

An industrial facility, possibly a refinery or power plant, is shown in the background. Several tall smokestacks are emitting large, bright plumes of smoke or steam that rise into the sky. The facility consists of various structures, including a large dark building and several smaller units, connected by a network of pipes and walkways. In the foreground, there is a body of water, likely a reservoir or a cooling pond, which reflects the smokestacks and the sky. The overall scene is set against a clear, light-colored sky.

BROKEN

PROMISES

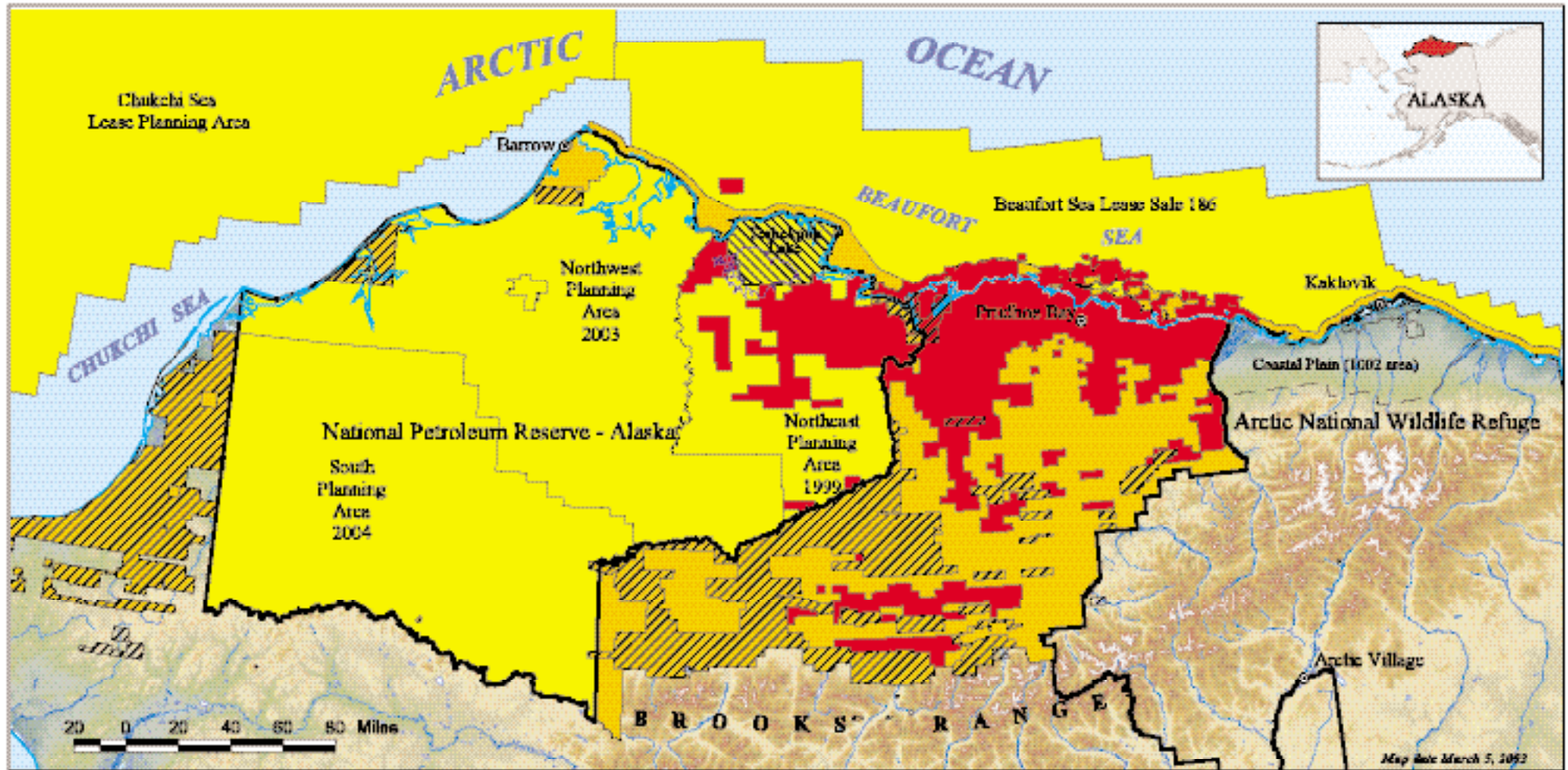
THE REALITY







OF BIG OIL

IN AMERICA'S

ARCTIC

CURRENT AND PROPOSED OIL AND GAS LEASES ON ALASKA'S NORTH SLOPE



- | | | | |
|---|--|--|---|
|  Proposed Federal Leases |  Existing State and Federal leases |  1999 Teshekpuk Lake Area deleted from leasing. April 2003 BLM plans to consider leasing. |  |
|  Proposed State Leases |  ASRC Surface and/or subsurface lands | | |

INTRODUCTION

Proponents of opening the Coastal Plain of the Arctic National Wildlife Refuge to oil development consistently argue that oil drilling will not harm the environment of the Arctic Refuge. They say drilling on Alaska’s North Slope has been clean, and they cite several factors they say will make future development environmentally benign. They profess a commitment to strict environmental regulation, and they assert that new technologies – particularly ice roads and directional drilling – would reduce even further any impact of drilling in the Arctic National Wildlife Refuge.

This report assesses those claims by comparing them with the documented impact of past and present North Slope oil development, the industry’s environmental track record at Prudhoe Bay and in the National Petroleum Reserve – Alaska (NPR-A), real technological trends in the oil industry, and other factors. The result is a clear record of broken promises on the North Slope that casts serious doubt on the reassurances being made by drilling proponents and their allies today.

Map, opposite page:

Well over 90 percent of Alaska's North Slope is available for oil and gas exploration or development. The Coastal plain of the Arctic National Wildlife Refuge is the only portion of the North Slope where oil and gas development is prohibited by law.

Front cover:

Gas flares at the Prudhoe Bay production facility. Production in the Arctic oil fields continues 365 days a year.

Back cover:

The coastal plain of the Arctic National Wildlife Refuge (1002 Area) and the Brooks Range Wilderness.

BROKEN PROMISE # 1:

Oil development on the North Slope has not been environmentally benign.

Three decades of oil industry public relations have drilled away at one familiar theme that belies the reality on the ground: that new technologies, particularly directional drilling and in recent years use of so-called "ice roads," have made oil development on Alaska's North Slope better for the environment."



Black smoke from flaring, Prudhoe Bay production facility

THE REALITY:

Prudhoe Bay and 24 other producing fields¹ today sprawl across 1,000 square miles, an area the size of Rhode Island.² There are more than 4,700 exploratory and production wells,³ 225 production and exploratory drill pads, over 500 miles of roads, 1,100 miles of trunk and feeder pipelines, two refineries, 20 airports, 115 pads for living quarters and other support facilities, five docks and gravel causeways, 36 gravel mines, and a total of 27 production plants, gas processing facilities, seawater treatment plants, and power plants.⁴

Prudhoe Bay air pollution emissions have been detected nearly 200 miles away in Barrow, Alaska.⁵ The oil industry on Alaska's North Slope annually emits approximately 70,413 tons of nitrogen oxides, which contribute to smog and acid rain.⁶ This is more than twice the amount emitted by Washington, DC, according to the US Environmental Protection Agency (EPA), and more than many other U.S. cities.⁷ Other regulated pollutants include 1,470 tons of sulfur dioxide, 6,199 tons of particulate matter, 11,560 tons of carbon monoxide, and 2,647 tons of volatile organic compounds emitted annually, according to industry records submitted to the Alaska Department of Environmental Conservation.⁸ North Slope oil facilities release large quantities of greenhouse

gases, including 24,000 metric tons of methane⁹ and 7.3 to 40 million metric tons of carbon dioxide annually.¹⁰

The Prudhoe Bay oil fields and Trans-Alaska Pipeline have caused an average of 423 spills annually on the North Slope since 1996, according to the Alaska Department of Environmental Conservation (ADEC).¹¹ Forty different substances, from acid to waste oil, have been spilled during routine operations. There were 2,958 spills between 1996 and 2002 totaling more than 1.7 million gallons of toxic substances, most commonly diesel, crude oil, and hydraulic oil. Pollution in the Arctic has more severe and persistent effects than in temperate regions. Recovery from spills in the Arctic is slower due to cold temperatures, slower growth rates for plants and longer life spans of animals.¹² Even localized, relatively small spills can have tragic consequences; a polar bear died after licking spilled ethylene glycol.¹³ While many spills affect only gravel pads, these can become contaminated and pose long-term restoration problems. For example, the ADEC lists over 100 contaminated sites caused by the North Slope oil industry.¹⁴ The effects of a large oil spill in coastal or marine waters could be devastating due to the difficulty of cleaning them up, especially in broken ice.¹⁵

NATIONAL ACADEMY FINDS WIDESPREAD IMPACTS ON THE ARCTIC

While industry focuses attention on the direct "footprint" where facilities will be built, harmful effects of the industrial network extend well beyond the sites of constructed facilities.

- A major study by the National Academy of Sciences (NAS) released in March 2003 documented significant cumulative impacts of oil development on wildlife, the land, wilderness values, and Native American cultures across an extensive area of the North Slope. Even considering the application of "new technology," the study concluded significant effects from oil industry operations are expected to continue expanding.¹⁶
- The negative effects of oil development on animals and vegetation extend well beyond the immediate "footprint" of development, according to the NAS study. Even considering technological improvements, adverse effects on caribou are expected to increase due to the density of infrastructure development and the area over which it is spread. The study found, "the common practice of describing the effects of particular projects in terms of the area directly disturbed by roads,

pads, pipelines, and other facilities ignores the spreading character of oil development on the North Slope and the consequences of this to ... wildland values over an area far exceeding the area directly affected."¹⁷

- According to the National Academy of Sciences, wildlife impacts from oil industry operations and infrastructure on the North Slope include direct mortality of grizzly bears, reduced reproductive rates of birds such as brant due to predation, and altered distribution of caribou calving and reduced reproductive productivity. Habitat for breeding and molting birds has been directly altered by gravel fill in wetlands.
- "The extent of disturbance greatly exceeds the physical 'footprint' of an oil-field complex," according to caribou biologists.¹⁸ Caribou use of preferred habitats declined substantially as the density of roads increased, according to studies of the Kuparuk oil field.¹⁹ Caribou densities decreased within 4 km of pipelines and roads, and there have been region-wide changes in calving distribution for the Central Arctic Herd at Prudhoe Bay.²⁰

- Seismic exploration surveys have covered most of the North Slope, with over 32,000 miles of seismic trails made from 1990 to 2001.²¹ Seismic exploration involves bulldozers and 56,000-pound trucks that cause long-term damage by disturbing the fragile tundra vegetation and permafrost. Endangered whales over 100 miles away can detect noise from offshore seismic exploration. According to subsistence hunters, "pods of migrating bowhead whales are displaced from their normal migratory path by as much as 30 miles."²²

RECENT OIL COMPANY FINES AND PENALTIES

ENVIRONMENTAL

\$675,000 CIVIL ASSESSMENTS AND COSTS. BP. November 2002. Fine for spill cleanup problems with 60,000 gallon Prudhoe Bay pipeline spill (\$300,000 waived by ADEC if spent on environmental project to increase using low-sulfur fuel use in school buses).²³

\$300,000 FINE. BP. June 2002. BP paid fine for delays in installing leak detection systems for Prudhoe Bay crude oil transmission lines.²⁴

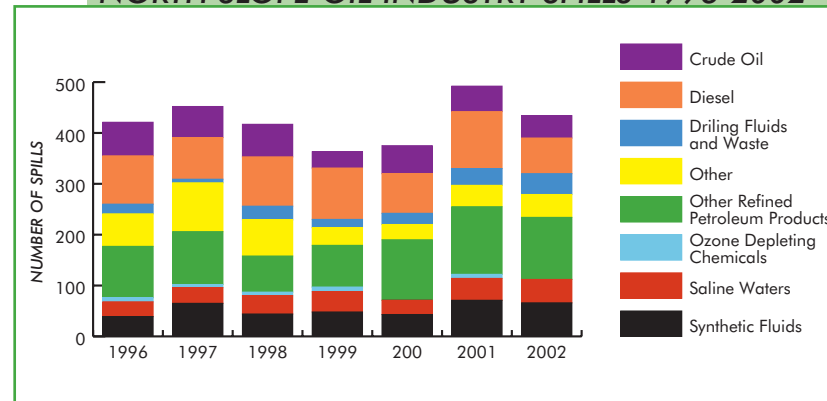
\$412,500 FINE. BP. April 2001. EPA reduced the total penalty to only \$53,460 because BP voluntarily disclosed violations of the Clean Water Act. From 1996 to 2000, BP failed to properly analyze discharges from the Prudhoe Bay Central Sewage Treatment facility and the Endicott and Prudhoe Bay Waterflooding operations.²⁵

\$22 MILLION FINES. BP. February 2000. The federal court ordered BP to pay \$6.5 million in civil penalties, \$15.5 million in criminal fines, and to implement a new environmental management program, and ordered five years of probation for late reporting of hazardous dumping down Endicott wells.²⁶

\$3 MILLION FINE. DOYON DRILLING. 1998. This BP contractor pled guilty to 15 counts of violating the Oil Pollution Act of 1990 for dumping hazardous wastes down Endicott wells.²⁷

\$51,000 PENALTY. BP. June 1993. Alaska Department of Environmental Conservation found violations of the state emission standards and the conditions of BP's Clean Air Quality permit for flaring that resulted in black smoke emissions at the Gathering Center 1 processing plan; assessed penalty reduced to \$10,000.²⁸

NORTH SLOPE OIL INDUSTRY SPILLS 1996-2002



Source: Alaska Department of Environmental Conservation Spill Database (December 18, 2002)

BROKEN PROMISE #2: Directional Drilling: Exaggerated Claims

Proponents of increased drilling on the North Slope, and boosters of drilling in the Arctic National Wildlife Refuge in particular, often claim that "directional" or "horizontal" drilling would allow them to tap oil resources while minimizing disturbance on the surface. However, their claims for the technology have been exaggerated.

THE PROMISE:

*"With new horizontal drilling, companies make one hole and tap reserves up to 7 miles away."²⁹
Interior Secretary Gale Norton,
April 5, 2001*

"The New Technology... Directional drilling, ideally suited for North Slope operations, enables the reservoir to be tapped more than one mile from the pad... no unsightly drilling rigs are left to mar the landscape... Only a relatively small system of flow lines will be

*installed above ground to carry the oil from each well to the gathering centers. Formal cleanup programs keep Prudhoe Bay part of the wilderness. No longer do abandoned oil drums litter the areas."³⁰
(British Petroleum, 1978)*

*"In order to lessen the environmental impact of man's presence, road construction is kept to a minimum. There is only one major road servicing the drilling program on the 400-square mile Prudhoe Bay field... Buildings are built on top of pilings... A number of wells are drilled from each pad – a technique adopted from years of offshore drilling technology – and angled (directionally drilled) into the target area in the producing formation."³¹
(American Petroleum Institute, 1983)*

THE REALITY:

In fact, directional drilling would do little if anything to mitigate the full impacts of oil production in the Arctic Refuge.

Permanent gravel roads and/or busy airports are still used for access, and production well sites must be connected by pipelines. Intrusive, noisy and damaging seismic surveys on the surface are still necessary for exploration.

Throughout the North Slope oil fields, the average distances of horizontal drilling have remained surprisingly constant, contrary to media portrayals and claims of drilling proponents. The average horizontal offset distance for production wells drilled in 2002 was 1.04 miles, compared with 1.02 in 1989 and 0.91 miles in 1972. The average for all wells except exploratory wells for the 1990's was 1.09 miles, compared with 0.83 miles in the 1980's, according to the GIS analysis of Alaska Department of Natural Resources well data.³² No wells have been drilled beyond a four-mile horizontal offset; the maximum horizontal offset distance drilled is 3.78 miles, in 1997.

Economic factors play a major role in determining whether extended-reach wells are drilled at all. In 2000, BP noted "the company stopped drilling

extended reach wells—those which reach out a long distance from the pad—after oil prices crashed in the late 1990's, because extended-reach drilling, ERD, is expensive."³³

The Interior Department has made it clear that directional drilling has major limitations. The Minerals Management Service explained some of the limitations of directional drilling in 2001:

..."Extended-reach drilling has not been used, or proposed, for a new startup development project. Additionally, extended-reach drilling wells are planned and approved as single-well projects, not as a comprehensive development program. Information on the long-term viability of extended-reach drilling wells for production is limited, and industry has little experience in the use of extended-reach drilling wells for gas- or water-injection wells."³⁴

The Bureau of Land Management explained that two exploratory wells need to be drilled on different pads about three miles apart, not drilled directionally from one site:

"Based on site-specific conditions, one additional alternative was considered, but eliminated from detailed evaluation. This alternative involves drilling all wells from a single ice pad (i.e. directional drilling). However, the dis-

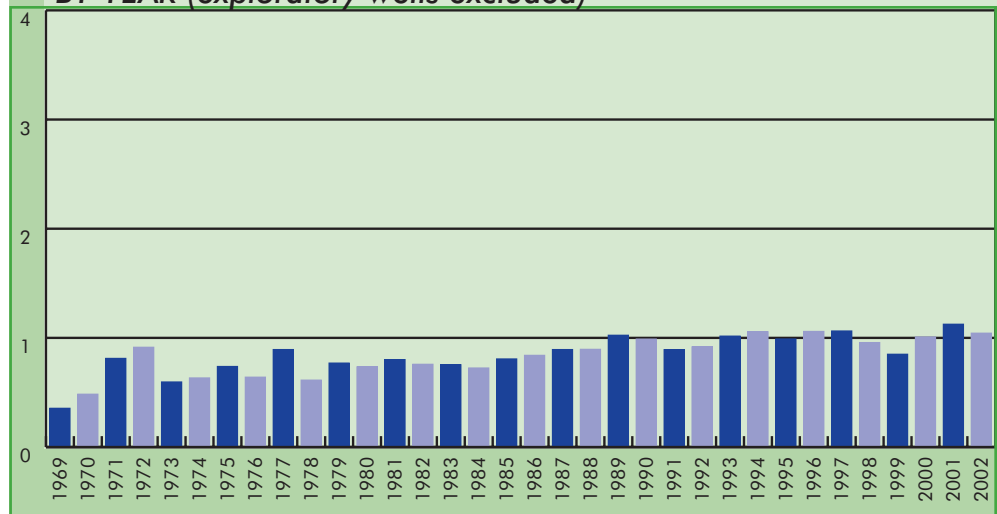
tance separating the targets at the two drill sites is farther than the capability of the drilling rig currently stored at Puviaq. In addition, extended reach drilling methods are rarely employed for exploration wells when alternatives are available. Drilling a vertical well provides far better exploration data than drilling a deviated well... the extent of commercial oil and gas prospects on CPAI leases cannot be determined if the applicant is not allowed to drill the minimum number of wells needed to define prospective oil and gas deposits. Accordingly, alternatives involving drilling at fewer sites or drilling fewer wells than applied for were considered but eliminated from further evaluation in this Environmental Assessment.¹¹³⁵ (Emphasis added)

Even at the recently developed Alpine oil field—touted as a model of new technology—the average production well has extended only 1.42 miles laterally from the wellhead (measured as the horizontal offset difference between the drill hole on the surface and its location downhole), according to GIS analysis of data from the Alaska Department of Natural Resources. The farthest production well has extended only 2.8 miles laterally from the wellhead. Contrary to the rhetoric about new technology at Alpine, the proliferation of additional drill sites—even at locations only four miles away from the main production pad—shows that the claim that directional wells tap reservoirs four to seven miles away is at best misleading.

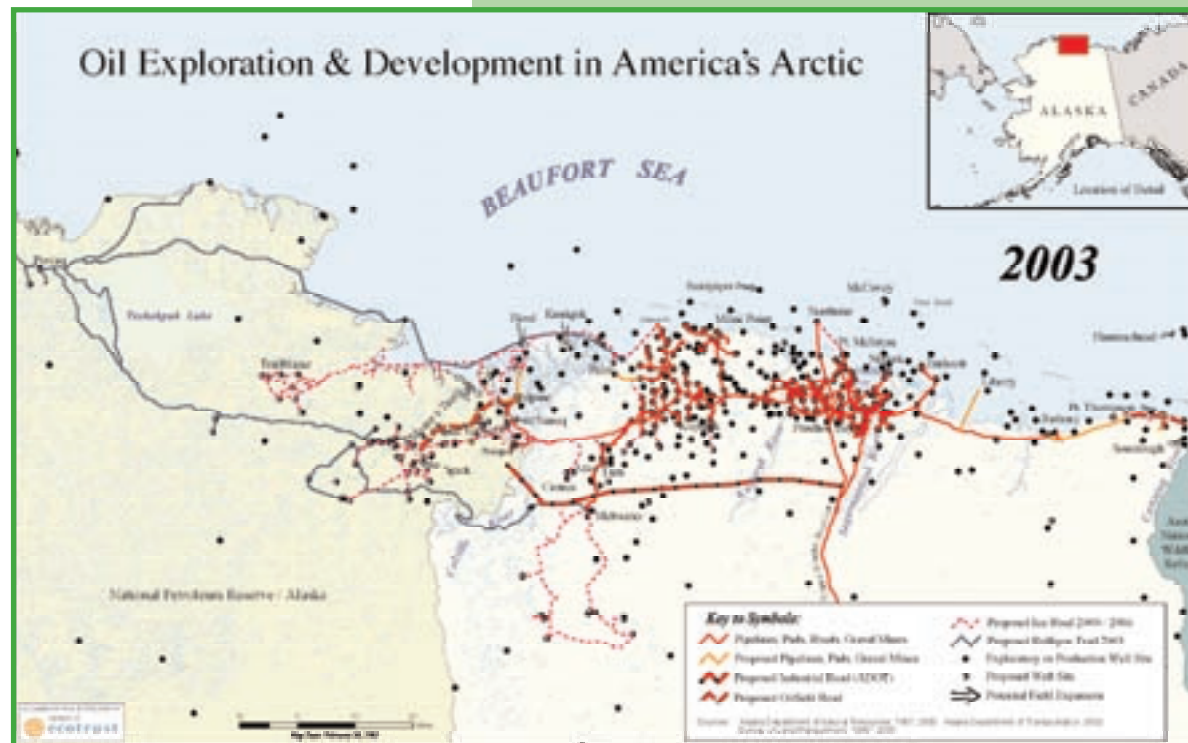
The BLM said in 2003:

“The cost of extended-reach wells is considerably higher than conventional wells because of greater distance drilled (measured depth) and problems involving well-bore stability. Alternative field designs must consider the cost tradeoffs between fewer pads with more extended-reach wells as opposed to more pads containing conventional wells. In most instances, it is more practical and cost-effective to drill conventional wells from an optimum site, [than] it would be to drill ERD wells from an existing drill site.”¹¹³⁶

NORTH SLOPE WELLS—MEAN DRILLING DISTANCE BY YEAR (exploratory wells excluded)



Directional drilling has not lived up to the claims made for it: average lateral distances have barely topped one mile.



Despite claims that new technology will reduce drilling's footprint, new and planned facilities and their associated roads and pipelines add to the sprawl across vast reaches of the North Slope.

BROKEN PROMISE #3 The "WINTER ONLY" Fallacy

The oil industry's supporters have claimed that oil development only occurs in the winter months on Alaska's North Slope, and therefore has no impact on wildlife and habitat. Such claims ignore the impact of winter exploration on wildlife and the environment and ignore the vital fact that the permanent installations required for full-scale oil production operate year-round.

THE PROMISE:

"Oil and gas activity only takes place in the wintertime—not in the summertime."

**Senator Ted Stevens
(April 10, 2002)
Congressional Record.**

THE REALITY:

While most oil exploration takes place during winter, cold-season activity still can create significant environmental damage. Winter exploration can disturb polar bears in their maternity dens and frighten sensitive muskoxen, year-round residents of the Coastal Plain. Exploration also can impact fish habitats in rivers and lakes by removing massive amounts of water, and seismic trails damage plants and permafrost.

More importantly, once oil is discovered, efforts to recover it continue year-round. Year-long vehicle traffic, production plant noise, helicopter and airplane traffic, air pollution, and other activities create inevitable conflicts with wildlife in every month and season. Oil companies have never ceased production activity in the summer months on the North Slope.³⁷

"There was Phillips' chopper right there across the main channel. They went right over the caribou back towards Alpine, and those caribou that we were going to [hunt], they took off. We're going to see this every year. There is so much traffic with Alpine and their studies during our subsistence months, in summertime. I only got one caribou this summer. All we see is traffic up in the air. And the herds we used to see... gone. With the opening of NPR-A we will only see more (airplanes)." **Dora Nukapigat, Nuiqsut, 2002**

ALPINE OIL FIELD SUMMER CONSTRUCTION

ConocoPhillips

(Then ARCO):

"Committed to minimizing the impact of aircraft operations..."

"Minimize aircraft travel during June 1 – July 15."³⁸

PREDICTION:

13 monthly flights (1997)³⁹

REALITY:

1,980 airplane & helicopter take-offs, landings in 45 days June 1-July 15, 2000⁴⁰

Air travel in and out of the Alpine oil field provides a stark example of the high degree of disruptive activity that occurs in the summer and a clear example of the industry's broken promises. During the permit-review stage of the Alpine project, ConocoPhillips, (then ARCO) stated in 1997, "use by aircraft will be restricted



Kuparuk oil field roads, pipelines, and production facilities, September 6, 2001.

during the six weeks when birds are nesting in the region." The oil company said they would need one flight every two to three days during summer for construction (13 per month), as well as during production operations.⁴¹

This prediction was off by a factor of more than 100. Between June 1 and July 15, 2000, 1,980 airplane and helicopter take-offs and landings occurred at Alpine – an average of 44 per day, including large DC-6 and C-130 cargo planes –⁴² during the bird-nesting season.⁴³ These summer flights supported production drilling, in-field road improvements and maintenance, installation of equipment and buildings, major structural modifications on gravel pads, and other construction.⁴⁴

Studies by the U.S. Fish and Wildlife Service and university biologists documented significant behavioral effects to the Pacific brant, a species of waterfowl of significant subsistence value, from helicopter overflights in the Teshekpuk Lake area.⁴⁵ Molting brant did not habituate to repeated aircraft disturbances,⁴⁶ and migration success may have been reduced.⁴⁷



Prudhoe Bay infrastructure. The pipelines, wells, roads and processing facilities of the Prudhoe Bay industrial complex sprawl over 1000 square miles of Alaska's North Slope.

BROKEN PROMISE #4 Ice Road Travel Season is Melting Away

Ice roads have received a lot of discussion as a panacea for environmentally damaging oil development. Yet the promise of this technology is flimsy. The season during which such roads are practical has been dramatically reduced by global warming and areas like the Arctic National Wildlife Refuge lack sufficient water to build the required ice roads.

THE PROMISE:

Exploration and development is done in the harsh winter months, which allows the use of ice airstrips, ice roads and ice platforms... When the ice melts in late spring, there is little remaining evidence of the work—and minimal impact on the land.⁴⁸
**Senator Frank Murkowski
(December 10, 2000)**



Even the brand-new oil field at Alpine includes miles of permanent gravel roads.

THE REALITY:

Global warming, a direct result of burning fossil fuels, is diminishing the oil industry's ability to use ice roads. Each year, the Alaska Department of Natural Resources determines when the Arctic tundra is sufficiently frozen to permit travel by heavy machinery and construction of ice roads. In 2003, this determination was made later into the winter season than ever before.⁴⁹ Increasingly, the ground is not sufficiently frozen in some regions of the North Slope before the Department approves tundra travel. Climate change researchers have noted that "the number of days that ice roads can be used for transportation and oil exploration has been severely reduced since the 1970s."⁵⁰

*"Over the past decade, ice road use on the North Slope has been shortened from 204 to 124 days. This has resulted in less time to build ice roads, complete drilling operations, and remove the drill rig. This restriction becomes a greater issue as exploration activities extend west into the NPR-A."***(Bureau of Land Management, 2002)⁵¹**

Global warming is not the only impediment to construction of ice roads and pads. Some parts of the North Slope – including the 1002 area of the Arctic National Wildlife Refuge – lack sufficient

water for ice road construction to be practical. As a result, the industry is lobbying the state and federal governments to roll back stipulations that limit the use of permanent gravel roads and airports for exploration.

WATER SHORTAGE IN ARCTIC REFUGE MAKES ICE ROADS IMPRACTICAL

Construction of ice roads requires enormous quantities of fresh water, mostly in the winter when liquid water is limited. According to the Alaska Department of Natural Resources, North Slope oil exploration and development consumed 1.5 billion gallons of water in 2000, mostly for ice roads and pads.⁵² Vast quantities of water have been extracted from lakes and rivers in the Prudhoe Bay oil fields and the National Petroleum Reserve-Alaska, which are dominated by many freshwater lakes.

The Arctic Refuge coastal plain, however, has few lakes, and water resources are far more limited. Even drilling exploratory wells in the Refuge would require huge amounts of water for ice roads, pads, ice airstrips, drilling, and drill camps. That water just isn't there.

The U.S. Fish & Wildlife Service has concluded that:

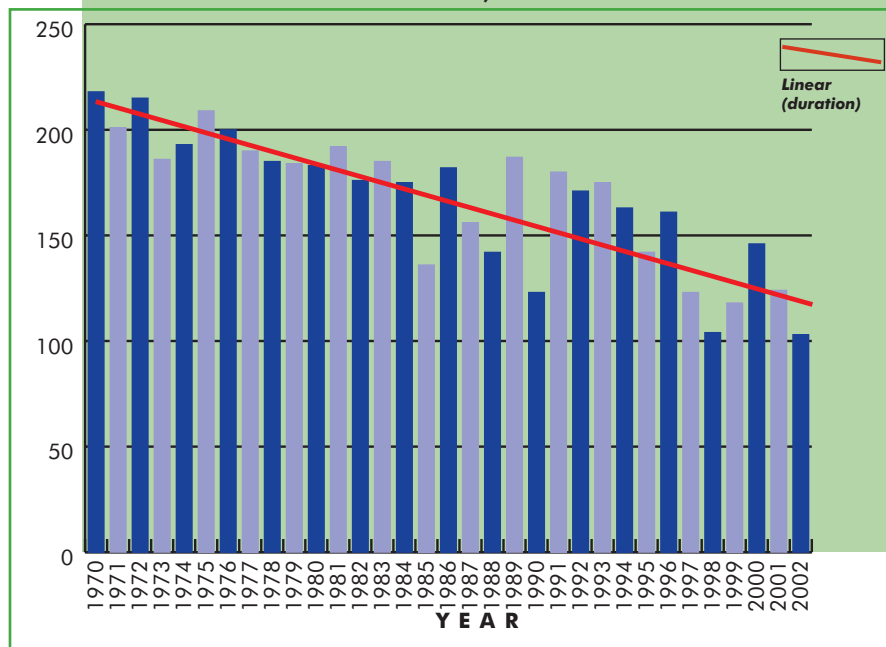
- Oil and gas development would cause major effects on the water resources of the coastal plain.⁵³
- There is only enough winter water for about seven miles of ice roads, one ice airstrip, or two ice pads in the 237 miles of rivers across the coastal plain.⁵⁴
- Only ten lakes in the coastal plain have sufficient liquid water below ice during the winter that could be used for ice road construction; 40% of the volume is in a single lake.⁵⁵
- Most of the coastal plain 1002 area is not within ten miles of these lakes – the maximum distance from a water source considered feasible for construction involving ice roads.

A 1995 U.S. Fish and Wildlife Service report reconfirmed earlier conclusions: "Additional investigations since 1987 substantiate the fact that water in the 1002 area is very limited and the impact upon water resources should be considered major."⁵⁶

In 2003, the National Academy of Sciences study found that ice roads may not be a viable alternative to gravel in areas with few lakes (e.g. the Arctic Refuge coastal plain).⁵⁷

The likely alternative? Excavate gravel from river beds and other sites to build water reservoirs and permanent roads, permanently impacting fish and wildlife habitat in the process.

A VANISHING ARCTIC WINTER TRAVEL SEASON: NORTH SLOPE TUNDRA TRAVEL – AVAILABLE DAYS PER YEAR, 1970-2002



All onshore North Slope oil fields include permanent gravel roads.

GOVERNOR MURKOWSKI MOVES TO BUILD NEW PERMANENT ROADS

Senator Frank Murkowski talked at great length about ice roads and asserted that gravel roads are not needed for oil development in the Arctic National Wildlife Refuge. Now, as one of his first acts as Governor of Alaska, Frank Murkowski is pushing for a new permanent road to be built on the North Slope from the Trans-Alaska Pipeline to the NPR-A. (See Alpine Map, page 11)

"Now let me show you how we operate. I said we are not going to have roads. We are not going to open up gravel pits. That is drilling in the Arctic. That is the same as in the 1002 area of ANWR. That is a winter road. It is a road that is frozen. It works fine... Where are they talking about these big gravel roads? It isn't done anymore. We use technology."⁵⁸
Senator Frank Murkowski
(April 17, 2002)

THE REALITY:

"Build a permanent new road west off the Dalton Highway to the village of Nuiqsut. The road would make it easier for oil and gas explorers to push into promising frontier areas west of existing oil fields around Prudhoe Bay... the proposed road would be built on state land, possibly beginning next winter."⁵⁹
Governor Frank Murkowski
(February 14, 2003)

BROKEN PROMISE #5: Alpine is no Environmental Showpiece

The oil industry and its supporters consistently cite the recent Alpine oil development, like the Endicott oil development before it, as a state-of-the-art showcase for new technology. The Bureau of Land Management has cited the Alpine project – which was originally permitted in 1998 as a facility with two drill sites linked by three miles of road – as a "model" for predicting future scenarios in environmental impact statements addressing the Western Arctic (NPR-A). Yet the sprawling, piece-meal development that has actually occurred at Alpine has far exceeded the oil companies' initial disclosures, and its environmental and other impacts are increasingly alarming.

THE PROMISE:

*"Smallest footprint ever...we'll develop Alpine from just two drill sites of less than 115 acres."
ARCO "Alpine – Discovering the Future" (1998)*

THE REALITY:

In 2003, ConocoPhillips announced plans for developing five additional production well sites and eventually 10 more to connect to Alpine. Once the first five new satellites are constructed, the Alpine Project will include 25 miles of permanent gravel roads, 19 miles of which would be on the NPR-A; two airstrips; a 150-acre gravel mine; and 60 miles of pipelines.⁶⁰ This pattern of incremental expansion of oil field development has been reported over and over again across Alaska's North Slope.

For some time now, the National Marine Fisheries Service has raised concerns about the gradual sprawl of the North Slope's industrial complex. In comments to the U.S. Army Corps of Engineers (1997), the agency stated,

*"The incremental environmental changes caused by the proliferation of new development projects are of concern to the NMFS. The proposed project will forever change the landscape, and while ARCO will endeavor to minimize those changes, **there will be no mitigation that will be able to replace the functions and the values of this area** as it now exists. Also, should a commercial operation be realized the subsequent development to bring the*

field into full production could be substantial. For example, the infrastructure for the Alpine Development Project is already being viewed as the 'gateway' for development in the National Petroleum Reserve."⁶¹

Alaska Native residents, particularly Inupiat (Eskimos) from the villages closest to Alpine, have raised serious concerns as well:

"I am a subsistence hunter, and what you were saying about the potential development to our sensitive area... clenched my heart with anger. I don't want to tell my kids 'this is where I used to hunt.' You have touched a sensitive part of where we hunt now.

*I remember going to meetings before Alpine was developed, and I remember Mark Major [ARCO, now ConocoPhillips] saying, 'Alpine is going to be small... you are going to hardly even notice we are there.' I think that is just a doorstep for you to go that way (to the west). 'Oh yeah, we want to build a pipeline now this way, we found more oil...' Where are we going to go?"
Dora Nukapigat, Nuiqsut, 2002.⁶²*

Abandonment of previous restrictions has been commonplace. Even though the U.S. Army Corps of Engineers Clean Water Act permit for the Alpine oil field included a condition requiring "roadless" satellite production facilities for future additions in the Colville Delta,⁶³ one of the currently planned projects in that area will connect with a road.

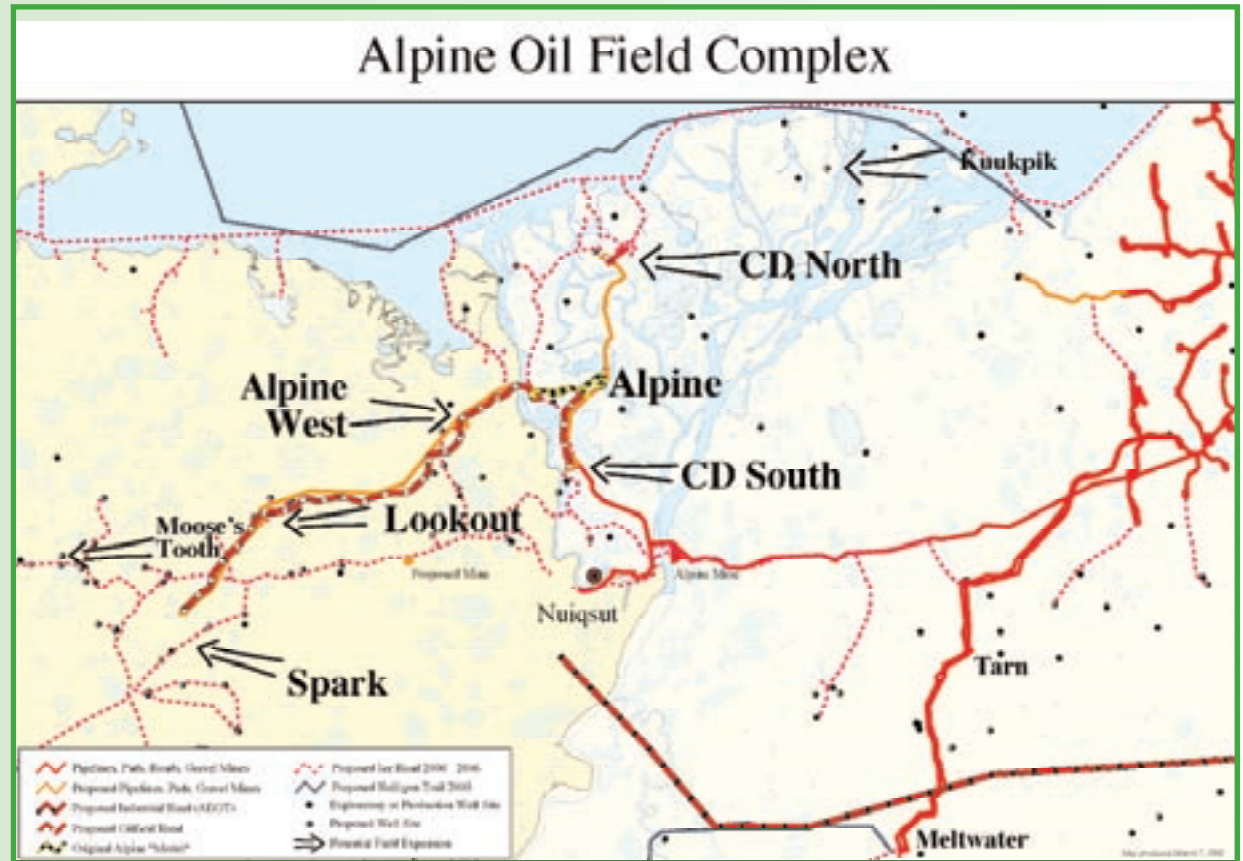
In fact, ARCO asserted in its application to develop Alpine that leasing or development in the NPR-A would be highly unlikely.⁶⁴ The eventual three new satellites in the NPR-A were not even contemplated in the environmental reviews on Alpine. The Corps of Engineers did not evaluate this future activity, even though seismic surveys had already begun in the area.

There really is no such thing as "roadless" development on the tundra. Every onshore oil field uses roads to transport people and equipment, and even the initial Alpine field had three miles of roads. In addition to the new roads proposed for the Alpine satellites, other new roads are planned. To the east of Prudhoe Bay, Exxon has proposed 15 miles of new roads connecting together new drill pads, a jet airport, a dock, and drill sites for its Pt. Thomson gas hydrocarbon project.⁶⁵

Oil companies have continued to build new gravel roads connecting oil fields to the existing permanent road network since discussions about the Alpine "roadless model" began. For example, the Tarn and Meltwater oil fields were developed between 1998 and 2001 with 20 miles of new road as well as a new 25-acre gravel mine.⁶⁶

The bottom line is that permanent gravel roads are still standard practice for oil development in America's Arctic. Once the oil fields are built, the network of roads and pipelines sprawls out across the tundra.

Alpine's main production facility.
From this initial development, new wells, pipelines and roads connecting facilities to as many as 15 satellites will form an industrial spider web across the tundra.



ConocoPhillips claimed Alpine would be "roadless" and confined to 115 acres, but even from the start, it included a road connecting drill sites. Just a few years later, the company plans multiple satellite fields, more permanent roads and pipelines, and is establishing Alpine as the "gateway" to the NPR-A.

BROKEN PROMISE #6: *Environmental Regulation of Alaska Oil Drilling Activity Getting Weaker, not Stronger*

The U.S. Department of Interior and the State of Alaska have promised to apply the "strictest" environmental standards to oil leasing and development proposed for the Arctic National Wildlife Refuge. But a look at their recent actions casts serious doubt on the reliability of this pledge. In fact, the State and federal government are weakening existing lease stipulations and standards for oil development across America's Arctic.



Pipelines and roads sprawl across the landscape at Prudhoe Bay.

FEDERAL ROLLBACKS AT ALPINE:

Environmental lease stipulations do not provide long-term effective protection for sensitive areas because the oil industry can and does put political pressure on the agencies to remove or loosen those restrictions later. The federal Bureau of Land Management (BLM) attached stipulations to its leases in the Northeast corner of the NPR-A in 1999 that limit oil companies to "roadless development" (unlike state leases). But ConocoPhillips is now planning a 19-mile road that would violate the road ban.⁶⁷ To permit construction of the proposed road, a stipulation set by Interior Secretary Babbitt on the leases must be rolled back.

Lease stipulations would also have to be cast aside to allow the proposed Lookout production drill site. This site is located in the Fish Creek buffer zone area, where permanent oil and gas surface facilities were prohibited under the 1998 Record of Decision on the NPR-A lease sale.⁶⁸

NEW LEASING PLAN FOR NORTHWEST NPR-A WEAKENS RULES:

The proposed Northwest NPR-A Oil and Gas Leasing Plan⁶⁹ contains dramatically weaker lease stipulations than those required under Secretary Babbitt's 1998 plan for the Northeast NPR-A to mitigate environmental degradation. The oil and gas industry has pushed for leasing 100 percent of the

area and for weaker environmental requirements (Alternative A of the EIS).⁷⁰ BLM proposes between nine and 20 lease stipulations in the Northwest Area, compared with 79 in the 1998 final decision for the Northeast NPR-A.

A closer look at the plan for the Northwest NPR-A shows that roughly 50% fewer mitigation measures are proposed, compared with the Northeast NPR-A lease sales. Forty restrictions that were included in the 1998 NPR-A Northeast Plan are completely absent from the 2003 NPR-A Northwest Plan. The dropped restrictions topics including waste prevention, disposal, and spills; ice roads and water use; overland moves and seismic work; exploratory drilling; facility design and construction; ground transportation; air traffic; oil field abandonment; and protection of subsistence hunting resources.

There are additional measures listed, called Required Operations Procedures (ROPs), but they would not be attached to the leases themselves. Instead, their application would be left to the discretion of the local agency bureaucrat. As it is, the existing lease stipulations for the Northeast plan contain loopholes and many of the stipulations are being rolled back, as described above.

Alternative A of the NPR-A Northwest EIS contains no buffer zones (set-backs for permanent facilities) from important rivers and streams. While Alternative B does identify areas where there might be vaguely defined "additional mitigation or design features," they are not true buffer zones where no permanent facilities or "surface occupancy" would be allowed.

This is not just a numbers game. Key environmental practices that were required in the 1998 NPR-A Northeast Plan and that industry claims as "standard practice" have been dropped for the proposed Northwest Area, and furthermore, BLM has announced plans to re-evaluate leasing the Teshekpuk Lake goose area—deleted from the leasing program by Interior Secretary Babbitt in 1999—and industry is pressing to weaken the stipulations for the Northeast Plan area.⁷¹

STATE OF ALASKA GUTS STANDARDS

Since his election as Governor in November 2002, former Senator Frank Murkowski has taken actions with grave ramifications for oversight of future oil field development. By Executive Order, he abolished the permitting responsibilities of the Alaska Department of Fish and Game Habitat Division, which has authority over activities in rivers and streams that contain anadromous fish (salmon and other

migratory species), and moved them to the Alaska Department of Natural Resources, the agency responsible for oil and gas leasing and mining.⁷² He appointed Randy Reudrich to the Alaska Oil and Gas Conservation Commission, the oversight agency for well safety.⁷³ Mr. Reudrich had been the general manager of Doyon Drilling, a contractor to BP, when the company illegally dumped hazardous wastes into Endicott oil wells.⁷⁴

In 2002, the State of Alaska rolled back lease stipulations in place as recently as 2001, which prohibited construction of permanent gravel roads and pads associated with oil exploration for new lease sales on most of the North Slope (the state did not have such a restriction for development). A look at the changing terms of the State's findings illustrates the shift in position:

In 2001, gravel roads were prohibited: "Permanent gravel roads may not be used for exploration and activities must be supported by air service or an existing road system.... Except for approved off-road travel, exploration activities must be supported only by ice roads, winter trails, existing road systems, or air service...."¹⁷⁵

The following year, the state allowed exceptions to their RULE: "The Department has become aware that, in the southern portion of the sale area, in certain limited circumstances, a gravel road or pad could be the only feasible and prudent alternative to conduct certain exploration activities... the department is clarifying that... gravel roads and pads may be allowed for exploration in certain limited and site-specific circumstances."¹⁷⁶

And in 2003, a broad exemption essentially allows the industry to build roads wherever it sees fit: Lease Stipulation #2: "Except for approved off-road travel, exploration activities must be supported only by ice roads, winter trails, existing road systems or air service.... Exceptions, including the use of gravel, may also be granted on a site-specific basis, if it is determined, after consulting with ADF&G, that no feasible and prudent alternatives exist for constructing an exploration road or pad"¹⁷⁷

The new Meltwater field, which opened in 2002, operates year-round and includes miles of gravel roads and pipelines.





Wildflowers bloom along Marsh Creek, in the 1002 Area of the Arctic National Wildlife Refuge.



THE
WILDERNESS
SOCIETY

CONCLUSIONS

In their push to open the Arctic National Wildlife Refuge to oil development, the big oil companies and their allies in the Administration, Congress and the Alaska state government say that impacts of drilling have been small and will be reduced by new technological improvements. Yet the industry has already caused significant environmental damage, the “new” technologies are not new, their benefits are often exaggerated, and “new” practices are often not used at all due to economics or practical reasons. Even as industry touts its “new” technologies, the Bush Administration and Alaska Governor Murkowski are rolling back existing regulations on oil and gas development.

Most Americans maintain that there are some places so special that they should be off-limits to oil drilling and industrial development, and they believe the coastal plain of the Arctic National Wildlife Refuge is one of them. Policy makers evaluating proposals to open the Arctic Refuge to oil drilling should look carefully at the industry’s promises, and its track record, before casting their votes.

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