered. We would be interested in negotiating an exchange which would include these lands as well.

While it is true that all of the areas listed have resource values which make them suitable for refuge status, most of the areas have not been identified as a priority for acquisition by the FWS. Nearly all of the parcels listed are outside the boundaries of Alaska NWR's, some being within the boundary of National Parks. Acquisition of these areas would present additional land administration and management problems. In addition, many of the areas are most important for resident game, a State responsibility, or those marine mammals which are a National Marine Fisheries Service responsibility. Although the FWS is not insensitive to the need for enhancing management of habitats important to these species, it is simply not an FWS priority to actively pursue acquisition of such habitats. In areas recommended for additional protection, such as those on the Bristol Bay coastal plain of the Alaska Peninsula, we believe that in most cases adequate protection could be provided through cooperative management agreements.

If you would like to meet and further discuss this matter please feel free to call me.

Sincerely,

*John E. Schmale*  
Regional Director

MAR 12 1986

DLWM Directors Office

Attachments

3-17

Ranked List of State Lands Available for Exchange Consideration With  
the U. S. Fish and Wildlife Service\*

HIGH PRIORITY	PRINCIPAL RESOURCE VALUE
Area 15 Tetlin NWR Consolidation (Tetlin NWR)	Waterfowl nesting.
<hr/> MEDIUM PRIORITY <hr/>	
Area 4 Marmot Island (Alaska Maritime NWR)	Marine mammals, seabirds.
Area 7 Tugidak Island (Alaska Maritime NWR)	Harbor seal rookery.
Area 10 Alaska Peninsula (portion within Alaska Peninsula)	Waterfowl nesting/staging.
Area 11 Black Hills	Resident game, waterfowl.
Area 8 Kisaralik River	Salmon, resident game.
Area 1 Trumpeter Swan Nesting Area	Waterfowl.
Area 2 Redoubt Bay	White-fronted goose nesting.
<hr/> LCW PRIORITY <hr/>	
Area 6 Shearwater Peninsula	Resident game, seabirds, marine mammals.
Area 9 Nushagak/Iliamna Area	Salmon spawning, resident game.
Area 5 Raspberry Island	Resident game.
Area 12 Kamishak	Resident game.
Area 13 Kokrine Hills/Melozitna River	Resident game.
Area 14 Lower John/Alatna Rivers	Resident game, salmon spawning.
Area 16 Wolf Townships	Resident game. (NPS inholding)
Area 17 Reed River	Resident game. (NPS inholding)
Area 3 McCarthy	Resident game. (NPS inholding)


\* List of parcels was developed by Alaska Dept. of Natural Resources and submitted to Fish and Wildlife Service on February 5, 1986.

Rationale for Ranking of State Lands Available for Exchange Consideration by the U. S. Fish and Wildlife Service (letter from Alaska Dept. of Natural Resources, 5 February 1986).

#### HIGH PRIORITY

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##### Area 15 - Tetlin NWR Consolidation:

 This area is a priority because it would eliminate a large State selection on Tetlin NWR that has high waterfowl nesting densities. Major species are northern pintail, scaup and green-winged teal. Note: other State owned lands within Tetlin are a higher priority for acquisition but were not offered for exchange. Some of the land described on the maps supplied by the State appears to be Native owned. ?

#### MEDIUM PRIORITY

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##### Area 4 - Marmot Island:

Identified by refuge staff as a high priority for acquisition. The eastern shore of the island contains a haulout site for about 8,000 Steller's sea lions. There are also several small seabird colonies present. Feral pigs were recently introduced and have begun to impact island vegetation. Management of Steller's sea lions is a National Marine Fisheries Service responsibility.

##### Area 7 - Tugidak Island:

Identified by refuge staff as a high priority for acquisition. The harbor seal rookery located here is one of the largest in the world. As many as 20,000 animals have been present at one time. Management of harbor seals is a National Marine Fisheries Service responsibility.

##### Area 10 - Alaska Peninsula:

None of the area described on the maps submitted by the Department of Natural Resources includes land within the boundary of Alaska Peninsula or Becharof NWR's. The area is very large, about 2.9 million acres, and contains a great deal of high quality nesting habitat for tundra swans and sandhill cranes and low density nesting habitat for several duck species. The area includes waterfowl staging habitat near State Critical Habitat Areas (SCHA) that Realty Division recommended for inclusion in expanded SCHA's and not as "new" refuge. Comprehensive Conservation Plans for the area recommend additional protection for large pieces of this area but do not necessarily recommend federal acquisition.

**Area 11 - Black Hills:**

Most of this area has been recommended for additional protection by Comprehensive Conservation Planning. The Bristol Bay Plan discusses the possibility of a cooperative management agreement or exchange of the area to FWS. None of the area is within Izembek NWR or Alaska Peninsula NWR but is contiguous to both. Major resource values include: calving area for the southern Alaska Peninsula caribou herd and waterfowl and shorebird nesting habitat throughout the Caribou-Sapsuk River lowlands. Migratory bird values are believed to be high based on preliminary surveys but very little work has been done in the area.

**LOW PRIORITY**

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**Area 1 - Trumpeter Swan Nesting Area:**

One of the best waterfowl nesting areas in the State that was not included in the refuge system. Not in or near an existing NWR. About 25% of the Pacific Flyway trumpeter swans recorded on breeding ground population counts use the Gulkana Basin for nesting.

**Area 2 - Redoubt Bay:**

This area is located on the west side of Cook Inlet and is not in or near an existing refuge. The area contains most of the (Tule) greater white-fronted goose nesting and fall staging habitat. Resident game values are also high.

**Area 8 - Kisaralik River:**

This area includes the uppermost portion of the Kisaralik watershed. The parcel is outside the boundary of Yukon Delta NWR. Raptor surveys conducted in 1984 documented very high nesting density and diversity along the Kisaralik downstream from this area. Resident game such as beaver, moose and caribou is the principle wildlife resource value. The river is used by anglers and has high recreational potential.

**Area 6 - Shearwater Peninsula:**

Near Kodiak NWR this area is now managed as a "refuge" by the State as part of the Terror Lake Agreement (mitigation). The area contains small numbers of nesting seabirds and a few small, marine mammal haulout sites. Some of the coastal streams are brown bear feeding areas.

Area 9 - Nushagak/Iliamna Area:

A very large parcel of almost 7 million acres. Not in or near an NWR. Important area for resident game. The area also contains salmon spawning habitat for the Bristol Bay run and a large and growing sport fishery. Scenic values are very high and the area is adjacent to Lake Clark National Park and Preserve.

Area 5 - Raspberry Island:

Not within a refuge. The State owns about half of the island, the other half being owned by a Native Corporation. The island contains the only elk herd in the Kodiak area that is on public land. Black-tailed deer and brown bear are also present.

Area 12 - Kamishak:

Not within a refuge. Located between McNeil River State Game Area and Katmai National Park and Preserve. Contains several small seabird colonies and some moose habitat. Important area for resident game especially brown bears which use the adjacent McNeil River area for feeding.

Area 13 - Kokrine Hills/Melozitna River:

Not within a refuge. The area is almost all upland and is primarily habitat for resident game species such as moose, brown bear and caribou.

Area 14 - Lower John/Alatna River:

Not within a refuge. The area is primarily upland and is habitat for resident game. Also contains some spawning habitat for king and chum salmon.

Area 16 - Wolf Townships:

Bordered on three sides by Denali National Park and Preserve. Habitat for resident game including wolves, sheep, moose and caribou. National Park Service is interested in acquiring this parcel.

Area 17 - Reed River:

Bordered on three sides by Gates of the Arctic National Park and Preserve. Important habitat for resident game. Used by the western Arctic caribou herd.

Area 3 - McCarthy:

An inholding in Wrangell St. Elias National Park and Preserve. Alleged by the State to be threatened by development.

# MEMORANDUM

DEPARTMENT OF NATURAL RESOURCES--DIVISION OF LAND AND WATER MANAGEMENT

# State of Alaska

TO: Bob Arnold  
Deputy Commissioner

DATE: May 20, 1986

FILE NO:

*Tom Hawkins*

TELEPHONE NO: 762-4355

FROM: Tom Hawkins  
Director

SUBJECT: ANWR

This memo describes actions taken over the past few months to monitor ANWR land exchange activities and to advance state interest in potential exchange opportunities.

In early February ADF&G and ADNR jointly prepared a listing of candidate lands for possible exchange for presentation to the USF&WS (Appendix I). The list included more than 12,000,000 acres of state land within and adjacent to refuges and other ANILCA units. The listing emphasized lands which were primarily valuable for habitat and recreation resources. In March, Robert Gilmore, Alaska Regional Director for the U.S. Fish & Wildlife Service responded to the state's listing and indicated the interests of his agency.(Appendix II). In short the USF&WS marked 1 state parcel as high priority but indicated considerable interest in 7 additional parcels.

It should be recognized that the state list did not include those valuable state habitat lands that had been designated for long-term retention by the Alaska legislature. For instance the USF&WS has repeatedly expressed its interest in owning the Izembek Lagoon tidelands accorded state refuge status by the legislature in 1972. These and other state lands in critical habitat areas and game sanctuaries were not included in the ADF&G/ADNR proposal because it would take legislative action to make them available for exchange consideration. While the habitat values of these lands would most likely be preserved and protected as well in federal ownership as under current state management ADF&G determined that raiding the state's designated habitat protection system in order to acquire subsurface estate speculatively valuable for oil and gas would create its own set of perception problems.

The USF&WS response offers the state a clear opportunity to proceed to the next stage of an exchange. Land exchange negotiations with the USF&WS should proceed in order to preserve the state's standing in any exchange activities. At the very least efforts to advance the Tetlin townships would keep the state in the midst of the land exchange action. As could be expected the USF&WS did not recognize advantage in acquiring lands that are sought by the National Park Service. These parcels were included on the list to allow the federal government to realize which benefits from possible exchanges in addition to acquiring refuge lands. A second prong of the state initiative should include elevation of the USF&WS lack of interest in these parcels to the attention of Interior department policymakers.

The remainder of the assignment contained in the February 17 memorandum required monitoring of USF&WS exchange activities with parties other than the State of Alaska. USF&WS efforts in this regard began in 1984 when Koniag

broached the subject with the Service and have been conducted on a variety of fronts since that time. DNR met with the USF&WS to find out what was happening in these exchange negotiations. The dual purpose of that meeting was to reiterate the State's position that any land tenure changes on the Arctic coastal plain should involve significant state participation and to present the aforementioned inventory of state land which may be available for exchange consideration should Congress determine that oil and gas development will be permitted in ANWR.

USF&WS's Robert Gilmore conducted the briefing, seemed quite familiar with the State's general interest, and was intrigued by the list of possible exchange land candidates offered by the State. He explained that the Service, through its refuge planning process, had identified numerous parcels of land within and adjacent to refuge system units in Alaska that had significant wildlife values but were not in federal ownership. Gilmore also explained that Koniag made the initial contact with his predecessor Keith Schreiner a number of years earlier. Possibilities for an exchange had been discussed off and on since that time. Map review exercises had been carried out with Koniag, Bristol Bay, Doyon and Arctic Slope regional corporations. The focus was initially on regional corporations because of ANCSA subsurface ownership provisions, including 7(1), and the plans of the Service to only offer Arctic National Wildlife Refuge (ANWR) subsurface estate for exchange purposes.

USF&WS recognized early that village corporations owned many of the Service's land acquisition candidates. Unfortunately region-village institutional arrangements and operating relationships didn't always allow the region to offer swaps of village surface estate. At first the Washington Office of Interior prohibited contact with village corporations. This ban has since been lifted and Gilmore has conducted a series of village contacts including meetings in King Salmon and Ft. Yukon.

Another problem facing USF&WS was the absence of a habitat rating methodology to allow the Service to prioritize among parcels identified by regions in the map review portion of the discussion. The Service has now developed a ranking system which permits them to assess their interest in acquiring particular units of candidate lands. USF&WS utilized the methodology to review the State's candidate acreage. Gilmore believes that the methodology materially advanced the state of the art and usefully substitutes for the regularly confusing array of superlatives normally used to characterize habitat values.

The next dilemma facing the Service was the matter of appraisal. Borrowing from refuges across the country Gilmore assembled a team of Service appraisers and began the task of determining values for about 1 million acres of surface estate held by the subject corporations. Familiarity with Service appraisal standards was not the problem for this task force. Applying the traditional methodology to the immense acreages, remote locations, and other unique Alaskan conditions required special training and adaptations however. The standard discount for large parcels had to be modified for this exercise because it reduced the value of the native land to unacceptable values. The absence of meaningful comparative sales also posed difficulties. Calculation of the discount appropriate for Section 22(g) of ANCSA was done administratively because it also exceeded the experience of the appraisal team. However the initial appraisal work is not essentially complete. The appraisals have been approved by the Washington office and Gilmore has a ball park estimate of the values involved.

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Calculating the 22(g) factor was just one of a host of nontraditional aspects of the appraisal assignment. The Service proceeded along the lines of the zone concept developed in the Kodiak Refuge Plan to determine a standard deduction value for the fact that much of the native land was required to be managed according to the adopted refuge plan. This severely restricted the possible uses of the land and lowered its value considerably. Coupled with the fact the acreage was remote and not of great worth in traditional real estate terms, the appraised value of native land was quite low even after Gilmore's efforts to modify the traditional Service methodology.

Low value was not the problem on the other end of the exchange package. Rumors described BLM's appraisal of the subsurface value of the Arctic Coastal Plain as quite high at least in preliminary review stages of the process. When the oil and gas industry points to an area and states that it is the best prospect in the country it is easy to imagine how the folks with access to geological and seismic information from that area might be enthusiastic. But the objective approach to these possibilities places them in terms of probability and must provide for a discount factor. When BLM's analysis is unveiled it can be reviewed and contrasted with the similar study performed by the State of Alaska. As the state has experienced in numerous past exchange situations the F&WS recognized that subsurface valuation was not an exact science. BLM was hesitant to place hard and fast values on the individual lease tracts in their analysis. But without comparative values it is difficult to fashion any kind of a trade package. Gilmore has pressed BLM to offer values that can be utilized in the exchange process. Additionally the Service has had to design a failsafe process so that participating native corporations aren't faced with the risk of losing their land base and finding no oil and gas resources. A mechanism which would guarantee a soft landing in case of exploration failures has been fashioned. None-the-less the exchange process has bogged down because Koniag is unwilling to accept the values that have been assigned to their lands by the USF&WS. Koniag has retained former USF&WS Alaska Director Bob Putz and others to press their case in Washington D.C. They argue that in addition to the real estate value the lands must receive credit for their public interest values. This effort to attach a "blue sky" increment to the land value may be successful because it's permitted by law and Interior's presumed interest in offering ANWR subsurface for development. Most likely the actual exchange will not occur until Congress takes action allowing subsurface development.

Koniag's situation is reported here because their train is furthest down the track. Other regions maintain interest in ANWR subsurface and access to current status on all fronts is not available. Most recently CIRI met with Interior officials in Washington and received encouragement to fashion a joint state - ANCSA corporation package for Interior consideration. Most observers agree that such a configuration would be the most saleable package to the Department. CIRI envisions a swap that would give them ANWR subsurface while the USF&WS would acquire state acreage and the state would conclude its Kachemak State park acquisition from Seldovia and CIRI. Alternatively teamed with CIRI or some other ANCSA corporation the state could be more likely to acquire ANWR subsurface. All of these possibilities should be measured against Alaska's current 90% interest in ANWR's mineral resources and its steadfast assertion that it should be considered first in any further decision-making process.

In summary, ADF&G & DNR advanced candidate exchange lands to USF&WS. The Service's positive response calls for further action. We continue to monitor exchange efforts underway and find it would be easier to accomplish these tasks from the midst of the maelstrom than from the edges.

November 14, 1986

Robert E. Gilmore, Regional Director  
U.S. Fish and Wildlife Service  
1011 E Tudor Road  
Anchorage, Alaska 99503

Dear Mr. Gilmore:

Some time has passed since we last discussed state participation in land exchanges involving the Arctic National Wildlife Refuge (ANWR). I feel it is appropriate to renew our discussion.

As you recall, last February I wrote to ask that you consider a large pool of state land for possible exchange. Included in the pool are almost 12 million acres with considerable habitat attributes, located within or adjacent to national park and wildlife refuges in Alaska. In March, you responded to my request by listing these state lands in priority of USFWS acquisition interest. You expressed particular interest in the state lands located within the Tetlin NWR and also indicated an interest in certain remaining state lands within the Tetlin NWR which we had inadvertently failed to include in the pool. Finally, you concluded that most of the state lands are not a priority for acquisition by the USFWS due to various management constraints or because adequate resource protection might be provided through cooperative management agreements.

The possibility of oil and gas development within ANWR and the discussion of associated land trades continues to cast a highly visible profile. Accordingly, the state has clearly articulated its concern that state royalty benefits not be jeopardized if oil and gas development is authorized by Congress. One direct means to preserve these existing benefits is for the state to obtain oil and gas interests in ANWR through land exchanges with the Department of Interior.

Therefore, I am prepared to propose the inclusion of all state land within the Tetlin NWR as well as those state lands noted as "medium priority" in your March correspondence. This includes Marmot Island, Tugidak Island, state land within the Alaska Peninsula NWR, Black Hills, Kisaralik River, Copper River trumpeter swan nesting areas and Redoubt Bay. I am confident that this pool is sufficiently extensive that we can negotiate some combination of the above candidate areas for inclusion in an exchange proposal. In addition, the state continues to be willing to consider the

Robert E. Gilmore  
Page 2  
November 14, 1980

exchange of state lands in Alaska which may be of interest to other federal agencies, such as the National Park Service (NPS).

The NPS has indicated interest in several tracts of state land and the magnitude of the ANWR decision suggests the exchange discussion should address the broadest possible consolidation of federal interests in the state. We mentioned some of these areas in our earlier correspondence and offer a more complete list of potential candidates in the attached appendix. Although the exact mechanics of this aspect of a possible exchange will require additional staff work, we are eager to proceed with those steps necessary to value these lands for exchange purposes.

Subject to your agreement, I am prepared to draft a preliminary exchange agreement for your consideration. I expect this draft would represent a first step towards negotiating an exchange between our agencies. If you concur in this approach, please let me know. I suspect that we will need to get together again soon to discuss this matter in greater detail.

At your convenience, I would also appreciate an update on the status of your exchange negotiations involving ANCSA corporations. Recent discussion with your staff and others indicate you have made considerable progress. I believe it is extremely important for the state to continue to closely monitor your progress in this regard. In addition, I would also like to coordinate state exchange negotiations with those involving the ANCSA corporations so that the state can afford itself the same ANWR selection opportunity you propose to the corporations.

I appreciate your continued attention to this important matter and await your response.

Sincerely,

*Tom Hawkins*

Tom Hawkins  
Director

cc: Esther C. Wunnicke, CO  
John Katz, Washington D.C.

TH/GG/jlh

State Lands Within or Adjacent to N.H. Lands

1. Wrangell-St. Elias
  - °Selections east of Copper River
  - °McCarthy
2. Katmai
  - °Kamishna
3. Aniakchak Bay area
  - °1/4 township north side
4. Lake Clark
  - °eastern entrance
  - °western boundary
  - °Upper Chitkadrotna
  - °west of Stoney River
  - °calving areas in Bonanza Hills
5. Denali
  - °western boundary Swift Fork
  - °Wolf townships
6. Bering Land Bridge
  - °Serpentine Hot Springs
7. Gates of the Arctic
  - °southern boundary
  - °hydrographic divide
8. Glacier Bay
  - °Icy Bay
9. Kenai Fjords
  - °Nuka Island

BILL SHEFFIELD  
GOVERNOR



State of Alaska

OFFICE OF THE GOVERNOR

WASHINGTON, D.C., 1985  
December 3, 1985

MEMORANDUM

TO: THE HONORABLE TED STEVENS, U.S. Senate  
THE HONORABLE FRANK MURKOWSKI, U.S. Senate  
THE HONORABLE DON YOUNG, U.S. House of Reps.

FROM: *JLK* JOHN W. KATZ, Director of State/Federal Relations  
and Special Counsel to the Governor

SUBJECT: ANWR LAND EXCHANGE

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As you know, the Interior Department has commenced discussions with various Native corporations about the possibility of exchanging privately owned lands for federal acreage located in the Arctic National Wildlife Refuge (ANWR). We are advised that these discussions are at an early stage. Accordingly, the State has neither been consulted by DOI officials, nor have we taken a position regarding the wisdom of such an exchange.

Nevertheless, the State does have certain interests and concerns which hopefully will be addressed as negotiations continue. Some of these concerns are expressed in the attached correspondence from Governor Sheffield to Bob Gilmore of the U.S. Fish and Wildlife Service.

In essence, we have three specific interests at this point in time. First, as a sovereign State, Alaska should be fully consulted and meaningfully involved in matters, such as ANWR, which are integrally related to important State land use and resource concerns. On the basis of Mr. Gilmore's letter to the Governor and of my conversations with Bill Horn, I believe that such State participation will occur.

Second, the State is concerned about possible adverse impacts on the 90-10 revenue sharing formula which applies to the allocation of federal mineral revenues derived from oil and gas development within wildlife refuges in Alaska. Under this formula, the State receives 90 percent of the

Page 2

federal share of bonuses, rentals, and royalties attributable to such development. The accompanying memorandum from Tom Koester of the Attorney General's office details the legal and policy reasons which support continuation of the current formula.

Third, as the owner of certain lands located within or adjacent to federal conservation system units, the State may be interested in exchanging some of these lands for federal acreage located on the coastal plain of ANWR. The resource related reasons for discussions regarding such an exchange are similar to those which pertain to certain Native holdings.

I will be meeting with Bill Horn later this week to discuss these matters in greater detail. However, knowing of your longstanding interest in the management and disposition of ANWR lands, I wanted to apprise you of the State's current thinking at this early juncture.

We look forward to working with you and your staffs in the development of a land ownership and management regime for ANWR which adequately balances all of the various considerations. Please let me know if you have any questions or comments concerning the subject matter of this memorandum.

Attachment

cc: Bill Phillips  
Greg Chappados  
Dennis Fradley  
John Moseman  
C.J. Zane  
Rick Agnew

41 south, range 53 west, sections 1, 2, 11, 12, 13 S. M., Alaska, notwithstanding;" and inserting in lieu thereof the following:

- "Township 36 south, range 52 west, all;
- "Township 37 south, range 51 west, all;
- "Township 37 south, range 52 west, all;
- "Township 37 south, range 53 west, sections 1 through 4, 9 through 16, 21 through 24, and the north half of sections 25 through 28;
- "Township 38 south, range 51 west, sections 1 through 5, 9, 10, 12, 13, 18, 24, and 25;
- "Township 38 south, range 52 west, sections 1 through 35;
- "Township 38 south, range 53 west, sections 1, 12, 13, 24, 25, and 26;
- "Township 39 south, range 51 west, sections 1, 6, 7, 16 through 21, 28 through 33, and 36;
- "Township 39 south, range 52 west, sections 1, 2, 11 through 15, and 22 through 24;
- "Township 39 south, range 53 west, sections 33 through 36, and the south half of section 26;
- "Township 40 south, range 51 west, sections 2 and 6;
- "Township 40 south, range 52 west, sections 6 through 10, 15 through 21, and 27 through 36;
- "Township 40 south, range 53 west, sections 1 through 19, 21 through 28, and 34 through 36;
- "Township 40 south, range 54 west, sections 1 through 34;
- "Township 41 south, range 52 west, sections 7, 8, 9, 16, 17, and 18;
- "Township 41 south, range 53 west, sections 1, 4, 5, 8, 9, 11, 12, and 16;
- "Township 41 south, range 54 west, section 6, S. M., Alaska;"

and  
(2) by striking out "The" in the undesignated paragraph immediately following such description and inserting in lieu thereof "Notwithstanding the".

**TITLE X—FEDERAL NORTH SLOPE LANDS STUDIES, OIL AND GAS LEASING PROGRAM AND MINERAL ASSESSMENTS**

**OVERALL STUDY PROGRAM**

16 USC 3141.

SEC. 1001. (a) The Secretary shall initiate and carry out a study of all Federal lands (other than submerged lands on the Outer Continental Shelf) in Alaska north of 68 degrees north latitude and east of the western boundary of the National Petroleum Reserve—Alaska, other than lands included in the National Petroleum Reserve—Alaska and in conservation system units established by this Act.

(b) The study shall utilize a systematic interdisciplinary approach to—

- (1) assess the potential oil and gas resources of these lands and make recommendations concerning future use and management of those resources including an evaluation of alternative transportation routes needed for oil and gas development;
- (2) review the wilderness characteristics, and make recommendations for wilderness designation, of these lands; and
- (3) study, and make recommendations for protection of, the wildlife resources of these lands.

(c) After completion—

- (1) the potential
- (2) the in resources or caribou herds
- (3) the n resources of
- (4) the n characteris
- (5) the na of these lan
- (d) In the cou Secretary of En Native Village the Alaska Lar Secretary shall ment on a dra approval.

(e) The Secre President and t enactment of t Congress on the

(f) Nothing is otherwise affect pursuant to th referred to in pursuant to th

ARCTIC NA

SEC. 1002. (a a comprehens and wildlife Wildlife Refug development, within the co effects on the

(b) DEFINITI

- (1) The in the r August 1
- (2) The explorat the coast

(c) BASELI Governor of the North f persons, sha (with special migratory w and their h (A) as the fish (B) de habitat

sections 1, 2, 11, 12, 13 S. M., Alaska, inserting in lieu thereof the following:  
 range 52 west, all;  
 range 51 west, all;  
 range 52 west, all;  
 range 53 west, sections 1 through 4, 9, 24, and the north half of sections 25

range 51 west, sections 1 through 5, 9, 10,

range 52 west, sections 1 through 85;  
 range 53 west, sections 1, 12, 13, 24, 25,

range 51 west, sections 1, 6, 7, 16 through

range 52 west, sections 1, 2, 11 through 15,

range 53 west, sections 33 through 36, and 26;

range 54 west, sections 2 and 6;  
 range 55 west, sections 6 through 10, 16 through 36;

range 53 west, sections 1 through 19; 21 through 36;

range 54 west, sections 1 through 34;  
 range 52 west, sections 7, 8, 9, 16, 17, and

range 53 west, sections 1, 4, 5, 8, 9, 11, 12,

range 54 west, section 6, S. M., Alaska;"

The" in the undesignated paragraph such description and inserting in lieu of the".

#### ORTH SLOPE LANDS STUDIES, OIL PROGRAM AND MINERAL ASSESSMENT

##### STUDY PROGRAM

shall initiate and carry out a study of submerged lands on the Outer Continental Shelf of 68 degrees north latitude and east of the National Petroleum Reserve—Alaska, in the National Petroleum Reserve—system units established by this Act, by a systematic interdisciplinary approach

oil and gas resources of these lands and concerning future use and management including an evaluation of alternative transportation and gas development; characteristics, and make recommendations, of these lands; and recommendations for protection of the lands.

(c) After completion of the study, the Secretary shall make findings

- on—
- (1) the potential oil and gas resources of these lands;
  - (2) the impact of oil and gas development on the wildlife resources on these lands, particularly the Arctic and Porcupine caribou herds and the polar bear;
  - (3) the national need for development of the oil and gas resources of all or any portion of these lands;
  - (4) the national interest in preservation of the wilderness characteristics of these lands; and
  - (5) the national interest in protection of the wildlife resources of these lands.

(d) In the course of the study, the Secretary shall consult with the Secretary of Energy and other Federal agencies, the State of Alaska, Native Village and Regional Corporations, the North Slope Borough, the Alaska Land Use Council and the Government of Canada. The Secretary shall provide an opportunity for public review and comment on a draft study and proposed findings prior to their final approval.

Public review and comment.

(e) The Secretary shall submit the study and his findings to the President and the Congress no later than eight years after the date of enactment of this Act. The Secretary shall submit annual reports to Congress on the progress in carrying out this title.

Report to President and Congress.

(f) Nothing in this title shall be construed as impeding, delaying, or otherwise affecting the selection and conveyance of land to the State pursuant to the Alaska Statehood Act, or any other Federal law referred to in section 102(3)(A) of this Act, and to the Natives pursuant to the Alaska Native Claims Settlement Act and this Act.

48 USC note prec. 21.  
43 USC 1601 note.

#### ARCTIC NATIONAL WILDLIFE REFUGE COASTAL PLAIN RESOURCE ASSESSMENT

SEC. 1002. (a) PURPOSE.—The purpose of this section is to provide for a comprehensive and continuing inventory and assessment of the fish and wildlife resources of the coastal plain of the Arctic National Wildlife Refuge; an analysis of the impacts of oil and gas exploration, development, and production, and to authorize exploratory activity within the coastal plain in a manner that avoids significant adverse effects on the fish and wildlife and other resources.

16 USC 3142.

(b) DEFINITIONS.—As used in this section—

(1) The term "coastal plain" means that area identified as such in the map entitled "Arctic National Wildlife Refuge", dated August 1980.

(2) The term "exploratory activity" means surface geological exploration or seismic exploration, or both, for oil and gas within the coastal plain.

(c) BASELINE STUDY.—The Secretary, in consultation with the Governor of the State, Native Village and Regional Corporations, and the North Slope Borough within the study area and interested persons, shall conduct a continuing study of the fish and wildlife (with special emphasis on caribou, wolves, wolverines, grizzly bears, migratory waterfowl, musk oxen, and polar bears) of the coastal plain and their habitat. In conducting the study, the Secretary shall—

(A) assess the size, range, and distribution of the populations of the fish and wildlife;

(B) determine the extent, location and carrying capacity of the habitats of the fish and wildlife;

(C) assess the impacts of human activities and natural processes on the fish and wildlife and their habitats;

(D) analyze the potential impacts of oil and gas exploration, development, and production on such wildlife and habitats; and

(E) analyze the potential effects of such activities on the culture and lifestyle (including subsistence) of affected Native and other people.

Within eighteen months after the enactment date of this Act, the Secretary shall publish the results of the study as of that date and shall thereafter publish such revisions thereto as are appropriate as new information is obtained.

(d) **GUIDELINES.**—(1) Within two years after the enactment date of this Act, the Secretary shall by regulation establish initial guidelines governing the carrying out of exploratory activities. The guidelines shall be based upon the results of the study required under subsection (c) and such other information as may be available to the Secretary. The guidelines shall include such prohibitions, restrictions, and conditions on the carrying out of exploratory activities as the Secretary deems necessary or appropriate to ensure that exploratory activities do not significantly adversely affect the fish and wildlife, their habitats, or the environment, including, but not limited to—

(A) a prohibition on the carrying out of exploratory activity during caribou calving and immediate post-calving seasons or during any other period in which human activity may have adverse effects;

(B) temporary or permanent closing of appropriate areas to such activity;

(C) specification of the support facilities, equipment and related manpower that is appropriate in connection with exploratory activity; and

(D) requirements that exploratory activities be coordinated in such a manner as to avoid unnecessary duplication.

(2) The initial guidelines prescribed by the Secretary to implement this subsection shall be accompanied by an environmental impact statement on exploratory activities. The initial guidelines shall thereafter be revised to reflect changes made in the baseline study and other appropriate information made available to the Secretary.

(e) **EXPLORATION PLANS.**—(1) After the initial guidelines are prescribed under subsection (d), any person including the United States Geological Survey may submit one or more plans for exploratory activity (hereinafter in this section referred to as "exploration plans") to the Secretary for approval. An exploration plan must set forth such information as the Secretary may require in order to determine whether the plan is consistent with the guidelines, including, but not limited to—

(A) a description and schedule of the exploratory activity proposed to be undertaken;

(B) a description of the equipment, facilities, and related manpower that would be used in carrying out the activity;

(C) the area in which the activity would be undertaken; and

(D) a statement of the anticipated effects that the activity may have on fish and wildlife, their habitats and the environment.

(2) Upon receiving any exploration plan for approval, the Secretary shall promptly publish notice of the application and the text of the plan in the Federal Register and newspapers of general circulation in the State. The Secretary shall determine, within one hundred and twenty days after any plan is submitted for approval, if the plan is consistent with the guidelines established under subsection (d). If the

Results and  
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publication.

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Secretary determines that the plan: except that no period following the date of determination, the Secretary shall determine the State for purposes of public on the plan. The Secretary shall determine whether the plan submitted by the United States Geological Survey meets the requirements of subsection (h). The Secretary shall determine under this section—

(A) may require that the Secretary shall determine whether the plan submitted by the United States Geological Survey meets the requirements of subsection (h). The Secretary shall determine under this section—

(B) shall require that the Secretary shall determine whether the plan submitted by the United States Geological Survey meets the requirements of subsection (h). The Secretary shall determine under this section—

(C) shall make such modifications to the plan as may be necessary to ensure that the plan submitted by the United States Geological Survey meets the requirements of subsection (h). The Secretary shall determine under this section—

(f) **MODIFICATION TO EXPLORATION PERMIT.**—(1) If an exploratory activity is being carried out under a permit approved under subsection (c), the Secretary shall determine whether the plan submitted by the United States Geological Survey meets the requirements of subsection (h). The Secretary shall determine under this section—

(g) **CIVIL PENALTIES.**—(1) After notice and an opportunity for a hearing, the Secretary shall determine whether the plan submitted by the United States Geological Survey meets the requirements of subsection (h). The Secretary shall determine under this section—

(2) Any person against whom a civil penalty is assessed under paragraph (1) may obtain a writ of habeas corpus from the court of the United States for the District of Columbia within thirty days from the date of the assessment. The Secretary shall promptly publish notice of such assessment in the Federal Register and newspapers of general circulation in the State. The Secretary shall determine, within one hundred and twenty days after any plan is submitted for approval, if the plan is consistent with the guidelines established under subsection (d). If the

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Secretary determines that the plan is so consistent, he shall approve the plan: except that no plan shall be approved during the two-year period following the date of enactment of this Act. Before making the determination, the Secretary shall hold at least one public hearing in the State for purposes of receiving the comments and views of the public on the plan. The Secretary shall not approve of any plan submitted by the United States Geological Survey unless he determines that (1) no other person has submitted a plan for the area involved which meets established guidelines and (2) the information which would be obtained is needed to make an adequate report under subsection (h). The Secretary, as a condition of approval of any plan under this section—

Public hearing.

Approval condition.

(A) may require that such modifications be made to the plan as he considers necessary and appropriate to make it consistent with the guidelines;

(B) shall require that all data and information (including processed, analyzed and interpreted information) obtained as a result of carrying out the plan shall be submitted to the Secretary; and

(C) shall make such data and information available to the public except that any processed, analyzed and interpreted data or information shall be held confidential by the Secretary for a period of not less than two years following any lease sale including the area from which the information was obtained.

(f) MODIFICATION TO EXPLORATION PLANS.—If at any time while exploratory activity is being carried out under an exploration plan approved under subsection (e), the Secretary, on the basis of information available to him, determines that continuation of further activities under the plan or permit will significantly adversely affect fish or wildlife, their habitat, or the environment, the Secretary may suspend the carrying out of activities under the plan or permit for such time, make such modifications to the plan or to the terms and conditions of the permit (or both suspend and so modify) as he determines necessary and appropriate.

(g) CIVIL PENALTIES.—(1) Any person who is found by the Secretary, after notice and an opportunity for a hearing in accordance with section 554 of title 5, United States Code, to have violated any provision of a plan approved under subsection (e) or any term or condition of a permit issued under subsection (f), or to have committed any act prohibited under subsection (d) shall be liable to the United States for a civil penalty. The amount of the civil penalty shall not exceed \$10,000 for each violation. Each day of a continuing violation shall constitute a separate offense. The amount of such civil penalty shall be assessed by the Secretary by written notice. In determining the amount of such penalty, the Secretary shall take into account the nature, circumstances, extent, and gravity of the prohibited act committed, and, with respect to the violator, the history of any prior offenses, his demonstrated good faith in attempting to achieve timely compliance after being cited for the violation, and such other matters as justice may require.

(2) Any person against whom a civil penalty is assessed under paragraph (1) may obtain review thereof in the appropriate district court of the United States by filing a notice of appeal in such court within thirty days from the date of such order and by simultaneously sending a copy of such notice by certified mail to the Secretary. The Secretary shall promptly file in such court a certified copy of the record upon which such violation was found or such penalty imposed, as provided in section 2112 of title 28, United States Code. The

Review.

findings and order of the Secretary shall be set aside by such court if they are not found to be supported by substantial evidence, as provided in section 706(2)(E) of title 5, United States Code.

(3) If any person fails to pay an assessment of a civil penalty against him under paragraph (1) after it has become final, or after the appropriate court has entered final judgment in favor of the Secretary, the Secretary shall refer the matter to the Attorney General of the United States, who shall recover the amount assessed in any appropriate district court of the United States. In such action, the validity and appropriateness of the final order imposing the civil penalty shall not be subject to review.

(4) The Secretary may compromise, modify, or remit, with or without conditions, any civil penalty which is subject to imposition or which has been imposed under this subsection unless the matter is pending in court for judicial review or recovery of assessment.

(h) REPORT TO CONGRESS.—Not earlier than five years after the enactment date of this Act and not later than five years and nine months after such date, the Secretary shall prepare and submit to Congress a report containing—

(1) the identification by means other than drilling of exploratory wells of those areas within the coastal plain that have oil and gas production potential and estimate of the volume of the oil and gas concerned;

(2) the description of the fish and wildlife, their habitats, and other resources that are within the areas identified under paragraph (1);

(3) an evaluation of the adverse effects that the carrying out of further exploration for, and the development and production of, oil and gas within such areas will have on the resources referred to in paragraph (2);

(4) a description of how such oil and gas, if produced within such area, may be transported to processing facilities;

(5) an evaluation of how such oil and gas relates to the national need for additional domestic sources of oil and gas; and

(6) the recommendations of the Secretary with respect to whether further exploration for, and the development and production of, oil and gas within the coastal plain should be permitted and, if so, what additional legal authority is necessary to ensure that the adverse effects of such activities on fish and wildlife, their habitats, and other resources are avoided or minimized.

(i) EFFECT OF OTHER LAWS.—Until otherwise provided for in law enacted after the enactment date of this Act, all public lands within the coastal plain are withdrawn from all forms of entry or appropriation under the mining laws, and from operation of the mineral leasing laws, of the United States.

#### PROHIBITION ON DEVELOPMENT

16 USC.3143.

SEC. 1003. Production of oil and gas from the Arctic National Wildlife Refuge is prohibited and no leasing or other development leading to production of oil and gas from the range shall be undertaken until authorized by an Act of Congress.

#### WILDERNESS PORTION OF STUDY

Report to  
President.  
16 USC 3144.

SEC. 1004. (a) As part of the study, the Secretary shall review the suitability or unsuitability for preservation as wilderness of the

Federal lands described  
President.

(b) The President shall  
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#### WILDLIFE

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#### TRANSPORTATION

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Federal lands described in section 1001 and report his findings to the President.

(b) The President shall advise the Senate and the House of Representatives of his recommendations with respect to the designation of the area or any part thereof as wilderness together with a map thereof and a definition of its boundaries.

Presidential recommendations to Congress.

(c) Subject to valid existing rights and the provisions of section 1002 of this Act, the wilderness study area designated by this section shall, until Congress determines otherwise, be administered by the Secretary so as to maintain presently existing wilderness character and potential for inclusion in the National Wilderness Preservation System. Already established uses may be permitted to continue, subject to such restrictions as the Secretary deems desirable, in the manner and degree in which the same were being conducted on the date of enactment of this Act.

WILDLIFE RESOURCES PORTION OF STUDY

SEC. 1005. The Secretary shall work closely with the State of Alaska and Native Village and Regional Corporations in evaluating the impact of oil and gas exploration, development, production, and transportation and other human activities on the wildlife resources of these lands, including impacts on the Arctic and Porcupine caribou herds, polar bear, muskox, grizzly bear, wolf, wolverine, seabirds, shore birds, and migratory waterfowl. In addition the Secretary shall consult with the appropriate agencies of the Government of Canada in evaluating such impacts particularly with respect to the Porcupine caribou herd.

16 USC 3145.

Consultation with Canadian Government.

TRANSPORTATION ALTERNATIVES PORTION OF STUDY

SEC. 1006. In studying oil and gas alternative transportation systems, the Secretary shall consult with the Secretary of Transportation and shall consider—

16 USC 3146.

- (1) the extent to which environmentally and economically feasible alternative routes could be established;
- (2) the prospective oil and gas production potential of this area of Alaska for each alternative transportation route; and
- (3) the environmental and economic costs and other values associated with such alternative routes.

ARCTIC RESEARCH STUDY

SEC. 1007. (a) The Secretary, the Secretary of Defense, and the Secretary of Energy shall initiate and carry out a study of the mission, facilities and administration of the Naval Arctic Research Laboratory (NARL), at Point Barrow, Alaska. The study shall review the historical responsibilities carried out at NARL and their contribution to applied and basic Arctic research. The study shall specifically address and the Secretary shall make recommendations on the need for redirecting the United States Arctic research policy and the role of the NARL facilities in developing and implementing that policy.

16 USC 3147.

- (b) The Secretaries shall assess the future use of NARL in—
  - (1) developing relevant scientific information on the Arctic environment and utilizing applied research to (A) deal with the unique problems the Arctic presents in providing public services;
  - (B) minimize the impact of resource development on the environ-

Naval Arctic Research Laboratory, assessment.

ment and the culture of the Native people; and (C) promote international cooperation among the Nations which share responsibility for the Arctic environment;

(2) assessing the impact of oil and gas exploration, development, and transportation on the Arctic environment, including impact on fish, marine and land mammals, and migratory waterfowl;

(3) developing advanced design technologies, operational practices, and transportation systems to improve the environmental safety and efficiency of oil and gas exploration and production in the Arctic, including offshore activities;

(4) enlarging the body of knowledge on Arctic ice conditions and developing practical and efficient means of dealing with potential oil spills and other hazards associated with resource development in Alaska's Arctic; and

(5) developing a comprehensive Arctic policy for the Federal Government that will accommodate the need for development and use of Arctic resources with appropriate recognition and consideration given to the unique nature of the Arctic environment and the needs of its Native residents.

(c) After completion of the study, the Secretaries shall make recommendations on—

(1) changes in the mission and management of NARL necessary to accomplish the research and policy goals addressed in the study;

(2) the appropriate Federal agency or agencies that should have primary responsibility for management of NARL;

(3) changes in the organizational structure of NARL that would allow greater involvement by State and private organizations in the use, management and/or funding of NARL; and

(4) the appropriate level of Federal funding for scientific and technological research on the Arctic environment and its uses.

Consultation.

(d) In the course of the study, the Secretaries shall consult with representatives of the Department of Navy, the National Oceanic and Atmospheric Administration, the National Science Foundation, the Smithsonian Institution, the State of Alaska, local governments, representatives of public and private institutions conducting Arctic research, and Native Village and Regional Corporations in the areas now affected by the activities of NARL. The Secretaries shall provide an opportunity for public review and comment on the draft report and proposed recommendations prior to final approval, and shall include any recommendations of the local community in the final study.

Public review and comment.

Study submittal to Congress.

(e) The Secretaries shall submit the study and their recommendations to the Congress no later than one year after the date of enactment of this Act.

(f) Pending submission of the study to the Congress, the President is directed to continue the operation of NARL at the level of funding provided for in fiscal year 1979.

OIL AND GAS LEASING PROGRAM FOR NON-NORTH SLOPE FEDERAL LANDS

16 USC 3148.  
30 USC 181 note.

SEC. 1008. (a) The Secretary shall establish, pursuant to the Mineral Leasing Act of 1920, as amended, an oil and gas leasing program on the Federal lands of Alaska not subject to the study required by section 1001 of this Act, other than lands included in the National Petroleum Reserve—Alaska. Such program shall not be

undertaken by the National Wildlife Refuge System which is prohibited by the National Wildlife Refuge System laws, regulations, and orders that the exploration and production of oil and gas is incompatible with the preservation of such lands and those uses which would be a detriment to such oil and gas.

(b)(1)(A) In such cases, the Secretary shall conduct studies under such lands and those uses which would be a detriment to such oil and gas.

(B) The Secretary shall determine whether geological, geophysical, and other data can be used for purposes for which such lands are reserved.

(2) The Secretary shall determine whether the national interest in the production of oil and gas in the State of Alaska is such that the Secretary should be studying the production of oil and gas.

(3) The Secretary shall determine whether the values or benefits of such lands are such that the Secretary should be studying the production of oil and gas.

(4) The Secretary shall determine whether the Secretary should be studying the production of oil and gas.

(c) At such time as the Secretary has completed the study, the Secretary shall determine whether the production of oil or gas in those areas which are now affected by the activities of NARL (herein referred to as "reserves"). In such cases, the Secretary shall utilize all information available to the Secretary to determine whether the development of such reserves is in the national interest.

(d) Pursuant to section 1001 of this Act, the Secretary is authorized in this section, to regulate the production of oil and gas, provided that such regulation is within the scope of the authority conferred only by competition.

(e) At such time as the Secretary has completed the study, the Secretary shall determine whether the production of oil and gas in the State of Alaska is such that the Secretary should be studying the production of oil and gas.

undertaken by the Secretary on those lands where applicable law prohibits such leasing or on those units of the National Wildlife Refuge System where the Secretary determines, after having considered the national interest in producing oil and gas from such lands, that the exploration for and development of oil or gas would be incompatible with the purpose for which such unit was established.

(b)(1)(A) In such areas as the Secretary deems favorable for the discovery of oil or gas, he shall conduct a study, or studies, or collect and analyze information obtained by permittees authorized to conduct studies under this section, of the oil and gas potential of such lands and those environmental characteristics and wildlife resources which would be affected by the exploration for and development of such oil and gas.

Study.

(B) The Secretary is authorized to issue permits for study, including geological, geophysical, and other assessment activities, if such activities can be conducted in a manner which is consistent with the purposes for which each affected area is managed under applicable law.

Permits.

(2) The Secretary shall consult with the Secretary of Energy regarding the national interest involved in exploring for and developing oil and gas from such lands and shall seek the views of the Governor of the State of Alaska, Alaskan local governments, Native Regional and Village Corporations, the Alaska Land Use Council, representatives of the oil and gas industry, conservation groups, and other interested groups and individuals in determining which land should be studied and/or leased for the exploration and development of oil and gas.

Consultation.

(3) The Secretary shall encourage the State to undertake similar studies on lands associated, either through geological or other land values or because of possible transportation needs, with Federal lands. The Secretary shall integrate these studies, to the maximum extent practicable, with studies on Federal lands so that needs for cooperation between the Federal Government and the State of Alaska in managing energy and other natural resources, including fish and wildlife, can be established early in the program.

(4) The Secretary shall report to the Congress by October 1, 1981, and yearly thereafter, on his efforts pursuant to this Act regarding the leasing of, and exploration and development activities on, such lands.

Report to Congress.

(c) At such time as the studies requested in subsection (b)(4) are completed by the Secretary, or at such time as the Secretary determines that sufficient interest has been indicated in exploring an area for oil or gas, and leasing should be commenced, he shall identify those areas which he determines to be favorable for the discovery of oil or gas (hereinafter referred to as "favorable petroleum geological provinces"). In making such determination, the Secretary shall utilize all information obtained in studies conducted under subsection (b) of this section as well as any other information he may develop or require by regulation to be transmitted.

(d) Pursuant to the Mineral Leasing Act of 1920, as amended, the Secretary is authorized to issue leases, on the Federal lands described in this section, under such terms and conditions as he may, by regulation, prescribe. Areas which are determined by the Secretary to be within favorable petroleum geological provinces shall be leased only by competitive bidding.

30 USC 181 note.

(e) At such time as paying quantities of oil or gas are discovered under a noncompetitive lease issued pursuant to the Mineral Leasing Act of 1920, the Secretary shall suspend all further noncompetitive

leasing in the area and shall determine the favorable petroleum geological province in proximity to such discovery. All further leasing in such area shall be in accordance with the requirements of subsection (d) of this section.

Exploration plan.

(f) Prior to any exploration activities on a lease issued pursuant to this section, the Secretary shall require the lessee to describe exploration activities in an exploration plan. He shall approve such plan if such activities can be conducted in conformity with such requirements as may be made by the Secretary for the protection and use of the land for the purpose for which it is managed under applicable law.

(g) Subsequent to a discovery of oil or gas in paying quantities, and prior to developing and producing such oil and gas, the Secretary shall require the lessee to describe development and production activities in a development and production plan. He shall approve such plan if such activities may be conducted in conformity with such requirements as may be made by the Secretary for the protection and use of the land for the purpose for which it is managed under applicable law.

(h) The Secretary shall monitor the performance of the lessee and, if he determines that due to significant changes in circumstances regarding that operation, including environmental or economic changes, new requirements are needed, he may require a revised development and production plan.

Operation suspension and cancellation.

(i) If the Secretary determines that immediate and irreparable damage will result from continuation in force of a lease, that the threat will not disappear and that the advantages of cancellation outweigh the advantages of continuation in force of a lease, he shall suspend operations for up to five years. If such a threat persists beyond such five-year suspension period, he shall cancel a lease and provide compensation to the lease under such terms as the Secretary establishes, by regulation, to be appropriate.

OIL AND GAS LEASE APPLICATIONS

16 USC 3149.

SEC. 1009. (a) Notwithstanding any other provision of law or regulation, whenever the Secretary receives an application for an oil and gas lease pursuant to the Mineral Leasing Act of 1920 for lands in Alaska within a unit of the National Wildlife Refuge System which are not also part of the National Wilderness Preservation System he shall, in addition to any other requirements of applicable law, follow the procedures set forth in this section.

30 USC 181 note.

(b) Any decision to issue or not to issue a lease shall be accompanied by a statement setting forth the reasons for the decision, including the reasons why oil and gas leasing would be compatible or incompatible with the purposes of the refuge.

42 USC 4332.

(c) If the Secretary determines that the requirements of section 102(2)(C) of the National Environmental Policy Act of 1969 do not apply to his decision, the Secretary shall render his decision within six months after receipt of a lease application. If such requirements are applicable to the Secretary's decision, he shall render his decision within three months after publication of the final environmental impact statement.

ALASKA MINERAL RESOURCE ASSESSMENT PROGRAM

16 USC 3150.

SEC. 1010. (a) MINERAL ASSESSMENTS.—The Secretary shall, to the full extent of his authority, assess the oil, gas, and other mineral

potential on a the data base mineral asses techniques su other than su drilling for g such drilling and test dri geologic samj values of ge exploratory c practicable, with the Sta tary under 1 State. In orc this or any Uranium Re access by air all public la Secretary of such prograr necessary to wildlife. Suc during nesti wildlife in t activities. T public or pri assessment described in

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TITLE XI AND A SYSTEM

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the favorable petroleum discovery. All further leasing shall be subject to the requirements of subsection (a).

a lease issued pursuant to this section, the lessee shall describe exploration activities and shall approve such plan in conformity with such requirements for the protection and use of the land managed under applicable law.

in paying quantities, and oil and gas, the Secretary shall approve such plan in conformity with such requirements for the protection and use of the land managed under applicable law.

of the lessee and, in circumstances where environmental or economic factors may require a revised plan, the Secretary shall approve such plan in conformity with such requirements for the protection and use of the land managed under applicable law.

mediate and irreparable damage to the land by force of a lease, that the advantages of cancellation of a lease, he shall not cancel a lease and shall terminate the lease on such terms as the Secretary

REGULATIONS

Under this provision of law or under an application for an oil and gas lease under the Act of 1920 for lands in the National Wildlife Refuge System which are in the National Preservation System he shall follow the provisions of applicable law, follow

such decision shall be accompanied by a statement of the reasons therefor and shall be compatible or inconsistent with the requirements of section 1011 of the Act of 1969 do not apply: If such requirements shall render his decision final environmental

requirements of section 1011 of the Act of 1969 do not apply: If such requirements shall render his decision final environmental

MINERAL PROGRAM

Secretary shall, to the extent practicable, provide for the development of oil, gas, and other mineral

potential on all public lands in the State of Alaska in order to expand the data base with respect to the mineral potential of such lands. The mineral assessment program may include, but shall not be limited to, techniques such as side-looking radar imagery and, on public lands other than such lands within the national park system, core and test drilling for geologic information, notwithstanding any restriction on such drilling under the Wilderness Act. For purposes of this Act, core and test drilling means the extraction by drilling of subsurface geologic samples in order to assess the metalliferous or other mineral values of geologic terrain, but shall not be construed as including exploratory drilling of oil and gas test wells. To the maximum extent practicable, the Secretary shall consult and exchange information with the State of Alaska regarding the responsibilities of the Secretary under this section and similar programs undertaken by the State. In order to carry out mineral assessments authorized under this or any other law, including but not limited to the National Uranium Resource Evaluation program, the Secretary shall allow for access by air for assessment activities permitted in this subsection to all public lands involved in such study. He shall consult with the Secretary of Energy and heads of other Federal agencies carrying out such programs, to determine such reasonable requirements as may be necessary to protect the resources of such area, including fish and wildlife. Such requirements may provide that access will not occur during nesting, calving, spawning or such other times as fish and wildlife in the specific area may be especially vulnerable to such activities. The Secretary is authorized to enter into contracts with public or private entities to carry out all or any portion of the mineral assessment program. This section shall not apply to the lands described in section 1001 of this Act.

(b) REGULATIONS.—Activities carried out in conservation system units under subsection (a) shall be subject to regulations promulgated by the Secretary. Such regulations shall ensure that such activities are carried out in an environmentally sound manner—

- (1) which does not result in lasting environmental impacts which appreciably alter the natural character of the units or biological or ecological systems in the units; and
- (2) which is compatible with the purposes for which such units are established.

PRESIDENTIAL TRANSMITTAL

SEC. 1011. On or before October 1, 1982, and annually thereafter, the President shall transmit to the Congress all pertinent public information relating to minerals in Alaska gathered by the United States Geological Surveys, Bureau of Mines, and any other Federal agency.

16 USC 1131 note.

Consultation.

Contracts.

Mineral information, transmittal to Congress. 16 USC 3151.

TITLE XI—TRANSPORTATION AND UTILITY SYSTEMS IN AND ACROSS, AND ACCESS INTO, CONSERVATION SYSTEM UNITS

FINDINGS

SEC. 1101. Congress finds that—

(a) Alaska's transportation and utility network is largely undeveloped and the future needs for transportation and utility systems in Alaska would best be identified and provided for through an orderly,

16 USC 3161.

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of each claim allowed and the name and address of the claimant. The Secretary of the Treasury shall pay to such claimant from the Alaska Native Fund the amount certified. No award under this subsection shall bear interest.

TAXATION

SEC. 21. (a) Revenues originating from the Alaska Native Fund shall not be subject to any form of Federal, State, or local taxation at the time of receipt by a Regional Corporation, Village Corporation, or individual Native through dividend distributions or in any other manner. This exemption shall not apply to income from the investment of such revenues.

(b) The receipt of shares of stock in the Regional or Village Corporations by or on behalf of any Native shall not be subject to any form of Federal, State or local taxation.

(c) The receipt of land or any interest therein pursuant to this Act or of cash in order to equalize the values of properties exchanged pursuant to subsection 22(f) shall not be subject to any form of Federal, State or local taxation. The basis for computing gain or loss on subsequent sale or other disposition of such land or interest in land for purposes of any Federal, State or local tax imposed on or measured by income shall be the fair value of such land or interest in land at the time of receipt.

(d) Real property interests conveyed, pursuant to this Act, to a Native individual, Native group, or Village or Regional Corporation which are not developed or leased to third parties, shall be exempt from State and local real property taxes for a period of twenty years after the date of enactment of this Act: *Provided*, That municipal taxes, local real property taxes, or local assessments may be imposed upon leased or developed real property within the jurisdiction of any governmental unit under the laws of the State: *Provided further*, That easements, rights-of-way, leaseholds, and similar interests in such real property may be taxed in accordance with State or local law. All rents, royalties, profits, and other revenues or proceeds derived from such property interests shall be taxable to the same extent as such revenues or proceeds are taxable when received by a non-Native individual or corporation.

(e) Real property interests conveyed pursuant to this Act to a Native individual, Native group, or Village or Regional Corporation shall, so long as the fee therein remains not subject to State or local taxes on real estate, continue to be regarded as public lands for the purpose of computing the Federal share of any highway project pursuant to title 23 of the United States Code, as amended and supplemented, for the purpose of the Johnson-O'Malley Act of April 16, 1934, as amended (25 U.S.C. 452), and for the purpose of Public Laws 815 and 874, 81st Congress (64 Stat. 967, 1100), and so long as there are also no substantial revenues from such lands, continue to receive forest fire protection services from the United States at no cost.

23 USC 101  
et seq.  
49 Stat. 1458.  
72 Stat. 548.  
79 Stat. 27.  
20 USC 531,  
236.

MISCELLANEOUS

SEC. 22. (a) None of the revenues granted by section 6, and none of the lands granted by this Act to the Regional and Village Corporation and to Native groups and individuals shall be subject to any contract which is based on a percentage fee of the value of all or some portion of the settlement granted by this Act. Any such contract shall not be enforceable against any Native as defined by this Act or any Regional or Village Corporation and the revenues and lands granted by this Act shall not be subject to lien, execution or judgment to fulfill such a contract.

(b) The Secretary is directed to promptly issue patents to all persons who have made a lawful entry on the public lands in compliance with the public land laws for the purpose of gaining title to homesteads, headquarters sites, trade and manufacturing sites, or small tract sites (43 U.S.C. 682), and who have fulfilled all requirements of the law prerequisite to obtaining a patent. Any person who has made a lawful entry prior to August 31, 1971, for any of the foregoing purposes shall be protected in his right of use and occupancy until all the requirements of law for a patent have been met even though the lands involved have been reserved or withdrawn in accordance with Public Land Order 4582, as amended, or the withdrawal provisions of this Act: *Provided*, That occupancy must have been maintained in accordance with the appropriate public land law: *Provided further*, That any person who entered on public lands in violation of Public Land Order 4582, as amended, shall gain no rights.

34 Stat. 1052.

(c) On any lands conveyed to Village and Regional Corporations, any person who prior to August 31, 1971, initiated a valid mining claim or location under the general mining laws and recorded notice of said location with the appropriate State or local office shall be protected in his possessory rights, if all requirements of the general mining laws are complied with, for a period of five years and may, if all requirements of the general mining laws are complied with, proceed to patent.

Mining claims, possessory rights.

(d) The provisions of Revised Statute 452 (43 U.S.C. 11) shall not apply to any land grants or other rights granted under this Act.

(e) If land within the National Wildlife Refuge System is selected by a Village Corporation pursuant to the provisions of this Act, the secretary shall add to the Refuge System other public lands in the State to replace the lands selected by the Village Corporation.

(f) The Secretary, the Secretary of Defense, and the Secretary of Agriculture are authorized to exchange any lands or interests therein in Alaska under their jurisdiction for lands or interests therein of the Village Corporations, Regional Corporations, individuals, or the State for the purpose of effecting land consolidations or to facilitate the management or development of the land. Exchanges shall be on the basis of equal value, and either party to the exchange may pay or accept cash in order to equalize the value of the properties exchanged.

Land exchanges.

(g) If a patent is issued to any Village Corporation for land in the National Wildlife Refuge System, the patent shall reserve to the United States the right of first refusal if the land is ever sold by the Village Corporation. Notwithstanding any other provision of this Act, every patent issued by the Secretary pursuant to this Act—which covers lands lying within the boundaries of a National Wildlife Refuge on the date of enactment of this Act shall contain a provision that such lands remain subject to the laws and regulations governing use and development of such Refuge.

(h) (1) All withdrawals made under this Act, except as otherwise provided in this subsection, shall terminate within four years of the date of enactment of this Act: *Provided*, That any lands selected by Village or Regional Corporations or by a Native group under section 12 shall remain withdrawn until conveyed pursuant to section 14.

Withdrawals, termination dates.

(2) The withdrawal of lands made by subsection 11(a)(2) and section 16 shall terminate three years from the date of enactment of this Act.

(3) The provisions of this section shall not apply to any withdrawals made under section 17 of this Act.

(4) The Secretary is authorized to terminate any withdrawal made by or pursuant to this Act whenever he determines that the withdrawal is no longer necessary to accomplish the purposes of this Act.

(i) Prior to a conveyance pursuant to section 14, lands withdrawn by or pursuant to sections 11, 14, and 16 shall be subject to administration by the Secretary, or by the Secretary of Agriculture in the case of National Forest lands, under applicable laws and regulations, and their authority to make contracts and to grant leases, permits, rights-of-way, or easements shall not be impaired by the withdrawal.

(j) In any area of Alaska for which protraction diagrams of the Bureau of Land Management or the State do not exist, or which does not conform to the United States Land Survey System, or which has not been surveyed in a manner adequate to withdraw and grant the lands provided for under this Act, the Secretary shall take such actions as are necessary to accomplish the purposes of this Act, and the deeds granted shall note that upon completion of an adequate survey appropriate adjustments will be made to insure that the beneficiaries of the land grants receive their full entitlement.

Land patents in national forests, conditions.

(k) Any patents to lands under this Act which are located within the boundaries of a national forest shall contain such conditions as the Secretary deems necessary to assure that:

(1) the sale of any timber from such lands shall, for a period of five years, be subject to the same restrictions relating to the export of timber from the United States as are applicable to national forest lands in Alaska under rules and regulations of the Secretary of Agriculture; and

(2) such lands are managed under the principle of sustained yield and under management practices for protection and enhancement of environmental quality no less stringent than such management practices on adjacent national forest lands for a period of twelve years.

Land selection limitation.

(l) Notwithstanding any provision of this Act, no Village or Regional Corporation shall select lands which are within two miles from the boundary, as it exists on the date of enactment of this Act, of any home rule or first class city (excluding boroughs) or which are within six miles from the boundary of Ketchikan.

REVIEW BY CONGRESS

Reports to Congress.

SEC. 23. The Secretary shall submit to the Congress annual reports on implementation of this Act. Such reports shall be filed by the Secretary annually until 1984. At the beginning of the first session of Congress in 1985 the Secretary shall submit, through the President, a report of the status of the Natives and Native groups in Alaska, and a summary of actions taken under this Act, together with such recommendations as may be appropriate.

APPROPRIATIONS

SEC. 24. There are authorized to be appropriated such sums as may be necessary to carry out the provisions of this Act.

PUBLICATIONS

Publication in Federal Register. 60 Stat. 237. 5 USC 551 et seq.

SEC. 25. The Secretary is authorized to issue and publish in the Federal Register, pursuant to the Administrative Procedure Act, such regulations as may be necessary to carry out the purposes of this Act.

SAVING CLAUSE

SEC. 26. To the extent that there is a conflict between any provision of this Act and any other Federal laws applicable to Alaska, the provisions of this Act shall govern.

(b) During a period of three years from the date of enactment of this Act, each Village Corporation for the villages listed in subsection (a) shall select, in accordance with rules established by the Secretary, an area equal to 23,040 acres, which must include the township or townships in which all or part of the Native village is located, plus, to the extent necessary, withdrawn lands from the townships that are contiguous to or corner on such township. All selections shall be contiguous and in reasonably compact tracts, except as separated by bodies of water, and shall conform as nearly as practicable to the United States Lands Survey System.

(c) The funds appropriated by the Act of July 9, 1968 (82 Stat. 307), to pay the judgment of the Court of Claims in the case of The Tlingit and Haida Indians of Alaska, et al. against The United States, numbered 47,900, and distributed to the Tlingit and Haida Indians pursuant to the Act of July 13, 1970 (84 Stat. 431), are in lieu of the additional acreage to be conveyed to qualified villages listed in section 11.

25 USC 1211.

JOINT FEDERAL-STATE LAND USE PLANNING COMMISSION FOR ALASKA

SEC. 17. (a) (1) There is hereby established the Joint Federal-State Land Use Planning Commission for Alaska. The Planning Commission shall be composed of ten members as follows:

Establishment.  
Membership.

(A) The Governor of the State (or his designate) and four members who shall be appointed by the Governor. During the Planning Commission's existence at least one member appointed by the Governor shall be a Native as defined by this Act.

(B) One member appointed by the President of the United States with the advice and consent of the Senate, and four members who shall be appointed by the Secretary of the Interior.

(2) The Governor of the State and the member appointed by the President pursuant to subsection (a) (1) (B), shall serve as cochairmen of the Planning Commission. The initial meeting of the Commission shall be called by the cochairmen. All decisions of the Commission shall require the concurrence of the cochairmen.

(3) Six members of the Planning Commission shall constitute a quorum. Members shall serve at the pleasure of the appointing authority. A vacancy in the membership of the Commission shall not affect its powers, but shall be filled in the same manner in which the original appointment was made.

(4) (A) Except to the extent otherwise provided in subparagraph (B) of this subsection, members of the Planning Commission shall receive compensation at the rate of \$100 per day for each day they are engaged in the performance of their duties as members of the Commission. All members of the Commission shall be entitled to reimbursement for travel, subsistence, and other necessary expenses incurred by them in the performance of their duties as members of the Commission.

Compensation.

(B) Any member of the Planning Commission who is designated or appointed from the Government of the United States or from the Government of the State shall serve without compensation in addition to that received in his regular employment. The member of the Commission appointed by the President pursuant to subsection (a) (1) (B) shall be compensated as provided by the President at a rate not in excess of that provided for level V of the Executive Schedule in title 5, United States Code.

(5) Subject to such rules and regulations as may be adopted by the Planning Commission, the cochairmen, without regard to the provisions of title 5, United States Code, governing appointments in the

80 Stat. 463;  
83 Stat. 864.  
5 USC 5316.  
5 USC 101  
et seq.

85 STAT. 707

80 Stat. 443,  
467.  
5 USC 5101,  
5331.  
5 USC 5332  
note.

80 Stat. 416.  
Hearings.

Information,  
availability.

72 Stat. 339.  
48 USC  
prec. 21 note.

competitive service, and without regard to the provisions of chapter 51 and subchapter III of chapter 53 of such title relating to classification and General Schedule pay rates, shall have the power—

(A) to appoint and fix the compensation of such staff personnel as they deem necessary, and

(B) to procure temporary and intermittent services to the same extent as is authorized by section 3109 of title 5, United States Code, but at rates not to exceed \$100 a day for individuals.

(6) (A) The Planning Commission or, on the authorization of the Commission, any subcommittee or member thereof, may, for the purpose of carrying out the provisions of this section, hold such hearings, take such testimony, receive such evidence, print or otherwise reproduce and distribute so much of its proceedings and reports thereon, and sit and act at such times and places as the Commission, subcommittee, or member deems advisable.

(B) Each department, agency, and instrumentality of the executive branch of the Federal Government, including independent agencies, is authorized and directed to furnish to the Commission, upon request made by a cochairman, such information as the Commission deems necessary to carry out its functions under this section.

(7) The Planning Commission shall—

(A) undertake a process of land-use planning, including the identification of and the making of recommendations concerning areas planned and best suited for permanent reservation in Federal ownership as parks, game refuges, and other public uses, areas of Federal and State lands to be made available for disposal, and uses to be made of lands remaining in Federal and State ownership;

(B) make recommendations with respect to proposed land selections by the State under the Alaska Statehood Act and by Village and Regional Corporations under this Act;

(C) be available to advise upon and assist in the development and review of land-use plans for lands selected by the Native Village and Regional Corporations under this Act and by the State under the Alaska Statehood Act;

(D) review existing withdrawals of Federal public lands and recommend to the President of the United States such additions to or modifications of withdrawals as are deemed desirable;

(E) establish procedures, including public hearings, for obtaining public views on the land-use planning programs of the State and Federal Governments for lands under their administration;

(F) establish a committee of land-use advisers to the Commission, made up of representatives of commercial and industrial land users in Alaska, recreational land users, wilderness users, environmental groups, Alaska Natives, and other citizens;

(G) make recommendations to the President of the United States and the Governor of Alaska as to programs and budgets of the Federal and State agencies responsible for the administration of Federal and State lands;

(H) make recommendations from time to time to the President of the United States, Congress, and the Governor and legislature of the State as to changes in laws, policies, and programs that the Planning Commission determines are necessary or desirable;

(I) make recommendations to insure that economic growth and development is orderly, planned and compatible with State and national environmental objectives, the public interest in the public lands, parks, forests, and wildlife refuges in Alaska, and the economic and social well-being of the Native people and other residents of Alaska;

(J) make recommendations to improve coordination and consultation between the State and Federal Governments in making resource allocation and land use decisions; and

(K) make recommendations on ways to avoid conflict between the State and the Native people in the selection of public lands.

(8) (A) On or before January 31 of each year, the Planning Commission shall submit to the President of the United States, the Congress, and the Governor and legislature of the State a written report with respect to its activities during the preceding calendar year.

(B) The Planning Commission shall keep and maintain accurate and complete records of its activities and transactions in carrying out its duties under this Act, and such records shall be available for public inspection.

(C) The principal office of the Planning Commission shall be located in the State.

(9) (A) The United States shall be responsible for paying for any fiscal year only 50 per centum of the costs of carrying out subsections (a) and (b) for such fiscal year.

(B) For the purpose of meeting the responsibility of the United States in carrying out the provisions of this section, there is authorized to be appropriated \$1,500,000 for the fiscal year ending June 30, 1972, and for each succeeding fiscal year.

(10) On or before May 30, 1976, the Planning Commission shall submit its final report to the President of the United States, the Congress, and the Governor and Legislature of the State with respect to its planning and other activities under this Act, together with its recommendations for programs or other actions which it determines should be taken or carried out by the United States and the State. The Commission shall cease to exist effective December 31, 1976.

(b) (1) The Planning Commission shall identify public easements across lands selected by Village Corporations and the Regional Corporations and at periodic points along the courses of major waterways which are reasonably necessary to guarantee international treaty obligations, a full right of public use and access for recreation, hunting, transportation, utilities, docks, and such other public uses as the Planning Commission determines to be important.

(2) In identifying public easements the Planning Commission shall consult with appropriate State and Federal agencies, shall review proposed transportation plans, and shall receive and review statements and recommendations from interested organizations and individuals on the need for and proposed location of public easements: *Provided*, That any valid existing right recognized by this Act shall continue to have whatever right of access as is now provided for under existing law and this subsection shall not operate in any way to diminish or limit such right of access.

(3) Prior to granting any patent under this Act to the Village Corporation and Regional Corporations, the Secretary shall consult with the State and the Planning Commission and shall reserve such public easements as he determines are necessary.

(c) In the event that the Secretary withdraws a utility and transportation corridor across public lands in Alaska pursuant to his existing authority, the State, the Village Corporations and the Regional Corporations shall not be permitted to select lands from the area withdrawn.

(d) (1) Public Land Order Numbered 4582, 34 Federal Register 1025, as amended, is hereby revoked. For a period of ninety days after the date of enactment of this Act all unreserved public lands in Alaska are hereby withdrawn from all forms of appropriation under the public land laws, including the mining (except locations for metalliferous

Report to President and Congress of U.S., Governor and legislature of Alaska, Recordkeeping.

Appropriation.

Final report.

Termination date.

Public easements.

Unreserved public land, withdrawal.

minerals) and the mineral leasing laws. During this period of time the Secretary shall review the public lands in Alaska and determine whether any portion of these lands should be withdrawn under authority provided for in existing law to insure that the public interest in these lands is properly protected. Any further withdrawal shall require an affirmative act by the Secretary under his existing authority, and the Secretary is authorized to classify or reclassify any lands so withdrawn and to open such lands to appropriation under the public land laws in accord with his classifications. Withdrawals pursuant to this paragraph shall not affect the authority of the Village Corporations, the Regional Corporations, and the State to make selections and obtain patents within the areas withdrawn pursuant to section 11.

(2)(A) The Secretary, acting under authority provided for in existing law, is directed to withdraw from all forms of appropriation under the public land laws, including the mining and mineral leasing laws, and from selection under the Alaska Statehood Act, and from selection by Regional Corporations pursuant to section 11, up to, but not to exceed, eighty million acres of unreserved public lands in the State of Alaska, including previously classified lands, which the Secretary deems are suitable for addition to or creation as units of the National Park, Forest, Wildlife Refuge, and Wild and Scenic Rivers Systems: *Provided*, That such withdrawals shall not affect the authority of the State and the Regional and Village Corporations to make selections and obtain patents within the areas withdrawn pursuant to section 11.

(B) Lands withdrawn pursuant to paragraph (A) hereof must be withdrawn within nine months of the date of enactment of this Act. All unreserved public lands not withdrawn under paragraph (A) or subsection 17(d)(1) shall be available for selection by the State and for appropriation under the public land laws.

(C) Every six months, for a period of two years from the date of enactment of this Act, the Secretary shall advise the Congress of the location, size and values of lands withdrawn pursuant to paragraph (A) and submit his recommendations with respect to such lands. Any lands withdrawn pursuant to paragraph (A) not recommended for addition to or creation as units of the National Park, Forest, Wildlife Refuge, and Wild and Scenic Rivers Systems at the end of the two years shall be available for selection by the State and the Regional Corporations, and for appropriation under the public land laws.

(D) Areas recommended by the Secretary pursuant to paragraph (C) shall remain withdrawn from any appropriation under the public land laws until such time as the Congress acts on the Secretary's recommendations, but not to exceed five years from the recommendation dates. The withdrawal of areas not so recommended shall terminate at the end of the two year period.

(E) Notwithstanding any other provision of this subsection, initial identification of lands desired to be selected by the State pursuant to the Alaska Statehood Act and by the Regional Corporations pursuant to section 12 of this Act may be made within any area withdrawn pursuant to this subsection (d), but such lands shall not be tentatively approved or patented so long as the withdrawals of such areas remain in effect: *Provided*, That selection of lands by Village Corporations pursuant to section 12 of this Act shall not be affected by such withdrawals and such lands selected may be patented and such rights granted as authorized by this Act. In the event Congress enacts legislation setting aside any areas withdrawn under the provisions of this subsection which the Regional Corporations or the State desired to select, then other unreserved public lands shall be made available for alternative selection by the Regional Corporations and the State. Any

72 Stat. 339.  
48 USC  
prec. 21 note.

Final with-  
drawal date.

Report to  
Congress.

# U.S. FISH & WILDLIFE SERVICE

## ALASKA

1011 E. TUDOR RD.

ANCHORAGE, ALASKA

99503 FISH AND WILDLIFE SERVICE

24 NOV 1986

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Phil Million 343-5634

### INTERIOR DEPARTMENT SEEKS PUBLIC COMMENTS ON DRAFT REPORT REGARDING OIL AND GAS POTENTIAL ON ARCTIC NATIONAL WILDLIFE REFUGE

The coastal plain of the Arctic National Wildlife Refuge in Alaska is "the most outstanding oil and gas frontier remaining in the United States," according to a draft report released to the public today by the Department of the Interior.

William P. Horn, Assistant Secretary for Fish and Wildlife and Parks, said he was making the draft report and legislative environmental impact statement (LEIS) on the oil and gas potential of the Arctic refuge available for public review so that public comments can be considered before a final report and LEIS are submitted to Congress next spring.

The report, "Arctic National Wildlife Refuge, Alaska, Coastal Plain Resource Assessment," predicts that the 1.5-million acre coastal plain area within the 19-million-acre refuge could contain more than 29.4 billion barrels of oil and 64.5 trillion cubic feet of gas in-place. The refuge coastal plain, which constitutes about 8 percent of the Refuge, also has outstanding wildlife values and is perhaps best known to the public as part of the calving grounds for a large, migratory caribou herd. Other species using the area include musk oxen, polar and brown bears, and many kinds of migratory birds.

The Interior Department prepared the report to fulfill the requirements of Section 1002(h) of the Alaska National Interest Lands Conservation Act (ANILCA). Section 1002(h) required the Interior Department to study the wildlife and energy values of the coastal plain and report to Congress on the study results. Section 1002(h) also asked the Secretary of the Interior to make recommendations to Congress concerning future management of the coastal plain.

Since ANILCA was enacted in 1980, the U.S. Fish and Wildlife Service has studied the biological resources of the area extensively, and the U.S. Geological Survey, the Bureau of Land Management, and exploration crews from private industry have conducted surface geologic studies. Approximately 1300 gravity readings and more than 1300 line miles of seismic data also were acquired by industry under special-use permits issued by the Fish and Wildlife Service, which administers the refuge. The analyses of these biological and geological data represent the efforts of more than 50 Interior Department scientists.

(over)

Horn said the range of alternatives identified in the draft report includes leasing the entire area for oil and gas development; leasing a limited area; permitting additional exploration, including exploratory wells; taking no action regarding oil and gas activity but including the area in the comprehensive conservation planning process for the Arctic refuge; or designating the coastal plain as wilderness. The report also examines the potential environmental consequences of each alternative.

Horn said that, on the basis of the draft report's findings, he is proposing to recommend that the entire coastal plain be made available for oil and gas leasing, with necessary environmental safeguards. Horn's proposed recommendation is being circulated as a part of the draft report and LEIS for public review and comment. He emphasized that the final recommendation to Congress will be made by Secretary Hodel and that the final decision about management of the area will be made by Congress.

"Based on the analyses presented, on the national need for domestic sources of oil and gas, and on the ability of industry to minimize damage as learned from oil and gas activities elsewhere in the Alaskan arctic, I am proposing full leasing of the coastal plain," Horn said. "To afford the special protection necessary to conserve the high natural resource values of the coastal plain, the recommendation asks for authority to impose restrictions to ensure environmental integrity during oil and gas operations. Development must result in no unnecessary adverse effects, and unavoidable habitat losses should be fully compensated.

Public comments are being solicited to assist Secretary Hodel in making his final recommendation. Comments will be included as a part of the final report and LEIS to Congress. By releasing the draft report and LEIS at this time, the Interior Department is commencing the administrative requirements imposed by the district court's February 25, 1986, order in Trustees for Alaska, et al. v. Donald Hodel, et al., (D.AK), a case brought under the National Environmental Policy Act (NEPA) to challenge the Department's plans for the preparation of the report. The district court ruled that the Department is required by NEPA to provide the public an opportunity to participate in the preparation of the report in advance of its submission to Congress. The Department has appealed the district court's order to the ninth circuit court of appeals, but no decision on the appeal has been rendered yet. In initiating the steps necessary under the court's order to permit the submission of the final report and LEIS by next spring, the Department does not feel that its action makes the appeal moot.

Copies of the report may be obtained from Clay Hardy, U.S. Fish and Wildlife Service, 1011 East Tudor Road, Anchorage, Alaska 99503; or from Noreen Clough, Division of Refuge Management, Room 2343, U.S. Department of the Interior, 18th and C Streets NW., Washington, DC 20240. Written comments should be sent to the U.S. Fish and Wildlife Service, Attention: Division of Refuge Management, 2343 Main Interior Building, 18th and C Streets NW., Washington, DC 20240, by January 20, 1987.

(continued)

The Fish and Wildlife Service plans to hold public meetings in Anchorage and Kaktovik, Alaska, and Washington, DC, to receive public comments. The Washington, DC, meeting will be held January 9, 1987, at 1:30 p.m., in the Interior Building auditorium. Dates and locations of the Kaktovik and Anchorage meetings will be announced at a later date.

The final report and LEIS is scheduled to be released to the public in March 1987, after which it will be forwarded to Congress.

-DOI-

FEB 8 1981

PRELIMINARY PETROLEUM RESOURCE APPRAISAL  
OF THE  
WILLIAM O. DOUGLAS  
ARCTIC WILDLIFE RANGE IN ALASKA

U.S. DEPARTMENT OF THE INTERIOR  
JULY 1980

Preliminary Petroleum Resource Appraisal  
of the William O. Douglas  
Arctic Wildlife Range, Alaska  
U.S. Department of the Interior

July 1980

Summary

The Department of the Interior has completed a preliminary petroleum resource appraisal of the William O. Douglas Arctic Wildlife Range as requested by the Chairman of the U.S. Senate Committee on Energy and Natural Resources. The appraisal was conducted by two teams of geologists assembled by the U.S. Geological Survey, a Geologic Assessment Committee and a Resource Appraisal Review Committee, using a methodology developed for the economic and policy analysis of the National Petroleum Reserve in Alaska (NPR-A).

The petroleum potential of the Wildlife Range is highly uncertain. With no subsurface geologic and seismic data for that area, the appraisal is based almost entirely on extrapolation from data acquired in areas adjacent to the Range. The appraisal was further complicated because the Wildlife Range may lie in a major geologic transition zone.

The results of the preliminary appraisal are a range of probabilities that certain amounts of oil and gas in place exist in the Wildlife Range. As shown in Table 1, there is a 50 percent chance that there would be at least 2.7 billion barrels of oil in place, a 5 percent chance of 17.0 billion barrels of oil in place, and a 95 percent chance of .16 billion barrels of oil in place. By way of comparison, the most recent appraisal for the National Petroleum Reserve in Alaska, based on substantial geologic and seismic data, indicates a 50 percent chance that there would be 5.2 billion barrels of oil in place.

It must be emphasized that these estimates are for resources in place. The average recovery rate for conventional crude oil is about 32 percent. However, based on speculation that oil in the Wildlife Range may be heavier than conventional crude oils, only about 20 to 25 percent of this oil might actually be recovered. Furthermore, no estimates have been made of the probability that oil and gas might be discovered.

Geologic Assessment

Methodology. A Geological Assessment Committee, a team of geologists with expertise in the geology and geophysics of northern Alaska, reviewed all available surface geological data and magnetic anomaly data which have been compiled over the years from field studies in the Wildlife Range. The committee also examined all available geologic information on areas adjacent to the Wildlife Range, extending west of its boundaries

into the Prudhoe Bay area and eastward into Canada. Information relating to the geology of the petroleum-producing areas of the Mackenzie Delta and the Canadian part of the Beaufort Sea was provided by the Canadian Geological Survey and Dome Petroleum of Canada. Through representation on the Geological Assessment Committee, data were also provided by the State of Alaska. The most recent seismic data collected by the USGS in the Beaufort Sea offshore from the Wildlife Range was carefully reviewed in light of the possible continuity of the geology onshore into the Wildlife Range.

No subsurface geologic or seismic data exist for the Wildlife Range itself. Subjective extrapolations of the geology to the west, to the east, from offshore and from analogous areas had to be considered. The diversity in the interpretations of the subsurface geology, in the absence of subsurface data, and the related potentials for the probable occurrence of petroleum, account for the large range in uncertainty in the estimates.

Findings. The area of the Wildlife Range that may have petroleum lies between the Brooks Range and the Beaufort Sea and covers roughly 3,000 square miles, or less than one-third of the total Wildlife Range (see Figure 1). This area is about one-tenth the size of the National Petroleum Reserve in Alaska, much of which is believed to have petroleum potential. The potential sedimentary section may consist of from 15,000 feet to 25,000 feet of sediments in some parts of the Wildlife Range.

The Wildlife Range is located in an area where there may be a major transition in the geology from a Mesozoic-Paleozoic rock sequence similar to the Prudhoe Bay area to that of a major Tertiary sequence similar to the geology of the Canadian Mackenzie Delta-Beaufort Sea petroleum province. This generates two different sets of geologic scenarios and great uncertainty as to which might actually exist. If the Mesozoic-Paleozoic rock sequence similar to the Prudhoe Bay area should have a major extension into the Wildlife Range, it is possible that Prudhoe Bay-type conditions may exist. On the other hand, if the major Tertiary rock sequence occurs similar to the conditions in Canada just east of the Wildlife Range and to the geology immediately offshore in the Beaufort Sea, then the conditions that provide the petroleum potential of the Canadian Mackenzie Delta-Beaufort Sea areas may occur in the Wildlife Range.

#### Resource Appraisal

Methodology. The methodology used for this preliminary petroleum resource appraisal had earlier been developed by the Interior Department's Office of Minerals Policy and Research Analysis for use in the economic and policy evaluation studies of the National Petroleum Reserve in Alaska. These studies, required by Section 105(b) of the Naval Petroleum Reserves Production Act of 1976, were used in developing recommendations to the Congress on development of the Reserve.

This methodology first requires a determination of the number of possible petroleum plays <sup>1/</sup> within the Range; subjective probability estimates are then made of various geologic parameters to determine the number of prospects that might exist in each play and which of those prospects might contain oil and gas. The Geologic Assessment Committee defined 10 plays within the Wildlife Range and compiled subjective estimates of the values of each of the geologic parameters for each of the 10 plays. These estimated geologic values were entered into a computer model to calculate the petroleum resources.

A Resource Appraisal Committee, consisting of some of the geologists from the Geological Committee and additional USGS staff knowledgeable in resource appraisal methods and procedures, then reviewed the geology and geologic assessments of the 10 possible petroleum plays. It also reviewed and further refined the estimated distributions from the computer model for each of the 10 individual plays and for the aggregated resource estimates for the Wildlife Range.

Findings. As can be seen in Table 1, the wide range of geological interpretations and the uncertainties that went into the resource appraisal process are reflected in the range of probabilities for occurrence of oil and gas. There is a 50 percent probability that at least 2.7 billion barrels of oil are in place, a 95 percent chance of .16 billion barrels and a 5 percent chance of 17.03 billion barrels. Similarly, estimates of gas in place range from a 95 percent probability of 1.4 trillion cubic feet (tcf) to a 5 percent probability of 33.9 tcf, with a 50 percent chance that 8.4 tcf of gas are in place.

No estimates were made of the probability of actually finding the resources nor were predictions made of recovery rates. The Geological Survey team of geologists, however, indicated that recovery rates may be lower than the average rate of recovery for conventional crude oil, which is normally about 32 percent. They speculate that there may be heavier crude oils in the Wildlife Range with recovery rates in the range of 20 to 25 percent.

Full documentation of the geologic data for each of 10 exploration plays for the William O. Douglas Arctic Wildlife Range and the individual resource assessments for each of the plays are being prepared by the U.S. Geological Survey and will be available upon request.

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<sup>1/</sup> A play is defined as a geologic formation or stratigraphic unit consisting of one or more prospects in a common or relatively homogeneous geologic setting which can be explored for by using geological, geochemical, and geophysical techniques. A prospect is a potential hydrocarbon accumulation, or field.

TABLE 1

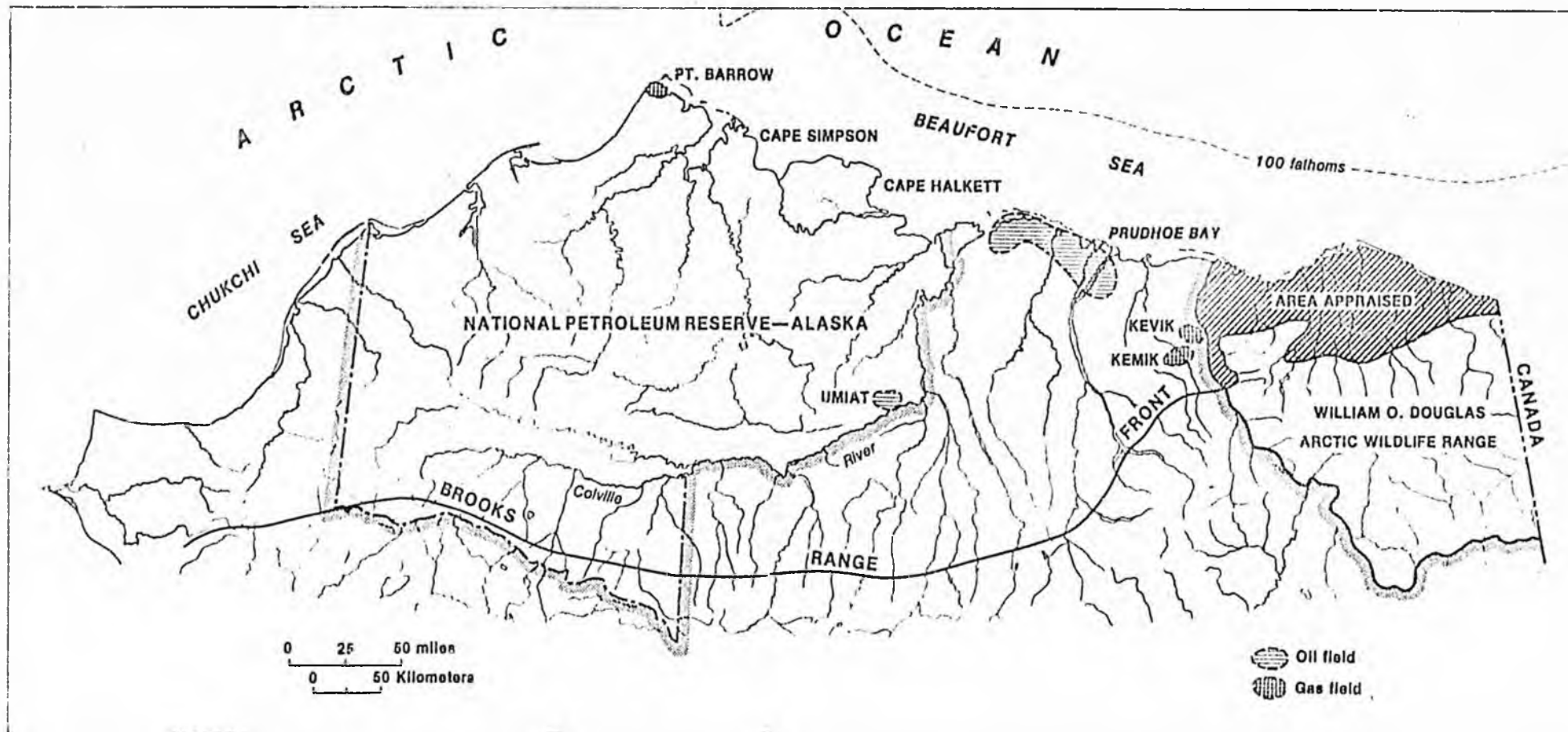
Preliminary Distribution of Estimated  
Oil and Natural Gas Resources In Place  
in the William O. Douglas Arctic Wildlife Range

(June 1980)

<u>Probability that Quantity is at Least Given Value</u>	<u>Oil In Place (Billions of Barrels)</u>	<u>Gas In Place (Trillions of cubic feet)</u>	<u>Barrels of Oil Equivalent In Place* (Billions of Barrels)</u>
95%	.16	1.44	.86
75%	1.12	4.33	2.48
50%	2.71	8.41	4.74
25%	5.87	15.14	8.52
5%	17.03	33.93	20.53
Mean	4.85	11.90	6.94

\* Barrels of oil equivalent are obtained by converting the estimated gas in place to the energy equivalent in oil and adding the resulting value to the estimated oil in place.

Figure 1



INDEX MAP: NATIONAL PETROLEUM RESERVE—ALASKA AND WILLIAM O. DOUGLAS ARCTIC WILDLIFE RANGE

MEMORANDUM OF UNDERSTANDING BETWEEN THE  
UNITED STATES DEPARTMENT OF THE INTERIOR  
AND THE STATE OF ALASKA

1.0 Parties.

The parties to this Memorandum of Understanding  
(hereinafter MOU) are:

1.1 The United States Department of the Interior  
(hereinafter Interior), acting by and through  
the Secretary of the Interior (hereinafter  
the Secretary). As used in this MOU,  
"Interior" means any of the component bureaus  
and offices of Interior which has expertise in, or  
responsibility for, oil and gas assessment or land  
management, and which has a need for access to the data  
and information subject to this MOU in connection with  
the performance of the official business of Interior.

1.2 The State of Alaska (hereinafter Alaska),  
acting by and through the Alaska Department  
of Natural Resources (hereinafter DNR) and  
the Commissioner of Natural Resources. As  
used in this MOU, "DNR" means the Division  
of Geological and Geophysical Surveys  
(hereinafter DGGS) or the Division of Oil and  
Gas (hereinafter DO&G) or both and their line

supervisors within the government of the State of Alaska. Nothing in this MOU precludes an agreement on oil and gas data sharing between Interior and another division or office within the Department of Natural Resources or another state agency.

2.0 Premises.

2.1 Section 1002 of the Alaska National Interest Lands Conservation Act of 1980 (hereinafter ANILCA), 94 Stat. 2449, as amended by section 110 of Pub. L. 97-394, 96 Stat. 1982, 16 U.S.C. § 3142, provides for a comprehensive and continuing inventory and assessment of the fish and wildlife resources of the coastal plain of the Arctic National Wildlife Refuge (hereinafter ANWR). It also authorizes surface geological and geophysical exploration for oil and gas within the coastal plain in a manner that avoids significant adverse effects on the fish and wildlife and other resources. As used in this MOU, "coastal plain" means the area referred to in section 1002(b)(1) of ANILCA and described in Appendix I to 50 C.F.R. Part 37.

2.2 Under 50 C.F.R. § 37.53 any person authorized pursuant to section 1002 of ANILCA and 50 C.F.R. Part 37 to conduct exploratory activities on the coastal plain is required to submit to the Regional Director, Region 7, United States Fish and Wildlife Service (hereinafter FWS) free of charge all data and information obtained as a result of carrying out such activities at the time and in the form specified therein.

2.3 Section 1002(h) of ANILCA requires the Secretary to submit to Congress, not earlier than December 2, 1985 nor later than September 2, 1986, a report containing:

2.3.1 The identification, by means other than drilling of exploratory wells, of those areas within the coastal plain that have oil and gas production potential and estimate of the volume of the oil and gas concerned;

2.3.2 The description of the fish and wildlife, their habitats, and other resources that are within the areas identified under paragraph 2.3.1;

- 2.3.3 An evaluation of the adverse effects that the carrying out of further exploration for, and the development and production of, oil and gas within such areas will have on the resources referred to in paragraph 2.3.2;
- 2.3.4 A description of how such oil and gas, if produced within such area, may be transported to processing facilities;
- 2.3.5 An evaluation of how such oil and gas relates to the national need for additional domestic sources of oil and gas; and
- 2.3.6 The recommendations of the Secretary to Congress with respect to whether further exploration for, and the development and production of, oil and gas within the coastal plain should be permitted and, if so, what additional legal authority is necessary to ensure that the adverse effects of such activities on fish and wildlife, their habitats, and other resources are avoided or minimized.

2.4 FWS, which has the lead responsibility within Interior for administering the section 1002 program, has through a tripartite agreement established interagency procedures enabling it to use the technical assistance of the Geological Survey (hereinafter GS) and the Bureau of Land Management (hereinafter BLM) in analyzing data and information obtained as a result of exploratory activities authorized by FWS pursuant to section 1002 of ANILCA and in preparing the report to Congress required by section 1002(h) of ANILCA. Under the agreement, GS has the lead role in providing assistance to FWS in completing those portions of the report addressing the requirements of section 1002(h)(1), and BLM has the lead role in providing assistance to FWS in completing those portions of the report addressing the requirements of sections 1002(h)(4) and (5). In addition, FWS has delegated to the Alaska State Director, BLM, the responsibility for the storage, physical security, transfer, and disclosure of such data and information, with the stipulation that, whenever BLM transfers any proprietary or confidential data to any other agency or party, the transferee must

assume sole responsibility for maintaining the confidentiality of such data at the time of transfer.

2.5 DGGs and DO&G have the expertise to determine, examine, classify and evaluate geologic structures and mineral resource production potential, including the oil and gas production potential of ANWR. DGGs and DO&G have developed an extensive professional staff and the technical means and methodologies for such evaluations, and have already assembled some oil and gas data and information for areas in and offshore of Alaska adjacent to ANWR.

2.6 Under section 1003 of ANILCA, 94 Stat. 2452, 16 U.S.C. § 3143, oil and gas production, leasing and any other development leading to production within ANWR are prohibited until authorized by an act of Congress.

2.7 The United States and Alaska each have important and distinct interests which will be affected by executive and congressional decisions on the future

use and administration of ANWR. These interests will best be served by seeking to ensure that such executive and congressional decisions are based upon information which is as comprehensive and reliable as current technology, data, science and law will allow. Both Interior and DNR have access to important oil and gas data and information not readily available to the other. Therefore, to the extent that Interior and DNR share such data and information, each agency's knowledge and capacity to make sound administrative decisions about the lands and resources for which each is responsible will be enhanced. It is the purpose of this MOU to advance these governmental interests by providing for the sharing of oil and gas data and information and geophysical and geological expertise and analyses to the fullest extent permissible under Alaska and federal law. By executing this MOU, it is not Interior's intent to seek, nor is it DNR's intent to offer, DNR's advice or recommendations on either the content of the section 1002(h) report or on the Secretary's recommendations to Congress concerning any

further exploration for and development and production of oil and gas within the coastal plain. However, nothing in this MOU is intended to preclude Alaska from participating in public discussions over the future use and management of the ANWR's coastal plain to the extent that Alaska's use and disclosure of any oil and gas data and information obtained by it pursuant to this MOU are consistent with section 1002 of ANILCA, 50 C.F.R. Part 37, and this MOU.

### 3.0 Authorities.

This MOU is authorized by 50 C.F.R. § 37.54(b) and (c), AS 38.05.020, AS 41.08.040 and 11 AAC 96.220(2) and is entered into with the following understandings with respect to these authorities:

3.1 To the extent that under this MOU DNR inspects and/or obtains any data and information which qualifies as "raw data and information" as that term is defined in 50 C.F.R. § 37.2(p), 50 C.F.R. § 37.54(b) shall govern DNR's access to and use of such data and information and DNR's compliance with the terms and conditions of this MOU

shall be deemed to satisfy DNR's obligations thereunder not to disclose such data and information, and any interpretations and analyses derived therefrom, to any third party without Interior's consent. DNR shall be liable to Interior and the permittee that submitted such data and information to Interior for any unauthorized disclosure of such data and information and any interpretations and analyses derived therefrom which divulge confidential data and information to and any unauthorized use thereof by third parties. Whenever DNR inspects and/or obtains such data and information directly from the permittee, rather than indirectly through Interior, DNR's exercise of such direct access shall constitute notice to the permittee of Interior's disclosure of such data and information to DNR. Whenever DNR inspects and/or obtains such data and information from BLM, BLM shall, if practicable, give advance notice of such disclosure to the permittee.

- 3.2 To the extent that under this MOU DNR inspects and/or obtains any data and information which qualifies as "processed, analyzed and interpreted data or information"

(hereinafter processed data) as that term is defined in 50 C.F.R. § 37.2(o), 50 C.F.R. § 37.54(c) shall govern DNR's access to and use of such processed data and DNR's compliance with paragraph 4.7 hereof shall be deemed to constitute a proper request thereunder. DNR shall be responsible for maintaining the confidentiality of such processed data and any interpretations and analyses derived therefrom which divulge such processed data in accordance with section 1002 of ANILCA, 50 C.F.R. Part 37, and this MOU.

4.0 Data and Information Sharing by Interior.

4.1 To the extent that Geophysical Service Inc. (hereinafter GSI) is required by 50 C.F.R. § 37.53, its exploration plan or its special use permit to submit such data to FWS without charge, Interior hereby authorizes DNR to obtain directly from GSI, provided that DNR pays GSI for its costs in duplicating such data and information, duplicates of all processed data obtained by GSI as a result of its exploration of the coastal plain pursuant to section 1002 of ANILCA, including, but not limited to, full-scale final stack and

migrated seismic sections, half-scale velocity seismic sections, half-scale velocity analyses and its velocity tape with tape format, processed gravity data, and shot-hole sample geochemical and paleontological analyses, and duplicates of all data, whether raw or processed, obtained by GSI from its exploration of the coastal plain which are essential to DNR's use of such processed data, including, but not limited to, its navigation tape with tape format and a reproducible shot-point base map.

4.2 To the extent that International Technology, Ltd. (hereinafter Itech) is required by 50 C.F.R. § 37.53, its exploration or its special use permit to submit such data to FWS without charge, Interior hereby authorizes DNR to obtain directly from Itech, provided that DNR pays Itech for its costs in duplicating such data and information, duplicates of all processed data obtained by Itech as a result of its exploration of the coastal plain pursuant to section 1002 of ANILCA, including, but not limited to, processed gravity data, and duplicates of all data, whether raw or

processed, obtained by Itech from its exploration of the coastal plain which are essential to DNR's use of such processed data, including, but not limited to, its navigation tape with tape format.

4.3 At its option, DNR may obtain duplicates of the data and information described in paragraphs 4.1 and 4.2 hereof directly from BLM, provided that DNR pays BLM for its duplication costs.

4.4 To the extent that DNR wishes to obtain from GSI or Itech data and information obtained as a result of its exploration of the coastal plain in a format or medium different than that in which such data and information are required to be submitted to FWS, DNR may request GSI or Itech to reproduce such data and information in such format or medium, provided that, if GSI or Itech grants DNR's request, DNR shall pay both the costs, if any, for altering their format or medium and the duplication costs.

4.5 Nothing in this MOU shall be construed to authorize DNR to obtain oil and gas data and information obtained as a result of the exploration of ANWR from other FWS permittees, including, but not limited to, the participants to GSI's special use permit, or to require such permittees to furnish such data and information to DNR. In addition, nothing in this MOU shall be construed to limit DNR's ability otherwise to obtain such data and information in accordance with applicable law.

4.6 Whenever arrangements can be made to the mutual satisfaction of DNR and BLM or the permittee actually furnishing DNR with access to oil and gas data and information under the terms and conditions of this MOU, DNR may, if it wishes, inspect and use such data and information on the premises of BLM or the permittee.

4.7 Nothing in this MOU shall be construed to require GSI, Itech, FWS, GS or BLM automatically to share with DNR oil and

gas data and information obtained from exploration of the coastal plain upon their becoming available to that permittee or bureau. Rather, in order to maintain accountability and security, DNR shall in writing notify GSI, Itech, or BLM, as appropriate, whenever it wishes to inspect and/or obtain duplicates of such data and information in accordance with this MOU, reasonably describe the data and information to which it seeks access, and provide the Alaska State Director, BLM, with an informational copy of such notice. Upon DNR's request, BLM will assist DNR in identifying oil and gas data and information obtained from exploration of the coastal plain pursuant to section 1002 of ANILCA which DNR may wish to obtain under paragraphs 4.1, 4.2, 4.3 and 4.4 hereof. Upon the receipt of DNR's written notice and description, the appropriate permittee or BLM shall within 30 days therefrom, if practicable, make the requested data and information available to DNR in the manner requested by DNR, i.e., by affording DNR the opportunity to inspect if the requirements of paragraph 4.6 hereof have been satisfied, or

by providing duplicates of such data and information if the requirements of paragraph 4.1, 4.2, 4.3 or 4.4 hereof, whichever paragraph is applicable, have been satisfied, or both. Whenever DNR inspects or receives duplicates of any data and information from a permittee pursuant to this MOU, DNR shall thereafter promptly provide the Alaska State Director, BLM, with an itemized inventory of such data and information which has been verified and countersigned by the entity disclosing such data and information to DNR. Whenever DNR inspects or receives duplicates of any data and information from BLM pursuant to this MOU, BLM shall make an itemized inventory of such data and information which shall be verified and countersigned by DNR. BLM shall provide a copy of such countersigned inventory to the permittee(s) that originally submitted the data and information covered thereby to FWS as soon thereafter as is practicable.

- 4.8 Nothing in this MOU shall be construed to require Interior to exercise any authority or remedy available to it to obtain data and information required to be submitted to it by

section 1002 of ANILCA and 50 C.F.R. Part 37 in order to enable it to perform its obligations to DNR under this MOU or to ensure that it does in fact perform such obligations.

4.9 Nothing in this MOU shall be construed to require or affect the sharing by Interior with Alaska of any oil and gas data and information which may be obtained from any area within ANWR and submitted to Interior pursuant to any legislation that may hereafter be enacted by Congress to permit any further exploration for or development or production of oil and gas within ANWR.

5.0 Data and Information Sharing by Alaska.

5.1 DNR shall use its best efforts to provide Interior to the maximum extent possible with access to all oil and gas data and information obtained from state and private lands, including, but not limited to all geological, geophysical, geochemical and paleontological data and information, and all ancillary data and information, such as engineering and economic data, whether such

data and information were submitted to Alaska by a state contractor, permittee, licensee, or lessee, or derived by Alaska or its agent from data and information so submitted, which are not required to be held confidential by DNR under state law or the terms of any permit or any agreement to which Alaska is a party, and which in the judgment of Interior are relevant to the evaluation and administration of the hydrocarbon resources of federal lands within Alaska and of the federal Outer Continental Shelf offshore of Alaska. DNR shall provide such access to Interior by cooperating in the identification of the existence and location of such data and information, permitting Interior to inspect such data and information on DNR's premises or, if mutually satisfactory arrangements can be made between Interior and the person or organization submitting them, on the submitter's premises, and providing Interior with such duplicates thereof as Interior may request, provided that Interior pays the costs of duplicating any materials normally not distributed to the public or Interior free of charge. DNR shall provide Interior with access in the manner requested

by Interior to such data and information in its possession within 30 days, if practicable, of receiving Interior's request therefor. However, if DNR has already provided duplicates of the requested data and information to a component bureau or office of Interior and there is no limitation or prohibition on the subsequent transfer of such data and information within Interior, DNR may meet its obligations under this paragraph by notifying the requesting bureau or office within 30 days, if practicable, of the identity and location of the Interior bureau or office to which such duplicates have already been provided. Where the data and information described herein are held by another agency, DNR shall, at Interior's request, use its best efforts to assist Interior in obtaining access thereto from that agency.

5.2 DNR shall use its best efforts to assist Interior in obtaining access to all oil and gas data and information obtained from state and private lands which are required to be held confidential under state law or the terms of any permit or any agreement to which

Alaska is a party, including, but not limited to, all confidential geological, geophysical, geochemical and paleontological data and information, all confidential ancillary data and information, such as engineering and economic data and information, and all data and information derived from such confidential data which must also be held confidential under state law or the terms of any permit or any agreement to which Alaska is a party because they divulge the original confidential data and information from which they were derived, that in the judgment of Interior are relevant to the evaluation and administration of the hydrocarbon resources of federal lands within Alaska and of the federal Outer Continental Shelf offshore of Alaska. Such assistance shall, upon Interior's request, include cooperating in the identification of the existence and location of such data and information to the extent that DNR is able to do so without divulging data and information required to be held confidential under state law or the terms of any permit or agreement to which Alaska is a party; identifying the person or organization thought to have the authority to

waive or modify any provisions of state law or the terms of any permit or any agreement to which Alaska is a party which would otherwise preclude or inhibit Interior's access to and use of such data and information, including, but not limited to, provisions relating to the requirement for the submitter's consent to such disclosure, the identity of the bureaus to which such data and information can be disclosed, the site of inspection, duplication, and other procedures for disclosure; and cooperating in the development and/or negotiation of such waivers or modifications and stipulations concerning Interior's use and disclosure of such data and information with the appropriate persons and organizations. Where such data and information are held by another state agency, DNR shall, at Interior's request, use its best efforts to help Interior to obtain that agency's assistance in obtaining access to such data and information. DNR shall provide such assistance as is requested by Interior under this paragraph within 30 days, if practicable, of receiving Interior's request. Nothing in this paragraph shall require DNR

or any other Alaska state agency to disclose confidential data or information to Interior unless state law or the terms of permit or any agreement to which Alaska is a party permits such disclosure or a valid waiver of state confidentiality requirements has been obtained.

5.3 At Interior's request, DNR shall provide Interior with its appraisal of the oil and gas production potential of the ANWR's coastal plain, which appraisal shall include DNR's identification of the areas within the coastal plain thought to have oil and gas production potential and its estimates of the volume of oil and gas in such areas, and a description of the methodology and sources of information used to arrive at such appraisal. Unless Interior otherwise stipulates to a later date or dates by 30 days advance notice to DNR, DNR shall provide such appraisal to Interior no earlier than January 1, 1986, and no later than March 1, 1986. In addition, at the time of DNR's disclosure of its appraisal to Interior, all reports setting forth, summarizing, and explaining DNR's appraisal then in existence shall be provided to

Interior and any additional reports, revisions and supplements thereto as may at any time thereafter be prepared for a period up to two years following the termination of this MOU pursuant to paragraph 9.8 hereof, which use or reflect data and information obtained by Alaska under this MOU, shall be provided to Interior as soon as possible, provided, however, that DNR may segregate and delete therefrom any specific data and information required to be held confidential under state law or the terms of any permit or any agreement to which Alaska is a party. DNR will use its best efforts to prepare such appraisal, reports, revisions and supplements thereto in a manner such as to facilitate, and to obtain whatever waivers of state confidentiality requirements that are necessary to facilitate, their maximum disclosure to Interior, while at the same time maintaining their credibility. To the extent that such appraisal, reports, revisions or supplements divulge data and information submitted to FWS under section 1002 of ANILCA, Interior shall apply the same

measure of confidentiality thereto as it is required to apply to the underlying section 1002 data or derivative information.

5.4 Any appraisal, report, revision or supplement thereto generated by Alaska which concerns the oil and gas production potential of the ANWR's coastal plain will not be disclosed by Alaska to any person or entity outside of the government of the State of Alaska other than Interior until after the Secretary has formally submitted to Congress the report required by section 1002(h) of ANILCA, and in no event shall Alaska disclose to any person or entity other than Interior in such appraisal, report, or revision or supplement thereto any data or information obtained by Alaska pursuant to this MOU which are required by federal law or this MOU to be held confidential. Before Alaska discloses any such appraisal, report, revision or supplement thereto to any person or entity outside of the government of the State of Alaska other than Interior, Alaska shall afford Interior the opportunity to review it for the purpose of commenting on whether in Interior's judgment such document divulges

data or information obtained by Alaska pursuant to this MOU which are required by federal law or this MOU to be held confidential.

#### 6.0 Consultation.

It is agreed that intergovernmental consultation may enhance the quality of mineral resource assessments performed by both Interior and Alaska. Accordingly, it is agreed that, upon the effective date of this MOU, personnel of Alaska and Interior authorized to have access to any confidential oil and gas data and information that are covered by this MOU will be available to consult with each other with regard to the interpretation and analysis of those data and information which are authorized to be shared under this MOU.

#### 7.0 Confidentiality.

7.1 To the extent permitted by law, Alaska and Interior each agree to maintain the confidentiality of any data or information obtained from the other pursuant to this MOU, which are required by the laws of

the party transferring such data or information to be held confidential, in accordance with the requirements for preserving such confidentiality applicable to the transferring party and this MOU. In addition, Alaska shall not make any commercial use of, or allow any person or entity who obtains such data or information from Alaska to use for any commercial purpose, including, but not limited to, participation in a lease sale including the area from which such data or information were obtained, any data or information required to be submitted to FWS by 50 C.F.R. § 37.53 and obtained by Alaska pursuant to this MOU.

7.2 DNR and Interior each shall use such standards of care for maintaining the security and confidentiality of any data and information shared under this MOU which are required to be held confidential by the laws of the transferring party as are equivalent to or more stringent than the standards and procedures for maintaining the security of Proprietary/Confidential Information set forth in BLM Manual Section 1273, a copy of which is attached hereto as

Appendix I and incorporated herein, to the extent that such BLM standards and procedures are not inconsistent with this MOU, section 1002 of ANILCA or 50 C.F.R. Part 37. Whichever DNR division initially receives such data or information from Interior or a FWS permittee pursuant to this MOU and whichever Interior bureau initially receives such data or information from Alaska or a state contractor, permittee, licensee or lessee pursuant to this MOU shall be regarded as the "Office of Control", as that term is used in BLM Manual Section 1273, for those data or information. DGGs and DO&G may share confidential data and information obtained pursuant to this MOU with each other and with their line supervisors within the government of the State of Alaska, but DGGs, DO&G, and their line supervisors shall not divulge such data and information, and any interpretations and analyses derived therefrom which divulge such data and information, to any other division or office within the Department of Natural Resources or any other state agency without obtaining Interior's prior written

consent and without giving prior written notice to the FWS permittee that originally acquired such data and information. Upon request, Alaska and Interior shall each be provided the opportunity to review and comment upon the facilities, standards and procedures the other uses for maintaining the security and confidentiality of such data and information.

7.3 DNR and Interior each shall, upon written request, promptly provide to the other a list showing the name, title, organization and locale of each person authorized to have access to or use any data or information obtained under this MOU which are required by the laws by the transferring party to be held confidential, and describing for each person listed the type of data and information to which such person is authorized to have access or use.

#### 8.0 Retention of Data and Information.

Any data or information obtained by DNR or Interior pursuant to this MOU may be retained and used by each to carry out its authorized activities, subject to the continuation of all

applicable obligations established hereunder concerning the confidentiality and commercial use of such data or information. Such data and information may be destroyed whenever in the judgment of the party possessing them they are no longer needed, provided that, when data or information required to be held confidential under the terms and conditions of this MOU are being destroyed, such party documents the dates of their destruction, the specific data or information destroyed, whether there are any remaining copies thereof under that party's control, and, if so, by whom they are possessed.

9.0 Other Administrative Matters.

9.1 Alaska agrees to be responsible for its own acts and the results thereof, and assumes all risk and liability to itself, its agencies, officers, employees, and agents, Interior, its officers and employees, GSI and Itech, and their officers and employees, for any injury to any person, organization or property resulting in any manner from the conduct of its own operations, and the operations of its agencies, officers, employees or agents, under the MOU, and for any loss, cost, damage or expense resulting at any time from any and all causes due to any act or acts, negligence, or the failure

to exercise proper precautions, of or by itself or its agencies, officers, employees or agents while using any data or information or otherwise acting under or pursuant to this MOU. In any action commenced against Alaska pursuant to this paragraph, Alaska shall not raise as a defense any claim of sovereign immunity or any claim that any officer, employee or agent who revealed data or information required by this MOU to be held confidential was acting outside the scope of his employment or agency in revealing such data or information. Interior's liability shall be governed by the provisions of the Federal Tort Claims Act, as amended, 28 U.S.C. § 2671 et seq. (1982).

9.2 The parties agree that non-compliance with this MOU on the part of either party hereto shall be subject to those judicial remedies available at law and in equity.

9.3 The parties may severally and jointly take those steps that are necessary and proper to carry out the intent of this MOU, provided that they are not contrary to this MOU or applicable law.

- 9.4 Implementation of this MOU shall be subject to the availability of appropriated funds and personnel. Each party shall bear its own costs for implementing this MOU.
- 9.5 This MOU shall be modified only by a written document executed by both parties hereto.
- 9.6 No member of or delegate to Congress, or resident commissioner, shall be admitted to any share or part of this MOU or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this MOU if made with a corporation for its general benefit.
- 9.7 This MOU shall be effective on that date upon which the last of the signatories hereto signs the MOU.
- 9.8. This MOU may be terminated by written notice of either party to the other party hereto at any time after the Secretary formally submits the report required by section 1002(h) of ANILCA to Congress, provided that, as to any data or information obtained hereunder, those terms and conditions of the MOU concerning

the confidentiality and commercial use thereof shall continue in effect until the underlying laws on which they are based are no longer applicable to such data or information, and provided further that such termination shall not extinguish any claims or remedies accruing hereunder.

THE UNITED STATES DEPARTMENT  
OF THE INTERIOR

February 19, 1985

(Date)

Donald Paul Hodel

By: Donald Paul Hodel  
Secretary of the Interior

THE STATE OF ALASKA

March 5, 1985

(Date)

Esther C. Wunnicke

By: Esther C. Wunnicke  
Commissioner of Natural  
Resources

Attachment

RECEIVED DEC 29 1986

# For Publication

# FILED

DEC 23 1986

UNITED STATES COURT OF APPEALS

FOR THE NINTH CIRCUIT

CATHY A. CATTERSON, CLERK  
U.S. COURT OF APPEALS

1  
2  
3 TRUSTEES FOR ALASKA, et al., )  
4 Plaintiffs-Appellees, )  
5 vs. )  
6 DONALD P. HODEL, Secretary, )  
7 United States Department of the )  
8 Interior, et al., )  
9 Defendants-Appellants. )

No. 86-3738

DC No. CV-A-85-551

OPINION

Argued and Submitted:  
September 3, 1986 -- Anchorage, Alaska

Before: Joseph T. Sneed, Anthony M. Kennedy and  
Charles E. Wiggins, Circuit Judges.

Appeal from the United States District Court  
for Alaska  
Laughlin E. Waters, District Judge, Presiding

WIGGINS, Circuit Judge:

Section 1002(h) of the Alaska National Interest Lands  
Conservation Act (ANILCA), 16 U.S.C. § 3142(h), concerns the  
resources of the 1.5 million acre coastal plain of the Arctic  
National Wildlife Refuge (ANWR). Section 1002(h) requires that  
the Secretary of Interior (Secretary) submit a report to Congress  
(1002 report) containing: (1) specific information about  
potential oil and gas production and fish and wildlife within the  
coastal plain of the ANWR; and (2) recommendations concerning

1 possible exploration, development, and production of oil and gas  
2 within the coastal plain, and what additional legal authority  
3 would be necessary to protect fish and wildlife if such  
4 development were to take place.<sup>1/</sup> The Secretary had five years  
5 and nine months from the effective date of the statute to complete  
6 the 1002 report, which was due no later than September 2, 1986.<sup>2/</sup>

7 The Secretary and the Fish and Wildlife Service seek review  
8 of the district court's order enjoining them from submitting the  
9 1002 report to Congress until they comply with the National  
10 Environmental Policy Act of 1969, 42 U.S.C. §§ 4321-4370(a)  
11 (NEPA), and its implementing regulations. The Secretary and the  
12 Service contend that: (1) the environmental groups lack standing;  
13 (2) the issues are not ripe for review; and (3) NEPA and its  
14 implementing regulations do not require public comment on a  
15 legislative proposal before its submission to Congress. We  
16 disagree on all three grounds and affirm.

17  
18 BACKGROUND

19 On October 2, 1985, five environmental groups -- Trustees for  
20 Alaska, American Wilderness Alliance, Defenders of Wildlife,  
21 Northern Alaskan Environmental Center, and the Wilderness Society  
22 (the Trustees) -- filed an action for declaratory and injunctive  
23 relief against the Department of Interior, the Secretary, the Fish  
24 and Wildlife Service, and the Director and Regional Director of  
25 the Fish and Wildlife Service (the Department). The Trustees  
26 sought a declaration requiring the Department to submit an

1 environmental impact statement (EIS) pursuant to section 102(2)(C)  
2 of NEPA, 42 U.S.C. § 4332(2)(C), before the Secretary submitted  
3 the 1002 report to Congress. The Trustees also sought a mandatory  
4 injunction requiring that the Secretary follow all necessary  
5 public participation procedures in preparing the EIS. The  
6 Trustees alleged that under NEPA and the regulations of the  
7 Council on Environmental Quality (CEQ), the Department must  
8 circulate a draft EIS for public notice and comment before  
9 submitting the 1002 report to Congress. Finally, the Trustees  
10 alleged that the Department failed to comply with the Freedom of  
11 Information Act (FOIA), 5 U.S.C. § 552.<sup>3/</sup>

12 All parties filed motions for partial summary judgment on the  
13 NEPA claims. In the amended answer, the Department alleged that  
14 it would prepare a legislative environmental impact statement  
15 (LEIS), but would not circulate the 1002 report and LEIS for  
16 public comment until the report was submitted to Congress. After  
17 oral argument, the district court granted the Trustees' motion for  
18 partial summary judgment. The court determined that the  
19 Department's decision to submit the 1002 report and LEIS without  
20 first providing an opportunity for public notice and comment  
21 violated NEPA and its implementing regulations. (The court's order  
22 directed the Department to prepare a draft 1002 report and LEIS,  
23 and provide for full public review and comment of the draft  
24 documents. The order further directed the Department to respond  
25 to and incorporate the public comments and suggestions into the

26

1 report. The court ordered the Department to publish its responses  
2 locally before or at the time it released the final 1002 report.

3 The district court determined that there was no just reason  
4 for delay and entered judgment for the Trustees pursuant to Fed.  
5 R. C. P. 54(b) on March 6, 1986. The Department filed a timely  
6 notice of appeal on April 4, 1986.

7  
8 ANALYSIS

9 I  
Standard Of Review

10 We review the district court's grant of partial summary  
11 judgment de novo. See Lojek v. Thomas, 716 F.2d 675, 677 (9th  
12 Cir. 1983). We review the Secretary's action to see if it was  
13 "arbitrary, capricious, an abuse of discretion, or . . . without  
14 observance of procedure required by law." 5 U.S.C. §§ 706(2)(A,  
15 (D); see Sagebrush Rebellion, Inc. v. Hodel, 790 F.2d 760, 763  
16 (9th Cir. 1986).

17 II  
Standing

18 The Department contends that the Trustees lack standing  
19 because actual or potential impairment of their members' use of  
20 the coastal plain can only be accomplished by Congress choosing to  
21 eliminate the current statutory prohibitions against gas and oil  
22 development in the ANWR. The Department argues that mere  
23 speculation on the contents of the 1002 report and its effect on  
24 Congress does not confer standing.

1     The Department's characterization of this case is incorrect.  
2     The Trustees alleged in their complaint that their members had a  
3     procedural right under NEPA and the CEQ regulations to comment on  
4     the LEIS and 1002 report before the Secretary submits the report  
5     to Congress. The Trustees have standing to challenge alleged  
6     agency violations of these procedural rights. See Western Oil &  
7     Gas Ass'n v. EPA, 633 F.2d 803, 808 n.4 (9th Cir. 1980); City of  
8     Davis v. Coleman, 521 F.2d 661, 671-72 (9th Cir. 1975).

9                                    III  
10                                  Ripeness

11           The Department contends that the issues raised by the  
12     Trustees' claimed rights to comment on the draft LEIS are not  
13     ripe. It argues that the 1002 report may recommend that Congress  
14     take no action concerning the coastal plain. As current law  
15     prohibits production of gas and oil in the ANWR, 16 U.S.C. § 3143,  
16     the no-action recommendation would mean that the 1002 report would  
17     not contain a "proposal for legislation." If the report does not  
18     contain a "proposal for legislation," then no LEIS is required  
19     under NEPA, see 42 U.S.C. § 4332(2)(C), and the Trustees' claims  
20     are not ripe.

21           The doctrine of ripeness is intended "to prevent the courts,  
22     through avoidance of premature adjudication, from entangling  
23     themselves in abstract disagreements over administrative policies,  
24     and also to protect the agencies from judicial interference until  
25     an administrative decision has been formalized and its effects  
26     felt in a concrete way by the challenging parties." Abbott

1 Laboratories v. Gardner, 387 U.S. 136, 148-49 (1967). Ripeness  
2 requires an evaluation of "the fitness of the issues for judicial  
3 decision and the hardship to the parties of withholding court  
4 consideration." Id. at 149. A claim is fit for decision if the  
5 issues raised are primarily legal and do not require further  
6 factual development and the challenged action is final. See  
7 Friedman Brothers Investment Co. v. Lewis, 676 F.2d 1317, 1319  
8 (9th Cir. 1982).

9 Under Abbott Laboratories, this case is ripe for review. The  
10 disagreement here is concrete. The Department will not provide  
11 presubmission public review and comment. Its decision is clear  
12 and final and the issue is therefore fit for judicial review.  
13 Moreover, a denial of review at this point may impose substantial  
14 hardship on the Trustees. Once Congress acts on the information  
15 submitted to it, the Trustees will lose their right to comment on  
16 the draft LEIS at the administrative level.

17 The Department is being less than candid in arguing that the  
18 1002 report may not contain a "proposal for legislation." The  
19 Department has already decided to provide an LEIS with the 1002  
20 report, presumably because it expects the 1002 report to contain a  
21 "proposal for legislation."<sup>4/</sup> Further, an LEIS appears necessary,  
22 because the no-action alternative is unlikely. The express  
23 language of section 1002(h) provides for a five-year study and  
24 requires specific recommendations on the future use of the coastal  
25 plain. Since the purpose of the 1002 report is to determine  
26 either to allow further oil and gas development or to designate

1 the coastal plain for wilderness preservation, see S. Rep. No.  
2 413, 96th Cong., 2d Sess. 240-41, reprinted in 1980 U.S. Code  
3 Cong. & Ad. News 5070, 5184-85, the report will likely recommend  
4 some change in the status quo and so will likely contain a  
5 "proposal for legislation."<sup>5/</sup> Waiting until the Department  
6 actually submits the 1002 report to Congress could cause the  
7 Trustees to lose their claimed rights to presubmission comment.  
8 Waiting is also unnecessary in view of the Department's decision  
9 to submit an LEIS with the report.<sup>6/</sup>

10 IV  
11 Procedural Rights Under NEPA

12 NEPA is essentially a procedural statute designed to insure  
13 that environmental issues are given proper consideration in the  
14 decisionmaking process. See City of Davis v. Coleman, 521 F.2d  
15 661, 670 (9th Cir. 1975). Section 102(2)(C) of NEPA requires  
16 agencies to include a detailed environmental impact statement with  
17 "proposals for legislation and other major federal actions  
18 significantly affecting the quality of the human environment  
19 . . . ." 42 U.S.C. § 4332(2)(C). Congress has directed that the  
20 policies, regulations, and public laws of the United States shall  
21 be interpreted and administered in accordance with the policies of  
22 NEPA "to the fullest extent possible." 42 U.S.C. § 4332; Lathan  
23 v. Brinegar, 506 F.2d 677, 687 (9th Cir. 1974) (en banc).

24 By Executive Order, the CEQ issued regulations to federal  
25 agencies for implementing NEPA. Exec. Order No. 11991, 42 Fed.  
26 Reg. 26,967 (1977). The CEQ regulations are binding on all

1 federal agencies and provide formal guidance to the courts for  
2 interpreting NEPA requirements. 43 Fed. Reg. 55,978 (1978). The  
3 CEQ's interpretation of NEPA is entitled to substantial deference.  
4 Andrus v. Sierra Club, 442 U.S. 347, 358 (1979). Thus, the  
5 Trustees may have a right to comment on the draft LEIS before the  
6 Secretary submits the 1002 report to Congress if the CEQ  
7 regulations require such a procedure.

8 A. Modified Procedures for Legislative Proposals

9 The CEQ regulations provide for several stages in the  
10 preparation of an EIS. Generally, an agency must prepare a draft  
11 EIS and obtain comments on the draft from the appropriate federal  
12 agency. 40 C.F.R. § 1503.1 (1985). An agency must also request  
13 comments from state and local agencies, and the public, and  
14 affirmatively solicit comments from interested or affected persons  
15 and organizations. Id. In preparing a final EIS an agency must  
16 consider and respond to the comments. 40 C.F.R. § 1503.4 (1985).  
17 The comments must be included with the final EIS. Id.

18 Section 1506.8 establishes a modified procedure for preparing  
19 an EIS on legislative proposals. Except for specified exceptions,  
20 section 1506.8 permits an agency to transmit a single LEIS to  
21 Congress and to federal, state, and local agencies, and the public  
22 for review and comment. No final, revised EIS is necessary.  
23 43 Fed. Reg. 55,978, 55,987 (1978).

24 B. Exception to Modified Procedures for Study Processes

25 The Trustees contend that the proposal here falls within one  
26 of the specified exceptions set forth in section 1506.8 and

1 federal agencies and provide formal guidance to the courts for  
2 interpreting NEPA requirements. 43 Fed. Reg. 55,978 (1978). The  
3 CEQ's interpretation of NEPA is entitled to substantial deference.  
4 Andrus v. Sierra Club, 442 U.S. 347, 358 (1979). Thus, the  
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22 for review and comment. No final, revised EIS is necessary.  
23 43 Fed. Reg. 55,978, 55,987 (1978).

24 B. Exception to Modified Procedures for Study Processes

25 The Trustees contend that the proposal here falls within one  
26 of the specified exceptions set forth in section 1506.8 and

1 therefore the Department must provide presubmission public  
2 comment. Subsection 1506.8(b)(2)(ii) provides that proposals  
3 resulting from a "study process required by statute" must follow  
4 the normal draft/final procedures established in section 1503.1.<sup>7/</sup>

5 The Department contends that the 1002 report is not a "study  
6 process required by statute" within the meaning of the  
7 regulations. It asks the court to contrast the 1002 report with  
8 the Wild and Scenic Rivers Act, 16 U.S.C. §§ 1271-1287, and the  
9 Wilderness Act, 16 U.S.C. §§ 1131-1136, the two examples of a  
10 "study process" given in subsection 1506.8(b)(2)(ii). The  
11 Department contends that unlike section 1002(h), these Acts  
12 require outside participation in formulating their respective  
13 studies. Here, the Department argues, Congress does not desire  
14 outside participation but has specifically requested information  
15 and recommendations from the Secretary alone.<sup>8/</sup>

16 We find that section 1002(h) is a study process required by  
17 statute under subsection 1506.8(b)(2)(ii). Section 1002(h)  
18 contains a "study process" within the ordinary meaning of the  
19 term. Section 1002(h) sets forth detailed requests for  
20 information that require research, and grants the Secretary five  
21 years and nine months in which to gather the information and  
22 present it to Congress. The example Acts contain similar requests  
23 for information within set time frames and also require submission  
24 of various reports to Congress. See 16 U.S.C. §§ 1132, 1136,  
25 1275(a). The detailed research request and the extended time  
26 provided for that research in section 1002(h) convinces us

1 that the 1002 report is part of a "study process required by  
2 statute."<sup>9/</sup>

3 Moreover, the CEQ regulations make clear that the main reason  
4 for following a modified procedure for legislative statements is a  
5 concern that the LEIS be submitted to Congress before Congress  
6 acts. In its summary of major innovations in the regulations, the  
7 CEQ states that the regulations provide accelerated procedures for  
8 legislative proposals "to fit better with Congressional  
9 schedules." 43 Fed. Reg. 55,978, 55,979 (1978). In its comments  
10 to section 1506.8, the CEQ states that the timing of votes and  
11 hearings for legislative proposals is not within the agency's  
12 control. 43 Fed. Reg. 55,978, 55,988 (1978). Section 1500.5(j)  
13 states that agencies shall reduce delay by using accelerated  
14 procedures for proposals for legislation. 40 C.F.R. § 1500.5(j)  
15 (1985). This time concern does not exist when a "study process"  
16 includes a set time frame that permits the agency to anticipate  
17 and plan for congressional schedules. In fact, it is doubtful  
18 that when Congress specifically requests information and  
19 recommendations from an agency in the context of a study process -  
20 - as it did here and in the two example Acts -- that Congress will  
21 act without the agency's report.

22 Congress requires federal agencies to comply with the  
23 policies of NEPA to the fullest extent possible. 42 U.S.C.  
24 § 4332. One of the policies of NEPA is to encourage and  
25 facilitate public involvement in decisions concerning  
26 environmental issues. 40 C.F.R. § 1500.2(d) (1985). In fact, the

1 CEQ regulations interpret NEPA to require public comment  
2 generally. See, e.g., 40 C.F.R. §§ 1500.1(b), 1500.2(b), (d),  
3 1503.1, 1506.6. The modified procedures for legislative proposals  
4 appear to be a narrow exception, not the norm. In view of the  
5 stated purpose of NEPA, we hold that the Department failed to  
6 comply with subsection 1506.8(b)(2)(ii) by deciding to submit the  
7 1002 report without an opportunity for public comment.<sup>10/</sup>

8 V  
9 Attorneys' Fees

10 The claim by the Trustees for attorneys' fees is denied. The  
11 claim is made under the Equal Access to Justice Act (EAJA), 28  
12 U.S.C. § 2412(d). EAJA provides that attorneys' fees are  
13 available to a prevailing party in a civil action against the  
14 United States unless "the position of the United States was  
15 substantially justified." 28 U.S.C. § 2412(d)(1)(A). Although we  
16 rule against the Department, it argued forcefully and well for its  
17 position. Its position was at all times justified, although  
18 erroneous.

19 AFFIRMED.  
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FOOTNOTES

1/  
2 Section 1002(h) provides:

3 Not earlier than five years after  
4 December 2, 1980, and not later than five  
5 years and nine months after such date, the  
6 Secretary shall prepare and submit to Congress  
7 a report containing--

8 (1) the identification by means other  
9 than drilling of exploratory wells of those  
10 areas within the coastal plain that have oil  
11 and gas production potential and estimate of  
12 the volume of the oil and gas concerned;

13 (2) the description of the fish and  
14 wildlife, their habitats, and other resources  
15 that are within the areas identified under  
16 paragraph (1);

17 (3) an evaluation of the adverse effects  
18 that the carrying out of further exploration  
19 for, and the development and production of,  
20 oil and gas within such areas will have on the  
21 resources referred to in paragraph (2);

22 (4) a description of how such oil and  
23 gas, if produced within such area, may be  
24 transported to processing facilities;

25 (5) an evaluation of how such oil and gas  
26 relates to the national need for additional  
domestic sources of oil and gas; and

(6) the recommendations of the Secretary  
with respect to whether further exploration  
for, and the development and production of,  
oil and gas within the coastal plain should be  
permitted and, if so, what additional legal  
authority is necessary to ensure that the  
adverse effects of such activities on fish and  
wildlife, their habitats, and other resources  
are avoided or minimized.

16 U.S.C § 3142(h).

1 2/ The Assistant Secretary for Fish and Wildlife and Parks  
2 stated in a letter to the Chairman of the Committee on Interior  
3 and Insular Affairs that the Secretary intends to withhold action  
4 on the 1002 report until the outcome of this case.

5 3/ The complaint consists of two counts: the first count  
6 alleges NEPA violations and the second count alleges violations of  
7 FOIA. At the time of this appeal, the FOIA claim and additional  
8 FOIA claims contained in the amended complaint are still pending  
9 before the trial court.

10 4/ The Department intends to prepare an LEIS, which will be  
11 integrated into the 1002 report.

12 5/ The congressional request for specific recommendations within  
13 a specific region distinguishes this case from Kleppe v. Sierra  
14 Club, Inc., 427 U.S. 390 (1976), a case in which the Court  
15 determined that the contemplation of a project is insufficient to  
16 require an EIS under NEPA. It is also significant that here the  
17 Secretary has already agreed to submit an LEIS, thus disposing of  
18 the Court's concern in Kleppe that premature and unnecessary  
19 statements will be filed. 427 U.S. at 406.

20 6/ The Department relies on Bennett Hills Grazing Ass'n v.  
21 United States, 600 F.2d 1308, 1309 (9th Cir. 1979), for its  
22 argument that this case is not ripe. This court's decision in  
23 Bennett Hills is, however, distinguishable. In Bennett Hills,  
24 this court vacated the district court's order enjoining the Bureau  
25 of Land Management (BLM) from preparing a final EIS until the  
26 appellees had ninety days in which to comment on BLM's draft  
statement. In Bennett Hills, however, the BLM complied with the  
regulations and solicited comments on its draft EIS. 600 F.2d at  
1309. Here, the Department has made its position clear that it  
will not permit any public comments on the draft LEIS before it is  
submitted to Congress.

The Department also relies on CEQ regulation section 1500.3,  
which states that "[i]t is the Council's intention that judicial  
review of agency compliance with the regulations [providing for  
public comment on draft statements] not occur before an agency has  
filed the final environmental impact statement . . . ." Ripeness  
is, however, a constitutional doctrine. Here, there is no  
indication that in creating the CEQ Congress intended to give the  
Council the power to limit judicial review. See 42 U.S.C.  
§§ 4342, 4344.

1 7/ Section 1506.8(b)(2) provides that the procedures requiring  
2 both a draft and final EIS with agency requests for public comment  
shall be followed when:

3 (ii) The proposal results from a study  
4 process required by statute (such as  
5 those required by the Wild and Scenic  
6 Rivers Act (16 U.S.C. § 1271 et seq.) and  
7 the Wilderness Act (16 U.S.C. § 1131 et  
8 seq.)).

9 40 C.F.R. § 1506.8(b)(2)(ii) (1985).

10 8/ The Department also contends that by preconditioning the  
11 Secretary's report to Congress, the district court's injunction  
12 unconstitutionally hinders the legislative process. This argument  
13 assumes, however, that the district court's injunction requires a  
14 procedure not found in the CEQ regulations. If the CEQ  
15 regulations require public comment at the administrative level,  
16 then the district court's order simply enforces Congress's mandate  
17 under NEPA and does not violate the separation of powers doctrine.

18 9/ Section 1002(h) is also part of a larger study, the Federal  
19 North Slope Lands Study Program. S. Rep. No. 413, 96th Cong., 2d  
20 Sess. 239-43, 292-96, reprinted in 1980 U.S. Code Cong. Ad. News  
21 5070, 5183-87, 5236-41. That study is indistinguishable from the  
22 Wild and Scenic Rivers Act and the Wilderness Act in that it too  
23 provides for outside participation in certain sections. See,  
24 e.g., 16 U.S.C. § 3142(c), (e)(2). To require specific reference  
25 to outside participation in section 1002(h) itself, however,  
26 interprets the term "study process required by statute" too  
narrowly.

19 10/ The Department argues that the Chairman of the CEQ agrees  
20 with its interpretation of subsection 1506.8(b)(2)(ii) and that  
21 the court must give the Chairman's interpretation of the CEQ  
22 regulations "controlling weight." Compare Udall v. Tallman, 380  
23 U.S. 1, 16-17 (1965); Sierra Club v. Clark, 756 F.2d 686, 690 (9th  
24 Cir. 1985). Although asked to do so repeatedly at oral argument,  
25 the Department was unable to point to any basis for the Chairman's  
26 authority to interpret the regulations, other than the affidavit  
of the CEQ's General Counsel stating that the current CEQ Chairman  
has assumed sole responsibility for issues involving NEPA and that  
the General Counsel consults with the Chairman on the  
interpretation of the CEQ regulations. The statute creating the  
Chairman's position makes no reference to his duties. 42 U.S.C.  
§ 4342. The statute designating the duties of the Council refers  
to the Council as a whole. 42 U.S.C. § 4344. Executive order

1 11991 authorizing the Council to promulgate regulations does not  
2 grant the Chairman any special powers to interpret or administer  
3 the regulations. Exec. Order No. 11991, 42 Fed. Reg. 26,967-68  
4 (1977). Thus, we are not convinced that the Chairman's  
5 interpretation is "controlling" or correct in this case.  
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FILED

DEC 23 1986

Trustees for Alaska v. Hodel - No. 86-3738

CATHY A. CATTERSON, CLERK  
U.S. COURT OF APPEALS

SNEED, Circuit Judge, Dissenting:

I respectfully dissent from the portion of the opinion that concludes that the 1002 report is a "study process" within the meaning of 40 C.F.R. § 1506.8(b)(2)(ii).

The majority decides that the Secretary must prepare a draft LEIS, request comments, and respond to the comments in its final LEIS in order to comply with NEPA. See 40 C.F.R. §§ 1503.1-1503.4. This is a considerable gloss on the language of NEPA, which asks only for "a detailed statement by the responsible official" describing the environmental impact. 42 U.S.C. § 4332(2)(C). The only authority for the gloss is the CEQ regulations. The chairman of the CEQ, however, has determined that only one LEIS is necessary under section 1002(h). 1 E.R. at 48. Because the chairman of the CEQ is an officer charged with administering the regulation, his interpretation of the regulation has "controlling weight." Udall v. Tallman, 380 U.S. 1, 16 (1965); Buschmann v. Schweiker, 676 F.2d 352, 355 (9th Cir. 1982). No additional basis for the chairman's interpretative authority is necessary, contrary to the majority's intimations in footnote 10.

Even without the chairman's guidance, I would be reluctant to conclude that the 1002 report is a study process. The language of section 1002(h), augmented by the pertinent legislative history, is too slight a skeleton to bear the weight of the procedures that the majority imposes. The regulation gives two examples of statutes that require a study process. One

explicitly provides for public participation. 16 U.S.C. § 1132(d). The other explicitly mentions "studies" and provides for participation by the heads of other federal agencies and state governors. 16 U.S.C. § 1275. The statute at issue here briefly outlines the contents of the required report and names no participant except the Secretary. 16 U.S.C. § 3142(h). Despite the generous length of time that the statute gives the Secretary to complete his report, I do not find that Congress here describes a study process.

November 14, 1986

Dr. Ruth Frye  
U.S. Department of Energy  
Route 118  
Germantown, Maryland 20874

Dear Ruth:

This letter is written in reference to publication of 'Structure, Stratigraphy, and Generalized Geology of the East-central Arctic Slope, Central Brooks Range, and Eastern Koyukuk Basin: A guide to the Geology of the Dalton Highway Corridor, Yukon River to Prudhoe Bay, Alaska.' This report represents a substantial contribution to the understanding of the oil-and-gas potential of the North Slope of Alaska, and as such, may fall within the parameters of Annex V of the Memorandum of Understanding signed between the State of Alaska and the U.S. Department of Energy in August 1985.

The volume was prepared for the 60th annual meeting of the Pacific Section of the American Association of Petroleum Geologists, the Society of Economic Paleontologists and Mineralogists, and the Society of Exploration Geophysicists held in Anchorage in May 1985. In conjunction with the meetings, the conference conducted a four-day field trip from Fairbanks to Prudhoe Bay that included a tour of the Prudhoe Bay oil field. A preliminary draft of the volume was presented to each participant on the field trip.

The report was initially prepared as part of the Division of Geological and Geophysical Surveys series of guides to the geology of various parts of Alaska, particularly as a companion volume to Guidebook 4, 'Elliott and Dalton Highways, Fox to Prudhoe Bay, Alaska: Guidebook to Permafrost and Related Features.' We anticipate that it will be the primary source document for a geologic field trip conducted in northern Alaska in conjunction with the International Geological Congress, which will meet in the United States in 1989.

Even more significant than the 'guidebook' aspect of this document is the fact that the report represents a significant contribution to the geologic knowledge of the North Slope of Alaska. In addition to a road log and geologic maps from the Yukon River to Prudhoe Bay, it contains 19 chapters by 12 authors from the Alaska Division of Mining and Geological and Geophysical Surveys, the University of Alaska, Atlantic Richfield Company, Standard Alaska Production Company, and Standard Oil Production Company. Three chapters describe the generalized structural and stratigraphic framework of the east-central Arctic Slope, the central Brooks Range, and the eastern

Koyukuk basin. Other chapters contain descriptions of the Nanushuk Group, which is the reservoir horizon at the Umiat oil field on the North Slope; the Fortress Mountain Formation, which was the drilling objective of two deep test wells on NPRA and has produced gas on tests of industry wells in the Brooks Range foothills; the Shublik (Oluk) Formation, considered by some to be the source of some hydrocarbons in the Prudhoe Bay oil field (it may also be the reservoir for gas in the Kavik gas field in the Brooks Range foothills); the Echooka Formation of the Sadlerochit Group, which is present in the Prudhoe Bay field; and the Lisburne Group, which is one of the major reservoir horizons in the Prudhoe Bay oil field. These strata are also present in the subsurface of the Arctic Slope and correlate with strata in the Prudhoe Bay area and the Arctic National Wildlife Refuge. These chapters represent the most up-to-date compilations of geologic data for the study area and contain discussions of the relationships between the structure and stratigraphy of the Brooks Range and the Arctic Slope. Chapters on the geologic evolution of the Brooks Range and the origin of and deposition into the Colville basin complete the detailed geologic discussions.

Also included in the report are a generalized geologic map of northern Alaska, a regional cross section of the Brooks Range and Arctic Slope, a generalized structure map of the Prudhoe Bay field, and the only seismic section available in the public record for the area between the Colville and Canning Rivers. In addition to the technical discussions, four chapters summarize the physiography, vegetation, climate, glacial geology, permafrost, and history of oil exploration in the Prudhoe Bay area. The volume contains 227 illustrations, including 137 photographs and 64 line drawings and generalized maps. The road log includes 26 geologic strip maps (in color) that cover the Dalton Highway.

Unfortunately, DMGGS does not presently have the resources to complete the final edit of the volume or to cover printing costs. Because the state budget process does not allow us to collect receipts from the sale of reports, it is particularly difficult to publish sizeable documents such as the aforementioned volume (printed copy about 250 pages). To date, the State of Alaska has contributed approximately \$175,000 in personnel costs to prepare the report. Ninety percent of the artwork is complete, and some revisions (based on peer reviews) have been made to the manuscript and maps. I will have a copy of the report with me when we meet on November 21.

It would appear that the document could be published jointly under the Memorandum of Agreement. Receipts from sale of the report will more than cover final editorial, typing, and printing costs and (per the MOA) could be used to fund other joint projects.

Projected costs to publish the document are listed below:

Geologist VI (3 wk)	\$ 6,000
Editor (2 mo)	10,800
Clerk-typist (2 mo)	5,200
Student intern to finalize drafting and copy edit text (2 mo)	5,200
Printing (2,500 copies)	45,000
Mailing	<u>7,500</u>
Total cost	\$ 79,700

Projected receipts:

2,500 volumes @ \$45/volume

\$112,500

Should DOE decide to fund the project, the volume would be print-ready four months from receipt of funding. Production of the document will not interfere with completion of work specified in the ANWR data-base proposal of November 12, 1986. In fact, the information presented in this report compliments that of the ANWR project.

Thank you for your consideration of this additional cooperative effort.

Sincerely,

Cheri L. Daniels, Chief  
Resource Information Section

cc: Keith Fry ✓  
Carolyn Klym  
Laura Jones  
Joseph Lagler  
Dick Nève  
Laurel Murphy  
Rich Kornbrath  
Wyett Gilbert  
Dick Reger  
Gil Mull

# STATE OF ALASKA

BILL SHEFFIELD, GOVERNOR

## DEPARTMENT OF NATURAL RESOURCES

### DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

- P.O. BOX 7028  
ANCHORAGE, ALASKA 99510  
PHONE: (907) 561-2020
- 794 UNIVERSITY AVENUE, BASEMENT  
FAIRBANKS, ALASKA 99709  
PHONE: (907) 474-7147

November 12, 1986

Joseph Lagler  
Deputy Associate Director  
Office of Technical Management  
U.S. Department of Energy  
Morgantown Energy Technology Center  
P.O. Box 880  
Morgantown, West Virginia 26505

Keith Frye

Dear Joe:

Enclosed is the implementation plan for the Arctic National Wildlife Refuge on-line data base and folio. This project is being proposed as a joint effort by the U.S. Department of Energy and the State of Alaska under the Memorandum of Understanding signed in August 1985. The project specifically addresses Annex V, 'Assessment and characterization of Alaskan fossil energy resources.'

Pursuant to our meeting on October 9, 1986, I have outlined a plan to compile an on-line nongraphic data base, a graphic data base, and basin analysis folios for the Arctic National Wildlife Refuge (ANWR). The objectives of the plan will be met by four subprojects; timelines and approximate costs are included.

<u>Subproject</u>	<u>Cost</u>	<u>Timeline</u>
1. On-line North Slope bibliography	\$ 50,200	3 months
2. On-line ANWR nongraphic data base	\$ 28,900	9 months
3. ANWR graphics data base	\$161,100	12 months
4. Basin analysis folios	\$148,700	12 months/volume

All subprojects can be accomplished simultaneously; specified timelines designate time to on-line capability after acquisition of the necessary equipment. Subproject 4 includes production of annual 'Accomplishments' volumes that will consist of topical studies on ANWR and several detailed geologic maps (in color).

During the 1985 and 1986 field seasons, the State of Alaska spent approximately \$400,000 in direct field support of ANWR studies. To date, \$154,000 has been expended to process analytical data. Personnel costs (field time only) total \$691,000, including \$557,000 at the Senior Geologist level and \$134,000 at the Geologist level. During 1985, a crew of 39 (with two helicopters) spent 45 days on ANWR-related studies. During 1986, a crew of 50 (with one helicopter) spent 45 days in the field. Approximately \$1,245,000 has been

spent by the State of Alaska to collect geologic data related to ANWR. As mentioned above, personnel costs are for field-time only; this figure could easily be quadrupled if year-round personnel costs are included.

Collection and analysis of data from ANWR is presently the highest priority project for DMGGS. We envision a 45-day field season for a helicopter-supported crew of 20 to 30 geologists during the summer of 1987. Prospects for post-1987 field work are promising but will depend on priorities set by the Legislature and Governor.

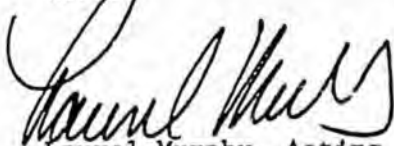
Per Annex V, proceeds of the sale of the on-line data and documents will go into a 'joint fund' especially designated for use in future mutually beneficial and agreed-upon joint projects. Revenues to the cooperative project will be realized through user charges and subscription fees for the on-line data bases and sale of the maps and 'Accomplishments' volumes. User charges and subscription fees for the on-line data bases will produce estimated revenues of between \$20,000 and \$40,000 per year. From experience with potential users over the past 2 years, we anticipate a user group of between 150 and 250 subscribers. A yearly subscription fee of \$120 would allow on-line access of 720 minutes per year. Additional on-line time would be charged at \$0.10 per minute. Pricing of the 'Accomplishments' volumes and detailed geologic maps (see Implementation Plan) is comparable to that of similar documents published by other organizations. Any profit that is realized will help defray unexpected expenses and pay for initial equipment costs.

I look forward to meeting with you in mid-November. As I mentioned to Laura Jones, I will be in the Washington, D.C. area from November 17-21, and available to meet with you late that week, perhaps November 20 or 21. Please don't hesitate to contact me about the attached implementation plan.

Sincerely,



Cheri L. Daniels, Chief  
Resource Information Section



Laurel Murphy, Acting Director  
Alaska Division of Mining and Geological  
and Geophysical Surveys

CLD/ram

Enclosure

cc: Keith Frye  
Ruth Fry  
Dick Nève  
Rich Kornbrath  
R.L. Reger  
John Decker  
W.G. Gilbert

IMPLEMENTATION PLAN  
ARCTIC NATIONAL WILDLIFE REFUGE ON-LINE DATA BASE AND FOLIO

OBJECTIVES

Consolidate relevant geological, geochemical, and nonproprietary geophysical information bearing on the development of oil-and-gas resources in the Arctic National Wildlife Refuge (ANWR).

Develop a graphic and on-line nongraphic ANWR data base for use by developers, investors, government decisionmakers, scientists, and private-interest groups.

Produce an annual 'Accomplishments' volume for ANWR that will include geologic reports and color maps in a saleable form.

CONTENT

The compilation will include an on-line nongraphic data base, a graphic data base, and an annual edition of a basin analysis folio that will consist of two detailed geologic maps and an 'Accomplishments' volume for the Arctic National Wildlife Refuge. The computerized data base will consist of (but not be limited to) the following items:

1. Bibliography of geologic references
2. Microfossil data
3. Megafossil data
4. Petrographic data
5. Porosity and permeability data
6. Thermal-maturation data
7. Geochemical data
8. Radiometric age data
9. Oil and gas well locations
10. Well-log data
11. Facies and basin evolution models
12. Preliminary reports
13. Digitized products
  - a. Detailed geologic maps
  - b. Isopach maps for reservoir units
  - c. Depth-to-basement and depth-to-reservoir maps
  - d. Pre-Mississippian basement lithofacies map
  - e. Net sand maps
  - f. Gravity maps
  - g. Aeromagnetic map(s)
  - h. Detailed structure maps and sections
  - i. Other derivative maps
  - j. Regional correlation diagrams
  - k. Time-temperature diagrams
  - l. Paleogeographic reconstructions
  - m. Thermal evolution models
  - n. Correlation diagrams and isopach maps that integrate ANWR, Prudhoe Bay, and Canadian stratigraphy
  - o. Measured stratigraphic sections

An annual edition of the basin analysis folio will include two detailed geologic maps (in color) and an 'Accomplishments' volume. An appendix to the folio will include selected stratigraphic sections, isopach maps, summaries of fossil data and chemical analyses, and RASP (Resource Assessment Simulation for Petroleum) evaluations.

## PRODUCTION

The objectives described in this plan will be met by four subprojects:

1. On-line North Slope bibliography;
2. On-line ANWR nongraphic data base;
3. ANWR graphic data base; and
4. ANWR basin analysis folios (produced annually) that consist of an 'Accomplishments' volume and two detailed geologic maps.

### SUBPROJECT I. On-line North Slope bibliography

**Task:**

Revise and update present Division of Mining and Geological and Geophysical Surveys North Slope bibliography so that it is available in a standard format that is easily indexed and readily available via modem to call-in users.

**Time:**

3 months

**Equipment:**

Compaq 386 microcomputer	
130 megabyte internal hard drive	
Color graphics monitor with EGA	
8 megabytes of memory	
2 floppy drives	\$ 10,000
Multitasking operating system	100
20 + 20 megabyte Bernoulli Box	3,000
Laser printer with graphics capabilities	4,000
2400 baud auto-answer modem	1,000
dBase III Plus	500
Microsoft Word	400
Communication software	1,000
Uninterruptible power supply	1,000
dBase class	1,000
Optical disk on-line mass storage system	2,500
9 Bernoulli 20 megabyte cartridges	700
	\$ 25,200

**Personnel:**

Geologist IV to coordinate implementation (1 mo)	6,400
Analyst Programmer for installation, maintenance, and upgrade of system (2 mo)	7,800
Student Intern for data entry (3 mo)	7,800
Data-entry clerk to answer requests (1 mo)	3,000
Maintenance and upgrade in succeeding years (per year)	7,800
Data-entry clerk in succeeding years (per year)	3,000

Total initial cost	<u>\$ 50,200</u>
Cost to maintain (per year)	<u>\$ 10,800</u>

SUBPROJECT II. On-line ANWR nongraphic data base

Task:

To develop and update an on-line nongraphic data base for ANWR that will include (but not be limited to) microfossil data, megafossil data, porosity and permeability data, thermal-maturation data, geochemical data, radiometric age data, well-log data, petrographic information, and oil and gas well locations. This data base will be readily available via modem to call-in users.

Time:

9 months

Equipment:

Equipment to complete this project is included in Subproject I.

Personnel:

Geologist IV to coordinate implementation (1 mo)	\$ 6,400
Analyst Programmer for installation, maintenance, and upgrade of system (3 mo)	11,700
Student Intern for data entry (3 mo)	7,800
Data-entry clerk to answer requests (1 mo)	3,000
Maintenance and upgrade in succeeding years (per year)	7,800
Data-entry clerk in succeeding years (per year)	3,000

Total initial cost	<u>\$ 28,900</u>
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Cost to maintain (per year)	<u>\$ 10,800</u>
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SUBPROJECT III. ANWR graphics data base

Task:

To develop and update a graphic data base for ANWR that will include (but not be limited to) the following digitized products. Graphic files will be installed on the on-line data-base computer for public access on an experimental basis.

1. Detailed geologic maps
2. Isopach maps for reservoir units
3. Depth-to-basement and depth-to-reservoir maps
4. Pre-Mississippian basement lithofacies map
5. Net sand maps
6. Gravity maps
7. Aeromagnetic map(s)
8. Detailed structure maps and sections
9. Other derivative maps

10. Regional correlation diagrams
11. Time-temperature diagrams
12. Paleogeographic reconstructions
13. Facies models
14. Correlation diagrams and isopach maps that integrate ANWR, Prudhoe Bay, and Canadian stratigraphy
15. Measured stratigraphic sections

Time:

12 months

Equipment:

Compaq 386 microcomputer	
130 megabyte internal hard drive	
8 megabytes of memory	
2 floppy drives	\$ 10,000
High resolution graphics monitor with EGA	3,500
Multitasking operating system	100
20 + 20 megabyte Bernoulli Box	3,000
Auto Cad System	2,500
PC Arc GIS system	8,000
Graphics laser printer	4,000
2400 baud auto-answer modem	1,000
Large format flat-bed plotter (Hewlett Packard)	5,000
Large format digitizing tablet	3,500
Section balancing program	12,000
Contouring program	500
Optical scanner	500
9 Bernoulli 20 megabyte cartridges	700
dBase III plus	500
Lotus 1-2-3	500
Communication software	1,000
Uninterruptible power supply	1,000
	<u>\$ 67,300</u>

Personnel:

Geologist IV to coordinate implementation (2 mo)	\$ 12,800
Two Analyst Programmers for installation, maintenance, and upgrade of system (6 mo each)	46,800
Two student interns for data entry (12 mo each)	31,200
Data-entry clerk to answer requests (1 mo)	3,000
Data-entry clerk in succeeding years (per year)	3,000
Maintenance and upgrade in succeeding years (per year)	15,600

Total initial cost \$161,100

Cost to maintain (per year) \$ 18,600

SUBPROJECT IV: Basin analysis folio for ANWR

**Task:**

To compile and print an annual 'Accomplishments' volume and two detailed geologic maps (in color; scale 1:63,360). An appendix to each volume will include selected stratigraphic sections, isopach maps, summaries of fossil data and chemical analyses, and RASP evaluations. The documents will be published in the DMGGS Professional Report series in cooperation with the U.S. Department of Energy.

**Time:**

12 months per volume (includes two maps)

**Equipment:**

Compaq 386 microcomputer	
70 megabyte internal hard drive	
Color graphics monitor with EGA	
3 megabytes of memory	
2 floppy drives	\$ 10,000
Multitasking operating system	100
dBase III Plus	500
Desktop publishing software	2,500
Laser Printer with graphic capabilities	4,000
Uninterruptible power supply	1,000
2400 baud auto-answer modem	1,000
20 + 20 megabyte Bernoulli Box	1,000
Communication software	3,000
	<u>\$ 23,100</u>

**Report and map preparation:**

**Personnel:**

Geologist IV to prepare report and maps (4 mo)	\$ 25,600
Geologist I to assist with report and map preparation (3 mo)	11,000
Editor (2 mo)	10,800
Cartographer to prepare maps (5 mo)	24,000
Clerk-typist to type manuscript and map explanations (2 mo)	5,200
	<u>\$ 76,600</u>

Cartographic supplies:	\$ 7,000
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**Printing:**

Two color maps (3,000 copies each)	\$ 12,000
Text (250 pages; 6 sheets; 3,000 copies each)	\$ 30,000

Total cost	<u>\$125,600</u>
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**Sales per year**

Accomplishments volume (\$30 each)	90,000
Color maps (\$8 each)	48,000
	<u>\$138,000</u>

100-100000

PROPOSED  
Resolution of the Interstate Oil Compact Commission  
regarding the  
Arctic National Wildlife Refuge

WHEREAS, the U. S. Congress has reserved the right to permit further exploration for, and development and production of, oil and gas within the coastal plain of the Arctic National Wildlife Refuge, Alaska; and

WHEREAS, the oil industry, the State of Alaska, and the Department of the Interior consider the coastal plain to have the highest potential for discovery of very large oil and gas accumulations on the North American continent; and

WHEREAS, a decision to permit oil and gas exploration development and production on the coastal plain will increase the value and facilitate development of highly prospective state owned tidelands and federally owned OCS lands offshore of the Refuge; and

WHEREAS, facilities developed to transport petroleum resources discovered on the coastal plain to the Trans-Alaska Pipeline System (TAPS) may allow marginal discoveries located between the Refuge and TAPS to be developed and produced and may prolong the economic life of TAPS; and

WHEREAS, oil and gas exploration and development of the coastal plain and adjacent lands could result in major discoveries that could reduce our nation's future needs for imported oil, help balance our trade deficit, and significantly increase the national security; and

WHEREAS, the 1.5 million acre coastal plain comprises only eight percent of the 19 million acre Refuge, and development of any oil and gas reserves subsequently discovered will affect an even smaller percentage of the coastal plain; and

WHEREAS, the oil industry has shown at Prudhoe Bay, as well as at other locations along the Arctic coastal plain, that it can safely conduct oil and gas activity without adversely affecting the environment or wildlife populations;

NOW, THEREFORE, BE IT RESOLVED that the Interstate Oil Compact Commission urges the Congress of the United States to open the Arctic National Wildlife Refuge (ANWR) Coastal Plain to environmentally responsible oil and gas exploration, development and production.

BE IT FURTHER RESOLVED that the Interstate Oil Compact Commission recommends that each of the member states urge their Congressional delegations to support the opening of ANWR.

BE IT FURTHER RESOLVED that the Executive Director is hereby directed to furnish a duly certified copy of this resolution to the Secretary of Interior, the Chairman and ranking member of the Committee on Energy and Natural Resources of the Senate, and the Chairman and ranking member of the Committee on Interior and Insular Affairs of the House of Representatives, and the Governors of the Compacting States.

DRAFT

RESOLUTION ON THE ANWR COASTAL PLAIN

- WHEREAS, Alaska's Arctic National Wildlife Refuge includes more than 19 million acres of land, amounting to approximately five percent of the entire state landmass, and
- WHEREAS, the Coastal Plain is approximately eight percent of the refuge, it is considered to be highly prospective for the discovery of large quantities of oil and gas; and
- WHEREAS, Congress has reserved the discretion to decide if the 1.5 million acres will be opened to further exploration, development and production; and
- WHEREAS, the petroleum industry has consistently demonstrated its ability to operate in conditions similar to those found on the coastal plain in a safe, responsible manner without significant adverse environmental impacts, and
- WHEREAS, the United States must prepare to develop domestic petroleum resources if it is to preclude overwhelming dependence on foreign petroleum sources in the 21st century; and
- WHEREAS, the value and development potential of state-owned tidelands and federally-owned OCS lands offshore of the ANWR Coastal Plain would be enhanced by a Congressional decision to open the coastal plain to further exploration, development and production; and
- WHEREAS, facilities developed to transport petroleum resources on the coastal plain to Pump Station One may allow marginal discoveries between the ANWR Coastal Plain and Prudhoe Bay to be developed; and
- WHEREAS, national energy security depends on the development of domestic oil and gas resources to replace depleted U.S. reserves; and
- WHEREAS, the nation stands to derive revenues including portions of bonuses, royalties and rents from oil and gas development; and
- WHEREAS, opening the ANWR Coastal Plain to further exploration, development and production will generate increased employment and business opportunities for all Alaskans and all Americans;
- THEREFORE BE IT RESOLVED THAT the 15th Alaska Legislature strongly urges the Congress of the United States to open the ANWR Coastal Plain to environmentally responsible oil and gas exploration, development and production.

Draft  
for  
NCSL  
rewritten  
by  
Shannon

PROPOSED  
RESOLUTION REGARDING THE  
ARCTIC NATIONAL WILDLIFE REFUGE

WHEREAS, the U.S. Congress has reserved the right to permit further exploration for, and development and production of, oil and gas within the coastal plain of the Arctic National Wildlife Refuge, Alaska; and

WHEREAS, the oil industry, the state of Alaska, and the Department of the Interior consider the coastal plain to have the highest oil and gas potential of any onshore area in North America; and

WHEREAS, the proximity of the coastal plain to the Trans-Alaska Pipeline System enhances both production in the coastal plain and nearby areas and the longevity and usefulness of the pipeline; and

WHEREAS, oil and gas exploration and development of the coastal plain and adjacent lands could result in major discoveries that could reduce or nation's future needs for imported oil, help balance our trade deficit, and significantly increase national security; and

WHEREAS, the value of federally-owned Outer Continental Shelf lands offshore the coastal plain would be enhanced by a decision to open the coastal plain to further exploration, development and production; and

WHEREAS, the nation stands to derive revenues including portions of bonuses, royalties and rents from oil and gas development; and

WHEREAS, the 1.5-million-acre coastal plain comprises only 8 percent of the 19-million-acre refuge, and development of oil and gas will affect an even smaller percentage of the coastal plain; and

WHEREAS, the oil industry has shown at Prudhoe Bay, as well as other locations along the Arctic coastal plain, that it can safely conduct oil and gas activity without adversely affecting the environment or wildlife populations; and

WHEREAS, after fully assessing the environmental resources, the oil and gas potential, and the effect of development on the coastal plain, the Department of the Interior has determined that development can be achieved in an environmentally sound manner and has recommended full leasing;

THEREFORE BE IT RESOLVED THAT the Committee on Energy, Natural Resources and Environment recommends to the NCSL and to Congress that ANWR be opened for oil and gas leasing.



P.O. BOX 129 BARROW, ALASKA 99723  
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PANAFAX TELECOPIER (907) 852-8733

**PRESIDENT**  
Jacob Adams

**VICE PRESIDENTS**  
Oliver Leavitt  
Andrew Tooyak, Sr.  
Roosevelt Panek

**SECRETARY**  
Jeslie Kaleak

**TREASURER**  
James Stotts

**ANCHORAGE OFFICE**  
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**PRESS RELEASE**

Jacob Adams, President of the Arctic Slope Regional Corporation (ASRC), a corporation owned by the Eskimo people on Alaska's North Slope, stated today that "the Federal Government's estimates of the crude oil potential of the 1.5 million acre Coastal Plain constitute the most significant energy development in this country since the discovery of Prudhoe Bay in 1968."

"The potential reserve estimates contained in the Department of the Interior's draft report on the Coastal Plain of the Arctic National Wildlife Refuge (ANWR) have major significance for our Nation's national security and economic well-being," Adams said. "These estimates, if proven true by a program of commercial exploration and development, will enable the Nation to maintain a reasonable level of domestic crude oil production and to avoid excessive and growing reliance on insecure sources of imported oil from the Middle East."

"This development could also," Adams said, "enable the 3,700 Eskimo shareholders of ASRC for the first time to derive direct economic benefit from crude oil production on Alaska's North Slope." ASRC, together with the Eskimo Village of Kaktovik, owns 92,000 acres of prime oil and gas lands both within and adjacent to the 1.5 million acre Coastal Plain.

Adams warned the Nation's oil companies, the Federal Government and the national environmental organizations that "all decisions on the future of ANWR's Coastal Plain, whether for crude oil development or the preservation of fish, wildlife or environment, must include full consultation with the Eskimo people on their vital interests."

"We are the stewards of the lands of the North Slope. We are the users of the land's subsistence resources. This is our ancestral home. The North Slope and the Coastal Plain will be our land long after the oil is gone. We want the land to remain productive for fish and wildlife and for our culture and traditions."

"The draft report indicates that the Coastal Plain may contain Middle East-class, giant reserves which could far exceed Prudhoe Bay's original ten billion barrels of reserves. I have been deeply concerned," Adams said, "that the national environmental organizations, which have advocated locking up the 1.5 million acre Coastal Plain by designating the area as "Wilderness", would persuade Congress to do so without full and careful consideration of this matter. The magnitude of the draft report projections of potential crude oil reserves gives me confidence that Congress will fully and carefully consider the benefits of development."

Adams said that "the crude oil potential of the Coastal Plain can and should be developed. This must, however, be done with the best Arctic planning, engineering and technology available. I am confident, based upon my careful observations over the past twenty years, that the Coastal Plain can be explored, developed and produced in a manner fully compatible with the use of the same area by the caribou and other fish and wildlife which my people depend upon for subsistence purposes."

Adams said that "the Congress now faces an extremely important decision on opening the Coastal Plain to development. This decision must be balanced and rational. It must be made with full appreciation of the major national security consequences involved."

I also call upon the Administration and the Congress to carefully consider the human element of this decision. Development will benefit the Eskimo people of the North Slope. Protection of the fish and wildlife resources of the Coastal Plain through appropriate regulation will also benefit my people. Impact aid will be essential to our local governments -- the Village of Kaktovik and the North Slope Borough -- to properly control development and to preserve the quality of Eskimo life."

Local Contact:

Bill Van Ness or Alan Mintz  
202/331-9400

Standard Oil  
Production Company  
5151 San Felipe  
P.O. Box 4587  
Houston, Texas 77210  
713 552 8300

**STANDARD OIL  
PRODUCTION**

**FOR IMMEDIATE RELEASE**

Contact: Brian Coughlin  
(713) 552-8738

Washington, DC Contact:  
Mark Schneider  
(202) 785-4888

Houston, Texas, November 24, 1986--The U. S. Department of Interior's recommendation that the Coastal Plain of the Arctic National Wildlife Refuge (ANWR) be opened for oil and gas exploration is a significant step for the U. S. oil industry, William J. Johnson, president of Standard Oil Production Company said today.

Commenting on the release of the draft report on ANWR, Johnson said: "The ANWR Coastal Plain is undoubtedly one of the best oil prospects on the North American continent."

"The U. S. oil industry has already demonstrated its ability over the last 20 years to explore and develop oilfields in environmentally-sensitive Arctic areas," Johnson said.

"We have yet to review this draft report in detail, but it would be unfortunate if it contains excessively restrictive conditions which could make economic exploration and production for oil and gas unfeasible," Johnson said.

The Arctic National Wildlife Refuge is located in the northeast corner of Alaska and is approximately 60 miles to the east of the largest oilfield in North America, the Prudhoe Bay oilfield, which currently supplies approximately 20 percent of U. S. domestic crude oil production. The Coastal Plain, which is the subject of the report, accounts for only 3 percent of the 19 million-acre refuge. Almost half, (about 44 percent) of ANWR is already set aside as permanent wilderness.

"The ANWR Coastal Plain is of critical importance to the U. S.," added Johnson. "Since it takes 12 to 15 years to bring new Arctic discoveries into production, it is unlikely that any ANWR discovery could contribute to U. S. crude supply before the year 2000."

"At the same time, production from currently developed U. S. oilfields will have dropped from almost 9 million barrels a day to less than 4 million barrels a day, as currently producing oil fields are depleted. Unless we find sizable new oil reserves, we will have no alternative but to increase crude oil imports significantly," Johnson said.

Standard Oil Production Company is the wholly-owned oil and gas exploration and production subsidiary of The Standard Oil Company.

To: I. TAPIA

From: M. KELLEY

Petroleum Institute  
Northwest  
20005



# news release

## For Immediate Release

WASHINGTON, November 24 -- The American Petroleum Institute today released the following statement about the Interior Department's draft report on the Arctic National Wildlife Refuge and its oil and natural gas potential:

"We are pleased that the Interior Department has taken the first important step toward opening the coastal plain of Alaska to oil and natural gas exploration and development.

"This area of the Arctic National Wildlife Refuge offers the brightest prospect on the North American continent for the discovery of substantial new domestic reserves of crude oil because of favorable geological conditions and proximity to the giant field at Prudhoe Bay. This is our best hope for additional giant new fields which are needed if U.S. oil production is not to decline dramatically by the turn of the century.

"Experience has shown that exploration, production and transportation of oil from Alaska can be carried out safely and with minimal disturbance to the environment and the wildlife. The development of Prudhoe Bay, construction of the Trans-Alaskan pipeline and other petroleum-related activities are examples. We are confident that operations in the coastal plain could be conducted in a way compatible with the natural values of the area.

"Careful and orderly development of the coastal plain is in the nation's economic and energy security interests. We must take the steps now to assure adequate and secure oil supplies in the future, and this project presents the opportunity to do so."

#

11/24/86(F)

**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.

ANWR Policy Statement  
Page 2

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.



Parker Drilling Company  
P.O. Box 112070  
Anchorage, Alaska 99511  
907 / 349-1591

Gary McCarrell  
Division Manager  
Alaska Division

December 1, 1986

Congressman Sam Cotton  
P.O. Box 770296  
Eagle River, Alaska 99577

Re: ANWR Leasing and Exploration

Dear Congressman:

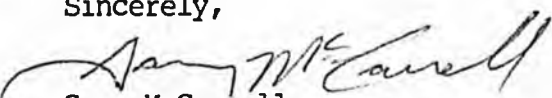
I am writing to you on a very significant issue--the opening of the Coastal Plain in the Arctic National Wildlife Refuge (ANWR). Probably no resource development issue will occur in Alaska in the next decade that is as important to Alaska and the United States as opening the ANWR Coastal Plain. Development of the ANWR Coastal Plain can mean the creation of thousands of jobs and the expenditure of billions of dollars--not just in Alaska, but also nationwide. Since 1975, oil development on Alaska's North Slope has produced \$24 billion of activity, with 37,000 vendor companies located in 49 states. Major activity on this scale can be expected to continue as a result of development in ANWR. Jobs in manufacturing, engineering, agricultural, shipping and technical fields will be created by developing the ANWR Coastal Plain. There is no more significant issue in Alaska.

The attached briefing paper outlines the significant facts relating to ANWR--that it is the single most likely oil exploration target in Alaska, that development there can occur promptly, and that development does not pose significant environmental risks because of the oil industry's proven track record on the North Slope.

Alaskans have been working hard on this issue. Now, YOU need to take the initiative--it is important that we have YOUR active assistance NOW in getting Congress to open ANWR. Not only should you contact Senators and Representatives, we need you to inform your friends and business associates in Alaska and in the Lower 48 so that we can get the story out, and so that those persons can contact their Congressmen to encourage the passage of legislation opening ANWR.

This issue will come before Congress in the next six months. We need your assistance. Please read the attached "Ten Questions About ANWR," and then copy that document and send it to interested persons, companies or organizations in Alaska and in the Lower 48. With your help, we can be successful.

Sincerely,

  
Gary McCarrell  
Division Manager  
Alaska Division

GMC/pb

## TEN QUESTIONS ABOUT THE ANWR COASTAL PLAIN

### 1. What is ANWR? What is the ANWR Coastal Plain?

ANWR (Ann' - Wahr) is the Arctic National Wildlife Refuge, located in the northeastern corner of Alaska. The ANWR Coastal Plain is the relatively small part of ANWR lying north of the Brooks Range along the shores of the Beaufort Sea. ANWR covers 18 million acres, an area about the size of South Carolina; the ANWR Coastal Plain covers about 1.5 million acres, or about 8% of the total.

### 2. What is the issue?

Whether Congress will open the ANWR Coastal Plain to oil and gas exploration and development. In 1980 Congress closed the ANWR Coastal Plain to oil and gas exploration and development until the Secretary of the Interior completed a report on its oil and gas potential and its compatibility with such development. That report is being finalized now; Congress will decide whether to open the ANWR Coastal Plain in early 1987. Congress also faces an alternative proposal to designate the Coastal Plain as wilderness.

### 3. Why Explore ANWR?

ANWR has the highest oil and gas potential of any unexplored region in the U.S.

### 4. How Much Potential for Oil and Gas Does ANWR Offer?

An almost unprecedented potential. ANWR lies between the giant Prudhoe Bay and Kuparuk oilfields, on one side, and large oil discoveries in the Canadian Arctic on the other; the same hydrocarbon-bearing geologic strata of the Prudhoe Bay oilfield and the Point Thompson gas/condensate field are believed to occur in the subsurface of the ANWR Coastal Plain.

Geologists agree that the hydrocarbon potential of ANWR is exceptionally high: the United States Geological Survey (USGS) mean estimate for oil resources in the ANWR Coastal Plain is 6.9 billion barrels of oil in place. That is an extremely large potential accumulation of oil, large enough to serve the national interests and the interests of the State of Alaska.

5. How Will National Interest be Served by ANWR Exploration and Production?

By reduced dependency upon foreign oil, by producing federal revenues and producing jobs nationwide.

(a) Reduced Dependency on Foreign Oil.

Preventing disruption of oil supplies is a key factor in the national interest. The U.S. is vulnerable to serious economic and security dislocations if it allows itself to be unnecessarily dependent on unstable sources of foreign oil. Also, at this time 1/3 of the nation's trade deficit results from imported oil (net payments for imported oil amounted to almost \$53 billion in 1984).

Our dependence on foreign oil is increasing: an American Petroleum Institute (API) survey indicates that domestic crude oil production would fall 25% by 1991 if oil prices remain at \$15 per barrel. Domestic production is forecast to fall at least 60% by the year 2000, the earliest any ANWR discovery is likely to be produced.

(b) Enhanced Federal Revenues

Oil production from the ANWR Coastal Plain would also serve the national interest by providing revenues to the federal government and thus reducing the federal deficit. Leases on federal lands are a major source of revenue for the government; in 1984 the federal government received \$1 billion in oil and gas lease bonuses, rentals, and royalties, as well as about 25% of the revenues generated by North Slope State leases through federal excise and federal income taxes.

(c) Jobs Will be Produced Nationwide.

Since 1975, oil development on Alaska's North Slope has produced \$24 billion of activity, with 37,000 vendor companies located in 49 states. Major activity on this scale can be expected to continue as a result of development in ANWR. Jobs in manufacturing, engineering, agricultural, shipping and technical fields will be created by developing the ANWR Coastal Plain.

6. How Will the State of Alaska's Interest be Served by Opening ANWR?

By providing jobs and revenues.

(a) Revenues.

The state of Alaska derives about 90% of its revenue from oil and gas activities related to the North Slope. The state spends much of this money in the State and Federal economy. The State faces severe revenue shortfalls in future years. Oil and gas activities in ANWR would be subject to State severance taxes, corporate income taxes, and property taxes. In addition, Alaska presently receives a share of federal bonus and royalty revenues. Such payments from ANWR may provide additional revenues to the State. This would significantly increase the amount invested in the Permanent Fund.

(b) Jobs.

Exploration and production activities provide jobs. Thirty percent of Alaska households have members holding jobs in the oil and gas industry; decline in Cook Inlet and North Slope construction work will significantly affect statewide unemployment levels; opening additional lands to exploration and potential development will have an important positive effect on employment in the State.

7. This is a Game Refuge: Is Oil and Gas Development Appropriate?

Yes. Oil and gas exploration, development and production are now occurring in the Swanson River Field in the Kenai National Wildlife Refuge in southcentral Alaska and many other refuges in the United States; production has continued in the Kenai refuge since 1962 without adverse impacts to moose that browse throughout the Refuge and to salmon that spawn in the Swanson River and its tributaries.

Many of the same species found in ANWR now utilize habitats in the Prudhoe Bay and Kuparuk oilfields west of ANWR, where crude oil has been produced since 1977. Such species include migratory waterfowl and caribou. The Central Arctic Caribou herd, whose summer range includes the Prudhoe Bay and Kuparuk fields, has approximately tripled—it has grown from about 3,500 animals in 1975 (before oil production began) to about 13,000 in 1985.

8. Is Oil and Gas Development Safe in the Arctic?

Yes. The ANWR Coastal Plain is very similar to the Prudhoe Bay and Kuparuk areas. There is an unprecedented record of safe and environmentally harmonious operations in those areas. Application of forty years of engineering experience in Arctic Alaska culminating in developments in the Prudhoe Bay and Kuparuk oil fields demonstrate that oil development can and does exist in harmony with the environment.

For instance, directional drilling techniques have been developed that allow consolidation of facilities to minimize the amount of surface area impacted by exploration and development facilities, and developers routinely consider wildlife habitat, drainage, and wildlife usage in selecting sites for production facilities, roads and pipelines.

9. Why Must the Decision to Open the ANWR Coastal Plain be Made Now?

Lead times are long in frontier Alaska regions—at least 10 years from discovery to first production, and sometimes 15 years. If a sale in ANWR were held today, oil would probably not be produced until the year 2000. Without significant new discoveries, our nation could be dependent upon foreign sources for 60% of its demand by the year 2000.

The argument has been presented that present depressed oil prices will result in bids at less than fair market value for oil and gas leases in ANWR. However, this argument ignores that the federal government can and does reject bids of less than fair market value, and that royalties, not bonuses provide the major source of revenues over time.

10. What Can I Do?

A lot.

(a) Contact Your Congressman.

Contact your Senators and Congressman and tell them you favor opening the Coastal Plain of the Arctic National Wildlife Refuge to oil and gas exploration and development. Also tell them you oppose legislation that would lock this area up as wilderness.

(b) Contact Other Interested Parties.

Contact others in Alaska and the Lower 48 and tell them about the significant economic effects that ANWR will have on jobs, on federal and state revenues, on the Permanent Fund, and on national security, and encourage them to contact their Senator or Representative.

(c) Write the Alliance.

Write to the Alliance, P.O. Box 100100, Anchorage Alaska, 99510 for further information, and to tell us of others who should receive this information. A wide variety of information is available for groups: we can help you by providing speakers, slide shows, and video programs.

fall 1986

DRAFT

by Resource Development Council

to State Legislature

RESOLUTION ON THE ANWR COASTAL PLAIN

- WHEREAS, Alaska's Arctic National Wildlife Refuge includes more than 19 million acres of land, amounting to approximately five percent of the entire state landmass, and
- WHEREAS, the Coastal Plain is approximately eight percent of the refuge, it is considered to be highly prospective for the discovery of large quantities of oil and gas; and
- WHEREAS, Congress has reserved the discretion to decide if the 1.5 million acres will be opened to further exploration, development and production; and
- WHEREAS, the petroleum industry has consistently demonstrated its ability to operate in conditions similar to those found on the coastal plain in a safe, responsible manner without significant adverse environmental impacts, and
- WHEREAS, the United States must prepare to develop domestic petroleum resources if it is to preclude overwhelming dependence on foreign petroleum sources in the 21st century; and
- WHEREAS, the value and development potential of state-owned tidelands and federally-owned OCS lands offshore of the ANWR Coastal Plain would be enhanced by a Congressional decision to open the coastal plain to further exploration, development and production; and
- WHEREAS, facilities developed to transport petroleum resources on the coastal plain to Pump Station One may allow marginal discoveries between the ANWR Coastal Plain and Prudhoe Bay to be developed; and
- WHEREAS, national energy security depends on the development of domestic oil and gas resources to replace depleted U.S. reserves; and
- WHEREAS, the nation stands to derive revenues including portions of bonuses, royalties and rents from oil and gas development; and
- WHEREAS, opening the ANWR Coastal Plain to further exploration, development and production will generate increased employment and business opportunities for all Alaskans and all Americans;

THEREFORE BE IT RESOLVED THAT the 15th Alaska Legislature strongly urges the Congress of the United States to open the ANWR Coastal Plain to environmentally responsible oil and gas exploration, development and production.

THE  
COASTAL PLAIN  
AND  
FORMATION  
OF THE  
COALITION FOR AMERICAN ENERGY SECURITY

A New Coalition of Member Organizations Dedicated To Seeing  
That Public Lands on Alaska's North Slope Containing The  
Nation's Most Valuable Prospects For Major New Oil and Gas  
Discoveries Are Opened To Exploration and Development Under  
Proper Environmental Regulations

1. Introduction and Summary

One of the most significant energy policy and national security issues of recent decades will be decided in the remaining months of this Congress or in the next Congress. At issue is whether 1.5 million acres of the nation's most highly prospective oil and gas lands, located on Alaska's North Slope near Prudhoe Bay and the Trans Alaska Pipeline, will be legislatively opened to exploration and development or, on the other hand, designated as "Wilderness" and, therefore, permanently closed.

This issue will see many national environmental organizations strongly advocate Wilderness designation for this area. Presenting the case for orderly development, with prudent environmental regulation, of the Coastal Plain's potentially huge oil and gas resources will be an Eskimo owned corporation which owns substantial private property within the area and a new Coalition -- the "Coalition for American Energy Security."

The Coalition will advocate opening this small (by Alaska standards) extremely promising area to oil and gas exploration and development. The Coalition urges national associations, labor unions, companies, governmental organizations and other groups who are concerned about America's growing dependence on insecure sources of foreign crude oil to join the Coalition for American Energy Security.

Set forth below is background information about the Coalition, its objectives, and its organization.

## 2. Background

During Congressional consideration of the Alaska National Interest Lands Conservation Act of 1980 (ANILCA), one of the significant issues considered was the creation of the 18 million acre Arctic National Wildlife Refuge (ANWR) on Alaska's North Slope and the designation of some areas of ANWR for "Wilderness" management. Congress resolved this issue, in part, by creating an 18 million acre Refuge and designating 8 million acres of the Refuge as Wilderness. These designations were primarily in areas that were considered to be of low, moderate or moderate-high interest for oil and gas potential.

## 3. The Coastal Plain Study

Congress also provided in 1980 that a 1.5 million acre area of ANWR known as the "Coastal Plain" be made the subject of a special in-depth study of its fish and wildlife resources and of its promising oil and gas potential by the Department of the Interior. This study is known as the ANILCA "Section 1002(h)" study and report. It was designed to provide Congress with all relevant information necessary to make an informed decision on the future management status of the 1.5 million acre Coastal Plain. This area has the very highest interest for major new oil and gas discoveries of any frontier area in the nation. In general, the alternatives available to the Congress for the Coastal Plain are: (1) to open the area for oil and gas exploration and production; (2) to close all or part of the area to any exploration or development by designating it for Wilderness management; or (3) to designate some other status for the area with defined permissible uses.

The Section 1002(h) report was scheduled for delivery to the Congress together with the Secretary of the Interior's recommendations by September 2, 1986. The report, however, has been delayed by litigation brought by a number of national environmental organizations which is now pending in the Ninth Circuit Court of Appeals.

## 4. H.R. 4922 - Wilderness Legislation

On June 3, 1986, Congressmen Udall and Seiberling, together with 25 cosponsors, prior to the release of the Section 1002(h) report which Congress mandated, introduced H.R. 4922. This bill would designate the whole 1.5 million acre Coastal Plain of ANWR as Wilderness and prohibit all oil and gas exploration and development. Subsequent to its introduction, 30 more cosponsors have been added to H.R. 4922.

## 5. What Is At Stake?

The 1.5 million acre Coastal Plain is regarded by all knowledgeable observers as the nation's highest and best prospect for discovery of one or more Middle East class oil and gas fields of Prudhoe Bay dimensions. A 1980 USGS open file study of the Coastal Plain estimates a 5 percent probability that the area may contain up to 17 billion barrels of crude oil and 34 trillion cubic feet (tcf) of natural gas. This is 70 percent more than the 10 billion barrel reserve discovered at Prudhoe Bay in 1968. The USGS also estimated a 50 percent probability of up to 4.85 billion barrels of crude oil and 12 tcf of natural gas in the Coastal Plain. Again, this is one-half the original reserves of Prudhoe Bay, the nation's largest oil field ever discovered.

The Department of the Interior's Section 1002(h) study and report when finally released will contain up-to-date estimates of the Coastal Plain's huge potential for new oil and gas resources. The new estimate will be based upon two years of very active seismic and geophysical work conducted since 1984 by Geophysical Sciences Inc. under contract to a consortium of oil companies and under the supervision of the Department of the Interior. It is anticipated that the new estimates in the Department's report will be significantly higher and more reliable than those in the 1980 USGS report.

Today Prudhoe Bay and Alaska's North Slope provide more than 20 percent of the nation's total domestic crude oil production. These resources are now in significant decline and are not being replaced. In the future, the 1.5 million acre Coastal Plain has the potential, if it is opened, for enabling Alaska's North Slope to continue to provide a major alternative to imported oil and a very substantial contribution to national petroleum needs.

## 6. The Issue

The issue the Coastal Plain presents to the Congress and the American people is straight-forward: Should the 1.5 million acre Coastal Plain, an area of significant fish and wildlife values and an area of immense potential for major new oil and gas resources, be:

- a) designated as "Wilderness" and permanently closed any to oil and gas exploration and development? or
- b) opened to oil and gas exploration and development under prudent environmental regulations similar to those which govern the

successful relationship between oil development and prospering fish and wildlife resources at the nearby Prudhoe Bay oil fields?

7. Formation of Coalition

A broad-based Coalition -- the "Coalition for American Energy Security" -- is being formed to educate the Congress and the public on the significance of the future status of ANWR and the Coastal Plain to the nation's national security and energy independence. The Coalition will consist of companies, associations, labor unions, consumer groups, concerned State and local governments and others who support the opening, by appropriate legislative action, of the highly prospective 1.5 million acre Coastal Plain to oil and gas exploration and development. The Coalition will operate informally and will be loosely organized and ad hoc in nature.

8. Coalition's Purpose

The primary purpose of the Coalition will be to secure Congressional enactment of legislation which will authorize and direct that all of the 1.5 million acre Coastal Plain of ANWR be opened for oil and gas exploration, development and production. The Coalition will seek to achieve this purpose by developing objective factual information, by coordinating member activities, and by serving as a central point for developing and sharing relevant information on the status of the Coastal Plain decision among Coalition members and supporters.

9. Nature of Coalition

Arctic Slope Regional Corporation, a North Slope based Corporation with 3700 Eskimo shareholders, has taken a lead role in calling for the formation of the Coalition. The Corporation owns substantial private lands within the boundaries of ANWR and within and adjacent to the Coastal Plain. Wilderness designation would prevent the development of these private Eskimo owned lands. The corporation's Washington, D. C. law firm of Van Ness, Feldman, Sutcliffe & Curtis has agreed to provide office space, conference rooms and other facilities for the Coalition's use. The law firm will also provide secretarial services and a full-time dedicated paralegal to serve as the Coalition's Executive Coordinator. The Executive Coordinator will keep Coalition Members fully and currently informed of developments and to assist coordinating efforts undertaken by the Coalition to achieve agreed upon objectives.

10. Coalition's Budget

Commitments by ASRC and other founding members have been made to cover the Coalition's expenses, on a minimal budget basis, through the balance of calendar year 1986. This budget will cover the Coalition activities discussed above. Once the Coalition is formed and active, other companies, associations and groups may wish to contribute toward meeting some of the Coalition's operating expenses for the balance of this year and into the next Congress. Such contributions are welcome. It is assumed that major contributions to the effort for calendar year 1987 will continue to be made by ASRC, other founding members, and other interested companies, associations and groups.

11. Coalition Offices

The Coalition for American Energy Security has offices at 1050 Thomas Jefferson Street, N.W., Sixth Floor, Washington, D.C. 20007. The Coalition's telephone number is (202)333-7484. Ms. Isabelle Tapia serves as the Coalition's Executive Coordinator.

COALITION FOR AMERICAN ENERGY SECURITY  
COORDINATING COMMITTEE MEETING

Tuesday, 2:00 p.m.  
November 25, 1986

AGENDA

1. Reports and developments
  - (a) Documents and Projects
  - (b) New Projects (no change as of 10/31/86)
  - (c) Materials Ready for Coalition Use  
(no change as of 9/18/86)
  - (d) Hill Developments
    - (i) House and Senate Committees
      - (a) Senate Energy Committee
      - (b) Senate Environment and Public Works
2. DOI 1002(h) Report Released on November 24
  - (a) DOI Press Release and Executive Summary
  - (b) Press Release Responses to Report by  
Coalition Members
  - (c) Press Stories on Draft Report
  - (d) Op-ed piece
  - (e) Editorial Boards - Mailing
  - (f) Environmental Organization Report
3. Hearings on Draft LEIS
  - (a) Federal Register
  - (b) January 5, 6 and 9, 1986
    - (i) Kaktovik
    - (ii) Anchorage
    - (iii) Washington, D.C.
4. Budget 1987
  - (a) Timing
  - (b) Public Relations and Grassroots capacity
  - (c) Other Contributors
5. D.O.E. Interagency Review of U.S. Energy Policy and  
National Security
  - (a) Meeting with William Martin, Deputy Secretary DOE
  - (b) Coordinate responses to reference ANWR issue

6. DOE December 1986 NEP Report
  - (a) Draft testimony to submit
7. State of Alaska role and involvement
  - (a) Draft State Report on ANWR
  - (b) Computer file and Publications
  - (c) North Slope Geology Update Publication
  - (d) Conferences
8. North Slope Borough Policy Statement
9. Coalition Committee Status
  - (a) New Members?
  - (b) Monthly Meeting of Coalition Members
    - (i) 12/4/86 Coalition Meeting at NAM
  - (c) Coalition Membership Status
10. Other matters
  - (a) Report on AEI Conference (Publication)
  - (b) Nat'l Leagus of Cities (11/29-12/3/86 - San Antonio)
  - (c) U.S. Conference of Mayors (6/13-17/87 - Memphis, TN)
  - (d) Alaska Coalition
    - (i) Seattle Chamber of Commerce
    - (ii) Portland Chamber of Commerce
11. Status Report on Caribou Treaty Deliberations
12. Legislative Strategy for 100th Congress
  - (a) Status of Draft Bill language for Alaska delegation
  - (b) DOI Proposed Bill

## COALITION FOR AMERICAN ENERGY SECURITY

November 25, 1986

### CURRENT STATUS REPORT ON ASRC, AOGA, API AND COALITION RELATED DOCUMENTS AND PROJECTS

Set forth below for your use and information is a report on the status of a variety of different documents and projects which ASRC, AOGA, API or the Coalition have underway or have recently completed.

An asterik (\*) by an item indicates that a new document or project has been undertaken or that a new development has occurred with respect to the document or project since the last meeting.

#### 1. Background Papers on Environmental/Cultural Issues

An advocacy paper and supportive background papers on the following topics have been prepared by AOGA and are in final form. They have been approved by the AOGA Executive Committee and approved for use by the Committee in connection with the Coalition advocacy efforts. The papers cover the following subjects:

- A. AOGA Advocacy Paper
- B. Briefing and Background Papers
  - 1. Petroleum Potential of ANWR
  - 2. Protecting the Natural Environment: Minimizing Impacts to Arctic Coastal Plain Vegetation, Soils, Water Bodies and Streams in the Course of Oil and Gas Exploration and Development
  - 3. Wildlife and Habitat Protection During Petroleum Exploration and Development
  - 4. History and Culture of ANWR's Native Inhabitants
  - 5. Resource Exploration and Aesthetic Values in ANWR
  - 6. Compatibility of Oil and Gas in and Adjacent to Wildlife Refuges and Conservation Units

This information is available in notebook form from AOGA and from North Slope Task Force members.

(Status as of July 31, 1986)

2. Advocacy Paper

A draft position paper advocating the opening of the Coastal Plain has been prepared by AOGA for approval by the AOGA Executive Committee.

(Status as of July 31, 1986)

3. Coastal Plains Slide Show

The slide show presentation prepared by AOGA is complete and has been approved for use by AOGA. Copies have been made available to the API committees and individual companies. Additional copies are available from AOGA. The format was expanded for presentation to IOCC Convention attendees at Prudhoe Bay on June 29, 1986. The text of the presentation to the IOCC Convention attendees can be modified for presentation to other groups.

(Status as of July 31, 1986)

4. ANWR Bibliography

A consultant's draft is complete and is currently under review by environmental experts serving on the AOGA Task Group.

(Status as of July 31, 1986)

5. Bird Impact Study

Fourteen companies have committed \$162,000 toward an approved budget of \$170,000. Field work is now underway. Standard Alaska Production Company will formalize an agreement with AOGA setting out their responsibilities as operator of the study.

(Status as of July 1, 1986)

6. Preparation of Film

A draft script has been submitted for review by the AOGA Task Force. On July 7, 1986, the script will be submitted to the Executive Committee for review and approval. The project is on schedule and should be complete by early September.

(Status as of July 1, 1986)

7. Field Guide Book

The field guide Book on the geology and petroleum potential of the Coastal Plain is complete. One thousand

copies have been printed. The AOGA Task Force has requested the approval of the AOGA Executive Committee to use the Guide Book in the advocacy effort.

AOGA has made copies available for use in the Washington, D.C. advocacy effort.

(Status as of July 31, 1986)

8. ANWR Report

A privately sponsored Report on ANWR and the Coastal Plain has been prepared by Arctic Slope Regional Corporation. The Report was publicly released in Alaska on July 18, 1986. Copies are available from the Coalition and from ASRC.

Jacob Adams, President of ASRC, is sending a letter and copies of the Report to every Member of Congress, to members of the Administration, to the national press and to prospective Coalition members.

(Status as of July 31, 1986)

9. ANILCA Legislative History

API has had a legislative history of ANILCA prepared and has made a copy available for the use of the Coalition. The document is very useful for seeing what members said about the Coastal Plain during the ANILCA debate and how they voted.

(Status as of August 7, 1986)

10. ANWR Visits and Briefings

On June 23 and 24, 1986, Under Secretary Ann McLaughlin was provided a tour of Prudhoe Bay and the ANWR Coastal Plain.

On June 29, 90 IOCC Convention attendees were briefed on the Coastal Plain issue and asked to support AOGA's efforts with their Congressional delegations.

On July 8, 1986, AOGA Task Force members participated in a briefing for DOE Secretary Herrington and Senator Murkowski.

On July 11, House Members of the Energy & Commerce, Interior and Insular Affairs, Armed Services and Appropriations Committees toured the North Slope, ANWR and the Coastal Plain.

On July 19-20, 1986 Congressman Ralph Regula (R OH) visited Alaska.

On August 18 the House Merchant Marine Committee visited ANWR.

On August 20 Administration officials visited ANWR.

The late August tentative trip planned for a group of Senators to visit ANWR was postponed.

On September 2 the National environmental organization leadership visited Alaska, ANWR and the Coastal Plain.

(Status as of September 3, 1986)

\*On November 18, 1986 Americans for Energy Independence hosted a Congressional Conference on the Coastal Plain of ANWR.

\*On November 24, 1986, DOI released Draft LEIS recommending that Coastal Plain of ANWR be opened to oil and gas exploration.

\*12/4/86 - Coalition "Membership" meeting at offices of NAM (2:30 p.m.).

\*12/11/86 - API-AOGA meeting in San Francisco, California.

COALITION FOR AMERICAN ENERGY SECURITY

DRAFT

November 12, 1986

Coalition Membership

Set forth below is the current status of the Coalition membership campaign.

1. Organization Granting Permission to Go on Letterhead

Alaska Oil & Gas Association

AMOCO Corporation (awaiting confirmation)

American Petroleum Institute

Americans for a Rational Energy Policy

Arctic Slope Regional Corporation

Association of American Petroleum Landmen

✓ BP Alaska

✓ Chevron U.S.A. Inc.

\*Dresser Industries

Highway Users Federation

\*Independent Petroleum Association of American  
(awaiting confirmation)

International Association of Drilling Contractors

\*International Association of Geophysical Contractors

\*Joint Maritime Congress

\*Marine Engineers Beneficial Association

\*National Association of Manufacturers

National Tour Association, Inc.

National Ocean Industries Association

\*Rocky Mountain Oil and Gas Association

✓ The Standard Oil Company

\*Sun Company

The National Grange

\*U.S. Chamber of Commerce

Western Oil and Gas Association

2. Organizations Active in Coalition Efforts, But Not on Letterhead

Alaska Coalition for American Energy Security

3. Organizations Cooperating and Assisting with Coalition's Efforts

State of Alaska

Americans for Energy Independence

which supports gas development in the ANWR, told OILGRAM: "The understanding we got in dealing with Interior on ANWR was that the Administration would be leaning more to recommending oil and gas activities at the refuge."

The coastal plain is the main calving area for a large herd of caribou, and Adler said he has yet to see any possible stipulations that would provide adequate protection for the herd.

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#### WATCH THE RAILROADS, GASLINES TOLD

Washington 11/13—U.S. interstate gas pipeline industry should look to federal regulation of railroads for lessons on how to operate in a newly deregulated market, a study commissioned by the Interstate Natural Gas Assn. of America says.

National Economic Research Assoc. said in its study that pipelines should take full advantage of their newly acquired rate flexibility in order to compete with alternative fuels. This rate flexibility should enable pipelines "to respond to rapid changes in market conditions and peak-load problems." However, the study notes that judging from the Interstate Commerce Commission's trouble with setting rate guidelines for captive customers, the Federal Energy Regulatory Commission is likely to find setting rate boundaries under Order 436 "arduous and controversial."

The report, "Lessons for the Interstate Gas Pipelines from Railroad Deregulation," notes that take/pay obligation "won't be remedied easily through government intervention." The lesson for pipeline regulators is that government involvement, even the possibility of involvement, can have an important, but-not-necessarily positive, effect on contract disputes.

The report also notes that:

--Increased competition may cause pipeline-distributor relationships to evolve from seller-buyer to joint ventures offering bundled services to the end-user;

--Network access problems could occur as competition increases for the transportation business because disincentives will exist to continue pipeline-to-pipeline exchange systems; and

--Service obligations should be revised to reflect changing market conditions with pipelines recognizing the opportunity costs of existing residual obligations and pressing for their removal, relaxation or "at least improved rate treatment."

#### EPA HAS CHANGE OF HEART ON CONDEMNING RECYCLED OIL AS HAZARDOUS

Washington 11/13—The Environmental Protection Agency has decided not to list recycled used oil as a hazardous waste requiring expensive controls. The agency had originally proposed last Nov. 29 to list used oil, including crankcase oil from automobiles, but changed its mind after deciding that such a move would "seriously discourage" recycling.

EPA estimates that if it had listed recycled used oil as a hazardous waste 61- to 128-million gal of used oil would have been dumped into U.S. waterways. Of the 1.1-billion gal of used oil consumed annually, nearly 700-million gal are recycled.

The agency is proceeding with development of standards to ensure safe management of the recycling process, but firm rules aren't expected for several years. The agency also is considering regulating used oil that isn't recycled.

#### ITA: OIL IMPORT PRICE DROP WON'T RESULT IN LIKE DROP IN DEFICIT

Washington 11/13—Declining imported oil prices won't result in an equivalent reduction in the U.S. trade deficit because key U.S. export markets in Mexico, Venezuela, Canada and the Mideast will have less ability to buy imports, the International Trade Administration reports.

ITA says, in "U.S. Trade: Performance in 1985 and

Outlook," that reduced oil prices will "after some delay" improve U.S. economic growth and the growth of other oil-importing nations, thereby providing inroads for reducing the trade deficit. ITA cautioned, however, the "net effect on the U.S. trade balance of these various crosscurrents is difficult to project."

ITA estimates that for each \$1/bbl reduction in crude prices, the trade deficit will decline by about \$2-billion/yr. But even with the benefits of price reductions, "U.S. oil import bill will stay very large." ITA noted that if crude prices stabilize at \$20/bbl, the U.S. oil bill would still be about \$43-billion annually.

ITA explains that one cause for the large oil import bill and lack of a matching decline with crude price drops is that more expensive oil products are being brought in.

Copies of the report (stock number: OCS-009-00481-1) may be ordered for \$8.30/copy from the U.S. Government Printing Office, Washington, D.C. 20402.

#### FINANCIAL REPORTS

(Total Net Figures in Million \$)

	1986	1985
Occoco		
3rd qtr net	(18.38)	(7.1)
Net per share	(\$2.17)	(\$1.06)
9 mo net	(49.13)	(53.75)
Net p. share	(\$6.22)	(\$7.60)

#### Corrections & Clarifications

The CN 11/13 story on DOE's contract to buy oil from Mexico for the Strategic Petroleum Reserve should have said that the department does intend to exercise an option to buy an additional 6,500 b/d from Mexico, above the contracted 65,000-b/d.

#### LATE NEWS

#### KHASHOGGI SELLS EDGINGTON TO SKYHIGH IN DEAL THAT MAKES HIM SKYHIGH'S CHIEF

San Francisco 10/13—Skyhigh Resource Ltd. of Vancouver has purchased Long Beach-based Edgington Oil Co. from Triad Energy Corp., subsidiary of Adnan Khashoggi's Triad Holding Corp. Skyhigh, originally a mining company which wants to diversify into oil, bid in excess of \$100-million for the asphalt and aviation fuels company, beating out about six others for the sale.

Triad will receive \$35-million in cash and \$45-million in debentures. It will also receive 2.8-million shares of Skyhigh stock giving Khashoggi about a 14% stake in the company. Khashoggi, who is already on the Skyhigh board, will now become Skyhigh chairman, although company officials say Skyhigh and Triad Holding will remain totally independent.

Triad Energy had put Edgington on the market in October, arranging the sale through First Boston. Edgington, with \$780-million sales in 1985, has a 41,600 b/d asphalt refinery in Long Beach and is said to be the leading supplier in the Southern California region. It also has the Triad Aviation fuel wholesaling business and is building a 35-million gal/yr ethanol plant for gasoline blending in Iberia Parish, La.

Skyhigh officials say their company, which also has computer holdings, is looking for further oil refining and production investments.

# # #

at 18.7-million b/d in first-quarter 1987, up from 18.6-million b/d in fourth-quarter-1986.

This higher demand figure for the first quarter and the fact that the oversupply should be absorbed by then could give OPEC a chance to increase the production ceiling and members' quotas in the first quarter. However, that could be threatened "if markets fail to stabilize and prices erode," triggering increased stockdraw and hitting demand.

#### COME BY CHANCE BUYER CAN ONLY SELL PRODUCTS IN NEWFOUNDLAND AND U.S.

Montreal 11/13—Petro-Canada's agreement last week to sell its Come by Chance oil refinery to U.S.-owned Newfoundland Energy Ltd. (ON 10/28) is conditioned on NEL's only being allowed to sell products to Newfoundland and the U.S.

However, the Combines Investigation Branch in Ottawa said it will investigate the deal once consummated in case it restricts competition in the Canadian market.

#### International Items

**CANADA:** Mobil Oil Canada says it will spend C\$12-million developing a heavy well steam stimulation pilot project in the Cold Lake area of northeastern Alberta. The company says the 160-acre pilot, consisting of 23 directional and slant wells, will provide it with technical information needed for potential full-scale development of its Cold Lake resources. Mobil says it plans drilling and construction in 1987 and expects the pilot will produce 1,450 b/d of oil when operations begin in 1988.

**CHINA:** The first Chinese-designed-and-built offshore production platform will go into service this month in Beibu Bay, South China Sea, the China Daily reports. The platform can produce up to 4,000 b/d of crude and 40,000 cu meters/d of gas. It was built to standards of the American Petroleum Institute, the American Welding Society and the American Bureau of Shipping, and will be operated by the Chengbei Oil Development Corp. of Japan. It sits above 23 wells sunk 1,680 meters into the bed of Beibu Bay. The platform was built in Dalian shipyard under supervision of the China Offshore Platform Engineering Corp. and was designed by the Shanghai Offshore Engineering Corp. Chinese authorities now want to sell similar platforms internationally.

**SPAIN:** Spanish refiner Explosivos Rio Tinto has decided to go ahead with plans to convert its ammonia plant at Palos de la Frontera in southern Spain to LNG at a cost of US\$22-million using basic technology provided by M. W. Kellogg. The company will install a radial synthesis converter, molecular sieve driers and a high pressure condenser-stripper. A LNG terminal will also be built. A spokesman for ERT said energy costs will be reduced by 15% and the company hopes to be able to compete with products from EC countries.

**USSR-UK:** The UK Dept. of Energy's Offshore Supplies Office (OSO) and the Soviet State Committee for Science & Technology will shortly convene the first meeting of a joint Oil & Gas Working Group, following the signing last April of a memorandum of understanding. UK Energy Minister Alick Buchanan-Smith said today. He said although significant offshore work is unlikely to emerge in the USSR until the 1990s, "limited opportunities" for the UK supply industry already exist under the present Soviet five-year plan. He urged UK offshore supply companies to counter the present crisis by looking "beyond the North Sea." The best immediate opportunities lie in Alzola, he said, noting the country's low-cost reserves, its deeper water potential and its impending loss of U.S. export credit. He also cited Canada, Brazil, India and China as prime markets for UK offshore technology.

#### UNITED STATES

#### COASTAL DROPS SUIT AGAINST PDVSA

Houston 11/13—The Coastal Corp. withdrew its \$450-million damage suit against Petroleos de Venezuela on the grounds that it was primarily a dispute over crude supply for Mobile Bay Refining, whose assets Coastal acquired last month (ON 10/6).

"We have no further interest in the suit, so we dropped it," a Coastal spokesman said, adding: "We're looking forward to a profitable business relationship with those people now."

The suit was filed jointly by Coastal and Mobile Bay in September 1984 in U.S. District Court in Beaumont, Tex. (ON 9/13/84). It accused PDVSA of reducing Coastal's 30,000-b/d contractual crude liftings by over 50% from Oct. 1, 1980, to the date of the suit. It also alleged violation of U.S. antitrust laws, racketeering and inducement to breach contracts under Texas common law.

PDVSA countered that the suit was groundless and was filed after "numerous fruitless efforts to obtain additional volumes of Venezuelan heavy crudes, which were not available, due to our level of production under national policy and our OPEC obligations."

#### AMOCO DRUG-TESTING AT UTAH REFINERY HALTED PENDING ARBITRATOR'S RULING

Denver 11/13—The Oil, Chemical & Atomic Workers Union said a federal judge enjoined Amoco from implementing a drug and alcohol testing program at its Salt Lake City, Utah, refinery until an arbitrator can consider if the new policy violates the union contract.

U.S. District Judge J. Thomas Greene granted the injunction on OCAW's motion, which asked only a stay of the program until the grievance/arbitration procedure outlined in the contract is completed. A union spokesman said it will be several weeks before an arbitrator is selected to consider the case.

#### DOI TO RELEASE DRAFT RECOMMENDATIONS ON ANWR DEVELOPMENT FOR PUBLIC COMMENT

Washington 11/13—The Interior Dept. is planning to release a draft report containing recommendations about oil/gas development on the Alaska National Wildlife Refuge coastal plain, OILGRAM NEWS learns, even though its appeal of a federal court order directing release of such a report is still pending.

The report is scheduled to be released for public comment Nov. 24. A U.S. district court directed the department to receive public comments before it submits a final report to Congress on whether to open the area for development (ON 9/2). Interior appealed the ruling and maintains that the Congressional debate would provide a "full and open forum for public participation."

The appeal is before the U.S. Court of Appeals for the Ninth Circuit in San Francisco. An attorney for the department said that while the release of the draft report "commences procedures laid out by the district court, that is not to say the department would recommend withdrawal of the appeal." There are requirements in the court order "we don't feel are required by law," and several issues still need to be resolved.

#### Development Go-Ahead Seen Likely

There reportedly will be a 30-day period for public comment after the report is issued. Robert Adler, an attorney for Trustees for Alaska, one of several parties suing the department, said 30 days is simply not enough time to respond to such a "complex issue," and he hopes for at least 60, if not 90, days.

Both Interior Secretary Hodel and Energy Secretary Herrington have cited the immense hydrocarbon potential of the ANWR, and Adler said that given the philosophy of the Reagan Administration, "it's a fair assumption the report will recommend either exploratory drilling or full-scale oil exploration and development."

Jacob Adams, president of Arctic Slope Regional Corp.,

3500

SENATE ENERGY COMMITTEE

Democrats

J. Bennett Johnston  
Dale Bumpers  
Wendell H. Ford  
Howard M. Metzenbaum  
John Melcher  
Bill Bradley  
Jeff Bingaman  
\* Conrad  
\* Fowler  
\* Wirth

Republicans

Have not made  
announcement

*Energy*

## Alaska Coalition for American Energy Security

P.O. Box 10-1515 Anchorage, Alaska 99510-1515 (907)561-8641

As Chairman of the Alaska Coalition for American Energy Security, I am asking for your help in developing grassroots support for opening the Coastal Plain of the Arctic National Wildlife Refuge (ANWR) to oil and gas exploration, development and production. ANWR's Coastal Plain is the nation's best oil prospect, yet a strong environmentalist movement is underway to close the Coastal Plain to exploration, development and production.

On November 24, 1986, the Department of the Interior released its long-awaited report on the Coastal Plain as required by Section 1002(h) of the Alaska National Interest Lands Act. This report confirms the very high potential of the Coastal Plain for holding giant reserves of petroleum with a mean estimate of 13.8 billion barrels of oil in-place. The report contains an assessment of the Coastal Plain's wildlife and environmental resources and the possible impact of oil and gas exploration, development and production on these resources. Most importantly, the report contains the proposed recommendation of the Secretary of the Interior that the Coastal Plain be opened to oil and gas exploration, development and production under appropriate measures to assure the protection of the environment.

Ultimately, this issue will be decided by the Congress of the United States. However, before final report and recommendation are submitted to the Congress, the Department of the Interior will receive public comment on the report. Hearings are being held in Anchorage, Kaktovik, and Washington, D.C. in January. Written comments on the report will be accepted until January 23, 1987.

Your expression of support for the opening of the Coastal Plain at the Anchorage or Washington, D.C. hearings would help counter the expected opposition from the environmental organizations. I would also appreciate your writing to the Department of the Interior expressing your support for opening the Coastal Plain. Letters of support must be received in Washington, D.C. on or before January 23, 1987.

A sample letter showing the proper address for the submittal of your letter is shown on the reverse side of this letter.

Your support on this important issue will help strengthen Secretary Hodel's recommendation to open the Coastal Plain to oil and gas exploration, development and production. It is expected that the final report and recommendation will be submitted to the Congress during the Spring of 1987. At that time, your support will also be needed.

If you desire further information on this important issue, please contact the Alaska Coalition for American Energy Security.

Sincerely,



Boyd Brownfield  
Chairman, Alaska Coalition for  
American Energy Security

News  
Jan 7,  
1987

ment unhappy with lack of consultation by U.S. on oil and gas development plan

WHITNEY  
news reporter

WASHINGTON — The Canadian government, upset with a lack of consultation by the U.S. Department of the Interior on development in the Arctic National Wildlife Refuge, has asked for a Jan. 23 meeting with department officials in Ottawa.

Interior Department officials say they recognize the requirement for consultation in the 1980 Alaska National Interest Land Conservation Act. But interviews with Interior Department and Canadian Embassy officials suggest the two governments have

different ideas about how the consulting should be done.

The Canadians believe their views about the refuge's development can only be discussed in private government-to-government meetings. The Interior Department wants the Ottawa government to state its views during the department's public-comment process, so that it can publicly respond to them.

These differences indicate how controversial oil and gas exploration in the refuge is in Canada and the delicacy with which the Canadian government is playing its role in a domestic U.S. issue.

The 1980 lands act requires consultation with the Canadians on wildlife issues involved in opening the refuge's 1.5 million-acre coastal plain to oil development.

The Interior Department's draft report, which recommended leasing of the coastal plain, was released Nov. 24. Canadian officials were not consulted before its release.

In a Dec. 4 meeting with U.S. Energy Secretary John S. Herrington and Interior Secretary Donald Hodel, Canadian Energy Minister Marcel Masse expressed, according to the Canadian Embassy, his "unhappiness" that the

Canadians were not consulted before the draft report was released.

The department's final recommendation will not come until after the close of a 60-day comment period Jan. 23. The department's recommendation would have to be approved by Congress.

Janet Davies, first secretary for the environment at the Canadian Embassy here, said the Canadian government also complained in a December letter to the Interior Department that it had been denied an opportunity to

See Back Page, REFUGE

## REFUGE: Canadians want meeting

Continued from Page A-1

consult on the draft recommendation.

"There were no consultations about the specific draft report," she said. "We have noted the section (of the 1980 law requiring consultation) and drawn it to the attention of the United States government."

But Bill Horn, deputy Interior undersecretary, said the Interior department has been engaged in prolonged negotiations with the Canadians on a Porcupine caribou agreement, initialed last month in Seattle.

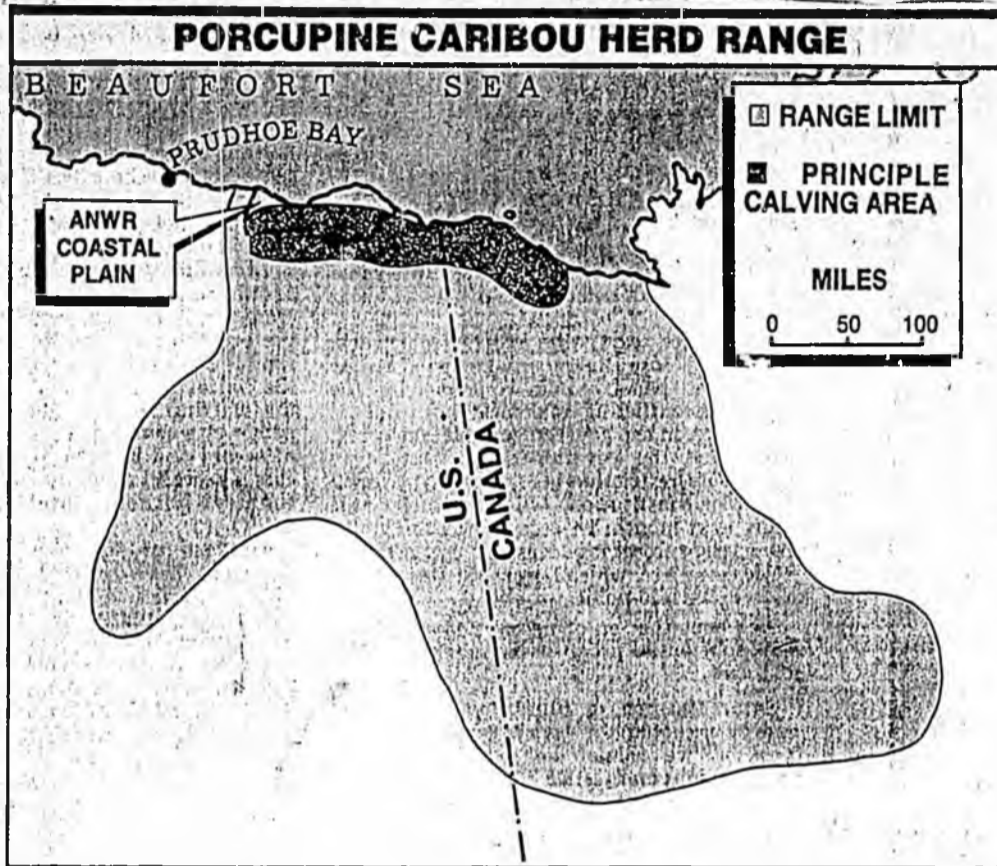
The 1980 act specifies that the department's wildlife consultations with the Canadians should include special attention to the migratory caribou herd.

The herd, upon which Canadian Natives subsist, uses the refuge's coastal plain as its calving grounds. Environmentalists are seeking a wilderness designation for the area, in large part because of their belief that any development activity would necessarily diminish the herd.

"There was some concern about the nature of the consultations," Horn said. "But we've been consulting with them on the Porcupine caribou herd."

"The question is, should we have done more before we put our draft out on the streets?" Horn said. "We're involved in the public comment period now. This is an appropriate time to do the consulting process as well."

Susan Recce, deputy assistant interior secretary, said she has no idea why the Canadians weren't consulted before the draft report was



Source: Arctic Slope Regional corporation

Anchorage Daily News/Peter Dunlap-Shohl

released.

"I have the feeling that people (here) wanted to have a report to send out first," she said. "If there are substantive issues to be discussed, that's what we want to hear."

But Recce also said that because Congress will have to make a final decision on the refuge's development, she thinks Congress is the "final forum" for the consultations.

"It would be a different story if we had the final decision," she said of the Interior Department.

"If the Canadians feel they've been excluded, all we can say is, we're sorry they feel that way but they won't lose any time," Recce said.

"What we'd be looking for-

ward to is that if they have official comments, that they be submitted as part of the official public-comment record so that we can respond to them," she said.

But Davies said that the policy of the federal government of Canada is not to comment at U.S. government hearings.

On Monday, officials with the Government of the Yukon, one of the Canadian provinces, testified at an Interior Department hearing in Anchorage. The Yukon government said it opposed development of the refuge because of the potential for harm to the caribou, among other things.

Davies said that her government expects to issue its

comments as part of the consultation process.

"What we expect from a meeting is what we would properly describe as consultation — how they arrived at their conclusions, a full briefing at which we'd offer our advice," she said.

Another sign of how strongly the the Canadians feel about the consultation controversy is that the embassy's political minister, rather than its environmental officials, sent a letter to Horn Dec. 30 requesting the Jan. 23 meeting in Ottawa.

Recce said that the Interior Department has yet to respond to the meeting request, although she said she expects a series of meetings to be held in the coming months.

By DAVID WHITNEY  
Daily News reporter

WASHINGTON — After eight years of negotiations, the United States and Canada have initialed an agreement to protect the Porcupine caribou herd that migrates across the international border north of the Arctic Circle.

The agreement, when signed, will create a two-nation advisory board to oversee the herd. Potentially, that board may become involved in the controversy about whether — and under what controls — the United States

should permit oil exploration and development in the coastal plain of Alaska's Arctic National Wildlife Refuge.

The herd, vital to Native populations — especially in Canada's Yukon Territory and Northwest Territories — uses the 1.5-million-acre coastal plain as its calving ground in the spring.

Environmentalists maintain that the coastal plain should be designated as wilderness by the Congress to prohibit development. Many oil-lease proponents agree that development would have

at least some detrimental effect on the Porcupine herd.

The agreement, initialed in Seattle Dec. 3, has touched off a debate about what it means to the future development of the coastal plain. In a preliminary report, the U.S. Department of Interior has recommended the coastal plain be opened to immediate leasing and oil exploration.

William Horn, assistant Interior secretary for fish and wildlife, said the coastal plain could become another Prudhoe Bay.

Alaska Sen. Frank Mur-

kowski, who has asked President Reagan to mention the need for the reserve's oil in his State of the Union message to Congress, sees the proposed agreement as a detriment to getting to the oil.

"I am concerned about the agreement being used potentially as a tool to have Canadian influence on whether or not we should develop ANWR," Murkowski said.

But an oil-company executive involved in the negotiations said he has been led to believe that the agreement "would put to bed the caribou

controversy."

"It's legitimate for us proponents of leasing to wave this (agreement) and say, 'Hey guys, there's no problem with the caribou. This has been solved,'" said Roger Herrera, explorations manager for Standard Alaska Production Company, a subsidiary of Standard Oil of Ohio.

The views of Herrera, one of 17 on the U.S. negotiating team led by Deputy Assistant Secretary of State Richard D. Smith, may help persuade development interests to go along with the proposed

agreement. But they do not reflect the views of others inside or outside of government.

"This agreement is working toward solving a problem but it is not the solution," said State Department spokesman Ed McKeon.

"Herrera is way out of line," said Randall Snodgrass, Alaska Program Director for the Wilderness Society. "From what I know of what was stripped out, this agreement in no way protects

See Page B-3, CARIBOU

Continued from Page B-1

the calving grounds of the herd."

Canada had been under great pressure from its northwestern territories to enter into an agreement. The Yukon Territory legislature, for example, passed a resolution Dec. 3 — the same day the agreement was initialed — urging Ottawa to stress the importance of an agreement before any decisions were made concerning development of the coastal plain.

The reason for this pressure is in part the great reliance of Canadian Natives on the herd, which has grown to about 180,000 animals.

Unlike the Kaktovik Natives in the Arctic refuge, who kill and use marine mammals as well as Porcupine caribou, the Inuit Eskimos and Dene-Metis and Council of Yukon Indians historically have relied virtually exclusively on the migrating herd for food.

But in reaching the tentative agreement, the Canadians and the United States rejected stronger language on protecting the caribou habitat damage in the arctic refuge or the herd's wintering grounds in Canada.

"There was a lot of careful wordsmithing to make this (agreement) compatible with the on-going public process (in the ANWR-development debate)," Herrera said. "The Canadians wanted stronger habitat language. There was a difference of opinion, no doubt about that."

Smith declined to discuss

the intricacies of the negotiations, other than to say that various viewpoints were represented on both sides, and that the Canadian and U.S. delegations both tried to avoid any interference with domestic land-use processes.

"I think the agreement is fair and balanced in that it recognizes the legitimate interests of the two countries and the users of the caribou without sweeping aside other interests as land-use decisions are made," Smith said.

Bob Childers of Anchorage represents the Alaska section of the International Porcupine Caribou Commission made up of Natives and is on staff of the State Working Group helping to form the state's position on the caribou issue.

He accused the U.S. Interior Department, which was involved peripherally in the talks, of "gladhanding" to oil-industry interests.

"We're disappointed, but we still want it," Childers said. "We got basically what we wanted — except what we wanted most."

What he most wanted was a specified commitment of both countries that no development would be permitted using less than the most up-to-date technology, and a commitment that developers would be strictly liable for any loss of caribou or access to them.

"The Interior Department wasn't prepared to do that," Childers said. "They kept out any prescriptive or performance standards. They removed any reference to Fish and Wildlife Service mitiga-

tion policy."

Lack of such provisions cuts both ways, Childers said. While it would have had an effect on the Arctic refuge's development, it would have protected Alaskan Natives' interests in case of development in Canada's caribou range.

Nonetheless, the agreement could add another voice in the debate over the impact of Arctic refuge development on the herd.

Childers said that oil potential is subject to overstatement, and the panel will be under the administration of the Interior Department's Fish and Wildlife Service. "Our concern will be to keep it independent," he said.

In its preliminary recommendation on the refuge last month, the Interior Department said that any development along the southerly reaches of the Jago River should be delayed, because its studies indicate that area is the most heavily used during the caribou calving season.

But the department said that even with that and other recommended mitigation procedures, the animals would unavoidably lose the use of 242,000 acres in their core calving grounds.

This is precisely the kind of issue the advisory panel would be empowered to comment on.

The United States and Canada each would appoint four members to an International Porcupine Caribou Board, which would "make recommendations and provide advice on those aspects of the conservation of the Porcupine

caribou herd and its habitat that require international cooperation."

Among the areas of involvement assigned to the board are review of "actions that are necessary or advisable to conserve the Porcupine caribou herd and its habitat," and "identification of sensitive habitat deserving special consideration."

Environmentalists say the coastal plain of the Arctic refuge is sensitive because the calving females separate and spread throughout its reaches to give birth privately when the herd arrives in May. The herd then gathers within the plain in June before it begins its migration back into Canadian territory.

They say any disturbance in the area will upset the natural calving process and interfere with the herd's ability to reach the cooler coastal area, where the caribou escape the oppressive pursuit of insects.

Although the board's recommendations would be only advisory, the proposed agreement commits the two countries to support the panel and to provide it with written reasons for rejecting its recommendations.

The tentative agreement has been submitted for comment to both governments, the Canadian territories, the state of Alaska and user and special-interest groups.

Smith said that unless there is a last-minute hitch, he expects the agreement can be signed in a month or so.

Because it is an agreement and not a treaty, no congressional approval is required.

~~MEMORANDUM OF UNDERSTANDING~~  
AGREEMENT  
BETWEEN  
THE GOVERNMENT OF CANADA  
AND

THE GOVERNMENT OF THE UNITED STATES OF AMERICA  
ON CONCERNING THE CONSERVATION OF THE PORCUPINE CARIBOU HERD

The Government of Canada and the Government of the United States of America, hereinafter called the "Participants":

Recognizing that the Porcupine Caribou Herd regularly migrates across the international boundary between Canada and the United States and that caribou in their large free-roaming herds comprise a unique and irreplaceable natural resource of great value which each generation should maintain and make use of so as to preserve them for future generations;

Acknowledging that there are various human uses of caribou and that for generations certain people of the Yukon Territory and the Northwest Territories in Canada have customarily and traditionally harvested Porcupine Caribou to meet their nutritional, cultural and other essential needs and certain rural residents of the State of Alaska in the United States of America have harvested Porcupine Caribou for customary and traditional uses and will continue to do so in the future, and that these people should participate in the conservation of the Porcupine Caribou Herd and its habitat;

Recognizing the importance of conserving the habitat of the Porcupine Caribou Herd, including such areas as calving, post-calving, migration, wintering and insect relief habitat;

Understanding that the protection of the Porcupine Caribou Herd and its habitat requires goodwill among landowners, wildlife managers, users of the caribou and other users of the area;

Recognizing that Porcupine Caribou should be conserved according to ecological principles and that actions for the protection of caribou to the long-term detriment of other indigenous species of wild fauna and flora should be avoided;

Recognizing that the participants wish to establish cooperative bilateral mechanisms to coordinate their activities for the long-term conservation of the Porcupine Caribou Herd and its habitat:

**Grin and ignore it.**

Sharma -

Here's the Agreement  
pls call if I can  
help Bob Childers  
276-7986 (H&Dk)  
279-2511 Rural CAP



*Handwritten initials*

*Handwritten initials*

*Handwritten initials*

*Handwritten initials*

*Handwritten initials*

*Handwritten initials*

*Handwritten initials*

Agreement

Recognizing that cooperation and coordination under this ~~Memorandum of Understanding~~ should not alter ~~existing~~ domestic authorities regarding management of the Porcupine Caribou Herd and its habitat and should be implemented by existing rather than new management structures;

Have reached the following ~~Understanding~~ Agreement.

1. Definitions

For the purpose of this ~~Memorandum of Understanding~~ Agreement only:

a. "Porcupine Caribou Herd" means the migratory barren ground caribou found north of 64 degrees, 30 minutes north latitude and north of the Yukon River which usually share common and traditional calving and post-calving aggregation grounds between the Canning River in the State of Alaska and the Eabba River in the Yukon Territory and which historically migrate within the State of Alaska, the Yukon Territory, and the Northwest Territories. ~~for the winters~~

b. "Conservation" means the management and use of the Porcupine Caribou Herd and its habitat utilizing all methods and procedures which ensure the long-term productivity and usefulness of the Porcupine Caribou Herd. Such methods and procedures include, but are not limited to, activities associated with scientific resources management such as research, law enforcement, census, habitat maintenance, monitoring and public information and education.

c. "Habitat" means the whole or any part of the ~~Ecosystems~~, including summer, winter and migration range, used by the Porcupine Caribou Herd during the course of its long-term movement patterns, as generally outlined on the ~~attached~~ map attached as an Annex.

2. Objectives

The objectives of the participants are:

a. To conserve the Porcupine Caribou Herd and its habitat through international cooperation and coordination of actions so that the risk of irreversible damage or long-term adverse effects as a result of use of caribou or their habitat is minimized;

b. To ensure opportunities for customary and traditional uses of the Porcupine Caribou Herd by:

(1) in Alaska, rural Alaska residents in accordance with 16 U.S.C. 3113 and 3114, ~~and~~ AS 16.05.940(23), (28) and (32), and ~~AS~~ 16.05.258(c); and

(2) in Northwest Territories and Yukon, Native users as defined by sections A8 and A9 of the Porcupine Caribou Management Agreement (Canada October 26, 1985) and those non-Native subsistence users identified pursuant to the process in section E2(e) of said Agreement.

- c. To enable users of Porcupine Caribou to participate in the international coordination of the conservation of the Porcupine Caribou Herd and its habitat.
- d. To encourage cooperation and communication among governments, <sup>users</sup> ~~of the~~ Porcupine Caribou and other ~~users~~ to achieve the above objectives.

3. Conservation

- a. The participants will take appropriate action to conserve ~~and manage~~ the Porcupine Caribou Herd and its habitat.
- b. The participants will ensure that Porcupine Caribou, their habitat and the interests of users of Porcupine Caribou are given effective consideration in evaluating proposed activities within the range of the Herd.
- c. Activities requiring participant approval having a potential impact on the conservation of the Porcupine Caribou Herd ~~and~~ its habitat will be subject to impact assessment and review consistent with domestic laws, regulations and processes.
- d. Where an ~~action~~ <sup>activity</sup> is determined to be likely to cause significant long-term adverse impact on the Porcupine Caribou Herd or its habitat, the other participant will be notified and given an opportunity to consult prior to final decision.
- e. ~~Participant approval of activities with~~ <sup>Activities requiring participant approval having</sup> a potential significant impact on the conservation or use of the Porcupine Caribou Herd or its habitat may require mitigation.
- f. Participants should avoid or minimize activities that would significantly disrupt migration or other important behavior patterns of the Porcupine Caribou <sup>Herd</sup> that would otherwise lessen the ability of users of ~~the~~ Porcupine Caribou to use the Herd.
- g. When evaluating the environmental consequences of a proposed activity, the participants will consider and analyse potential impacts, including cumulative impacts, to the Porcupine Caribou Herd, its habitat and affected users of ~~the~~ Porcupine Caribou.
- h. The participants will prohibit the <sup>commercial</sup> sale of meat from the Porcupine Caribou Herd.

4. International Porcupine Caribou Board

- a. The participants will establish an advisory board, to be known as the International Porcupine Caribou Board, hereinafter called the Board.
- b. The participants will each appoint four members of the Board within a reasonable period after the present ~~Memorandum~~ <sup>Agreement</sup> becomes effective.

c. The Board will adopt:

Handwritten initials: JG, JH, JF

- (1) rules and procedures for the operation of the Board except that a recommendation will require ~~concurrence~~ concurrence by a majority ~~vote~~ of each participant's appointees; and
- (2) ~~the~~ rules governing the chairmanship of the Board.

d. Handwritten initials: JG, JH

The Board, seeking, where appropriate, information available from management agencies, local communities, users of Porcupine Caribou, scientific and other interests, will make recommendations and provide advice on those aspects of the conservation of the Porcupine Caribou Herd and its habitat that require international coordination, including but not limited to the following:

Handwritten initials: JG

- (1) the sharing of information and consideration of actions to further the objectives of ~~the~~ this ~~Memorandum~~ Agreement at the international level;
- (2) the actions that are necessary or advisable to conserve the Porcupine Caribou Herd and its habitat;
- (3) cooperative conservation planning for the Porcupine Caribou Herd throughout its range;
- (4) the review of available data and, when advisable to conserve the Porcupine Caribou Herd, recommendations on overall harvest and appropriate harvest limits for each of Canada and the United States of America taking into account patterns of customary and traditional uses and other factors the Board deems appropriate.
- (5) the identification of sensitive habitat deserving special consideration; and
- (6) recommendations, where necessary, through the participants as required, to other Boards and agencies in Canada and the United States of America on matters affecting the Porcupine Caribou Herd or its habitat.

Handwritten initials: JG, JH

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It is understood that the advice and recommendations of the Board are not binding on the participants; however, by virtue of this Agreement ~~Memorandum~~, it has been accepted that the participants will support and participate in the operation of the Board. In particular they will:

- (1) provide the Board with information regarding the conservation and use of the Porcupine Caribou Herd and its habitat;
- (2) promptly notify the Board of proposed activities that could significantly affect the conservation of the Porcupine Caribou Herd or its habitat and provide an opportunity to the Board to make recommendations;

Large handwritten initials: JG, JH

(3) consider the advice and respond to the recommendations of the Board; and

*JH*

(4) provide written reasons for the rejection in whole or in part of conservation ~~and management~~ recommendations ~~made by the~~ made by the Board.

5. International Responsibility

The participants will consult promptly to consider appropriate action in the event of:

a. significant damage to the Porcupine Caribou Herd or its habitat for which there is responsibility under international law; or

*JH*

b. significant disruption of migration or other important behavior patterns of the Porcupine Caribou Herd that would significantly lessen the ability of users of Porcupine Caribou to use the Herd.

6. Implementation

*JH*

Cooperation and coordination under this ~~Memorandum~~ <sup>Agreement</sup> will be in accordance with the laws and regulations of the participants and is subject to the availability of funding.

7. Interpretation and Application

*JH*

All questions related to the interpretation or application of the ~~Memorandum~~ <sup>Agreement</sup> will be settled by consultation between the participants.

8. Effective date; Amendments.

*JH*

a. This ~~Memorandum~~ <sup>Agreement</sup> will take effect on the date of the signature of the last participant and continue in effect until one year from the date on which either participant has given written notice to the other of its desire to terminate this ~~Memorandum~~ <sup>Agreement</sup>.

*JH*

b. At the request of either participant, consultation will be held with a view to convening a meeting of the representatives of the participants to amend this ~~Memorandum~~ <sup>Agreement</sup>.

*JH*

FOR THE GOVERNMENT  
OF CANADA

FOR THE GOVERNMENT  
OF THE UNITED STATES  
OF AMERICA

\_\_\_\_\_

\_\_\_\_\_

(Date)

(Date)

*JH*  
*CAH*

STATE NEGOTIATING POSITION  
FOR A  
UNITED STATES-CANADA  
PORCUPINE CARIBOU HERD AGREEMENT

March 7, 1986

A. GENERAL CONSIDERATIONS.

1. The Porcupine Caribou Herd (PCH) Agreement should not alter existing domestic authorities and responsibilities of the State of Alaska, the United States, or other entity regarding management of the PCH in Alaska.
2. The PCH Agreement would be binding on its Parties.
3. Implementation of an Agreement would be designed to work smoothly with existing management structures. New management structures would not be created by the Agreement.

B. PURPOSES.

1. To Conserve the size, health, and productivity of the PCH and its habitat.
2. To ensure the continued availability of Porcupine caribou for use by Alaska residents and by other user groups consistent with the conservation of Porcupine caribou.
3. To help ensure the continuing health and welfare of local communities significantly dependent upon the PCH for subsistence.
4. To set forth the administrative and procedural mechanisms for ensuring:
  - a. the international coordination of management and conservation of the PCH and its habitat; and
  - b. the cooperation and communication among governments and users necessary to achieve the above purposes.

C. SCOPE.

1. The Agreement would apply to the PCH and its habitat north of 64 degrees 30 minutes North latitude, and north of the Yukon River:
2. The Agreement would be limited to those issues germane to the purposes stated above.

D. GENERAL CONSERVATION STANDARDS.

1. The Agreement would provide for the sound ecological management of the PCH and its environment.
2. Parties should agree to avoid, where possible, activities which may significantly impede, delay or disrupt the migration or other essential behavior patterns of the PCH, or which lessen the ability of Alaska residents to utilize Porcupine caribou.
3. The Agreement should include procedures to ensure that Porcupine caribou and their habitat requirements are given effective consideration in evaluating proposed activities within the range of the PCH.

E. HABITAT PROTECTION.

1. Government approval of activities with potential significant impacts on the conservation or use of the PCH or its habitat would require:
  - a. the use of the best available technology, mitigating measures and methods of operation, so as to avoid adverse impacts where possible and to minimize unavoidable impacts;
  - b. the rehabilitation of disturbed areas; and
  - c. scheduling of activities so as not to interrupt the seasonal patterns of the PCH.
2. The Agreement should address the issues of liability and compensation for significant damages to the PCH, its habitat, or the ability of Alaskans to continue to harvest Porcupine caribou.

F. PORCUPINE CARIBOU HERD ADVISORY BOARD OR COUNCIL.

1. The Agreement would establish an advisory U.S./Canada Porcupine Caribou Board or Council to facilitate its implementation.
2. The Board or Council would fairly represent state, local and federal interests in the PCH.
3. The Board or Council would:
  - a. provide the vehicle for formal sharing of information and consideration of actions that may be taken to further the purposes of the Agreement at the international level;

- b. recommend those actions which are necessary or advisable to conserve the PCH and its habitat;
- c. encourage and make recommendations for cooperative research and management planning for the PCH throughout its range;
- d. review available data and, when advisable to conserve the PCH, recommend an overall herd harvest limit and appropriate harvest limits for the United States and Canada;
- e. identify sensitive habitat components deserving special consideration; and
- f. establish advisory committee(s), as needed, to provide expertise offered by management agencies, user communities, scientific and other interests.

G. GOVERNMENT RESPONSIBILITIES.

- 1. Governments would agree to participate in and support the bilateral PCH Board or Council; and
  - a. provide the Board or Council with data and information regarding the conservation and use of the PCH and its habitat;
  - b. promptly notify the Board or Council of proposed activities which could significantly affect the conservation or use of the PCH or its habitat, and provide an opportunity to make recommendations;
  - c. to give effective consideration to the advice and recommendations of the Board or Council:
    - (1) the Board's or Council's advice and recommendations will not be binding;
    - (2) governments would consider the findings and advice, and respond to the recommendations of the Board or council; and
    - (3) rejection of a recommended harvest quota, caribou conservation measure, or habitat recommendation would indicate the reason(s) why the recommendation was not accepted.
- 2. When evaluating the environmental consequences of a proposed activity, government agencies should consider and analyze potential impacts, including cumulative impacts, to the PCH, its habitat, and affected users throughout the herd's range.

H. OTHER PROVISIONS.

1. The Agreement should recognize the special significance of the PCH for the economic and cultural well-being of local communities within the range of the PCH.
2. The Agreement should provide that subsistence shall be given preference among the beneficial uses of caribou from the PCH.
3. The Agreement should prohibit the commercial sale of meat from the PCH. "Commercial sale" will be defined to exclude traditional barter in accordance with state law.
4. The Agreement should call for subsequent bilateral discussions to consider the future designation of appropriate lands as the Arctic International Porcupine Caribou Range.

# State study: ANWR may hold huge oil reserves

By SUE CROSS  
The Associated Press

JUNEAU — State geophysicists said Thursday their studies back up the federal government's prediction that the Arctic National Wildlife Refuge could contain huge reserves of oil and gas.

The report by the Alaska Department of Natural Resources says the refuge's coastal plain could contain from 80 million to 45.8 billion barrels of oil.

The state said there's a 5 percent chance the 1.5 million-acre plain holds 26.5 billion barrels of oil, and a 95 percent chance it holds at least 80 million barrels.

"Assuming a recovery factor of 35 percent for oil, up to 16 billion barrels of recoverable oil may be present. This compares favorably with the original recoverable oil reserves of about 10 billion barrels in the Prudhoe Bay field," wrote co-authors and geophysicists James Hansen and R.W. Kornbrath.

The state report is considerably more conservative than federal estimates of the refuge's oil potential, Hansen noted.

A federal report by the Department of the Interior, now under public review, gives a 19 percent chance for finding oil. If there is oil, the federal report said, there's a 95 percent chance the coastal

## Comment period extended

The Associated Press

The Interior Department has given the public two extra weeks to comment on the agency's controversial draft report recommending on oil development in the Arctic National Wildlife Refuge.

The Jan. 23 deadline for comments has been extended to Feb. 6, said Robert Gilmore, regional director for the U.S. Fish and Wildlife Service.

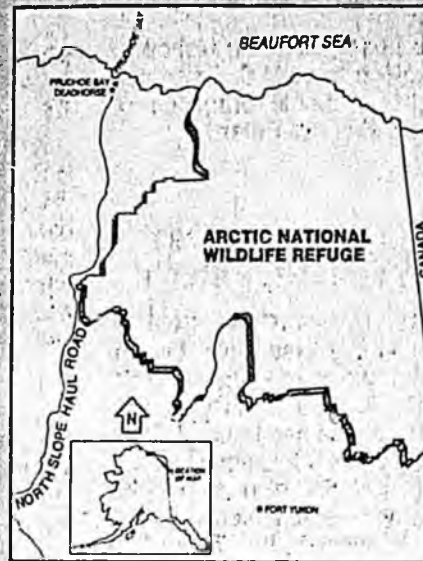
The report "has stirred much interest in Alaska and the Lower 48," Gilmore said Thursday.

Gov. Steve Cowper requested the extension, he said.

Cowper also had asked that the department hold public hearings in Fairbanks and Arctic Village, besides the three held last week.

But Gilmore said no additional public hearings will be scheduled.

Comments should be sent to the U.S. Fish and Wildlife Service, Division of Refuge Management, 2343 Main Interior Building, 18th and C Streets NW, Washington, D.C., 20240.



Anchorage Daily News/Peter Dunlap-Shott

plain contains at least 600 million barrels of recoverable oil, and a 5 percent chance it contains 9.2 bil-

lion barrels.

The state report was finished last March, but its release was

delayed until the Interior Department issued its findings, said Bob Butts, natural resource manager in the state Division of Oil and Gas.

Alaska Oil and Gas Director James Eason said the report is important because it confirms the potential for large reserves of oil.

"Since the probability of finding a commercial discovery in any frontier area is usually small, generally no greater than one in 20 wells, oil companies normally proceed only when there is a chance of finding a lot of oil," Eason said.

The director of an environmental organization that opposes exploration of the coastal plain said the report is significant for other reasons.

"I think the significance is two-fold," said Bob Adler, director of Trustees for Alaska. "One is that the federal government predictions are subject to a considerable amount of uncertainty."

"The second significant thing to me is that the federal government has had this state report since last March, and yet there is absolutely nothing in the draft (federal) report that (says) state geologists have much more conservative projections," Adler said. "I think it was deceptive, to say the least, for the federal government to exclude these lower estimates when it submitted its draft review."

# KAKTOVIK RESIDENTS' TESTIMONY, WILDERNESS BILL TIED

Times Business Staff  
and Fairbanks Daily News-Miner

Times 1/7/87

While residents of the North Slope village of Kaktovik argued on Tuesday before an Interior Department hearing the pros and cons of oil and gas exploration in the Arctic National Wildlife Refuge, Rep. Morris Udall, D-Ariz., a leading opponent of North Slope development, introduced legislation to bar exploration on the Arctic coastal plain.

The Arizona Democrat and 25 co-sponsors filed House Resolution 39, which would slap a wilderness designation on the

coastal plain to prevent development on the 18-million-acre arctic refuge.

According to the Interior Department, ANWR could be the largest untapped oil reserve in North America, possibly containing as much as 29.4 billion barrels of oil.

Ironically, HR39 was the same number attached to the 1980 Alaska National Interest Lands Claims Act, a bill that saw pro-development forces pitted in a lengthy, bitter battle against environmentalists during the late 1970s.

Environmental groups have pinned

their hopes on Udall, chairman of the House Interior Committee, to stop the development of ANWR. Udall has traditionally backed conservationist efforts in Alaska.

At the same time, the Fish & Wildlife Service, an agency of the Interior Department, has already announced its support of limited exploration on the 18-million-acre plain.

"It's ironic," said Dan Kish, a House Interior Committee aide to Rep. Don Young, of the bill's number. "But the irony has not been lost on us."

"It was deliberately planned irony," Susan Alexander, Alaska director of the Wilderness Society, said today.

"This is certainly the bill we hope to see move," she added. "We hope the coastal plain is designated wilderness. And ultimately, it will be."

Alaska's congressional delegation — Young and Sens. Ted Stevens and Frank Murkowski — favor oil exploration on the coastal plain. The trio and the oil industry will be at odds with a strong coalition of environmentalists.

See Refuge, page A-8

## Continued from page A-1

But in Kaktovik, residents of areas most directly affected by proposed development expressed a wide range of views at the Interior Department hearings on Tuesday.

"The City Council of Kaktovik has, after much deliberation, decided to support . . . limited leasing of the ANWR lands," said Kaktovik Mayor Loren Ahlers.

"This support comes with the understanding that certain stipulations be met towards the protection of wildlife, its habitat, subsistence lifestyles, and the social economic future of Kaktovik," he added.

The public hearing was the second of three such meetings. The first was held in Anchorage Monday and the final one will be in Washington, D.C. on Friday.

The testimony will be included in the department's final report and recommendation to Congress.

More than 100 people packed the new community center in Kaktovik, a village of 200 resi-

dents on Alaska's northern coast.

Because some residents do not speak or understand English, almost all testimony taken from the 25 people at the hearing was translated from Inupiat.

Ahlers also said he was concerned that possible impacts on the bowhead whale and offshore drilling were not adequately addressed in the Fish & Wildlife report. He also recommended that potential social problems be headed off before they develop.

"Again, prior to, instead of after, is essential," Ahlers said.

Acting North Slope Borough Mayor Edward Itta said exploration should be reviewed on a case-by-case basis but added that development and preservation of culture are not incompatible.

"This opportunity for Native corporations must not be denied," Itta said.

Four residents of Arctic Village, which is just outside ANWR's southern boundary, told the hearing that any impact on the 180,000 animal Porcupine caribou herd would also affect them.

"The reason I'm here is the

studies seem to have forgotten us somehow," said Lincoln Tritt. "Arctic Village was not taken into consideration."

Gideon James of Arctic Village expressed one side of the controversy over the effects oil development has on Porcupine caribou herd. "My people use that herd," he said. "Nobody can tell me nothing will go wrong if development takes place."

But Robert Newell, an Arco-Alaska Inc. employee, said development at Prudhoe Bay has proved that the wildlife, specifically caribou, and development can co-exist. "We do not have to guess," he said. "We should look no further than what has happened 100 miles to the west."

Times Jan 7, 1987

# ANWR report said to ignore caribou

By John Fridrich  
Fairbanks Daily News-Miner

**KAKTOVIK** — Some of the people who stand to be hurt the most by oil development of the Arctic National Wildlife Refuge's coastal plain weren't included in a draft report recommending exploration, and they told federal officials Tuesday of their displeasure.

Some residents of Kaktovik, the only village in ANWR and the site of a public hearing Tuesday, were just as concerned that the process leading to a congressional decision was unfolding too rapidly. And a Yukon Territory official, citing provisions in the Alaska lands act that created the arctic refuge, said the United States was required to consult the Canadian government regarding possible development, but so far has not.

At least one government official, meanwhile, praised the draft report, saying it was well-written and precise. Much of the displeasure regarding the report surrounded its assessment of the 180,000-animal Porcupine Caribou Herd, which mi-

grate back and forth across the Alaska-Canadian border. Native peoples on both sides of the border rely on caribou as a staple food source.

Critics said the 171-page document, five years in the making, doesn't address the consequences of the herd's presence in both countries, nor the caribou's passage near Arctic Village, which lies just outside the refuge's southern border.

"The caribou doesn't know there's a border," said Howard Linklater, a resident of Old Crow in the Yukon Territory, "and the best calving grounds are in your country."

Aaron Tritt of Arctic Village said the report "doesn't say anything about migration through Old Crow or Venetie."

Edward Itta, acting mayor of the North Slope Borough, said despite criticism of the report by environmentalists, he found it was a well-written and precise document. Jonathon Solomon, Fort Yukon's mayor, said hearings in Anchorage, Kaktovik and Washington, D.C. were inadequate.

Federal officials hadn't planned on ac-

cepting any public comment, but a successful lawsuit by environmental groups forced the Department of the Interior to allow public input. "Their (villagers) life depends on it (caribou) and they are not being heard at these hearings because they can't afford to attend," Solomon said.

Interior official Susan Reece said several weeks ago when the issue of holding hearings in Fairbanks and Arctic Village came up, that time didn't allow the department a chance to hold additional hearings, since the final report is due to Congress in March. The process is still in the very early stages, she said, and people have until Jan. 23 to submit written comment to the U.S. Fish and Wildlife Service, which coordinated the report.

Should Congress decide to open the area to oil and gas leasing, a series of public hearings and environmental impact statements would be required. Oil industry officials say it could be 10 to 15 years before fields could be brought to production if Congress approves exploration in the coastal plain.

# Middle ground scarce on ANWR report

By Harry McFarland  
Times Business Writer

The Arctic National Wildlife Refuge can be opened to responsible oil and gas exploration, Dick Lefebvre, a member of both pro-development and environmentalists groups, told a U.S. Department of Interior hearing in Anchorage on Monday.

Lefebvre, an anomaly at the hearing because of his membership in both the Wilderness Society and the Resource Development Council for Alaska, urged the department to recommend to Congress that exploration be allowed in the 1.2-million-acre coastal plain.

"I support the protection of the environment," Lefebvre said, "and I also support the wise use of our resources. I believe that responsible development of

## Divisions clear in hearings on development

ANWR is possible."

Most of the 30 organizations and 160 individuals that testified at the hearing at the William A. Egan Civic & Convention Center were either pro-exploration or environmentalist. As the testimony droned on during the day-long hearing, middle ground seemed impossible.

The hearings continued today in the North Slope village of Kakovik and move to Washington, D.C., on Friday. The public comments will be incorporated into the department's final report to Congress, which is expected to vote within the next few years on whether to open the coastal plain to exploration or lock it up as a wilderness.

The U.S. Fish & Wildlife Service, an agency of Interior, recommended in a draft report that a full, but staggered, leasing program be permitted on the coastal plain, which is part of the 18-million-acre refuge. Environmental groups challenge the recommendation, arguing that the area should be left in a pristine state.

Cindy Lowry, Alaska representative of Greenpeace USA, said that both the onshore and offshore ecosystems of the coastal plain would be threatened by development. Oil facilities deplete the water resources, pollute tundra ponds, threaten air quality and negatively affect

the Inupiat Eskimo lifestyle, she said.

Oil industry executives have argued strenuously that operating at Prudhoe Bay has given them the experience and technology to safely explore and develop the coastal plain.

Jamie Linxwiler, representing the Alaska Coalition for American Energy Security, a group of five pro-development groups and the Arctic Slope Regional Corp., focused his testimony on the United States' need to lessen its dependence on imported oil.

"The United States presently imports 43 percent of its daily domestic oil supply," Linxwiler said. "By the year 2000, roughly the time that production from

ANWR would come into the marketplace, the United States will import upwards of 75 percent of its daily supply of crude oil. History is an excellent teacher, and thus we know what the implications are of such a high degree of dependency on foreign oil."

He cited the last 15 years of manipulation by the Organization of Petroleum Exporting Countries, and said the development of the coastal plain would lessen the impact the oil cartel has had on the United States.

John Merrick, representing the Konlag Native Corp., one of several native corporations supporting drilling in the coastal plain, reiterated Linxwiler's point by saying oil exploration "is necessary and essential to the good of the national interest."

See ANWR, page A-1

## ANWR: Battle lines drawn

Continued from page A-1

Susan Alexander, Alaska regional director for the Wilderness Society, however, joined other environmentalists who said Interior overemphasized the probability of finding oil and overestimated the amount of reserves in the coastal plain area.

"Only upon delving deep into the 1002 report itself does the reader find that there is an 81 percent chance that no economically recoverable oil at all lies within the refuge," she said.

Alexander also criticized the Interior report for its understating of the impact that oil exploration would have on the 180,000 animals that make up the Porcupine Caribou Herd.

"For example, careful reading of the report reveals such conclusions as 'mitigation' of the loss of caribou habitat in (the core calving area) is not possible," said Alexander, citing from the Interior report. "Furthermore, the report repeatedly cites the lack of information and experience required for an accurate assessment of the impacts."

A representative of the Yukon

Territory joined environmentalists in criticizing the draft report. Steve Fuller, a policy adviser of the Government of the Yukon renewable resources department, also chastised federal officials Monday for claiming they had contacted his government prior to releasing the U.S. Fish & Wildlife draft report.

Fuller said the report refers to communication with Yukon officials. But, he claimed, "there was no direct contact with any group, village or government in Canada."

The lack of communication has now been partially rectified, Fuller said. The two governments have scheduled a meeting for Jan. 23, the last day Interior will accept written public comments on the report.

Yukon officials also are concerned with the impact that oil and gas development may have on wildlife that inhabit the refuge, Fuller said.

Canada several years ago set aside a portion of the area bordering northeast Alaska as a wilderness area. Oil development is specifically barred from the 3 million acres of the Northern Yukon National Park.

"We are concerned there is no adequate treatment of transboundary consequences (of development) in the report," Fuller said. Future population estimates on the Porcupine caribou and other wildlife, such as snow geese and musk oxen, are "solely based" on changes in Alaska.

Fuller said 80 percent of the subsistence use of the Porcupine herd is by the residents of Old Crow, a Yukon village located about 60 miles southwest of the southwestern corner of the arctic refuge. Residents of the Alaskan village of Arctic Village also depend on the herd for subsistence.

Others testifying Monday included Kenai Mayor John Williams, whose city council in December unanimously passed a resolution supporting the opening of ANWR, and Bob Grogan, director of the Office of Governmental Affairs in Gov. Steve Cowper's office.

Grogan said the administration was disappointed that hearings will not be held in Arctic Village and Fairbanks and that Interior has refused to extend the comment period from Jan. 23 to Feb. 15, as requested by the governor.

# Groups urge arctic refuge development

Times  
Dec. 30, 1986

By Sue Cross  
Associated Press

JUNEAU — Oil company officials and pro-development groups are telling Gov. Steve Cowper to press for development of the Arctic National Wildlife Refuge while federal officials are amiable toward the idea.

Cowper met for a half-hour Monday with advocates of a refuge development group "mostly as a courtesy" so they could air their views, said the governor's spokesman, David Ramseur. Cowper supports refuge development as long as it is environmentally safe and Alaskans are hired to do the work.

The governor also on Monday wrote to Interior Secretary Donald Hodel, asking that the federal government hold four public hearings on the issue in Alaska and extend a deadline for public comment from Jan. 23 to Feb. 15.

Cowper's meeting included ARCO Alaska president Harold Heinze, former Gov. Wally Hickel, who's also a former secretary of the Interior, and Max Hodel, representing the Anchorage-based development group Commonwealth North. The president of Standard Alaska Production Co., George Nelson, was weathered out of Juneau and could not attend as planned.

Heinze said oil companies routinely accommodate most of the 30-odd environmental stipulations that the Interior Department attached to a pro-development report, Ramseur said.

Heinze and Hickel told Cowper that in recent visits to Washington, they found sentiment there running for development of the refuge's 1.5 million-acre coastal plain.

"Hickel said 'The wind is with us' in Washington, D.C. He says it looks pretty good," Ramseur said.

But Cowper said he'll need the oil companies' help proving refuge development need not harm the 180,000 animals in the Porcupine caribou herd that lives there. He asked Heinze to provide data on the management of caribou at Prudhoe Bay and around the trans-Alaska pipeline, which was built so caribou could pass over or under the pipe.

The director of an environmental group opposing develop-

ment said the Prudhoe Bay comparison is invalid.

"It's like comparing apples and oranges," said Randy Rogers, director of the Northern Alaska Environmental Center, in Fairbanks.

He said a much smaller number of caribou are affected by the pipeline and Prudhoe Bay, and the refuge development would cut them off not only from migration routes but also from breeding and feeding grounds.

A Cowper administration task force is working on the state's response to the Interior report.

Responses were due Jan. 23, but Cowper is seeking the extension in response to complaints by environmentalists and rural residents that they need more time to comment.

Hearings now are scheduled in Anchorage Jan. 5 and in Kaktovik, an Eskimo village on the coastal plain, Jan. 6. Cowper wants hearings added in Fairbanks and Arctic Village.

"In the event that exploration and development does occur in ANWR, both these communities could potentially be impacted," Cowper wrote.

The Interior report said the plain should be opened to development, but warned it could harm the Arctic ecology and wildlife in the 19 million-acre refuge, located along the Arctic Ocean in northeast Alaska.

The report said the refuge's coastal plain could contain up to 9.2 billion barrels of recoverable oil. Environmentalists say there's only a 5 percent chance the plain contains that much oil. The report pegged the average recoverable amount at 3.2 billion barrels.

The governor has not scheduled a meeting with environmentalists who oppose development, but Ramseur said someone in the administration is sure to meet with them before the state responds to the federal report.

The governor's ANWR task force will recommend policy decisions and come up with a budget for state work on the issue, Ramseur said. The group includes representatives of the governor's office, Lt. Gov. Steve McAlpine, and the departments of economic conservation, natural resources, fish and game, and law.

# Canadian

By PATTI EPLER

Daily News business reporter

Oil development in the Arctic National Wildlife Refuge met international opposition Monday from Canadian officials who fear development will devastate an important caribou herd shared by the United States and Canada.

S.P. Fuller, a policy advi-

ser with the the Yukon's sources depai a draft repor gas potentia refuge, sayir "does not at the internati of the ANW. sources."

Fuller was people who o

Continued from Page A-1

The report, more than five years in the making, recommends opening up the coastal plain for oil leasing. It also includes a draft environmental impact statement detailing anticipated effects of oil development and ways to lessen adverse effects.

The Yukon government, for one, believes the environmental study is seriously flawed in several areas, so much so that the U.S. government should "decide in favour of increased and enhanced protection of (the coastal plain)," Fuller testified.

He took exception to a statement in the draft report that said, in part, oil development would "proceed with the goal of no net loss of habitat quality and that unnecessary adverse effects would not be allowed to occur."

"We do not believe... that such a goal is even remotely achievable," Fuller said, "and the statement stands as a poor representation of the reality of the situation."

Fuller also was critical of the report because it considers only effects on the wildlife in Alaska, despite the fact that the Porcupine caribou herd annually crisscrosses political boundaries as it migrates from Canada to Alaska and back. Although the report says the herd could decrease by as much as 40 percent due to oil development, Fuller said, it gives only passing attention to what that would mean in Canada, where the most subsistence hunting of the herd occurs.

Susan  
Wilde  
caribou

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Outs  
Egan C  
labor  
signs  
believe  
record

Haro  
ARCO A

# Officials say leave refuge alone

Monday at the first public hearing on whether Congress should allow oil exploration and production in the refuge's 5-million-acre coastal plain. The plain is now off-limits to the oil industry, but Congress is to decide, perhaps later this year, whether to lift its protection of the coastal area.

The oil industry contends the refuge's coastal plain

holds America's last, best hope for large domestic reserves of oil and gas. Oil company officials say development is needed to save the nation from a growing dependence on foreign oil. They point to a good environmental record at Prudhoe Bay as evidence that oil development can be done safely in the Arctic.

Environmentalists are arguing just as strongly that the coastal plain should be protected for its wilderness values and its importance as a calving ground and summer home for one of the world's largest caribou herds. They believe widespread development in the coastal plain will significantly damage the arctic ecosystem, including

bringing serious harm to the caribou herd.

More than 160 people signed up to testify at the Anchorage hearing. The Interior Department is conducting the hearings, which focus on a controversial draft report issued by the U.S. Fish and Wildlife Service in November.

See Back Page, ANWR

morning session" with the warning that a new national report indicates the decline in domestic oil production is more serious than at first thought. The report, by the National Petroleum Council, points out the "national need for ANWR oil," he said.

"We're five years behind where we ought to be," Heinze said.

The oil company president sported a caribou lapel pin on his gray business suit, identical to the one worn by Susan Alexander of The Wilderness Society on her gray business suit.

The entire refuge, including the coastal plain, is big enough for both the oil industry and the caribou, said Heinze. "It's hard for us to see that alternative use in a very small fraction of the coastal plain habitat will have any effect at all," he said.

But the National Audubon Society, which had been hesitant to join other conservation groups in opposing development, said it is now convinced "it is not in the long-term conservation, economic or national security interests of the United States to open the coastal plain to leasing at this time."

Dave Cline, head of the society in Alaska, said his group had wanted to thoroughly review the Interior Department report before taking a stand on oil development. But, he said, "serious shortcomings" in the report and in the way the government is handling the issue have led the group to oppose ANWR development.

Tundra Times, Dec. 25, 1986

## ANWR hearings to start Jan. 5

The U.S. Fish and Wildlife Service will hold hearings next month on a draft report on wildlife and oil values of the coastal plain of the Arctic National Wildlife Refuge in northern Alaska.

January hearings have been set for Anchorage and Kaktovik, as well as Washington, D.C., officials said. They noted that persons unable to attend the hearings may send their written comments on the report by Jan. 23. to the U.S. Fish and Wildlife Service — Attention: Division of Refuge Management, 2343 Main Interior Building, 18th and C Streets, N.W., Washington, D.C. 20240.

The meetings include:

- Anchorage, Jan. 5, Egan Civic and Convention Center, all-day hearing beginning at 9 a.m.

- Kaktovik Jan. 6, City Council Building, 7 p.m.

- Washington, D.C., Jan. 9, Interior Building Auditorium, Department of Interior, 18th and C Streets N.W., 1:30 p.m.

Public comments on the report are being solicited to assist the Interior secretary in making his final recommendation to Congress on how the coastal plain of the refuge should be managed.

His comments will be included as a part of the final report and legislative Environmental Impact Statement to Congress.

## Court finds refuge report bypassed public comment

A federal appeals court, upholding a district judge's ruling, says the U.S. Fish & Wildlife Service should have sought public comment for its report to Congress favoring oil and gas exploration in the coastal plain of the Arctic National Wildlife Refuge.

The 9th U.S. Circuit Court of Appeals ruling will not affect debate over the arctic refuge, because the agency of the Department of Interior has scheduled three hearings on the report. Those meetings will be in Anchorage on Monday, Kaktovik on Tuesday and Washington, D.C., on Jan. 9. More hearings may be scheduled as Gov. Steve Cowper on Monday asked that

hearings be scheduled in Arctic Village and Fairbanks.

The appeals court ruling, however, could affect future federal reports for areas and activity governed by the 1980 Alaska National Interests Land Claims Act.

Several environmental groups in October 1985 sued the federal government, seeking a court order requiring an environmental impact statement and public comment on any draft report before it was submitted to Congress.

In February, a federal district judge ruled in favor of the environmental groups. The appeals court last week re-

jected the government's argument that public comment was not required on a legislative proposal before it was submitted to Congress.

The court said Fish & Wildlife failed to comply with the National Environmental Policy Act when it decided to submit the report without public comment. The court said Congress intended that the public have a key role in environmental debates concerning public lands.

The Interior agency issued a report last week saying that oil and gas exploration should take place on the 1.5-million-acre coastal plain of the arctic refuge.

Times, Dec. 30, 1986



United Press International  
Rep. Morris Udall

# Udall tempers view Congressman foresees oil exploration

By DAVID WHITNEY  
Daily News reporter

WASHINGTON — House Interior Committee Chairman Morris Udall, who in the last Congress introduced a bill to designate as wilderness the Arctic National Wildlife Refuge's coastal plain, says he thinks oil development there should be allowed in the future.

But the Arizona Democrat said in an interview this week that exploration and de-

velopment should be delayed, perhaps into the next century, so that drilling technology can be improved to better protect the area's wildlife.

Udall said that while he will reintroduce his wilderness bill in the 100th Congress, there is the possibility of modifying it to "accommodate" future exploration and development.

"At worst, there's a big chunk of oil there and we're going to have to get it out

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Fargo  
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hist..... 257-4346  
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Barrow... 257-4326  
cCoy..... 257-4318  
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## UDALL: Wilderness bill to be modified

Continued from Page A-1

environmentalists, would prohibit drilling in the area, which the oil companies say is one of the best oil-producing bets in the country.

Several pro-development lobbyists said this week they expected Udall and his Democratic-controlled committee to be the main obstacle to the opening of the coastal plain for oil and gas leasing.

Randall Snodgrass, Alaska program director for The Wilderness Society in Washington, said he saw no change in Udall's position.

"I don't think this is any change from what President Carter or Rep. Udall said when the Alaska lands act was passed," Snodgrass said. "They've always said this is the last place we should go to develop oil and gas."

Udall said he sees his wilderness bill, which he intends to reintroduce after consultation with cosponsors and conservationists, as a "clean-cut forum for debate" rather than his ultimate goal.

"I don't think we're so short of oil and so desperate to find out what's there that we have to do it now," Udall said.

"It's one of the most fragile, important environmental areas in the whole state," Udall said. "I've tried to be honest with myself. I'm not citing excuses to put this off. I just don't think this is the time."

"And when is the time?" he asked. "Well, maybe in this century. But before we get too much further down the road we're going to have to do some drilling and take a look at it."

Udall said there is precedent for his committee to include special exemptions for development in wilderness areas.

"We've worked out some special things, some special deals here and there," he said. He mentioned "curving the boundaries a little bit or making some special provisions."

"That's what I keep hearing that hopefully we would do — is look at the possibilities for accommodation," Udall said. "There are all sorts of concessions that could be made."

Earlier, Udall said that if Congress were to lock up the coastal plain as wilderness, it could "years from now" re-

open it for exploration and development.

"I don't know why we have to have a decision now," he said. "Maybe (development proponents) think this is the best administration they will have to make this decision."

Udall said an Interior Department preliminary recommendation last week that Congress immediately open the coastal plain to leasing was no surprise, given the pro-development attitude of the Reagan administration.

Udall said he will not consider exempting Native-held lands within the coastal plain from wilderness designation in his bill, as some development interests have hoped he might.

The Interior Department is engaged in land exchange negotiations with Native corporations in the coastal plain. That could increase their holdings of subsurface rights beyond their current 92,000 acres, bringing with it additional development pressure.

"I don't think we ought to let the Natives resolve this," Udall said. "These tricky trades and switches always make me a little nervous."

# Environmental groups criticize refuge report

## Interior accused of misleading public on potential for oil, gas

By GUY DARST  
The Associated Press

WASHINGTON — Six environmental groups accused the Interior Department on Monday of misleading the public about the chances of finding oil and gas under the Arctic National Wildlife Refuge on Alaska's northern coastal plain.

Interior Secretary Donald P. Hodel said the accusation was "totally preposterous."

The groups wrote Hodel protesting that a Nov. 24 press release and summary of a draft report on the chances of finding oil did not state there was only a 19 percent chance that an economically recoverable reserve of oil lies under the refuge.

Instead, the press release and summary said there was a 95 percent chance that at least 600 million barrels of oil could be recovered from the refuge, a 5 percent chance that 9.6 billion barrels could be recovered, and a mean estimate of 3.2 billion barrels.

Only in the draft report

itself was it explained that these probabilities apply after the 19 percent cutoff. In other words, there's a 19 percent chance that there's an economically recoverable pool of oil at all and if there is, there's a 95 percent chance that the amount is at least 600 million barrels.

Reporters had to ask for the report, which was not distributed. "I think it was deceitful," said Randall Snodgrass, director of Alaska programs for the Wilderness Society, the organization distributing the letter.

The description of the refuge in the press release as the "most outstanding oil and gas area remaining in the United States" was "misleading to the press and to the American public," the letter said.

The other organizations signing the letter were the Sierra Club, the Natural Resources Defense Council, Defenders of Wildlife and two Alaska organizations, the Trustees for Alaska, an envi-

Continued from Page A-1

ronmental litigation group, and the Northern Alaska Environmental Center.

The refuge is adjacent to the Prudhoe Bay oil field to the west, which supplies about one barrel in five of domestic production.

The Interior Department placed the chance of finding oil in the Mukluk area of the Beaufort Sea off Alaska at 70 percent before oil companies drilled an exploratory well which proved dry, Snodgrass said.

In federal waters off central and northern California, the department puts the chance at 60 percent or better.

An oil company, faced with

a 19 percent chance of finding a giant field, might find the gamble worth taking. The draft report from William Horn, assistant secretary for fish and wildlife and parks, recommended opening the refuge to drilling.

Hodel said in a statement through spokesman David Prosper: "This is totally preposterous. There are people who have sent a clear signal that their intention is to blindfold America as to what resources may exist. . . . It would be better if we could have some genuine discussion and input about what the concerns are rather than red herrings about whether the press release contained every single piece of information."

Dec. News

# Unions won't back drilling

The Associated Press

**FAIRBANKS** — The Alaska AFL-CIO and Teamsters Local 959 say they will support oil exploration in the Arctic National Wildlife Refuge only if the oil industry agrees to hire Alaskans and pay the prevailing wage.

Last week, the U.S. Interior Department released a draft report recommending that the wildlife refuge's 1.5-million acre coastal plain be opened to exploratory drilling. Congress eventually will decide the issue.

In a news conference Monday, the Teamsters and the AFL-CIO said the use of non-resident workers by the oil industry has undercut wages and benefits for all Alaskan workers.

"With this deplorable record, we must resolve that the oil industry must first correct, to the satisfaction of the Alaskan people, the lack of Alaskan hire, and that a fair prevailing wage be established by the State of Alaska for all classifications of workers employed in the region before the industry is allowed to extract Alaskan oil in the ANWR," the unions said in a written statement.

Mano Frey, head of the Alaska AFL-CIO, said he expected some people to be "aghast" over the unions' position. But he said the issue is "a matter of survival to our people."

Frey said the unions will seek support from the Alaska congressional delegation.

# Panel may help settle ANWR fight

News

By PATTI EPLER

Daily News business reporter

The U.S. Arctic Research Commission could become a key player in the debate over oil development on the Arctic National Wildlife Refuge.

Commission Chairman James Zumberge said Thursday the panel could serve as a clearinghouse of impartial, scientific research that would help Congress decide the controversial issue of whether to allow oil exploration and production on the coastal plain of the refuge.

Last month, the U.S. Fish and Wildlife Service released a draft report recommending the 1.5 million-acre coastal plain be opened to the oil industry. The report said preliminary studies indicate some 600 million to more than 9 billion barrels of recoverable crude oil could be buried beneath the coastal plain.

Conservation groups strongly oppose development of the refuge because of its wildlife and environmental values.

Both sides — environmentalists and the oil industry — have cited scientific and biological studies that each says support its position. For example, the oil industry says studies of caribou herds show the animals and the industry can easily share the same ground, as they do at Prudhoe Bay. But conservation groups say similar reports warn oil development will harm the caribou.

Zumberge said the commission, whose members are appointed by President Reagan, could easily serve as the entity that recommends research to help answer controversial questions about coastal plain development.

"We want to find out if research needs loom," he said, "if gaps of a scientific nature exist."

For example, Zumberge said, "we'd like to know if the (coastal) plain is a huge maternity hospital for the Porcupine caribou herd."

Zumberge, who has spent years studying the Arctic, said some scientists believe caribou normally calve in areas other than the coastal plain, so oil development might not interfere with the herd's growth.

# Official: Expand exploration

12-5-86  
Times

WASHINGTON (AP) — Energy Secretary John S. Herrington told leaders of the natural gas industry Thursday they must find more domestic reserves in the face of the nation's increasing dependence on foreign oil and gas.

"This isn't just a problem for domestic energy producers or for Texas, Louisiana and Oklahoma; and it's not just a short-term problem. This is a national problem with potential long-term consequences," Herrington told the annual meeting of the Natural Gas Suppliers Association.

He compared the situation facing the country to that of the late 1970s, when manipulations by a single set of energy suppliers nearly tripled the

price of oil, and promised the administration would press Congress for deregulation to help free the market.

"Our prosperity and security depend on a constant flow of reasonably priced energy from reliable suppliers, and there is a risk that our security could be challenged by growing complacency about our energy future," Herrington said.

Describing the state of the oil and gas industry as devastated, Herrington predicted oil imports, primarily from the Middle East, would rise sharply by the mid-1990s unless more domestic fuel is unearthed.

"There are more than 800 fewer rigs at work than a year ago, and we hit a 46-year low earlier this year. Produc-

tion is flat and falling. Exploration budgets have been cut," the secretary said.

"By the end of the year, it is estimated that this industry will have lost a quarter of a million jobs. Capital expenditure programs for exploration and development have dropped 50 percent since 1981."

He urged further drilling and cited a draft study recently released by the administration that recommends the entire 1.5 million-acre coastal plain of the Arctic National Wildlife Refuge in Alaska be opened to oil and gas leasing.

"This draft study is now in a 60-day public comment period, and I believe it is essential that Congress take a good,

See Energy, page C-5

## Continued from page C-1

hard look at opening access to these huge potential oil and gas reserves — which could be much larger than Prudhoe Bay."

Gas is a desirable energy source because 95 percent of what is used domestically is produced in this country, and with

total proven gas reserves of approximately 200 trillion cubic feet, the country has the equivalent of about 35 billion barrels of oil, Herrington said.

"I am here today to tell you that this administration intends to carry into the 100th Congress its commitment to natural gas legislation, including price de-

control, transportation reform and repeal of demand restraints," he said.

Meanwhile, on Thursday, Sen. Lloyd Bentsen, D-Texas, cited a Library of Congress study that projected the nation can expect to lose 232 million barrels of oil production a year by 1990 and 532 million barrels a year by the turn of the century.

Daily News Nov. 25, 1988

# Report urges coastal plain development

By DAVID WHITNEY  
Daily News reporter

WASHINGTON — Calling it the "most outstanding oil and gas frontier in the United States," the Interior Department on Monday released a preliminary recommendation to open the coastal plain of the Arctic National Wildlife Refuge on Alaska's North Slope for full-scale leasing.

The department believes it

is possible, although unlikely, that the coastal plain may have as much recoverable oil as was at Prudhoe Bay before development there.

Environmentalists noted the report's more pessimistic finding — the 95 percent likelihood of only 600 million barrels of recoverable oil, an amount far smaller than Prudhoe Bay. Such an oil deposit is too small to justify

... See Back Page, **INTERIOR**

Continued from Page A-1

risking the fragile ecosystem through development, they said.

The recommendation, which must be approved by Interior Secretary Donald Hodel after a 60-day comment period, touches off what promises to be a bitter congressional battle between development advocates and environmentalists.

Development forces, including the Alaska congressional delegation, argue that the area should be opened for leasing because the country is growing more dependent on foreign oil while its own reserves dry up, a situation that presents a serious national security problem.

"Without the Arctic National Wildlife Refuge's resources, this nation faces the threat of a precarious future in which OPEC nations would be able to hold another and perhaps more serious oil embargo over our heads," Alaska Sen. Ted Stevens said.

Another catalyst for development is the current economic crisis in Alaska, which is suffering the effects of recent, severe declines in the price of oil. The state could stand to collect billions of dollars in revenues if a major oil field is found and developed.

Environmentalists claim development would endanger the 180,000-head Porcupine caribou herd to reach oil reserves that amount to only a few months' supply for the country.

The Interior report was suspect because "it was compiled in Washington, D.C., by an administration well-known for its policies of resource exploitation and development," said the Alaska Coalition, an alliance of 11 environmental organizations.

The controversy will be decided by Congress, which has sole authority under the Alaska National Interest Lands Conservation Act to permit development or convert the coastal plain into wilderness — the approach favored by Rep. Morris K. Udall, D-Ariz., chairman of the key House Interior Committee.

Based on seismic tests, the Interior Department concluded it is 95 percent certain the 1.5-million-acre plain contains about 600 million barrels of recoverable oil. By comparison, Prudhoe Bay's recoverable reserves at the time of development were figured at 9.6 billion barrels. The report's most optimistic projection — with a 5 percent probability — is that the coastal plain contains as much as 9.2 billion barrels of recoverable oil.

Estimates vary widely because deposits cannot be measured precisely without further exploration.

"We won't know until we drill," said William P. Horn, assistant Interior secretary for fish, wildlife and parks, whose office issued the report. "There's the potential for super giant-sized fields."

If substantial recoverable reserves are found, Alaska and the Native populations with subsurface rights in the area stand to share a financial windfall. The state is entitled to 90 percent of on-shore development royalties, traditionally about one-eighth of the per-barrel price. But its share could



dwindle as the Interior Department negotiates to trade its subsurface rights to Native corporations for Native lands around the state. Critics say this increases the political pressure for development. It is possible that Congress will agree with the state is too generous. The report recommended no formal lease. Horn said Hodel would make a decision after releasing the final report, probably after hearings in January in Alaska and Washington, D.C.

The Interior Department estimates that the 1.5 billion barrels of recoverable oil in the area could produce projects a yield of at least \$79.4 billion.

# t urges development of coastal plain



Daily News map

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as \$325 billion if the long-shot projection of 9.2 billion recoverable barrels were sold at \$40 each.

These per-barrel prices, though more than double the current price, are the department's estimate of what oil could sell for in 10 to 12 years — the earliest the coastal plain could be producing if opened for leasing this year.

"I'm not interested in the value of oil, I'm interested in the amount," said Alaska Rep. Don Young. "And the report is just about what I expected. It is one of the largest fields in the free world. The economics is up to the oil companies. If it's feasible, the oil companies will do it."

But Jack Hession, Alaska representative of the Sierra Club, said the report's 95 percent probability of 600 million barrels of recoverable oil may well tilt the development debate in favor of preservation.

"Six hundred million barrels is only about a month and half worth of consumption," Hession said. "There's just no justification for development. I don't think Congress will be stampeded into developing the coastal plain for that."

Feasibility is one issue the oil companies did not discuss in reacting to the report. William J. Johnson, president of Standard Oil Production Co., said one key factor in the economics of exploration and recovery would be the conditions imposed on development.

"We've yet to review this draft in detail but it would be unfortunate if it contains excessive restrictive conditions which would make economic exploration and production for oil and gas unfeasible," Johnson said in a prepared statement.

The report recommends 32 stipulations, some of which appear to be specifically designed to mitigate the effect on caribou, a key concern of environmentalists. One recommendation is that work cease during sensitive times for wildlife, including the May and June calving of the Porcupine caribou.

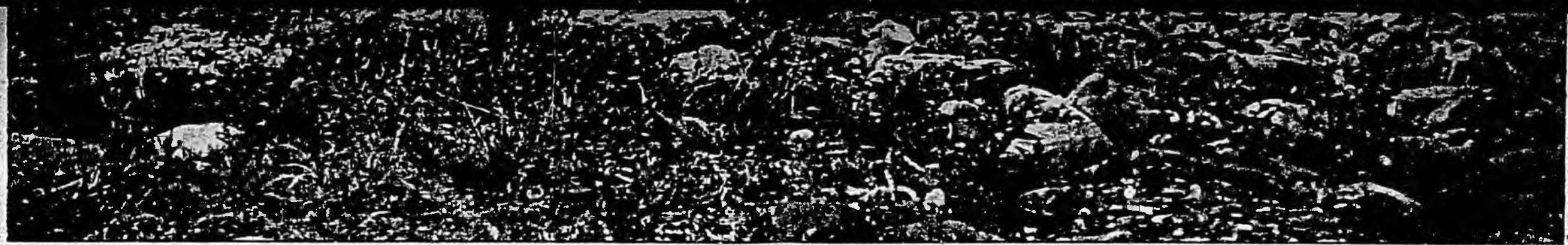
In addition, Horn said, the department would recommend that exploration and development along the upper Jago River, which the Porcupine caribou use most heavily during calving, be stalled as long as possible so that further studies can be done on the herd, which migrates between Canada and the U.S.

According to the report, full leasing in the coastal plain would result in the construction of 100 miles of pipeline, 180 miles of main and spur roads, two large permanent airfields and two small permanent airfields, along with various other facilities.

Environmentalists contend that the Porcupine caribou would be frightened by such development, even if there were no activity during calving.

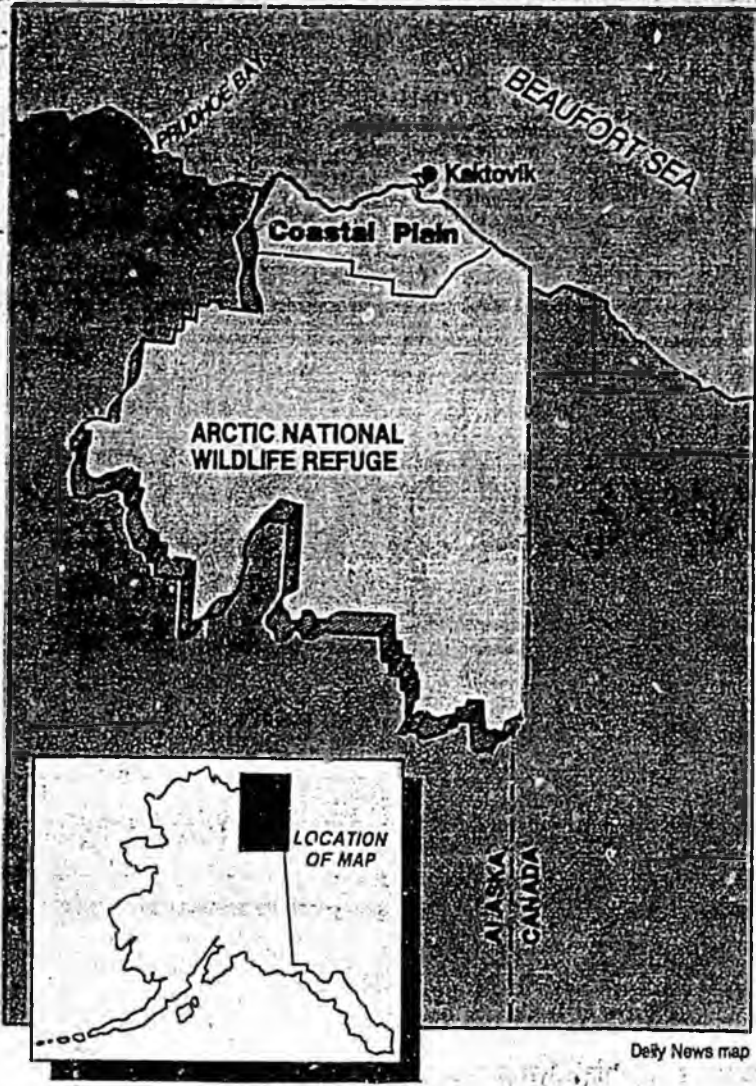
Dave Heatwole, vice president of external affairs for ARCO Alaska Inc., said the report "recognizes the fact that oil and gas development can take place in the Arctic without any detrimental effects."

"I would expect some negative impact," Horn said Monday. "The question is, at what level. We have another 12 or 15 years to develop mitigating technology."



The Associated Press/David Foster

Flowers bloom by the shore of Lake Schrader during the short Brooks Range summer.



# LAST CHANCE

The conflict in Alaska's northeastern corner looms as large as the land involved. Should we keep a Delaware-size expanse of tundra pristine or open it to oil exploration? Two participants in the debate, each in his element, tell what they would do. This is the first of three stories on wildlife, wilderness and oil development in the Arctic.

By DAVID FOSTER  
The Associated Press

**L**AKE SCHRADER — Wilderness guide Roger Rom and oil executive Harold Heinze agree on this much: The Arctic National Wildlife Refuge represents a last hope.

The agreement ends there. From where Roger Rom sits — at the moment, on a lichen-covered rock in the heart of the refuge — this cold and lonely corner of Alaska has value as the nation's northernmost tract of wilderness. It is a home for polar bears, waterfowl and 180,000

caribou; a place where visitors can soak up the undiluted essence of nature.

From where Harold Heinze sits — 600 miles to the south in an office atop the tallest building in Anchorage — the beauty of the refuge lies beneath the surface. Its coastal plain may hold the continent's best and last chance for a major oil discovery.

For years, environmentalists like Rom have wanted Congress to make the refuge's Delaware-size coastal plain an official wilderness area, closed to roads, settlement and oil exploration. Heinze



The Associated Press/David Foster

Wilderness guide and coastal plain defender Roger Rom

and others in the oil industry have wanted it opened to drilling.

Congress put off the issue in 1980 by ordering a study of the area's oil potential and wildlife resources. But now that study is nearly finished, the debate has revived, and

the lobbyists have not melted with age.

The conflict's grand scale has made it a top concern of national groups on both sides of the wilderness-development debate.

See Page D-2, ARCTIC

**ARCTIC: Future debated**

Continued from Page D-1

One side wonders if it's worth endangering a wildlife treasure for the chance of finding a few years' supply of oil. The other asks why oil and wildlife can't mix, and questions whether the nation needs to expand a wilderness system that has increased nearly tenfold in the last two decades.

The answers, of course, depend entirely on where one sits.

□

"This would be the only protected wilderness on the arctic coast," says Roger Rom, still perched on his rock. "They can drill on just about the entire coastline of Alaska. We're not trying to lock it up. We're just trying to stop development in one area that we believe is so special it shouldn't be developed."

The Arctic National Wildlife Refuge is the largest in the country's refuge system, occupying 18 million roadless acres of taiga, tundra and gravel-domed mountains in Alaska's northeastern corner. Nearly half the refuge is already designated wilderness, and Rom is deep within it.

It is late July, the height of the brief arctic summer, and he is leading nine people on a backpacking trip in the mountains of the Brooks Range, at the coastal plain's southern edge. A reporter has flown in to join them for a few days at Lake Schrader, a sparkling alpine lake swimming with trout and arctic char.

Alone on the wind-combed tundra, the hikers seem to have all 18 million acres to themselves. They almost do. Natives from two small villages hunt and fish on the refuge, and recreational use is limited to about 600 people a year, refuge managers say.

Cost and cold keep down the crowds. A traveler from Anchorage can spend \$1,500

on scheduled and chartered flights to reach the refuge, where even in July the average temperature is only 41 degrees.

Rom loves the solitude of the northern places, where he figures he spends 100 days a year "on the trail." He migrated from northern Minnesota to Alaska in 1980 and now runs Alaska Wilderness Inc., a guiding business he says has never made a profit. By his own account, Roger Rom is more a poet than a businessman.

At 31, the brown hair that once reached his waist now just grazes the collar of his pile jacket. A compact man, he can walk, and talk, all day without tiring.

This day, Rom and the reporter have left the others in camp and are hiking the length of Lake Schrader. They follow trails carved in the waterlogged tundra by the hooves of caribou.

Rom says he led the group up a north-facing ridge a few days earlier.

"I wanted people up on the ridge so they could envision the coastal plain with big trucks and a pipeline on it," he says. "That's just totally alien to wilderness."

They saw a 1.5 million-acre expanse of tundra — rolling hills in the foreground, a river-sliced plain near the coast. There, each June when the snow finally melts, the Porcupine caribou herd's 180,000 winter-wearied animals gather and the cows give birth.

Environmentalists say the herd's annual migration between Canada's Yukon Territory and the coastal plain is one of North America's most spectacular wildlife events. They fear that oil development, with its noise, pipelines, roads and construction camps, would disrupt the caribou's calving.

See Page D-3, COASTAL

**NEED CASH?**

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# COASTAL PLAIN: Bot

Continued from Page D-2

"Caribou are the main focus of the argument," Rom says. "But there are probably a hundred other arguments for preserving the wilderness. Aesthetics, recreation, the importance to the polar bear, the brown bear, musk ox, Dall sheep, snow goose. This is an extremely important habitat area for animals."

An example soon presents itself. Cresting a small ridge, the hikers come upon a grizzly bear prowling the tundra. A small bear, Rom says, not

created.

Some clues about the plain's geology have been provided recently by surface samples and seismic testing, a stethoscopic thumping of the land that produces a rough sketch of rock layers below.

The clues have been positive, Heinze says. But the proper reservoir rock may not be present, or the oil may have migrated away. Such factors are elusive. As Heinze says: "You don't get a handle on them until you put it to the drill."

Drilling doesn't have to

**6 This concept that Alaska needs to be preserved as wilderness for visitors is a crock. Most visitors want to have some reasonable access. 9**

— Harold Heinze

more than 300 pounds. Rom's companion deems it large enough, here where the nearest climbing tree is 50 miles south.

The bear spots the two humans and dashes away, up the mountainside. It watches as they pass, then lopes in closer. For more than a mile, it follows about 100 yards behind.

Roger Rom is unconcerned. "He's just going the same way we are," he says.

Wilderness may put the romance in Alaska, but oil fills its bank accounts.

Anchorage sprawls at the feet of high-rise office buildings built by oil companies — and the highest of all belongs to Arco Alaska Inc.

There, in a many-windowed suite on the 21st floor, company president Harold Heinze is holding forth on the coastal plain's amazing geology.

"This is not a boring area of rock," Heinze says, his feet propped up on a glass coffee table. "There are oil seeps on the surface. There are outcrops that, if you smell them, you get the smell of methane."

Heinze, 43, has dark, slicked-back hair. His speech combines the refinement of a Long Island upbringing with an aw-shucks casualness born of years working in the Western oil capitals.

Schooled as a petroleum engineer, he speaks with animation about the coastal plain, and with frustration at not being allowed to explore its potential.

Geologists started finding the refuge's more obvious signs of oil 70 years ago. But exploratory drilling has been banned since 1960, when the refuge's precursor, the Arctic National Wildlife Range, was

harm wildlife, he says, noting Arco's operation at Prudhoe Bay. There, 60 miles west of the wildlife refuge, America's largest oil field produces 20 percent of the nation's domestic oil. But waterfowl still nest on the lake-dotted tundra, and the resident Central Arctic caribou herd has tripled in size during the past 10 years.

A Prudhoe Bay-size oil field would cover about 10 percent of the coastal plain, and less than 1 percent would be covered by roads or structures, he says.

"Prudhoe Bay is a huge development, but on the scale of the coastal plain, it is nothing. There will be plenty of room for caribou and waterfowl on the North Slope."

Alaska has more than enough designated wilderness, Heinze says. It is beautiful land, he says, but accessible only to those with money for air charters and with energy to hike in primitive conditions.

"Backpackers are not representative of the U.S. population," he says. "This concept that Alaska needs to be preserved as wilderness for visitors is a crock. Most visitors want to have some reasonable access."

The feet are off the table now, as Heinze leans into his subject. He says nearly all Alaska is wilderness, without need of congressional mandate, simply because so few people inhabit so much land.

"Alaskans have a better understanding of wilderness. We know that you can go over a hill and be away from the presence of man. I don't have to go 200 miles away from people to be in wilderness. It's OK for me to go two miles and not see them."

Harold Heinze is no backpacker, but he enjoys the out-

# Two sides in debate say area represents last chance



Arco Alaska President Harold Heinze says development of the coastal plain could be as safe as that at Prudhoe Bay.

doors. He owns a rustic cabin a few hours' drive north of Anchorage.

"I can drive to it. But I can get out of my car and I can be in a place that's as pristine as any other place in this state. It's pristine enough that I worry more about the bears than about other people."

□  
It is Roger Rom's turn to be frustrated. He has heard oil companies vaunt the potential of other areas that turned up dry — the Atlantic coast, the Gulf of Alaska.

"How many times are they going to cry wolf?" he asks. "We keep blundering blindly

ahead. We need to expand our vision."

He says Congress showed such vision when it passed the Wilderness Act of 1964. For the first time, a nation vowed to preserve some lands as nature had made them; in the words of Congress, as areas "where the Earth and

its community of life are untrammelled by man, where man himself is a visitor who does not remain."

The nation's wilderness system started 22 years ago with 9.1 million acres. It has grown to 88.5 million acres, or 3.8 percent of the country's total area. Two-thirds of the wilderness is in Alaska.

Some suggest that is enough, but Rom sees it differently.

"Every time we set a block of concrete, we should set a block of wilderness. Every time we develop, we should counteract it."

Wilderness provides a reference point that may prove useful if manmade developments change the world in unexpected ways, he says.

"We have to realize that man is not the king of the hill. We are part of a larger community. People like Harold Heinze will never understand that. They want to stand alone on the horizon and be masters of the landscape, and the rest of us will suffer for it." □

They may be representative, but Rom and Heinze are not the only voices crying in, or about, the wilderness.

The Group of 10, a coalition of national environmental leaders, made the refuge one of its first stops on a recent tour of Alaska's environmental hot spots. Most politicians in this oil-powered state, meanwhile, support opening the refuge to exploration.

Each side of the debate accuses the other of not waiting for the U.S. Fish and Wildlife Service's report on the refuge, which is expected out next spring.

The oil industry says wilderness advocates have jumped the gun by supporting a U.S. House bill that would designate the coastal plain a wilderness. The House has not acted on the bill.

The Fish and Wildlife Service, meanwhile, is negotiating with Alaska Native corporations about land swaps involving the coastal plain. Wilderness supporters say the agency cannot conduct an objective study while trying to trade off the plain to parties interested only in its oil potential.

Whatever Congress finally decides, one thing is certain. Someone will not be happy.

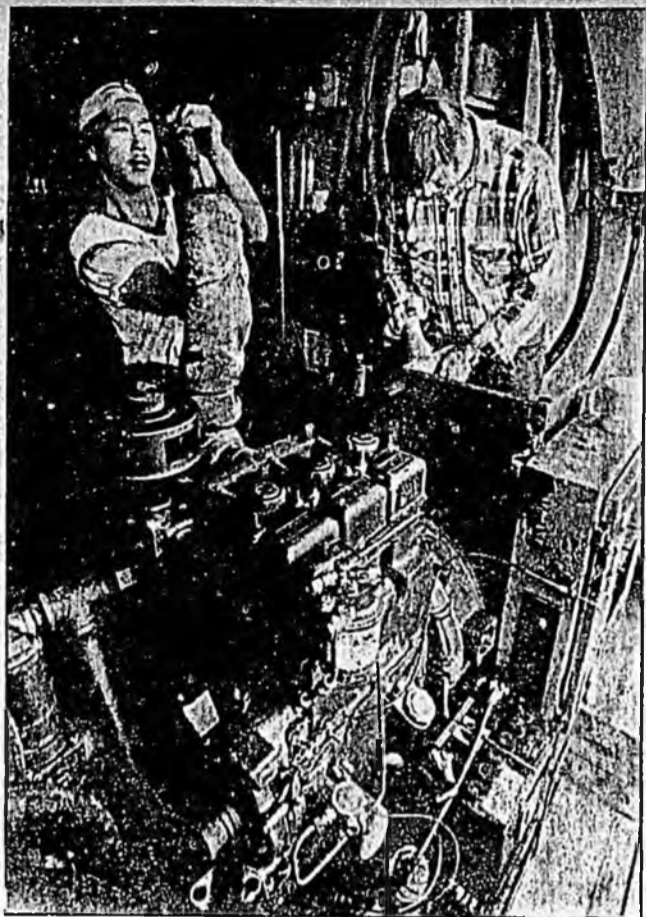
Harold Heinze:

"We've horsed around so long we're in trouble. We had better get going, or figure out how to make Saudi Arabia the 51st state. Lacking that, I think we had better get with the program."

Roger Rom:

"Are we going to burn up all the Earth's resources until we have to come up with alternatives, or are we going to have the guts to make a stand before we run out? If there's a will, we can develop alternatives to oil and gas, and we can keep treasures like this."

Anchorage Daily News/Erik Hill



Joe Soplu, left, and Mayor Loren Ahlers attend broken water pump.

Kaktovik, at the edge of the Arctic National Wildlife Refuge, could see great change if the refuge's coastal plain is opened to oil development. Much of that change could be beyond the village's power to control. This is the last of three stories on wildlife, wilderness and oil development in the Arctic.

By DAVID FOSTER  
The Associated Press

KAKTOVIK, Alaska — A chilling fog blew in from the pack ice offshore, shrouding the quonset hut that serves as this village's community hall.

It was a Tuesday night, and the city council was meeting — time, once again, to knock against the limits of how much control a village of 200 on the Arctic coast has over its own destiny.

"The meeting is called to order," announced Loren Ahlers, clutching a coffee cup in work-thickened hands. He is Kaktovik's full-time utility manager and part-time mayor.

The heater behind him rumbled to life. A fluorescent light glared down from the arched ceiling. Most of the dozen people crowded around the table were familiar: council members, the fire chief, a whaling captain.

But there were visitors, too. A man from Chevron USA Inc. wanted to tell of his company's plans for more offshore seismic testing. A scientist wanted to explain a government-funded study on bowhead whales and oil development.

Kaktovik, a speck of civilization on the vast, uninhabited tundra of Alaska's northeastern cor-

nar, has found itself amid a growing debate. The oil industry says the coastal plain this village clings to may hold the continent's last chance for a major oil discovery. Environmentalists say the wide-open tundra south of Kaktovik should remain free of oil development, preserved as part of the Arctic National Wildlife Refuge.

Sometimes, villagers complain; the tug of war by outsiders neglects those who will be stuck with the decision — the people who live here.

John Richardson, representing Ecological Research Associates, told the council about his company's study of bowhead whales off Kaktovik, paid for by the federal Minerals Management Service.

The government is interested in the whale because it is an endangered species. Kaktovik residents are interested for another reason. The annual late-summer hunt for bowheads is the highlight of village life.

"By studying these areas, we'll help determine whether oil drilling would have an effect on bowhead whales," Richardson said. He pulled out a radio transmitter attached to an arrowhead and said scientists would go out in power boats, then dispatch two people in a kayak to sneak up and dart the whale.

Nolan Solomon, whaling captain, had a question. "First, you say boats wouldn't bother the whales, now you say a boat would be by them. Wouldn't that hurt our whaling?"

See Page C-2, KAKTOVIK

## KAKTOVIK: Trying to deal with future

Continued from Page C-1

Richardson assured him the researchers would leave the area if villagers' whaling boats showed up.

Kaktovik's uneasy relationship with oil development started in the early 1970s with establishment of the Prudhoe Bay oil fields, 120 miles to the west.

Oil money — channeled through the North Slope Borough, the Arctic Slope Regional Corp. and the state — has given villagers new jobs, new homes, a huge new school, a fire station and a medical clinic.

They like the new wealth. But they don't want to sacrifice the old wealth — the land and sea that yield caribou, whale, fish and waterfowl for their tables.

"We're trying to preserve

our ability to travel across the country, to be able to hunt in the areas where we know are the best hunting," Ahlers had said before the meeting. "It's the freedom to do what you want."

A 1977 survey conducted by the state Institute for Social and Economic Research showed that Kaktovik residents tended to think health care, schools, shopping and homes were better than they were in 1970, before oil money started flowing. But villagers perceived a change for the worse in hunting and fishing, helping and sharing, and overall village life.

The Arctic Slope Regional Corp., representing Inupiat Eskimos across the North Slope, vigorously supports opening the coastal plain to oil development. But Kaktovik residents appear more

ambivalent.

Fire Chief George Tagarook, for example, appreciates his new fire station but would like to keep development at arm's length.

"We don't need another Prudhoe Bay here," he said — after the meeting. For now, he listened politely to Richardson.

Tom Cook, from Chevron, was next on the agenda. The oil company drilled an exploratory well last year 14 miles southeast of Kaktovik, on lands owned by the village and regional corporations. It was now disassembling the drilling platform. The next step, Cook said, would be seismic testing of the ocean floor off Kaktovik.

Ahlers thanked him for the presentation and opened the meeting to village concerns. The big topic was culverts.

Many in town weren't working, and new ones needed to be installed. Ahlers told the public works man he should get going, despite foot-dragging from borough offices in Barrow.

"You have the authority to do it, if it's needed," Ahlers said. "Just do it and say 'I did it, it's done, it looks good.'"

The meeting lasted two hours. It was typical, Ahlers said. The council had made no decisions after the visitors' presentations.

"We're not in a position to say yes or no," Ahlers said. Outside forces bring change to Kaktovik as surely as the pack ice grinds in to shore each fall. To many villagers, political activism seems as foreign as challenging the wind, or the cold, or the snow.

## LAST CHANCE ON THE NORTH SLOPE

### How have caribou fared?

*This is the second of stories on wildlife, wilderness and oil development in the Arctic.*

By DAVID FOSTER  
The Associated Press

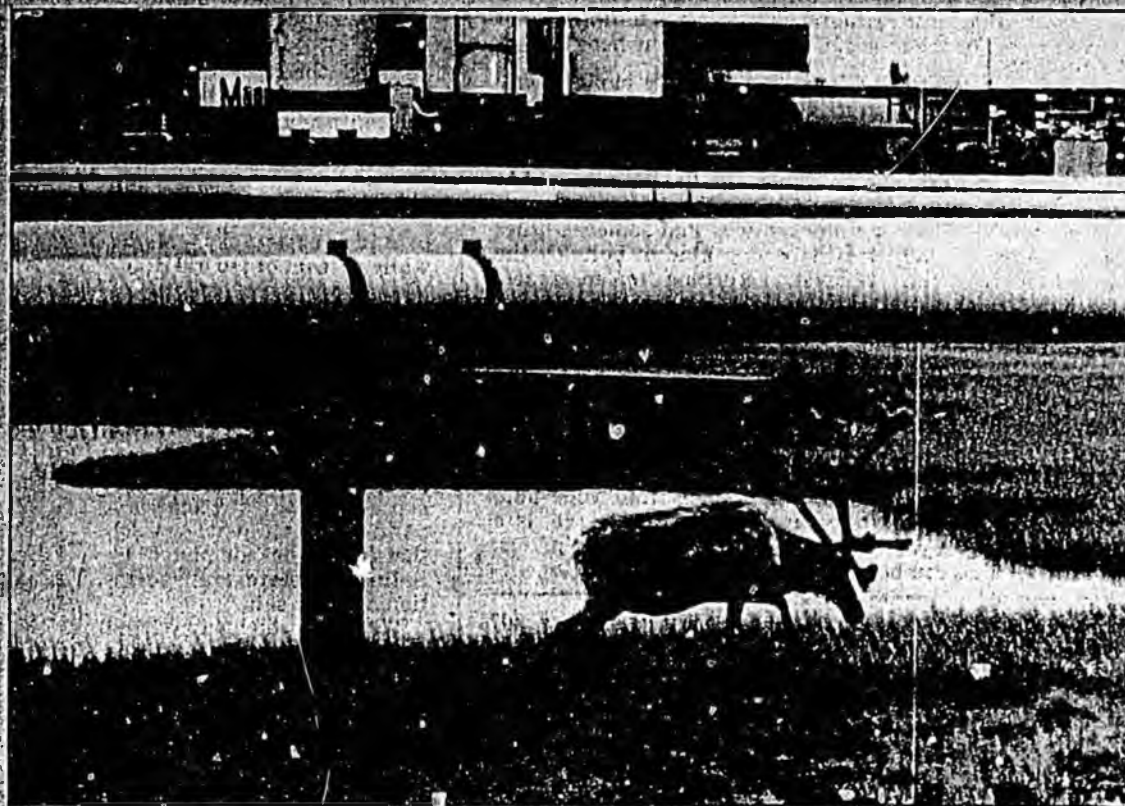
PRUDHOE BAY — Fifteen years ago, the predictions were dire: Oil development in the Arctic could devastate the caribou, blocking ages-old migration routes of an animal dependent on wide-open tundra for survival.

Despite those concerns about one of Alaska's most valued game animals, the wells were drilled. Roads and pipelines were stretched across the tundra, and Prudhoe Bay became the largest producing oil field in the nation.

Today, as policy-makers consider letting development spread eastward to the coastal plain of the Arctic National Wildlife Refuge, the question remains — how have the caribou fared?

The oil industry says it has spent millions reducing development's impact on caribou, apparently with good results — the Central Arctic caribou herd around Prudhoe Bay has tripled in size since 1975. But other biologists, claiming the oil field has disrupted the herd's instinctive movements, question how much more development the North Slope's caribou can stand.

"Ooh, look at that!" exclaimed Robert Newell, a wildlife biologist for ARCO Alaska Inc. He had scrunched his truck to a halt on the gravel road connecting the Prudhoe Bay and Kuparuk oil fields. Ahead, dozens of caribou were crossing the road and ducking under an elevated pipeline nearby.



A caribou forges beneath a pipeline at the Kuparuk oil field near Prudhoe Bay. The oil industry says such scenes and the herd's rapid growth prove that oil development does not harm caribou.

Some animals crossed hesitantly. Others dashed right across. A large bull with towering antlers trotted toward the pipeline, then crouched and twisted his head to the side, passing easily under the pipe. Newell could hardly control his excitement.

"That teaches you something about caribou-pipeline interaction," he said. "Here's an animal that lives out on the tundra, has never seen a tree in his life, but knew enough to turn his head so he wouldn't hit his antlers."

Above all, he said, caribou are adaptable. They survive winter's biting cold and summer's biting insects. They migrate hundreds of miles each year through a gauntlet of predators, including human hunters. The calving ground used by one of Alaska's

28 caribou herds is a military bombing range. Still they survive.

Newell believes the caribou of the Central Arctic herd are resilient enough to weather a few hundred miles of pipelines, roads and gravel drilling pads. He points to the numbers to prove it. In 1975, the herd had about 5,000 animals. Today it numbers at least 15,000.

"No one has documented any negative effects of the oil field on caribou," he said. "It starts out that simple. From there on, the arguments get really subtle."

Not that subtle, countered Ray Cameron, a wildlife biologist with the Alaska Department of Fish and Game. He disagrees with many of Newell's conclusions.

"The suggestion is that animals have totally accommodated to the development up there. We don't think that's the case," he said.

Cameron, who has studied the interactions of caribou and oil development since 1974, said studies have shown that the Prudhoe Bay complex has blocked some of the caribou's movements and pushed them out of part of their summer feeding and calving grounds. Wary cows with calves avoid pipelines and roads, he said.

The animals crossing in front of Newell's truck were not representative of the herd, he added.

"You probably noticed that very few of the animals had calves with them," he said.

See Page B-7, CARIBOU

# CARIBOU: Biologists debate future

Continued from Page B-4

"Cows with new calves are the most sensitive, and some of that sensitivity persists throughout the summer."

Caribou populations fluctuate widely as part of their natural cycle, and some biologists believe that the Central Arctic herd's population increase, rather than exonerating oil development, may actually be hiding harmful effects.

Cameron said calf production has recently declined in the Central Arctic herd. It may be the start of a trend.

"By no means am I saying that oil development is responsible," he said. "But it makes the industry's arguments a little shaky. They can't have it both ways."

One of Cameron's biggest concerns involves the bane of the caribou's existence: swirling clouds of mosquitoes that can suck a quart of blood each week from one animal.

On calm summer days, when insects are thickest, the caribou take to the coast, loping along the shore into prevailing breezes. When the wind picks up, dispersing bugs, the caribou trot inland to feed.

"The Prudhoe Bay complex has become a virtual barrier to east-west movement of caribou along the coast," Cameron said. "The industry says changes in wind direction explain that. We don't think so."

"To us, it's a reflection of sub-optimal use

of range. The animals do not get to where they apparently would like to be."

He said the caribou, especially cows weakened by pregnancy and the lean winter, may lose precious energy in detouring around manmade obstructions.

Newell becomes frustrated with such concerns, saying the oil industry has worked hard to avoid interfering with caribou. He said ARCO has reduced traffic during calving and periods of insect harassment. Many stretches of pipe are buried, or elevated so caribou can duck under. Gravel ramps have been built so animals can cross over pipelines.

Cameron said he hopes to answer some questions with a proposed research project that would monitor animals' energy losses by measuring body weight.

Other questions may be harder to answer. How many Prudhoe Bays can the caribou tolerate? And can the lessons learned here be applied to the Arctic National Wildlife Refuge? There, more than 10 times the caribou crowd onto a coastal plain that's much narrower than it is around Prudhoe.

In a 1983 report, Cameron wrote that nearly 60 percent of the Arctic coast has been identified as having oil potential. While it's unlikely all of it would be developed, it's also unrealistic to assume development "will be fortuitously in harmony with caribou," he wrote.



The New York Times/Nov. 25, 1986

Area proposed for oil development covers 1.5 million acres.

## U.S. Proposing Drilling for Oil In Arctic Refuge

By PHILIP SHABECOFF

Special to The New York Times

WASHINGTON, Nov. 24 — The Interior Department, setting the stage for a battle with conservationists, tentatively proposed today to allow oil drilling in a huge wildlife refuge on Alaska's Arctic coast.

A draft report made public by the Department's Fish and Wildlife Service recommended that all of the coastal plain within the Arctic National Wildlife Refuge be opened for oil and gas development.

William P. Horn, Assistant Interior Secretary for Fish and Wildlife, said at a news conference that the Arctic wildlife refuge offered the possibility of "a supergiant oil field that does not exist anywhere else in the United States."

### National Security Interests Cited

The draft report said the large oil and gas potentials of the field were needed for the country's economic well being and for national security.

"The numbers say that there is a good prospect here of another Prudhoe Bay," Mr. Horn said. Prudhoe Bay, on the coast just to the west of the Arctic Wildlife Refuge, now supplies about 20 percent of domestic oil production in the United States.

The 1.5 million-acre Arctic plain is

Continued on Page A23, Column 1

# U.S. Proposes to Open Arctic

Continued From Page A1

the calving ground of North America's largest herd of migratory caribou and contains large populations of polar and grizzly bears, musk ox, wolves, arctic foxes and, in warmer weather, millions of nesting birds.

Conservationists said oil drilling would unnecessarily threaten the existence of the great Porcupine caribou herd, which now numbers 180,000 animals, along with other wildlife.

The recommendation must be approved by Interior Secretary Donald P. Hodel and then by Congress. Mr. Hodel, a former Secretary of Energy who is an advocate of domestic energy development, is expected to back the plan. But it faces a stiff battle in Congress, where there is considerable backing for turning the entire refuge into a protected wilderness area.

The public has 60 days to comment on the proposal. The Interior Department intends to send its formal recommendation to Congress in March.

The draft report quotes estimates that 800 million barrels to 9.2 billion barrels of oil under the refuge are "recoverable," given economic and technological restraints. The "mean" estimate, the report said, was that there are 3.2 billion barrels of recoverable oil in the area. At today's price of \$15 a barrel, the oil would be worth \$48 billion.

The oil potential of Prudhoe Bay is usually estimated at nine billion barrels.

Mr. Horn noted that oil production from Prudhoe Bay had peaked and that the Arctic Wildlife Refuges offered a chance to make "substantial additions to domestic reserves" at a time when the nation's known reserves elsewhere

were declining.

Mr. Horn said that the oil industry had demonstrated that it could minimize damage to the environment as a result of oil and gas drilling. He also said the department was asking for authority to place any restriction on oil and gas operations that would be needed to avoid "unnecessary adverse effects."

Under the plan, the "core calving area" for caribou would be the last area to be leased, in order to have time to determine the impact of oil and gas activities on the animals, he said.

But his assurances were hotly disputed by environmentalists.

Susan Alexander, Alaska representative for the Wilderness Society, said the plan "would destroy America's Serengeti" for a few weeks' supply of oil. The Serengeti plain of East Africa is one of the world's great wildlife regions.

Leasing the Arctic National Wildlife Refuge for the oil and gas drilling, Ms. Alexander said, "would be like melting down the Statue of Liberty for the copper in its body and the gold in its torch."

Ms. Alexander also accused the Reagan Administration of "hypocrisy" for asserting it needed to drill for oil in the refuge because of national security interests. She noted that President Reagan had vetoed a bill requiring efficiency standards for electrical appliances that would have saved the equivalent of more than a billion barrels of oil through the year 2000.

## Ecological Damage Is Feared

Conservationists said the building of roads and pipelines would cut off the caribou from calving areas and from areas where they could escape insects that are rife on the plain. They also warned that continuing oil operations would erode the fragile ecological systems that support wildlife on the tun-

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TUESDAY, NOVEMBER 25, 1986

# to Oil Drilling

ment for the discovery of substantial new domestic reserves of crude oil."

Senator Ted Stevens, Republican of Alaska, said the nation's reliance on imported oil had risen substantially with the current world oil glut.

"Without the Arctic Wildlife Range resources this nation faces the threat of a precarious future in which OPEC nations would be able to hold another and perhaps more serious oil embargo over our heads," the Senator said, referring to the Organization of Petroleum Exporting Countries.

The Interior Department's estimate that the recovery of oil from the coastal plain would be economically beneficial is based on the assumption that oil will be selling at \$33 a barrel, after adjusting for inflation, 10 to 15 years from now, when the oil would be put on the market. World oil prices have been less than half that level in recent months.

## Interior Officials Recommend Allowing Oil, Gas Exploration in Arctic Refuge

By ROBERT E. TAYLOR

Staff Reporter of THE WALL STREET JOURNAL

WASHINGTON — Top Interior Department officials recommended that the entire coastal plain of the Arctic National Wildlife Refuge be opened to oil and gas exploration and development.

The recommendation came in a draft report forwarded to Interior Secretary Donald Hodel by William Horn, assistant secretary for Fish, Wildlife and Parks. After considering public comments, Mr. Hodel is expected to make a formal recommendation next spring to Congress, which will decide the area's future.

The release of the department's analysis is the opening salvo of a major battle between advocates of energy development and environmental protection. The stakes are inflated by the area's high resource potential and its fragile ecology.

The report called the 1.5 million-acre area in northeast Alaska the most promising unexplored onshore oil prospect in the U.S. It estimated there is a 5% chance of finding reserves even larger than the Prudhoe Bay field, which currently contributes about 20% of U.S. oil production. The potential for harm to wildlife is unclear, the report said, but it noted that any negative effects on wildlife are outweighed by the potential energy benefits and could be reduced by careful planning.

Though expected, the agency's stand drew strong opposition from several environmental groups. These critics fear irreparable harm to wildlife, especially a herd of 180,000 migratory caribou that produce calves in the area during the arctic summer.

Amy Skilbred, chairman of the Alaska Coalition, an association of Alaskan and

national environmental groups, called the coastal plain "a national treasure." She said it "should be the last place to go for oil and gas."

The oil industry welcomed the report. The American Petroleum Institute expressed confidence that petroleum development "could be conducted in a way compatible with the natural values of the area."

Oil executives have been expressing growing eagerness to explore the area, which lies between a cluster of oil fields around Prudhoe Bay to the west and several large discoveries of natural gas near the Canadian coast to the east. Oil seeps to the surface in areas of the coastal plain and is found in surface rock outcroppings there.

"This is our best hope for additional giant new fields, which are needed if U.S. oil production is not to decline dramatically by the turn of the century," said the petroleum institute, an industrywide trade group.

The department said the odds are even of finding 3.2 billion barrels of recoverable reserves, more than one-third of Prudhoe Bay's original reserves of 9.5 billion barrels. And there is a 95% chance of finding more than 600 million barrels, it said.

The 1980 Alaska Lands Act established the 19-million-acre Arctic National Wildlife Refuge, reserving almost half of it as wilderness. But the law called for the department to recommend and Congress to decide whether to develop the refuge's coastal plain.

The Interior Department is negotiating to trade subsurface rights on the plain to some of the Alaskan native corporations in exchange for title to other lands. This "megatrade" won't be consummated, Mr. Horn said, without congressional approval.

But environmentalists worry that this trade will reduce environmental protection and will steer the native Alaskans into supporting development in the area. One of the 13 native corporations, the Arctic Slope Regional Corp., already has endorsed development of the coastal plain.

Environmentalists warn against arctic air pollution and the spread of toxic drilling muds. Biologists warn about harm to various wildlife, including musk oxen, migratory birds, bears and caribou.

Interior Department biologists recommended last year against any development in the portion of the plain that is most often used by the migratory "porcupine" caribou herd to produce calves. Mr. Horn's report rejects any such bar, urging only that the "core calving area" for the caribou be the last to be developed.

# U.S. Study Urges Alaskan Oil Drilling

Associated Press

An Interior Department draft study recommended yesterday that the oil-rich Coastal Plain of north-eastern Alaska be opened to oil and gas development if the frigid tundra and its diverse wildlife are protected.

The study, released by Assistant Secretary William P. Horn, said the 1.5 million-acre parcel along the Arctic Ocean may contain 4.8 billion to 29.4 billion barrels of oil and huge reserves of natural gas.

"The area is clearly the most outstanding oil and gas frontier remaining in the United States and could contribute substantially to our domestic energy supplies," the study says.

Horn said he is recommending that any energy exploration on the Coastal Plain be restricted to ensure that development not result in unnecessary adverse environmental effects. Horn also recommended that unavoidable wildlife habitat losses be fully compensated.

The study says, "Oil and gas development will result in widespread, long-term changes in wildlife habitats, wilderness environment and native community activities."

The draft recommendation will be open to public comment before Interior Secretary Donald Hodel makes a decision and sends it to Congress, which has final responsibility for authorizing energy development in the area. The parcel is east of the Prudhoe Bay energy fields, which have produced oil and natural gas for the last decade.

The question of Coastal Plain development is expected to set off a major battle on Capitol Hill, where environmentalists hope to persuade lawmakers to bar drilling in the area and make the acreage part of the 19 million-acre Atkaska National Wildlife Refuge, which abuts the area on the south.

"There is a battle of monumental proportions brewing on this issue," said Sen. Ted Stevens (R-Alaska), who calls the Coastal Plain "the Saudi Arabia of North America."

Experts say the Coastal Plain's untapped oil perhaps rivals the 9.6 billion barrels originally contained in the Prudhoe Bay field, the continent's largest.

Geologist Roger Herrera of Standard Alaska Production Co. said there is unanimous agreement among his colleagues: "This area without a doubt is the area with the greatest oil and gas potential that hasn't been explored. The chance of finding super-giant oil fields in this tiny patch of real estate is tremendous."

Where development advocates see black gold, environmentalists see wildlife: wolves, polar bears, migratory birds and a growing herd of 600 musk oxen whose ancestors were nearly made extinct by gun-toting hunters early this century.

The area, environmentalists argue, is a critical habitat for a caribou herd estimated at 160,000 to 200,000. It is where they breed, calve and find relief from potentially deadly mosquitoes, said Jay Hair of the National Wildlife Federation.

11

aging about 13,000 b/d, reportedly has few drilling plans. It's reported to have negotiated the second stage of its production sharing agreement which takes into account the fall in prices and disappointing performance of its Oguendo Field.

Tenneco plans to bring on stream in third-quarter 1987 the offshore Octopus Marin Field on its Obando Marin Block. Conoco and Exxon are due to start mid-1987 offshore exploration on the Simba marine permit in the south Sun Oil, which recently concluded a production sharing agreement, isn't expected to start drilling until 1988.

Ministry of Mines is said to be still appraising bids from about 30 companies for 11 offshore and three onshore blocks covering some 30,000 sq km. Companies are urging the government to relax fiscal terms in the new production sharing agreements to reflect "market realities."

Financial Status

Gabon this week slashed its 1987 budget by 55% to \$1.1-billion from \$2-billion, according to government spokesman Zacharie Myboto. Oil receipts, which account for 65% of revenue, are estimated to have fallen 29% this year and will continue to drop sharply in 1987. Prices of Gabonese crudes have averaged \$13/bbl in 1986, down 50% from last year.

Crude export earnings are officially forecast to fall almost 60% to just under \$900-million in 1986. Crude normally accounts for some 80% of total exports and yielded \$1.6-billion in 1983. Exports are officially forecast to fall by 3.8% to 7.7-million tonnes this year. The balance between output and exports is absorbed by the Sogara refinery, which doubled its added value to \$42-million in 1985.

While the Rabi and other finds over the last three years by Elf and Tenneco have ensured that Gabon will remain a significant oil producer until at least the end of the century, it must first pass through a difficult period of austerity until crude prices recover, analysts conclude.—Peter Blackburn

**UNITED STATES**

**DOI TO RECOMMEND DEVELOPMENT OF ARCTIC WILDLIFE REFUGE, BUT WITH RESTRICTIONS**

Washington 11/21—The Interior Dept. draft report on the Arctic National Wildlife Refuge will recommend that the entire coastal plain of the ANWR, some 1.5-million acres, be made available for oil/gas leasing.

The recommendation was the most sweeping development alternative available. Assistant Secretary for Fish, Wildlife & Parks William Horn will release the report Nov. 24 (ON 11/19). There will be a 60-day comment period and a series of public hearings. Interior Secretary Model will make the final recommendation when the report is submitted to Congress early next year.

A Congressional source said the report may be a "mixed bag" because he understood it will also recommend "substantial restrictions" on when drilling activities can take place in an effort to protect wildlife in the area, particularly the caribou herds. Such restrictions could ultimately be a disincentive to oil/gas development and production.

The entire refuge, just east of Prudhoe Bay and west of the Mackenzie oilfield in Canada, covers 19-million acres. The U.S. Geologic Survey said there's a mean probability the coastal plain could contain 4.85-billion bbl, and a 5% probability it could contain up to 17-billion bbl of oil.

**ARCO SHAREHOLDER SUES OVER PROPERTY SALE TO FORMER CEO**

San Francisco 11/21—An Arco stockholder, Rodney B. Shields, has filed suit in Los Angeles Superior Court charging impropriety in the sale of oil and gas properties by the company last month to a group headed by former Arco chairman Robert O. Anderson (ON 10/29).

Arco immediately said it would dispute the charges, which it considers "without merit" and also asserted the auction sale of assets, conducted for it by First Boston, had been "competitive and fair to all."

In the suit, Shields alleged that among the 600 holdings in 11 states acquired in the auction by Anderson's Diamond A Cattle Co. in a joint venture with Lorrho, were some deep drilling rights in west Texas. However, he said, Anderson knew of these properties through his previous connection with Arco, while other bidders didn't. Shields al-

leged this allowed Anderson's group to bid lower than it otherwise might have to win the sale.

Arco said in a statement that it believes it received "the maximum value for the assets" and it doesn't consider that "the value of the deep drilling rights obtained by Diamond A Cattle is material to the total value of the package sold."

**CALIF. AIR CLEANUP PLAN MAKES SOME CONCESSIONS TO INDUSTRY ON EMISSIONS**

Sacramento 11/21—The California Air Resources Board has submitted to the Environmental Protection Agency a tougher Kern County air cleanup plan opposed by oil industry, but indicated it might ease some proposed offfield controls.

Industry officials appear pleased that the state is giving them more time to gather scientific evidence to dispute the need for further cuts in nitrogen oxide emissions in Kern County's west side, where some of the nation's richest oilfields, such as the Elk Hills Naval Petroleum Reserve, are located. Oil interests still strongly oppose NO2 emission controls recommended in the plan for the central county region, which surround oil-producing properties near Bakersfield.

In a concession to the industry, the state board agreed to consider a so-called "trigger" amendment that would give the county a two-year period to prove it can meet the federal air quality standard for ozone. The trigger would be pulled—implementing tougher offfield controls for NO2—if the county exceeds the national ozone standard of 0.13 parts per million on four separate days during 1986-88. Since that standard already was exceeded once this year, it means the limit can be reached no more than twice in the next 25 months.

Ozone Reduction Issue

In a further concession, the board agreed to ask EPA to delay final approval of the county's air cleanup plan until March 31, 1987, to allow more technical analysis of the benefits of reducing NO2 emissions. EPA told the board the federal government would delay final action on the county air plan. The board doesn't have "a closed mind," noted a Chevron official involved with regulatory matters.

The county's air exceeds federal standards for ozone, carbon monoxide and suspended particulates. The county faces possible federal economic sanctions, such as an industrial building ban or cutoff of federal highway funds, if the local air plan isn't toughened to reduce ozone.

Industry officials note that the county meets federal NO2 standards, but state researchers believe a further reduction might reduce ozone. The industry contends that reducing NO2 hasn't been proved to reduce ozone in Kern.

Some 60% of Kern's NO2 emissions come from steam generators and internal combustion engines in oilfields. Industry officials say NO2 controls on steam generators—which can cost up to \$200,000 apiece—could mean the difference between profit and loss.

**NYMEX CRUDE FUTURES DAILY REPORT**

New York 11/21—Futures prices on the New York Mercantile Exchange closed up today vs Nov. 20.

The settlement prices (S.P.) are official. Volume figures are estimates. All figures are of crude futures contracts for the four nearest open trading months. The benchmark crude on the Exchange is West Texas Intermediate. Following is such data for January-April:

	Jan.	Feb.	March	April
S.P.	\$15.38	\$15.45	\$15.42	\$15.38
Vol.	21,283	11,491	3,391	1,036

**UNION TEXAS SELLS PROPERTIES**

Houston 11/21—Union Texas Petroleum said it's agreed to sell its interests in seven oil and gas producing properties in western Texas to an undisclosed buyer for about \$83-million. Total proved reserves involved in the sale are about 9-million bbl of oil equivalent.

The sale still is subject to completion of a definite agreement but is expected to be closed in January 1987. Union Texas said the \$83-million will be used to prepay senior bank debt and to develop oil and gas reserves.

### WILDCATting IN THE NEWS

**ARGENTINA:** State Yacimientos Petroliferos Fiscales said it discovered natural gas in northwest Neuquen Province in Patagonia. A 8-mm-diameter well, drilled to depth of 1,300 meters at Pehuanches, 730 km west of Buenos Aires, yielded 11,400 cu meters/d of gas. A .2-mm-diameter well, the Filo Morado, drilled later produced 240,000 cu meters/d of gas. YPF said Filo Morado will be drilled to depth of 3,000 meters.

**VENEZUELA:** Lagoven's Furrilal-2 well, 32 km southwest of Maturin in Monagas state, produced 5,940 b/d of 28-gravity crude and 3,200 Mcf/d of gas from a depth of 14,835 ft. The find, which raises Lagoven's proved light/medium crude reserves by some 150-million b/d, is located within the new eastern oil province discovered last year by Lagoven (ON 12/4/85). The province holds an estimated 1-billion bbl of crude.

### FINANCIAL REPORTS

(Total Net Figures in Million \$)

	1986	1985
<b>Lear Petroleum</b>		
3rd qtr net	(6.93)	(1.31)
Net per share	(\$0.72)	(\$0.30)
9 mo net	(82.27)	(11.49)
Net per share	(\$7.35)	(\$1.71)

	1986	1985
<b>British Petroleum</b>		
3rd qtr net*	511	572
Net per ADR**	\$1.12	\$1.24
Exploration	184	476
Gas International	25	37
Oil International	313	202
Shipping	14	(8)
Chemicals International	71	28
Standard Oil	173	773

(\*) After tax but before extraordinary items.

(\*\*) ADR represents four BP ordinary shares.

### OILGRAM NEWS/WIRE

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# Inside Energy/with Federal Lands



An exclusive news weekly on federal energy and minerals activities

November 24, 1986

**LATE NEWS:** DOE announced Friday it has extended to Dec. 1 a deadline for investment banking firms to submit proposals to help the agency sell the Great Plains Coal Gasification Plant, the Naval Petroleum Reserves and the National Institute for Petroleum Research. The original deadline was Nov. 20.

### Inside this Issue

#### Conservation

- States are sent guidelines for spending \$727 million in oil-overcharge money . . . 8

#### DOE Organization

- An ex-FERC official active in order 436 may be headed to DOE as the next director of oil-and-gas policy . . . 3

#### Nuclear Energy

- Rep. Udall says the administration has "destroyed the credibility" of the waste repository program . . . 9
- Herrington offers a strong reinforcement of administration support for the nuclear option. . . 10
- EEI attacks IAEA's Blix for comments critical of coal. . . 5
- Herrington questions safety measures for two reactors planned for Cuba . . . 5

### **Federal Lands**

#### Coal Leasing

- Griles registers changes in section 7 diligence requirements a top priority for 1987. . . 11
- Despite having been judged in compliance, ARCO may relinquish two leases to avoid controversy . . . 11

#### OCS

- About 1,100 Gulf of Mexico leases may qualify for extensions under a new Interior policy . . . 16
- Chevron can proceed with Platform Gail development after a reaching truce with the California Coastal Commission . . 13

#### Surface Mining

- OSMRE has listed regulations suspended as a result of court actions . . . 14

### **HORN: LEASE ENTIRE COASTAL PLAIN OF ANWR**

Oil-and-gas leasing along the entire coastal plain of the Arctic National Wildlife Refuge (ANWR) is urged by Interior Assistant Secretary William Horn in a draft report to Congress, which is slated for release today (Nov. 24), according to an informed source.

Horn's findings are to be presented for public comment before Interior Secretary Donald Hodel makes his final recommendation on ANWR to Congress next spring. The ANWR issue is vital to Interior, which considers the refuge's coastal plain the most promising oil-and-gas frontier remaining in the U.S.

Horn's preliminary findings are certain to cause a furor among some environmental groups that argue the wildlife and scenic values of ANWR would be irreparably harmed by extensive energy development.

That much is acknowledged by the department. The draft report to Congress says that long-term losses of wilderness values, native subsistence uses and fish and wildlife resources would result from a long-term commitment to energy development of the coastal plain, the source said.

*(continued on page 13)*

### **DRAFT API STUDY WARY OF GOVERNMENT ACTION**

Although domestic oil production is suffering because of low prices, any decision to exercise government intervention should be weighed carefully, warns a draft energy-security study by the American Petroleum Institute.

The study, "Domestic Energy Production and National Security," is undergoing internal review within API and may be changed before being released in final reform. The current draft, a copy of which was obtained by *Inside Energy/with Federal Lands*, makes few policy recommendations and barely touches on a controversial topic in industry circles: an oil-import fee.

One source familiar with the study said at present it is intended more as an "educational tool" than as an effort to advocate any course of action.

API President Charles DiBona has said the association wants to complete two sections of the report — which will address the condition of the oil industry and import levels — in time for Reagan administration.

*(continued on page 4)*

### **RUSCHE INSISTS WASTE PLANS STILL CREDIBLE**

To hear Ben Rusche tell it, the credibility of DOE's nuclear waste program lies in the eyes of the beholder. And from his viewpoint, the program has lost none of its integrity — never mind the hailstorm of congressional and state criticism that followed the agency's decision last May to postpone work on a second repository.

"I don't know of any objective test of credibility, and if there is none, then I think that whether the program has maintained its credibility depends on whom you ask," the director of DOE's Office of Civilian Radioactive Waste Management said last week in an interview with *Inside Energy/with Federal Lands*.

For Rusche, who has largely been cast as the villain by Western congressmen and the three states named as potential repository sites, questions of credibility are more than just rhetorical and seem certain to

play an important role in determining whether the program as outlined by the department will succeed. Strong doubts have been raised by a number of House and Senate members, and the agency's integrity was most recently the target of an attack by Rep. Morris Udall, D-Ariz., who charged that the department based many of its decisions about the program on political considerations (related story elsewhere in this issue)

"There is no doubt in my mind that there are many people who suggest that the course we have taken leaves questions, . . . and there are some people who want to suggest to me that it relates to honesty," he added. "And if my honesty is in question, then I'm the wrong guy to do the job."

"It may turn out that my view of a set of facts or circumstances is different from your view, but I'll guarantee that I'm telling you with all the sincerity and honesty that I know how," Rusche said. "If I conclude that there is not integrity in the program, then that means that there is not integrity in me and I'm going to head south. If I come to the conclusion that we've lost that internal cohesiveness that I call integrity, then I don't want to be a part of it anymore."

Criticism of the program has been characterized as a "nightmare" by John Herrington, and Rusche tends to agree with the energy secretary. "I would say that the intensity of reaction has exceeded what I expected. It's not so much a matter of new and different things as it is the intensity of the reactions.

"From a management standpoint it's one of the most challenging things I've ever attempted to get a hold of, and I guess one could always look back and think that he could second-guess the situation. But in this particular set of circumstances, I'm hard put to identify some subsequent event or set of events that would have suggested another course."

The department, Rusche said, didn't have the opportunity to pick the time of its recommendation and was compelled to act when the final determinations were completed. The decision was not something that could have been scheduled with any great precision and the delays, he explained, forced the department to act at a time that was "perhaps inopportune in comparison with the work that we were doing with the second repository."

"On the other hand, it did provide us with the opportunity to look at the timing of the second repository, and maybe the convergence of events was helpful. It would have been difficult, I think, to have reached a decision on the second repository in the absence of knowing what our confidence was on the first repository program. And our confidence derived primarily from getting the president's consideration and acceptance.

"Many people want to look at the decision and say that if you had just known people were going to get intense and the outcry was going to reach this level, would you have done something different? But outcry was not the criteria for the choice," Rusche said.

Rusche expects that the department will submit a revised "mission plan" to Congress at about the same time the administration presents its next budget and said that he is confident that despite the criticism on the Hill, the program as now constructed does have enough support to win approval.

The mission plan, which in essence outlines the agency's administration of the program, will contain its rationale for postponing the second repository and Rusche defended the decision. "We exercised discretion because we believed there was room for discretion — in fact we believed there was an obligation for us."

"Our objective is to find a way for us and for them [Congress] to reach a clear and common understanding of the program's direction," Rusche said he believes there is sufficient support in Congress for the program. "We may be wrong, but we've got to find that out."

The decision by Congress late this session to cut funding for the program to \$499 million (the department had originally sought roughly \$770 million) was a serious blow to the program and will mean that the department is unlikely to meet many of the deadlines under the Nuclear Waste Policy Act that it had earlier hoped it would, Rusche said.

"The original budget request recognized that we were about nine months behind schedule if we still planned to make a recommendation of a site to the president by late 1991," he explained. "We had hoped to accelerate some of the things and catch that up, but we obviously won't do that now.

"What we have to do now is move as vigorously as we can and try to get the site characterization plans to the point where we can begin shaft work," he said.

Rusche added that the funding cut is unlikely to translate into any particular parts of the program being cut off entirely, and suggested instead that the pace of the work would be slowed. "We will not catch up unless we are able to accelerate the funding in future years, and that's a question that we and the Congress will have to face."

Although a number of critics of the program have suggested that Congress' ban precluding the department from conducting any shaft work at the three sites in this fiscal year was largely symbolic because current problems with the agency's quality assurance problems would have likely delayed shaft work next year in any event, Rusche dismissed such arguments. "We had hoped to begin shaft work late in the fiscal year — about late August in Hanford, and a little bit later but still in the fiscal year in Nevada — and I think people make a mistake to say that it [Congress' prohibition] was a hollow statement. What it did was preclude us from doing something that was an

## HORN: LEASE ENTIRE COASTAL PLAIN OF ANWR . . . . . begins on page 1

ANWR lies in the northern-most part of Alaska and borders the Beaufort Sea.

The Horn recommendation, therefore, is couched in conditional language. The source noted the report asks that Congress give Interior the authority to impose any restrictions necessary to avoid adverse environmental effects and to require compensation for any significant losses of wildlife-habitat quality. Horn is assistant secretary for fish and wildlife and parks.

Horn's conclusions were based on analyses of the national need for domestic sources of oil and gas and on the belief that industry can minimize environmental damage with the experience gained from energy development elsewhere in Alaska, the source said.

The report says there is a 5% chance that the coastal plain area could contain more than 29.4-billion barrels of oil and more than 64.5 Tcf of gas. It gives a 95% chance that the area could contain more than 4.8-billion barrels of oil and 11.5 Tcf. The coastal plain totals about 1.5-million acres out of 19-million acres in the entire refuge.

The report identifies 26 structural traps that could indicate potential for "giant" (100-million barrels or more) or "supergiant" (500-million barrels or more) oil fields.

The range of choices for ANWR's future identified in the draft report include: leasing the entire area for oil and gas development, as Horn recommended; leasing a limited area; permitting additional exploration, including exploratory wells; taking no action with regard to oil and gas activity but including the area in a comprehensive planning process for the refuge; and designating the coastal plain as wilderness.

The report also looks at the potential environmental consequences of each of those alternatives.

It was earlier thought the report would not be released until next year. But the Interior source said the department was unveiling the draft study now to fulfill requirements of a Feb. 25 federal district court ruling. That court decision said the National Environmental Policy Act (NEPA) required that Interior provide the public an opportunity to comment on the report prior to its release to Congress.

While Interior has appealed that ruling, department officials decided to proceed with release of the draft now so the final legislative report and final environmental impact statement can be sent to Congress by spring.

The report was prepared to fulfill the requirements of section 1002 of Alaska National Interest Lands Conservation Act. That section required Interior to study the wildlife and energy values of the coastal plain and for the secretary to report the results and ANWR-management recommendations to Congress.

Some environmentalists are concerned about potential effects oil-and-gas development would have on caribou herds that use the coastal plain as a calving ground.

Interior plans three public meetings on the report. One will be Jan. 9 in Washington, D.C. There will be announced later on meetings in Anchorage and Kaktovik, Alaska. — *Sheryl Morris*

## CHEVRON'S PLATFORM GAIL GETS GO-AHEAD IN CALIFORNIA COASTAL AGREEMENT

Chevron U.S.A. Inc. can haul the superstructure for its Platform Gail out of storage in Los Angeles Harbor and begin to install it off the California coast following an agreement with the California Coastal Commission and the Interior Dept.

The state commission had objected to Chevron's oil-and-gas production plans for the Gail project, forcing the company to postpone them pending resolution of the dispute (*IE/FL*, 22 Sept, 12). The agreement negates the need for U.S. Commerce Secretary Malcolm Baldrige to arbitrate in the matter. Chevron had appealed to the Commerce Dept. against a commission denial of consistency for the Chevron project.

Consistency refers to the provision under the Coastal Zone Management Act that oil-and-gas operations in federal waters be consistent with state coastal zone management plans.

Industry has urged the Reagan administration to watch more closely how states use their consistency authority. Some industry spokesmen complain the consistency process gives states too much leeway to interfere with projects outside of state waters.

An Interior official praised the Chevron agreement as recognizing "the importance of the federal offshore leasing program." Interior Assistant Secretary J. Steven Griles said, "This agreement demonstrates that solutions regarding offshore development and production can be negotiated."

The agreement means that Interior's Minerals Management Service will approve Chevron's amended development and production plan for Gail, Griles said. It also would prevent the state commission from initiating any further administrative or judicial challenges to MMS approval of the amended plan. The agreement also would set aside a legal challenge filed by Chevron against the state commission.

The Platform Gail issue drew widespread public attention when Chevron ended up paying what it said was \$200,000 a day to tow the platform's jacket in circles offshore California as a temporary measure during the dispute with the state commission. The jacket was later moved to harbor storage.

The oil company had given the go-ahead for delivery of the superstructure from Japan this past July. But when the structure arrived, the disagreement with the state commission left Chevron unable to install

the jacket at the operations site in the Santa Barbara channel.

A Chevron spokesman said the Platform Gail dispute was not a "good test case" on the consistency issue, terming the difficult history of the project an "aberration."

"The breakthrough was pretty much that we were able to meet the commission's environmental concerns, even though that was beyond what some people thought we should have to do," the spokesman said. "And we were able to do it in a manner that would not establish a precedent for other projects."

Chevron will now proceed with pipeline construction for the project, the spokesman said. Barge launching of the superstructure may take place in late February. Chevron estimates the delay may have cost the company about \$10 million to \$15 million, mostly from the cost of holding a launching barge on standby.

**OSMRE HAS PUBLISHED A LIST OF REGULATIONS IT PLANS TO SUSPEND** on Dec. 19, 30 days after the formal suspension notice was published in the *Federal Register*.

The action complies with two 1985 U. S. District Court decisions issued after many of the regulations implementing the Surface Mining Control and Reclamation Act of 1977 were challenged by states, coal industry representatives and citizens and environmental groups. Portions of both the 1979 regulations and the 1983 revisions of the regulations were challenged.

The Nov. 20 *Federal Register* notice also details the status of the regulations implementing SMCRA while the Office of Surface Mining Reclamation and Enforcement is developing rules to replace the suspended rules. "This suspension notice is an interpretative statement that describes how the Secretary [of the Interior] is already implementing the court's decision," the published notice says.

For each of the 57 regulations to be suspended, the notice contains an explanation of the rule, the basis for the court's action on the rule, and the legal effect of the suspension.

According to the notice, state programs based on 1983 revisions will remain in effect until the OSMRE director determines if changes are necessary and he has notified state regulatory authorities.

The sections of the Code of Federal Regulations affected include such definitions as affected area, previously mined area, and valid existing rights.

It also addresses the Indian lands program, federal lands program, the requirement that historic places be publicly owned, areas where mining is prohibited, and variances from approximate original contour of the land.

**A DISTRICT COURT HAS REFUSED TO REOPEN A TWO-ACRE-EXEMPTION CASE** against the Interior Dept. that was settled out of court in 1985, an agency spokesman said at press time. The court decision came Thursday.

Judge Charles Richey declined plaintiffs' motion to reopen at this time, but he indicated further briefs would be necessary and called for presentation of oral arguments in the spring, the spokesman said. Interior expects to receive a written confirmation of the order in about two weeks.

Plaintiffs in the case were Save Our Cumberland Mountains, Virginia Citizens for Better Reclamation and the Council of Southern Mountains.

The plaintiffs cited the Office of Surface Mining Reclamation and Enforcement's "systematic non-compliance with the earlier settlement" as reason for reopening the case. In its motion, the plaintiffs also asked for more Interior inspectors and more inspections of two-acre sites in Virginia and Kentucky. The judge refused both requests.

The out-of-court settlement called for an inventory of two-acre sites in Virginia and Kentucky and for the inspection of sites and appropriate enforcement actions. Interior reported quarterly on its actions to both the court and the plaintiffs.

**THE SUPREME COURT WON'T HEAR A CASE INVOLVING INDIAN ROYALTIES** for resources recovered from a reservation in New Mexico, in which the 10th U.S. Circuit Court of Appeals ordered several oil companies to pay the Jicarilla Apache Tribe \$3+3,738 on land leased since the early 1950s for oil-and-gas production.

The tribe brought suit against the companies, including Exxon, Southland Royalty and Unicon Producing, on several charges. The tribes charged that the amount of royalties due their members should have been calculated under a dual accounting method, which bases the royalty on the higher of two pricing schemes.

In its appeal to the high court, the oil companies claimed it was the government's responsibility to make sure the method most advantageous to the tribe was used in calculating the royalties and, therefore, the government was at fault and should pay the money to the tribe. The Supreme Court decision against reviewing the case allows the appeals court ruling to stand.

**Mount Diablo Meridian, Nevada**

T. 5 S., R. 43 E., (unsurveyed)

Sec. 17, SW 1/4 SW 1/4

Sec. 18, SE 1/4 SE 1/4

Sec. 19, E 1/4

Sec. 20, NW 1/4 NW 1/4

Sec. 30, NE 1/4

Containing 180 acres, more or less.

The area described is located in Esmeralda County, Nevada. The application was filed on October 8, 1986, and on that date the land was segregated from all other forms of appropriation under the public land laws.

For a period of 45 days from the date of this notice, interested persons may submit comments to the District Manager, Bureau of Land Management, Battle Mountain District, N. 2nd and Scott Streets, P.O. Box 1420, Battle Mountain, Nevada 89820.

Terry L. Plummer,

District Manager.

[FR Doc. 86-28452 Filed 11-21-86; 8:45 am]

BILLING CODE 4319-04-M

**Fish and Wildlife Service****Availability of the Arctic National Wildlife Refuge, Alaska, Coastal Plain Resource Assessment and Draft Legislative Environmental Impact Statement**

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of availability.

**SUMMARY:** As required by section 1002(h) of the Alaska National Interest Lands Conservation Act of 1980 (ANILCA), the U.S. Fish and Wildlife Service has prepared a report to Congress concerning the coastal plain of the Arctic National Wildlife Refuge, Alaska. In accordance with 40 CFR 1506.4 and 1506.8 of the Council on Environmental Quality's regulations to implement the National Environmental Policy Act (NEPA), this report incorporates a legislative environmental impact statement (LEIS). This draft report/LEIS is being made available for public review and comment due to the court's order in *Trustees for Alaska, et al. v. Donald Hodel, et al.*, Civ. No. A85-551 (D. Ak. Feb. 25, 1986). The United States has appealed the district court's ruling to the ninth circuit court of appeals because the government feels that the district court imposed administrative requirements in the preparation of the report/LEIS not required by law. The government's appeal was argued on September 3, 1986, but a date for the ninth circuit's decision is not known and no decision

has been rendered yet. Even though the government feels that the district court's ruling is wrong, the Department of the Interior is commencing the administrative process laid down by the district court because a final report/LEIS has already been delayed beyond the September 1986 deadline established by ANILCA and so that the process can be completed in time to give the members of Congress sufficient opportunity to consider the report/LEIS during their upcoming term. Should the court of appeals rule in the government's favor before it completes the steps imposed by the district court, the Department of the Interior will review the course of action which it is now commencing and advise the public through a future public notice of any changes that might be made in the procedures to be followed in completing and submitting the final report/LEIS to Congress.

**DATES:** Comments must be submitted on or before January 23, 1987, to receive consideration.

**ADDRESS:** Comments should be addressed to the Director, U.S. Fish and Wildlife Service, Division of Refuges, Room 2343 Main Interior Building, 18th and C Sts. NW., Washington, DC 20240.

**FOR FURTHER INFORMATION CONTACT:** Noreen Clough, U.S. Fish and Wildlife Service, Division of Refuges, 18th and C Streets NW., Room 2343 Main Interior Building, Washington, DC, 20240, telephone (202) 343-4313; or Clay Hardy, U.S. Fish and Wildlife Service, Division of Planning, 1011 E. Tudor Road, Anchorage, AK 99503, telephone (907) 786-3388.

Copies of the draft report/LEIS have been sent to all Federal, state and local agencies with jurisdiction by law or special expertise; to concerned conservation organizations; to affected Native regional and village corporations and other organizations; and to the oil and gas industry. Copies have also been distributed to selected members of Congress. Additionally, copies have been made available at major libraries in the State of Alaska and the other 49 states, in the Arctic National Wildlife Refuge headquarters in Fairbanks, and all regional offices of the Fish and Wildlife Service, as listed below:

Arctic National Wildlife Refuge, 101 12th Ave., Box 20, Fairbanks, AK 99701, telephone (907) 456-0250.

U.S. Fish and Wildlife Service, Refuges and Wildlife, Lloyd 500 Building, Suite 1382, 500 NE Multnomah St., Portland, OR 97232, telephone (503) 231-6118.

U.S. Fish and Wildlife Service, Refuges and Wildlife, 500 Gold Ave. SW., Room 1306, Albuquerque, NM 87103, telephone (505) 766-2321.

U.S. Fish and Wildlife Service, Refuges and Wildlife, Federal Building, For. Snelling, Twin Cities, MN 55111, telephone (612) 725-3563.

U.S. Fish and Wildlife Service, Refuges and Wildlife, Richard B. Russell Federal Bldg., 75 Spring St., Atlanta, GA 30303, telephone (404) 221-3588.

U.S. Fish and Wildlife Service, Refuges and Wildlife, One Gateway Center, Suite 700, Newton Corner, MA 02158, telephone (617) 965-5100.

U.S. Fish and Wildlife Service, Refuges and Wildlife, 134 Union Blvd., Lakewood, CO 80225, telephone (303) 238-7920.

Individuals wanting a copy of the document should contact Ms. Clough or Mr. Hardy.

Public meetings on the report/LEIS will be held in Anchorage and Kaktovik, Alaska, during the week of January 5, 1987. The exact times and locations will be announced in a future Federal Register notice and in local newspapers in the affected areas. A public meeting will also be held on January 9, 1987, at 1:30 p.m., in the Main Interior Building Auditorium, 18th and C Streets, NW., Washington, DC.

**SUPPLEMENTARY INFORMATION:** Section 1002(h) of the Alaska National Interest Lands Conservation Act (ANILCA), 16 U.S.C. 3142(h), of December 2, 1980, requires that the Secretary of the Interior prepare and submit to Congress a report concerning the resources of the 15-million acre coastal plain of the 19-million acre Arctic National Wildlife Refuge, Alaska. This report is to contain the following:

- (1) The identification of those areas within the Arctic Refuge coastal plain ("1002 area") that have oil and gas production potential and estimates of the volume of oil and gas;
- (2) A description of the fish and wildlife, their habitats, and other resources in the 1002 area;
- (3) An evaluation of the adverse effects of carrying out further exploration, development and production of oil and gas on the 1002 area;
- (4) A description of how oil and gas, if produced within the 1002 area, may be transported to processing facilities;
- (5) An evaluation of how this oil and gas relates to the national need for additional domestic sources of oil and gas; and
- (6) The recommendations of the Secretary with respect to whether further exploration for, and the development and production of oil and gas in the 1002 area should be permitted and, if so, what additional legal authority is necessary to ensure that the adverse effects of such activities on fish

and wildlife, their habitat, and other resources are avoided or minimized.

The draft report/LEIS summarizes more than 5 years of biological baseline studies, surface geological studies, and two seasons of seismic exploration surveys. The analyses of the data represent the exhaustive efforts of more than 50 scientists of the Department of the Interior. The draft report/LEIS has been prepared by the Fish and Wildlife Service, with cooperation from the U.S. Geological Survey and Bureau of Land Management.

Section 1002(h)(6) asks for a recommendation as to whether or not the coastal plain should be opened for oil and gas activity. To assist in making this recommendation, the draft report/LEIS analyzes a range of alternatives for management of the 1002 area: opening the entire area for oil and gas leasing; opening a limited area to oil and gas leasing; permitting additional exploration, including exploratory wells; taking no action regarding oil and gas activity but including the 1002 area in the comprehensive conservation planning process for the entire refuge; or designating the 1002 area as wilderness. The potential environmental consequences of implementing these alternatives are also examined.

Based on the analyses presented, on the national need for domestic sources of oil and gas, and on the ability of industry to minimize damage as learned from oil and gas activities elsewhere in the Alaskan arctic, the proposed action (preferred alternative) in the draft report/LEIS is to lease the entire 1002 area for further oil and gas exploration and development. To afford the special protection necessary to conserve the high natural resource values of the 1002 area the proposed action asks for authority to impose restrictions to ensure environmental integrity during all oil and gas operations. It is further recommended that development to be designed so as to result in no necessary adverse effects, and that unavoidable habitat losses be fully compensated.

During the early stages of preparing a preliminary draft report and detailed legislative environmental impact statement (LEIS) for departmental review, legal action was taken against the Department and the Fish and Wildlife Service by Trustees for Alaska and other environmental groups in *Trustees for Alaska, et al. v. U.S. Dep. of Interior, et al.*, Civ. No. A86-551 (D. AK, Feb. 25, 1986). The plaintiffs contended that the Department's plans (i.e., to circulate the report/LEIS for public comment concurrently with its submittal to Congress, and to forward any comments received and the Department's responses subsequently)

failed to fully comply with the National Environmental Policy Act (NEPA), and the Department must provide an opportunity for public participation in preparation of the report/LEIS in advance of its submittal to Congress. The court ruled in favor of the plaintiffs and by court order dated February 25, 1986, directed the Department to prepare both a draft and final report/LEIS's, and permit public review and comment on the draft LEIS. The court further directed that public meetings on the draft report/LEIS be held in Alaska and elsewhere and that the Department's responses to public comments be published locally before or at the time the final report/LEIS is submitted to Congress. It is the position of the Department and the Service that a draft report/LEIS need not be circulated in advance and that a single detailed report/LEIS, as provided for in 40 CFR 1506.8(b)(2), fully complies with the requirements of NEPA. Therefore, the Department has appealed the court's decision.

The appeal was argued on September 3, 1986. No decision has been issued yet and it is not possible to ascertain when the court of appeals will rule. Section 1002(h) of ANILCA requires the report be submitted by Congress no later than September 2, 1986. However, as a result of the lawsuit and appeal, submission of the report has been delayed. To afford the new Congress adequate time to consider the findings and recommendations of the Department of the Interior, the decision has been made to proceed with the administrative process imposed by the district court. By initiating the steps necessary to permit the early submission of the report/LEIS to the upcoming session of Congress, the Department of the Interior does not intend to disavow the government's position in *Trustees for Alaska v. Hodel*, nor has it requested the Department of Justice to withdraw its appeal.

Unless the public is notified otherwise in a future public notice, public comments will be included, together with the Department's responses, in the final report/LEIS and forwarded concurrently to the Congress with the Secretary's final report/LEIS and the Record of Decision for consideration by Congress in deciding the future management of the Arctic Refuge coastal plain.

Dated: November 19, 1986.

Bruce Blanchard,

Director, Office of Environmental Project Review.

[FR Doc. 86-26489 Filed 11-21-86; 8:45 am]

BILLING CODE 4310-65-M

## DEPARTMENT OF JUSTICE

### Lodging of Consent Decree; Western Sand and Gravel, Inc. et al.

In accordance with Departmental policy, 28 CFR 50.7, notice is hereby given that on November 14, 1986 a proposed Consent Decree in *United States v. Western Sand & Gravel, Inc.*, Civil Action No. 88-0808-B and the consolidated case of *Violet v. Western Sand & Gravel, Inc.*, Civil Action No. 83-0788-B, was lodged with the United States District Court for the District of Rhode Island. The proposed consent decree concerns the discharge of pollutants from a hazardous waste site in Burrillville and North Smithfield, Rhode Island. The proposed consent decree requires the defendants to undertake certain site cleanup actions, prepare and implement a long-term groundwater contamination study, and reimburse the United States and State of Rhode Island for costs incurred and to be incurred in cleaning up the hazardous waste site and ensuring safe drinking water supplies for neighboring residences.

The Department of Justice will receive for a period of thirty (30) days from the date of this publication comments relating to the proposed Consent Decree. Comments should be addressed to the Assistant Attorney General of the Land and Natural Resources Division, Department of Justice, Washington, DC 20530, and should refer to *United States v. Western Sand and Gravel, Inc.*, D.J. Ref. #90-11-2-83.

The proposed Consent Decree may be examined at the Office of the United States Attorney, Room 208 Federal Building and Courthouse, Kennedy Plaza, Providence, Rhode Island 02903; at the Region I Office of the Environmental Protection Agency, Office of Regional Counsel, 20th Floor, John F. Kennedy Federal Building, Boston, Massachusetts, 02203; and at the Environmental Enforcement Section, Land and Natural Resources Division of the Department of Justice, Room 1515, 10th Street and Pennsylvania Avenue, NW., Washington, DC 20530. A copy of the proposed Consent Decree may be obtained in person or by mail from the Environmental Enforcement Section, Land and Natural Resources Division of the Department of Justice at the above address. In requesting a copy, please enclose a check in the amount of \$18.40

# Study pushes for oil drilling in Alaskan wildlife refuge

Associated Press

Washington, D.C.

An Interior Department study recommended Monday that the energy-rich coastal plain of Alaska's Arctic National Wildlife Refuge be opened to full-scale oil development so long as its fragile ecology and wildlife are protected.

"The area is clearly the most outstanding oil and gas frontier remaining in the United States and could contribute substantially to our domestic energy supplies," according to the study mandated by Congress in 1980.

At the same time, the study warned that "oil and gas development will result in widespread, long-term changes in wildlife habitat, wilderness environment and native community activities."

Environmental groups, saying development and protection are not compatible in the refuge, said they would work to persuade Congress to bar oil and gas drilling in the tundra.

"We think we can kind of have it both ways," Assistant Secretary William Horn told a press conference. "You have here the potential for super-giant oil fields. . . . We see substantial economic and substantial national security benefits."

The study said geologic tests indicate that as many as 9.2 billion barrels of oil could be recovered from the 1.5



Star and Tribune map

million-acre tract, the northernmost section of the 18 million-acre Arctic National Wildlife Refuge.

This production level would rival the nearby Prudhoe Bay fields, which account for about 20 percent of the nation's production, and would represent about 589 days supply at current consumption levels.

The Fish and Wildlife Service study was sent to Interior Secretary Donald Hodel, who plans to make a formal recommendation to Congress early next year after public hearings in Alaska and Washington, D.C..

House Interior Committee Chairman Morris Udall, D-Ariz., will introduce legislation to prohibit development of energy resources in the coastal plain, according to a committee aide.

On the Senate side, Bennett Johnston, D-La., incoming chairman of the Energy and Natural Resources Committee, said any development legislation will be viewed "with the greatest care and caution."

The refuge is home to wildlife including snow geese, musk oxen and the Porcupine caribou herd.

# Feds urge new drilling in Alaska

USA Today  
Nov. 25  
1986

By Rae Tyson  
USA TODAY

An ecologically sensitive piece of northeastern Alaska coastline should be opened for oil and gas exploration, the Interior Department recommended Monday.

"The area is clearly the most outstanding oil and gas frontier remaining in the United States," a study said of the 1.5-million acre parcel.

The recommendation goes to Interior Secretary Donald Hodel, who's expected to ask Congress to OK it this spring.

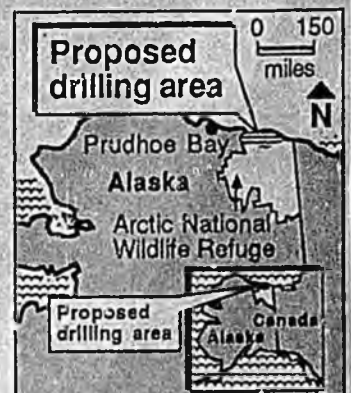
Monday's news brought immediate protests from environmentalists, who want to protect caribou herds and other wildlife in the remote region.

Defenders of Wildlife spokeswoman Amy Skilbred called it "a sin to drilling in Yellowstone National Park; this is the last place we should go for oil and gas."

Environmentalists' plea: Make the land part of the adjacent 19-million acre Arctic National Wildlife Refuge.

Sen. Ted Stevens, R-Alaska, said the Coastal Plain region — east of oil-rich Prudhoe Bay — could be "the Saudi Arabia of North America."

Stevens says that should the current oil glut ease, development would end reliance on



By Marcy Eckroth Mullins, USA TODAY

foreign oil and protect national security interests.

Estimated reserves in the coastal region: It could yield as much as 20 percent of domestic production.

The United States currently imports about 30 percent of its crude oil.

At a conference last week, geologist Roger Herrera of Standard Alaska Production Co. said that "this area without a doubt is the area with the greatest oil and gas potential that hasn't been explored."

"The chance of finding super-giant oil fields in this tiny patch of real estate is tremendous."

Said Randy Snodgrass of the Wilderness Society: "We liken it to melting down the Statue of Liberty for the copper."

Alaska Coalition for  
American Energy Security

P.O. Box 10-1515  
Anchorage, Alaska 99510-1515  
(907) 561-8641

## Arctic National Wildlife Refuge

## And America's Energy Need

### ANWR

#### What you should know . . .

The security of the United States is in jeopardy as a result of the dramatic rise in the level of oil imported from the Middle East.

The nation's most promising area for new oil discoveries lies in northeastern Alaska, on the Coastal Plain of the Arctic National Wildlife Refuge.

Congress created the 9 million-acre Arctic National Wildlife Range in 1960. In 1980, Congress passed the Alaska National Interest Lands Conservation Act renaming the area the Arctic National Wildlife Refuge and doubling the acreage which is now over 19 million acres. At the time, Congress recognized the need to assess the oil and gas potential of the Refuge's Coastal Plain — a 1.5 million-acre section of ANWR.

The Department of Interior was directed to conduct a study of the Coastal Plain's potential.

Soon, the question of what to do with ANWR will come before Congress again. The right decision will be to maintain the Coastal Plain as a refuge which could be explored for possible petroleum development under environmentally responsible measures. The wrong decision would be to classify it as wilderness and lock up the region altogether.

We urge you to consider these critical points:

- **REMEMBER THE OIL EMBARGO:** National security and economic stability depend on sufficient on-going quantities of domestic oil production.
- **ANWR's OIL POTENTIAL IS HUGE:** The Coastal Plain of the Arctic National Wildlife Refuge is America's best prospect for new discoveries of domestic petroleum to replace dwindling supplies.

#### STATE OF ALASKA

- COASTAL PLAIN
- ▨ ARCTIC NATIONAL WILDLIFE REFUGE



- **TO EXPLORE IS NOT AN EITHER/OR DECISION:** The environmental record in Arctic Alaska provides positive proof that sensible development can coexist harmoniously with wildlife.
- **OIL FIELD CARIBOU THRIVE:** Caribou in North Slope oil fields have tripled in population size since development and biologists expect ANWR caribou to adapt as well.

## A national need

North Slope production provides this country with more than 20 percent of its domestic supply of oil.

However, with the recent decline in oil prices, oil imports have increased alarmingly to 44.5 percent as of September, 1986. This amount will grow as dwindling domestic reserves are not replaced.

Who can forget the long gas lines of 1973? Most of the free world's proven oil reserves still exist in the Middle East, a region that is no more politically stable today than it was during the oil embargo in 1973, or in 1979 when prices escalated as a result of the Iran/Iraq conflict.

According to the Secretary of Energy and an interim report by the National Petroleum Council (NPC):

- "The positive trends of 1981-1985 toward reduced U.S. dependence on imported oil, particularly from the Middle East, are being reversed. Imports from the Middle East more than doubled during the first seven months of 1986."

- "The recent severe oil price decline has resulted in significant reductions in U.S. exploration, production, and drilling activity; these reductions cannot be quickly reversed."

- "Lower oil prices are encouraging growth in energy demand while reducing U.S. oil and gas production."

- "Until oil prices increase appreciably, U.S. exploration will remain stagnant, our dependence on imports will continue to increase, and our vulnerability to oil price shocks and possible oil shortages or stoppages will rise to an excessively dangerous level. All of this could seriously affect our strategic and national security as well as our economic stability."

## Economic benefits

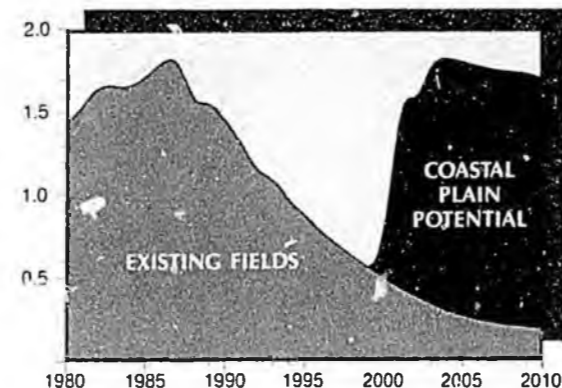
Virtually every state in the Union has experienced the economic benefits of oil production from Alaska's North Slope. But future jobs will depend on new discoveries of oil, since the major planned facilities are now in place. In addition to the money the federal government receives from petroleum lease bonuses, rentals, royalties and excise and income taxes:

**FUTURE SUPPLY/DEMAND OUTLOOK**  
Net U.S. Oil Imports as a Percentage of Oil Consumption



NOTE: Potential import levels are based on responses to an NPC survey of future supply/demand outlooks that utilized two oil price trends provided by the Department of Energy: an upper price trend starting at \$18/barrel in 1986 and growing at a real rate of 5%/year to \$36 in 2000, and a lower price trend starting at \$12/barrel in 1986 and growing at a real rate of 4%/year to \$21 in 2000.

**FUTURE ALASKA NORTH SLOPE PRODUCTION**  
Million Barrels Per Day



- The oil industry in Alaska has spent more than \$25 billion on North Slope development in goods and services purchased in all of the 50 states during the last five years.

- In Alaska, the oil and gas industry provides almost 90 percent of the state's income, and is the largest private employer.

## Gigantic potential

Situated between North America's largest oil field at Prudhoe Bay, and significant commercial discoveries in the Canadian Beaufort Sea and MacKenzie River Delta region, the geology of the Coastal Plain looks encouraging:

- The major geologic trends and rock formations of known North Slope reserves are believed to extend into ANWR.

- The U.S. Geological Survey estimates that ANWR's Coastal Plain may equal or exceed Prudhoe Bay which is expected to recover 9.6 billion barrels of oil.

## An excellent record

The industry's proven commitment to environmental protection, and stringent state and federal regulations would ensure that petroleum development in the Coastal Plain of ANWR would be carried out in a proper manner.

- Fifteen years of studying the North Slope near Prudhoe Bay, and more than forty years of engineering in Arctic Alaska will be applied to exploration and production in ANWR in a manner that protects the environment.

- Developers routinely consider wildlife, use, habitat and drainage in selecting sites for production facilities, roads and pipelines. Directional drilling allows for the consolidation of facilities, preserving acres within the oil field for wildlife habitat.

- Millions of barrels of oil are produced every day in sensitive environments around the country, including other national wildlife refuges.

## A caribou success story

The caribou of the Central Arctic Herd calve and spend their summers on the coastal plain of Alaska — in the Kuparuk and Milne Point oil fields. There's every reason to believe the Porcupine Caribou Herd, whose summer range includes the Coastal Plain of ANWR, would likewise adapt and prosper.

- The last Alaska Fish and Game census shows the Central Arctic Herd is continuing to grow at a healthy

rate, and in fact has tripled since development began.

- During calving and insect harassment periods, oil field activity is routinely curtailed.

- Caribou ramps have been installed over pipelines, even though years of study have shown that caribou do not need ramps in order to cross.



## An urgent decision

In frontier Alaska, production usually takes 10 to 15 years after discovery. In 10 years, domestic production will have significantly diminished without new exploration and development.

The ANWR Coastal Plain holds the greatest promise to supply the domestic reserves necessary to reduce our increasing dependency on foreign oil.

The national security and energy independence of the United States will be greatly enhanced if major petroleum reserves are discovered and developed.

Petroleum development in the ANWR Coastal Plain could provide jobs and economic benefits throughout the country.

- The ANWR decision Congress makes today will affect all our futures. If you agree that our country needs energy security through sensible development, write your Congressional representative today.

MEMO

TO: Sam  
FROM: Sharman  
RE: ANWR -- perspective from Katz' office  
DATE: Oct. 28, 1986

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I spoke with Eric Laschever in Katz' office in Washington. He's been following the ANWR issue there for the gov.

The first thing to be aware of is that ANWR won't be open for exploration until Congress acts. And it could take 2 to 4 years to work out a bill.

Congress won't officially start looking at the issue until the Dept. of Interior (Fish & Wildlife Service) finishes the 1002 report -- probably in early spring or summer. The state is also working on its own report and supplying information to the Dept. of the Interior. Most of this information is confidential until the report will be made public.

It is generally expected that the Dept. of the Interior will recommend allowing exploration and development. The difficult part is setting restrictions on the development.

Of critical concern to the state is the potential for land swaps. Katz' office is regarding land trades as the number one issue to keep on top of. In particular, the state is worried that if the federal government trades ANWR land for native corporation land, then the state could be out of luck as far as collecting royalties, rents and bonuses. Any land exchanges will have to be approved by Congress.

National environmental groups are already organizing their opposition to opening up ANWR and it is being regarded as the environmental battle of the decade. On the pro-open-ANWR side is the Coalition for American Energy Security. (The state isn't a member of this coalition and hasn't yet been actively lobbying yet.)

A related issue is a lawsuit by Trustees of Alaska against the Dept of Interior. If the trustees win, then an EIS has to accompany the study along with the entire public hearing process. In this case, the debate will take place in Alaska before it proceeds to Congress. If the Trustees lose, then the debate will take places simultaneously in Alaska and in Congress and probably take less time.

MEMO

from: Sharman  
re: ANWR land exchanges

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The state is in danger of losing its 90% share of royalties, rents and bonuses of ANWR. Time is very short if the state wishes to retain any or all of the 90% share.

The USF&WS is currently involved in land exchange proposals with several native corporations. F&WS wants to exchange ANWR subsurface rights for native corporation inholdings in federal wildlife refuges.

The state has been in communication with Interior undersecretary Bill Horn on this matter. Horn has assured the governor that the state would be apprised of details regarding land exchanges. Unfortunately, this information seems not to have filtered down to the individuals responsible for implementing the exchanges. Land exchange agreements with Koniag and CIRI are already at a very advanced stage and the state has been unaware of this until this month.

John Doebel, F&WS' land exchange man, had his first official meeting with the state today, Nov. 14. He wouldn't elaborate details of the land agreements but did give an idea of the time schedule, which is very accelerated. He said agreements with native corporations could be signed as soon as next spring. He also mentioned that tract selection would take place very soon -- and that it was almost too late for the state to get involved in the exchange process.

From the state's perspective, it is of the utmost importance to be able to be in the "game" with all the cards before tract selection takes place. Whoever gets to pick first will get the best tracts -- so getting to "play" first is critical. (The native corporations have oil companies advising them.)

The state needs to act quickly if it wants to preserve its options in ANWR.

DNR is going to recommend that the state create a special ANWR task force.

Ideally, it would be nice if this could be announced next week. The RDC is having a noon forum on ANWR next Friday (Nov. 21) and this would be an ideal time. What is needed is for both Sheffield and especially Cooper to endorse this.

The time is so critical because on Nov. 24 the Dept. of the Interior is issuing a draft 1002 (h) report -- the report that begins the debate on opening ANWR.

Nov 19, 1986

# Katz

\* SIS - separate document →  
1002 - end Feb., early March

\* land trade

↳ if done, state could participate if wanted  
- FWS got back to DNIR  
- meantime, PH

Horn \* state want being active

\* incl park lands, too

↳ BLM - have

= DOT's perception that =

= we haven't been moving fast enough =

## ② Native Trades

↳ gov to Horn

↳ "don't consummate until  
we're consulted"

↳ been in constant  
1st contact

↳ State contract to Koniag  
↳ Koniag comments  
then to state & Nat. Corps.

— Valuation - no consensus  
yet =

- Natives identify lands -  
state

- \* 1) state as landowner - we need to get moving
- \* 2) boilerplate contract -  
will get it in timely manner
- \* 3) valuation of native lands -  
selection - not too late?

BA, coming together in  
next few weeks  
- by January?

Congress \* must be approved  
land trade

\* part of 1002

\* priv. land ownership  
into coastal plain

\* y natives - then 90-10 is most?  
\* Kohiaq \* regarding  
royalty to Fed  
\* fail-safe mechanism  
\*

State revenue

→ STEVENS = 50/50 ?

• Horn-shooting for Jan - ?

• EIS - structures

• 26 sep. on ANWR

• shooting for A

14.30.31

ASRC

- got one of

most promising

• we can oppose

on bad pub. policy ground

• land trade sensibly

→ in which case

state competing w/ native groups

Deal

→ Izenbek

→ interview

a lot of "land" DOI "wants park"

McCarthy

Borah "Wolf Young Lips"  
McCarthy

State  
↳ get lands on  
table  
↳

D-2

State doesn't have its act together

Congress?

↳ develop a series  
of policy decisions  
for ANWR

↳ huge fight

# oppose opening

Alaska

- fight 1987
- 88 legislation likely
- possible linkage to other issues like 1991

→ 2 studies on Tongass Nat forest  
to evaluate in cost & fund

# additional wilderness

pat

# Native trade

- ↳ were out of it
- ↳ state part in trade
- ↳ INR is on right track
- time

## Proof -

~~land trade~~

no more than two weeks to get this underway

Konig 3-4 months

~~land~~

~~land~~

long. committees

THE PRECEDING PAGES WERE TREATED AS  
A UNIT IN THE ORIGINAL FILE.