

ACTION PAPER

SOLUTIONS
TO THE NATIONAL
ENERGY
CRISIS

WHY NOT ALASKA?



**SOLUTIONS
TO THE NATIONAL ENERGY
CRISIS:**

WHY NOT ALASKA?

A REPORT BY
COMMONWEALTH NORTH

Prepared by the Energy Committee

November 1979

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Excerpts From Reviews

"The report is an eye opener. The role that Alaska can play is far greater than I -- and I assume most other reasonably well-informed people -- had any idea. It is literally a national disgrace that Alaska's resources should not be made available to meet our national need."

- Milton Friedman, Economist, Senior Research Fellow
The Hoover Institute, Stanford, California

"Speaking for both myself and Dr. Herman Kahn, our Director of Research, I found the report to be factual, enlightening and compelling. It clearly shows that a can-do attitude coupled with existing U.S. energy resources even now offers our great nation an opportunity to escape from the energy track into which we have carelessly fallen."

- William M. Brown, Ph.D. Director, Technological
Studies, The Hudson Institute, New York

"In the face of the critical energy problems confronting North America and particularly the United States, I commend this report illustrating the important role that Alaska is able to play."

- The Honorable Maurice Strong, Secretary General of
the first United Nations Conference on the Human
Environment and first Director of the United Nations
Environmental Program

"This report makes clear the urgency of our nation gaining an understanding of the mineral reserves in Alaska. A crucial factor in the ultimate disposition of Alaskan lands must be a careful assessment of their energy potential. If any energy-related crash program is needed in this country, it is to survey these vast lands."

- William Ruckelshaus, first Director of the
Environmental Protection Agency

"The report's timing is propitious; it comes at a time when the Congress is considering legislation to classify millions of Alaskan acres into various land use patterns. In its deliberations, Congress must recognize the manifold potential of Alaska to supply this nation with much-needed resources such as oil, gas and minerals, as well as great scenic treasures."

- The Honorable Terry Miller, Lieutenant Governor
of Alaska

FORWARD

A serious loss of petroleum imports would take the United States to the edge of calamity. There is no possibility that the nation could respond quickly enough with synfuels, shale oil, solar power and wind power. None of these could prevent long lines of stalled cars and busses, idled farm machinery, grounded airliners, heatless homes, darkened factories, blacked-out cities and an emasculated defense system. Energy riots could spread across the land, since an energy disaster will fall most heavily on the urban poor.

Ever higher costs of gasoline and heating oils are already disastrous to the poor and the elderly. Those high costs, and the prospect of ever-multiplying petroleum prices, demonstrate the unleashed economic power of oil-rich countries and disclose their great political power.

There is little the United States government can do in foreign capitals to reverse a sudden change in sentiment, a palace coup or revolution. We can only hope that our statesmen must never face the temptation of going to war to save oil fields threatened by a Soviet-backed invasion from a "People's Republic."

Many members of the United States Congress appear willing to risk a national disaster by failing to secure energy supplies needed for the critical 10 to 20 years just ahead. Alternate energy sources will not be developed overnight. Conservation can help, but cannot reverse America's dangerous dependence on foreign oil producers.

Persuaded by prophets of preservation, the White House and Congress appear ready to withhold from the nation the abundant energy and mineral resources of the huge State of Alaska.

Recognizing the danger of national dependence on uncertain energy supplies, the Board of Directors of Commonwealth North asked the Energy Committee to address the question of Alaska's potential to help solve the nation's energy shortages. We accepted the task with a mixture of trepidation and enthusiasm.

Trepidation, because the nation's "Energy Crisis" has been debated and discussed almost to exhaustion over the past six years. The American people are weary of

hearing conflicting information, viewpoints, and finger-pointing. The pervasive misinformation concerning Alaska makes public acceptance of an objective review problematical, to say the least.

Our enthusiasm stems from those same factors. The need for reliable data upon which concerned Americans can rely with confidence was never greater. And weary or not, the nation must continue to face the energy challenge until it is overcome.

Our purpose is not to deal with, let alone solve, all of our country's problems concerning energy. Our contribution, an objective appraisal of Alaska's role, is merely a building block for the final answer. Having said that, we believe it is an important element of the whole picture.

We also know this. The material in this small study is not widely understood by the American people. Since no one is wise enough to reach sound conclusions from inaccurate data, we feel this project is justified if for no other reason than to help set the record straight.

Our hope, of course, is that it will generate a return to positive, creative leadership and a strengthening of national security and enlightened productivity.

Those are important and worthy goals. We are proud to have made this effort motivated solely by a sense of dedication to the needs of our great nation, and in a wider sense to the health and stability of the world as a whole.

Energy Committee
Commonwealth North

November, 1979

CONCLUSIONS

The questions posed to the authors of this report by the Board of Directors of Commonwealth North were essentially two-fold:

1. What is Alaska's potential for meeting the near-term (next 5 to 15 year) energy needs of the U.S.?
2. Why is Alaska not on the national agenda for meeting the energy crisis?

The following points summarize the conclusions of this study:

1. Conservation and solar energy, however wholesome and attractive for the long-term, will not, within the next five to fifteen years, reverse the ever-weakening national energy picture nor check the devastating U.S. dollar drain overseas to buy foreign energy.
2. While alternate energy technology is developing, the near-term solutions to the nation's problems lie in oil, gas and coal, which presently supply 92% of our national needs. Hydro and nuclear power provide only 8%.
3. Alaska currently produces 1.6 million barrels of oil per day (18% of all U.S. domestic production), and could be producing 4.5 to 5 million barrels per day.
4. Five million barrels per day of Alaska oil would reduce the overseas flow of U.S. currency by nearly one half.
5. Official government publications and the national media largely ignore Alaska's energy potential, and there is a virtual "black-out" of information about the State's enormous reserves of oil, natural gas, coal, hydro and alternate energy resources.

6. Responsible estimates of potential recoverable oil in Alaska range from 22 to 138 billion barrels. The larger figure compares favorably with Saudi Arabia's 110.4 billion barrels of estimated reserves. Coal reserve estimates range between 1.8 and 6 trillion tons.
-

The 49th State is a potential world power in the energy arena.

7. Many Americans think Alaska's oil and gas resources are being actively sought and produced, but the reverse is true. Only 7 oil rigs are at work in the State, compared to 366 in Louisiana and 807 in Texas.
8. The main deterrent to Alaska becoming part of the solution to the national energy crisis is the Federal government. Less than one third of one percent of Alaska is privately owned, and no Federal lease sale of on-shore oil potential land has taken place in Alaska since 1966.
9. The White House and many leaders of Congress are pushing for legislation that would place 123 million prime acres of Alaska in permanent, exclusive land classification, and yet the exploration of the resource base in these areas is in its infancy.
10. There are 250,000 square miles of on-shore sedimentary basins in Alaska, and another 300,000 square miles off-shore. Outside of Prudhoe Bay and Cook Inlet, only 136 wells have been drilled in these oil and gas potential regions since 1900, compared to over 2 million wells in the rest of the United States.

11. The vast majority of the on-shore potential oil and gas areas in Alaska are unexplored. The majority of this acreage will be off limits to exploration if the Alaska lands legislation passes.
12. According to the Louis Harris Perspective #56 (1979) eighty-seven percent of the American people believe that those Alaska lands which are rich in energy and mineral resources should not be placed in restrictive wilderness categories by the Federal government.
13. One such area, the Arctic National Wildlife Range has the greatest oil and gas potential of any area in North America. Reports, downplayed by government, say it could contain enough oil to supplant all foreign imports for up to ten years.
14. Only one half of one percent of the Arctic Range would be needed for exploration and production of oil and gas. No scientific evidence exists showing that such activity would threaten the wildlife with extinction or even population reduction.

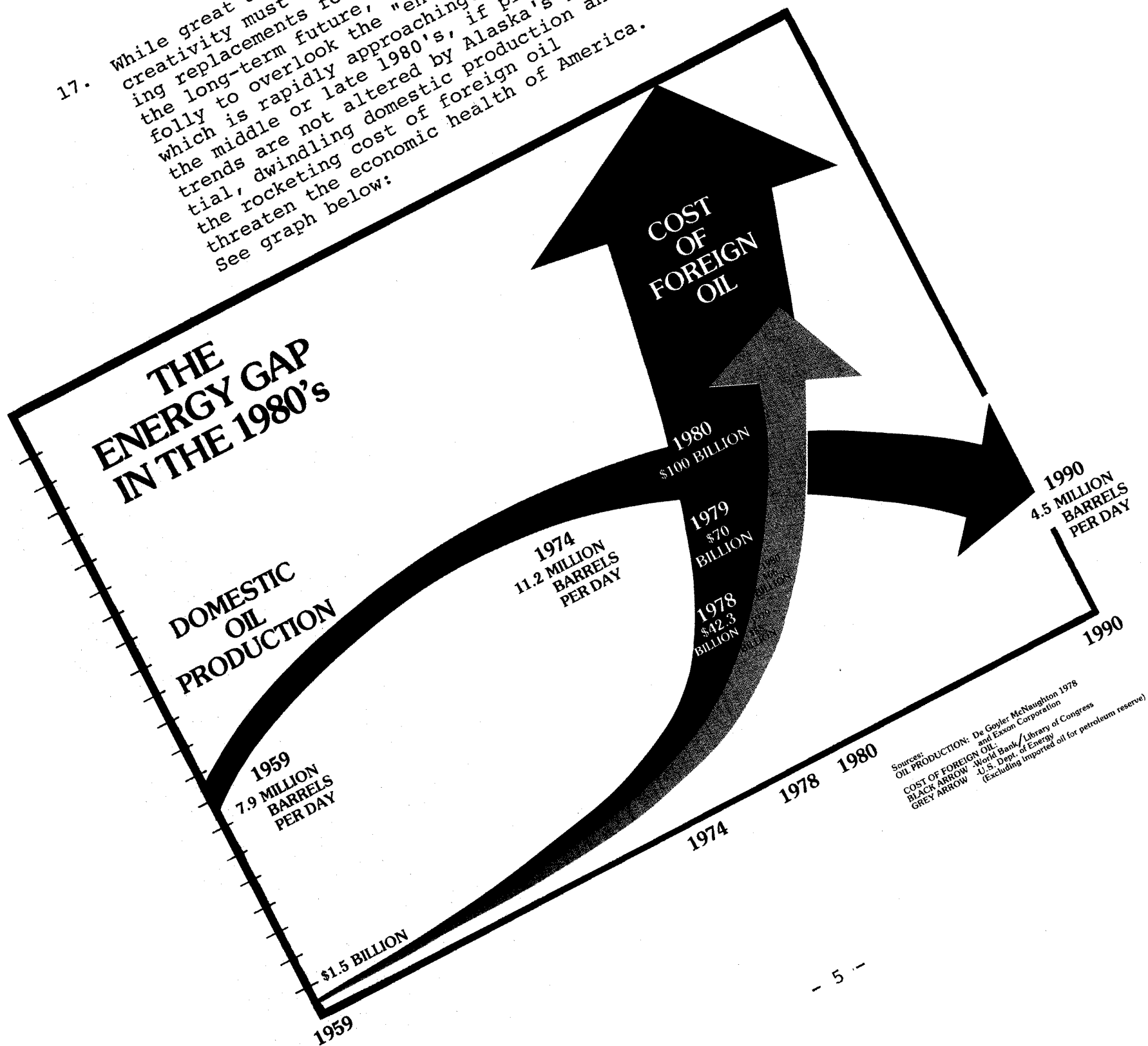
Congress is about to lock up energy potential lands in Alaska before they have been explored and inventoried.

15. Exploration in the Arctic does not mean callous disregard of other values. As proven by Prudhoe Bay's oil field development and the Trans-Alaska Pipeline, resource use can take place skillfully and carefully, providing energy America needs without destroying Alaska's beauty.

The Arctic's energy resources can be tapped without harming the land or the wildlife.

16. The reasons Alaska is being overlooked by most Americans as a major energy supplier are the following:
 - a. Honest ignorance on the part of the media, Members of Congress and the public at large about the incredible dimensions of Alaska's potential.
 - b. False fears that finding and producing these resources will harm Alaska's environment.
 - c. Devotees of a preservationist ethic have been placed in key decision-making positions in the Federal Administration. They have architected a deliberate government policy aimed at stopping exploration for and production of energy in Alaska, as illustrated by the postponement of nearly all lease sales of oil and gas potential land, and by the Alaska Lands Bill, which they are promoting in Congress.
 - d. Politicians who, pressured by ill-informed environmentalists at home, fail to connect Alaska as wilderness to a lock-up of their energy needs.

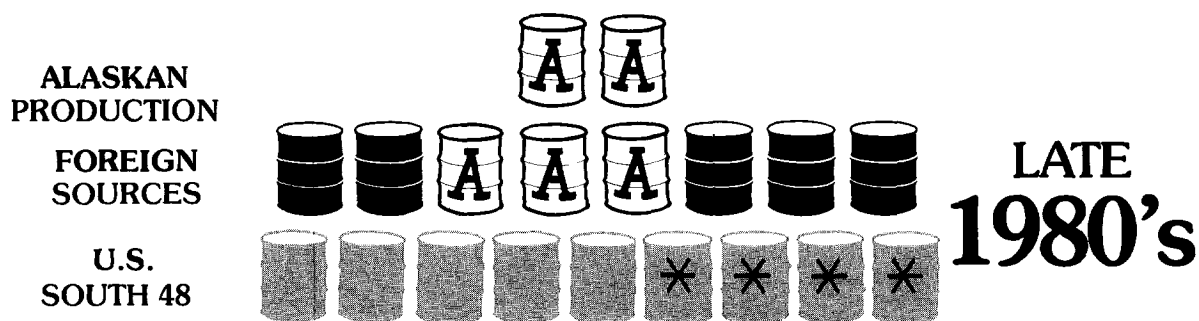
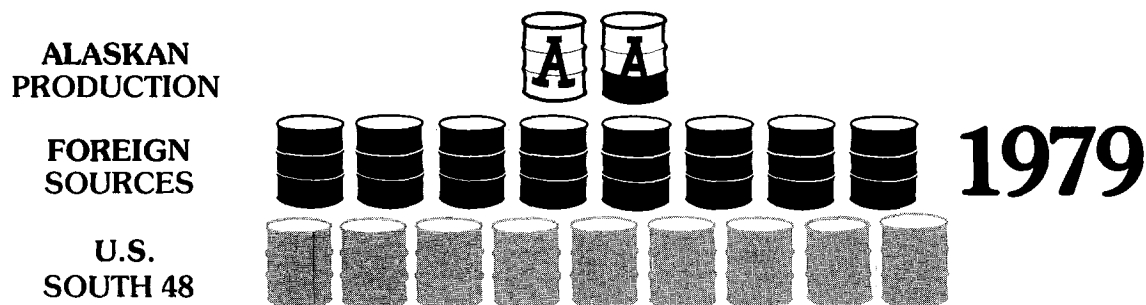
17. While great amounts of capital and creativity must be dedicated to finding replacements for oil and gas for the long-term future, it would be folly to overlook the "energy-gap" which is rapidly approaching. By the middle or late 1980's, if present trends are not altered by Alaska's potential, dwindling domestic production and the rocketing cost of foreign oil threaten the economic health of America. See graph below:



18. If government at all levels encourages the finding and transporting of Alaska oil, the control over the U.S. by the OPEC nations can be substantially reduced. The following diagram illustrates the positive impact Alaska oil can have on this situation. The illustration assumes that annual U.S. oil consumption will be held constant, through conservation or the production of other energy alternatives.

ALASKA'S POTENTIAL FOR REPLACING FOREIGN IMPORTS

18.8 Million Barrels per Day U.S. Oil Consumption



* IF SOUTH 48 PRODUCTION DECLINES, THESE BARRELS WILL HAVE TO BE REPLACED BY ALTERNATE SOURCES, SUCH AS CONSERVATION, SYN FUEL, SOLAR OR FOREIGN IMPORTS

SECTION I

INTRODUCTION:

WHY IS ALASKA BEING IGNORED?

North Slope oil production at Prudhoe Bay, the largest oil and gas field ever discovered in North America, thrust Alaska into the national energy spotlight. The Trans-Alaska Pipeline delivers 1,475,000 barrels of oil per day to the ice-free port of Valdez, where tankers carry it to the people of the south 48 states. Oil rigs in Kenai and Cook Inlet swell the total daily Alaska oil output to almost 1,600,000 barrels, accounting for over 18% of the nation's domestic oil production.

Alaska already provides over 18 % of America's domestic oil production.

And yet, because most of the vast sedimentary basins with oil and gas potential have yet to be tested seismically or drilled, the potential of America's largest state, one-fifth the size of the entire continental United States, is truly unknown.

It is safe to say that Alaska is rich in oil and gas. These fossil fuels are the cheapest and most immediate sources of energy, as illustrated by the fact that they account for three-quarters of all the energy consumed in the U. S. Therefore, Alaska most definitely holds enormous potential to alleviate the near-term national energy crisis.

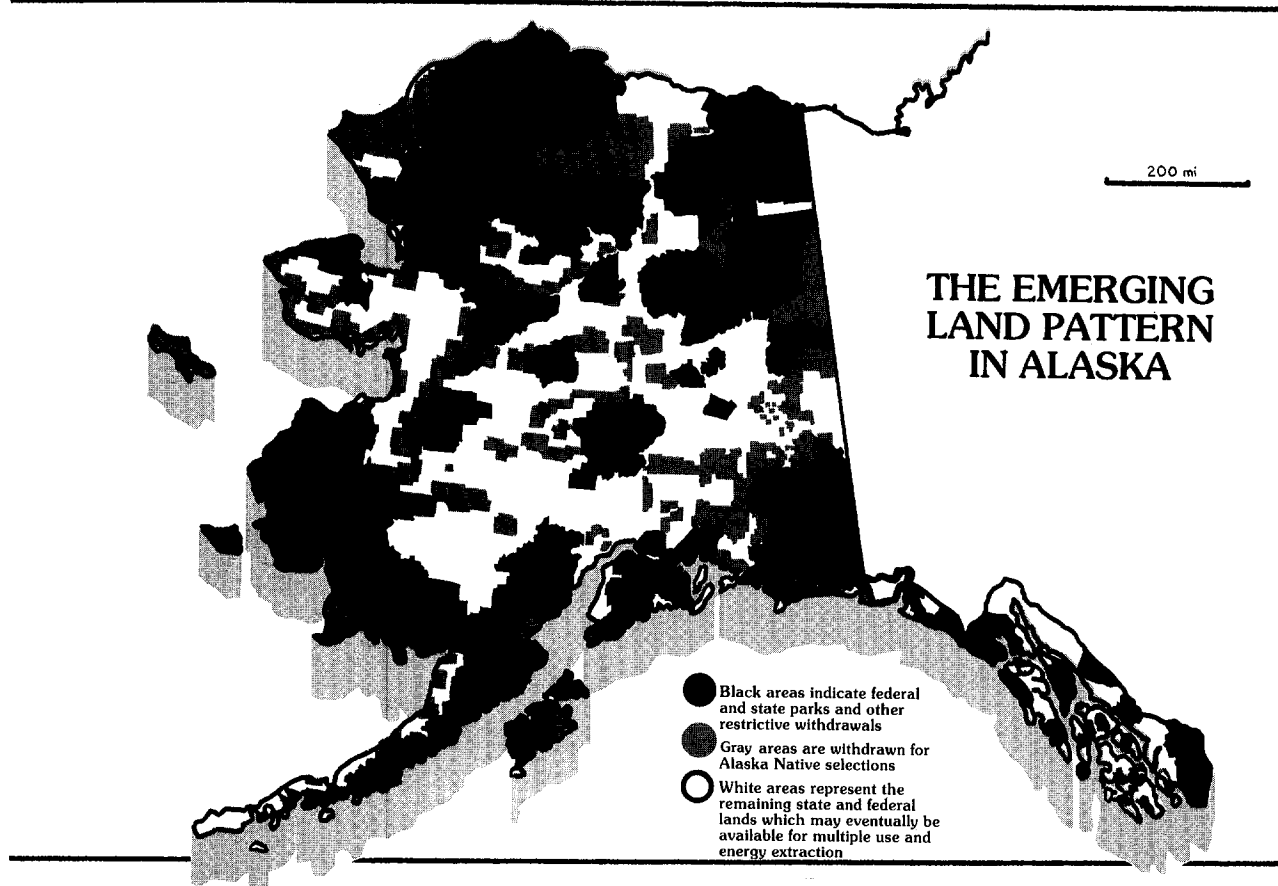
As oil and gas account for three-quarters of all energy consumed in the U.S., Alaska has enormous potential to alleviate the national crisis.

The question naturally follows:
Why is Alaska being ignored?

Why, when President Jimmy Carter launched his national energy program after his Camp David Summit did he fail even to mention the exploration and production of new sources of oil and gas in Alaska?

Why, in fact, does this very real, and apparently obvious possibility seem to be a top priority on no one's list?

The oil companies appear to have cooled towards Alaska. The U. S. Congress, ignoring the protests of the small three man Alaska congressional delegation, spends inordinate time and effort on an Alaska lands bill which would withdraw or block access to the majority of the acreage in the State which isn't already classified as off-limits to exploration for critically needed minerals and energy resources.



Meanwhile Federal and State coastal zone management legislation, critical habitat areas established by both governments and a near total freeze on leasing of public lands, make Alaska off-shore oil a constantly elusive, and ever-fading promise.

The American people seem oblivious. There is a very little awareness of Alaska's capacity to help solve two of the country's most severe problems, energy shortage and inflation. Instead they seem enraptured by a semi-erotic dream, a love affair with a "Yellowstone of the North," stage setting for "the last great wildlife spectacle," as Congressman Morris Udall of Arizona calls it.

Devotees of a preservationist ethic bombard the public with half-truths and "false dilemmas." An example: unless Alaska is "saved" (meaning placed in Federal wilderness status) it will be "destroyed and denuded."

There is no question that Alaska has certain prime land areas that must be and will be preserved. But the illusion that all of the areas Congress is planning to withdraw from multiple use classification have a Walt Disney cast of thousands of wild animals has no basis in reality. Most Americans will be surprised to learn that the tonnage of big game in the State of Pennsylvania equals, and may exceed, Alaska's.

In 1973, the late Alaska Senator Ernest Gruening, bluntly challenged the Federal Government's plan to withdraw vast regions of the State, saying, "The areas designated as National Parks, and I know them well, are not worthy of that designation and not up to National Park standards. Had any of them been, they would have been proposed long ago. Now they are just a pretext for massive withdrawals."

Why then is Alaska not on the national energy agenda? Is it due to (1) the high cost of operating in a frontier region, (2) State tax policy and regulations,

**The American people
seem oblivious.**

(3) the attitude and direction of the U. S. Congress, (4) White House policy, (5) the power of the national conservation lobby (6) financing priorities of the oil industry, (7) genuine ignorance on the part of national decision-makers, the media and the American public, (8) the cost to the environment of such development, or (9) some other reason?

This report seeks to find out why, and to make recommendations how Alaska can help the nation achieve energy independence.

This report, prepared by Commonwealth North, a non-partisan group of Alaskans dedicated to discovering the facts on critical issues facing the State and the nation, seeks to review these questions and to make recommendations how Alaska can play a major role to help America in a time of crisis.

SECTION II

WHAT IS ALASKA'S ENERGY POTENTIAL?

For years, Alaska has been viewed by its residents and leaders as an energy storehouse for the nation. Historically, most large oil companies were intrigued but intimidated by the high cost of exploration, production and transportation. Some small, independent oil firms and a few majors became involved; and after the discovery of a significant field on the Kenai Peninsula in 1957 and the subsequent giant find at Prudhoe Bay in 1968, oil company opinions began to reflect the optimism of Alaska's leadership. And yet, with the expense and uncertainty of bidding for leases on public land, the private sector downplayed the State's potential.

Admittedly, the estimates of oil and gas reserves in Alaska have always been controversial, encompassing a wide range of figures. In 1967, prior to the discovery of oil at Prudhoe Bay, Governor Walter Hickel announced to the nation that the North Slope contained at least one billion barrels of recoverable oil. The oil industry roundly criticized the statement, and he was soon called by President Lyndon Johnson to Washington, D.C. to meet with top U.S. oil men. They thought he was exaggerating.

"Governor, do you know how much 100 million barrels of oil is, let alone one billion?" an oil company representative asked him derisively.

In retrospect, Hickel's predictions were extremely conservative. The Sadlerochit formation at Prudhoe Bay warehouses over 24 billion barrels of oil. The North Slope producers estimate that 9.6 billion barrels of Prudhoe Bay oil will be recoverable.

The estimates of oil and gas reserves in Alaska have always been controversial.

The Sadlerochit formation warehouses over 24 billion barrels of oil...9.6 billion will be recoverable.

Former Governors Egan and Hickel maintain that Alaska's potential oil in place ranges from 300 to 600 billion barrels.

Former Alaska Governor William A. Egan, who both preceded and followed Hickel in office, staunchly believes that over 20 billion barrels of oil will eventually be extracted from that one area in Arctic Alaska.

Both former governors, after decades of living and working with geologists and experts both in and outside government, maintain that the total potential oil that will be found on and off-shore Alaska will range from 300 to 600 billion barrels. Translated to recoverable reserves, with today's technology, that means 100 to 200 billion barrels of producible oil. If these predictions prove true, our 49th state could rank in volume with Saudi Arabia for potential oil production.

Additional credence was added to these projections in September of this year at the Tenth Annual World Petroleum Congress. G. R. Harrison, senior vice president of Canada's Dome Petroleum Limited announced the discovery of a 12,000 barrel per day well in the Beaufort Sea east of Alaska. He presented a paper stating that "the strategic importance of the Arctic has been enhanced by the prospect of having oil and gas in quantities that may rival the Middle East."

"Seward's Folly" could tilt the world back into balance, reversing the frightening exodus of the U.S. dollar.

Reputable geologists vehemently disagree with this assessment. But the possibility remains that "Seward's Folly" could tilt the world back into balance, reversing the frightening exodus of the U. S. dollar.

In November 1979, in spite of the OPEC price of \$18 per barrel, other foreign oil is selling at an average of \$23.50 and is over \$40 on the spot market. The total 1979 price-tag for U.S. imports may go as high as \$70 billion or even higher. The graph on page 5 dramatically illustrates this phenomenon.

The question of Alaska's potential will continue to be a tantalizing guessing game until there is a thorough inventory of the State. Just as experts scoffed at the conservative announcement of Prudhoe Bay's potential years ago, the facts will never be known on the State's total reserves until wells are drilled. Seismic tests and core drilling have taken place only sparingly in Alaska's twenty-three oil provinces. And the amount of actual wells drilled is ridiculously small. See list below:

The number of wells drilled, the only real proof, is very small.

A. Number of wells drilled onshore

Arctic Coastal Plain

Prudhoe Bay & Pet IV-----	454
Arctic Wildlife Range-----	0
Cook Inlet Basin (Includes offshore)--	694
Foothills & Brooks Range-----	24
Yukon - Porcupine-----	3
Bristol Bay Tertiary-----	10
Yukon - Koyukuk-----	2
Copper River-----	9
Alaska Peninsula-----	16
Tanana-----	1
Holitna-----	0
Innoko-----	0
Minchumina-----	0

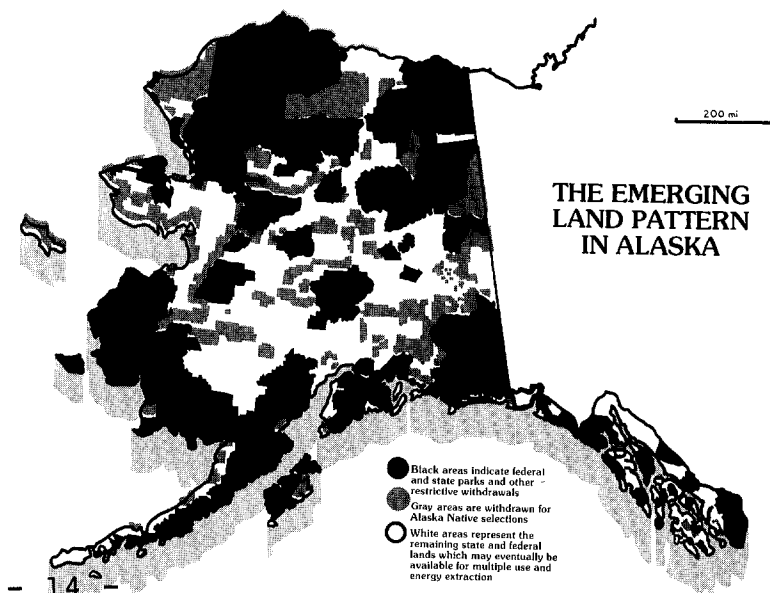
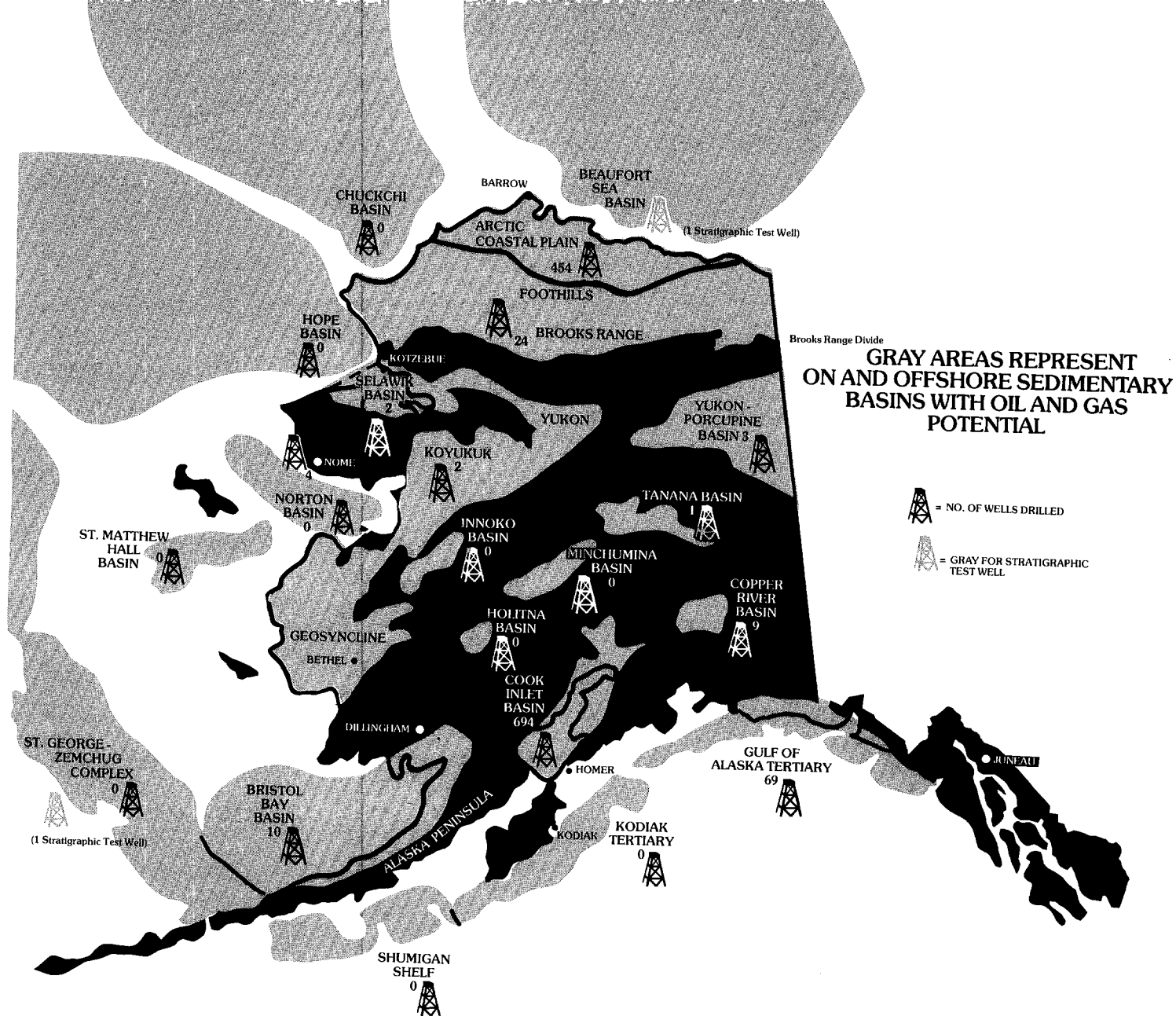
B. Number of wells drilled offshore

Cook Inlet (see above)	
Gulf of Alaska Tertiary-----	69
Beaufort Sea-----	1
Kodiak Tertiary-----	0
Bristol Bay -----	0
Norton Sound-----	0
Central Chukchi Sea-----	0
North Chukchi Sea -----	0
Hope -----	0
Zemchug - St. George complex-----	1
Selawik-----	2

1 Stratigraphic test*

1 Stratigraphic test

*A stratigraphic well is a test well deliberately located outside prime oil and gas potential structures, designed to verify seismic data.



As a comparison, in the 48 states, for the period 1947 to 1978, a total of 336,435 exploratory wells were drilled. The total of all oil and gas wells drilled in the search for oil and gas in the United States is estimated to be 2,256,800. Therefore Alaska, with all of its apparent potential, has had only two one hundreths of one percent (0.02%) of total U.S. exploratory drilling.

The average Alaska oil well produces 3,863 barrels per day. The average well in the other states produces 16.

Because of the lack of a transportation infrastructure (there are only 5575 miles of state-maintained roads and highways, roughly the same as Rhode Island, the nation's smallest state) and the other challenges of operating on a frontier, the oil companies have produced oil from none but the very largest reserves they have located. The daily production per well emphasizes this fact. The average Alaskan well produces 3,863 barrels of oil per day. The average well in the other states produces sixteen (16) barrels of oil per day.

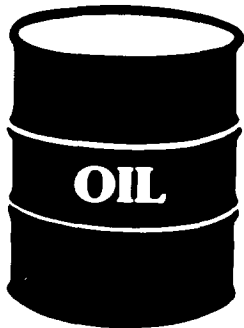
Unassailable and comprehensive figures from which to draw reliable estimates of Alaska's energy reserves are simply not available.

As the authors of this report have neither the expertise nor the clairvoyance to sign off on either end of the spectrum of estimates, the following discussion of the most credible and oft-quoted sources is presented for the reader's review.

Even without studying this material, an obvious and immediate conclusion presents itself. If the most pessimistic figures listed below are relied upon (22 to 59 billion barrels of recoverable oil), our most northern state could and should rank as a world power in the oil and gas arena, dramatically altering the national energy scene.

Even if the most pessimistic estimates are relied upon, Alaska ranks as a world power in the oil and gas arena.

The most pessimistic estimates peg Alaska's recoverable oil reserves as greater than Venezuela's and perhaps equal to the Soviet Union's.



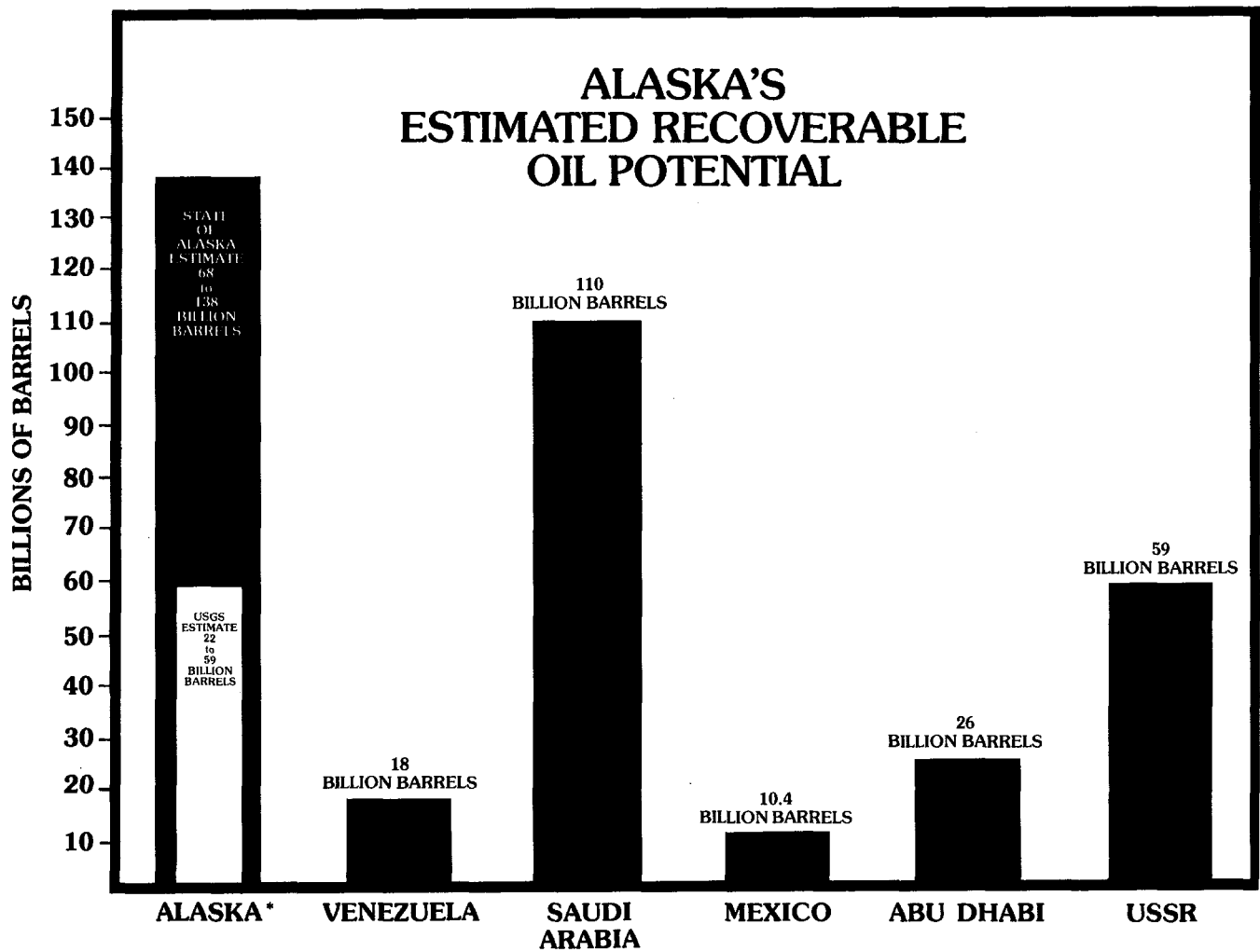
For comparison, according to DeGolyer and MacNaughton's Petroleum Statistics 1978, 22 billion barrels is more than the total estimated reserves in Venezuela and nearly as much as in OPEC's Abu Dhabi. Fifty-nine billion is equal to the total reserves in the Soviet Union, which now ranks as the largest daily oil producer in the world.

USGS ESTIMATES

The USGS Resource Appraisal Group is the source of the most conservative estimate of Alaska's hydrocarbon potential. Circular 725, published first in 1975, the latest USGS document available on the subject, pegs Alaska's undiscovered recoverable oil potential within a range of 12 to 49 billion barrels, and estimates natural gas potential at 29 to 132 trillion cubic feet. Added to the already proven recoverable oil reserves, the total becomes 22 to 59 billion barrels of oil and 61 to 164 trillion cubic feet of natural gas.

The Appraisal Group is currently revising their estimates, which insiders predict will be even more pessimistic due to the unsuccessful drilling in the past two years in OCS waters in Alaska's Northern Gulf.

These estimates by the Appraisal Group, a small team of employees located in an office in Denver, Colorado, are prepared through computer projections extrapolated from theoretical models and scientific rock work done by Survey geologists over



* SOURCES:
USGS CIRCULAR 725
STATE OF ALASKA OPEN FILE 50

SOURCE OF INTERNATIONAL ESTIMATES
DEGOLYER McNAUGHTON 1978

the past seventy years.

**Critics attack USGS
data as a product of
"ivory towerism."**

Critics attack much of this data as the product of "ivory towerism," in which rocks were studied academically. But information on geologic changes and structure is so scant, the critical guides to oil and gas deposits (permeability, porosity, organic content and structural traps) cannot be evaluated with any assurance. And geochemistry, the now sophisticated science of chemical analysis of source materials, has only recently been adopted by the Survey.

The other principal data used by the USGS is supplied by the American Petroleum Institute (API). These figures are accumulated from estimates provided by oil companies who have deemed it appropriate to release such information to the public. Traditionally, vital exploratory information is kept confidential. For obvious competitive reasons, oil companies are notoriously secretive with information they are willing to share.

Dr. Joseph Barnea, senior fellow of the United Nations Institute for Training and Research (UNITAR), claims that USGS figures nearly always underestimate potential energy and mineral reserves.

**Proprietary information
must be added to the
total data base.**

"I have fought with the USGS personnel for years," he says. "They continually exclude data from the private sector. On that basis, wise and rational judgements cannot be made by policy makers. Proprietary information must be added to the total data base, and it can be done without revealing specific numbers for regions for

which private enterprise is in competition."

As there are so many unknowns on the Alaska frontier, everyone's figures are vulnerable to honest challenge. One definite conclusion can be drawn. It requires an equal act of faith to stake the nation's future on the relatively pessimistic USGS figures as to judge the estimates of former governors Hickel and Egan as incorrect.

There are so many unknowns, everyone's figures are vulnerable to honest challenge.

ESTIMATES FROM THE STATE OF ALASKA

The most recent inventory of Alaska's oil and gas potential was produced in two volumes by the State of Alaska in October, 1977. Based on a study by the Department of Natural Resources in 1974, the report lists the estimated speculative oil resources on and off-shore, excluding the Arctic National Wildlife Range, as 76.1 billion barrels of recoverable oil and 439.6 trillion cubic feet of gas.

In the discussion of procedures, the authors of the earlier document write, "It is therefore considered that pessimistically the figures could be 25% too high, but with the addition of a few giant oil fields, they may be 50% too low."

When these percentages are calculated and added to the potential of the Arctic National Wildlife Range, (14 billion barrels; see discussion below) and already discovered reserves (9.9 billion barrels), Alaska's potential would be somewhere between 68 and 138 billion barrels of recoverable oil.

Neither the state nor the USGS has any estimates of the heavy crude oil potential in Alaska.

It is important to note that neither the figures from the State nor the USGS make any reference to heavy crude oil. Heavy crude has such a thick density it generally was not considered producible by the oil industry until very recently.

At the world conference on Heavy Crude Oil and Tar Sands at Edmonton, Alberta in June of 1979, experts agreed that heavy oil normally doubles the size of estimated reserves of lighter crude.

In Alaska, there is no data on heavy crude, except for an estimated 1.9 billion barrels at Prudhoe Bay. But the lack of information may only indicate the absence of interest on the part of the oil industry. To date, facing the costly economics of oil recovery in Alaska, the drilling companies have written off as a "dry hole" anything short of a giant field of light or medium range crude.

But, as the cost of oil escalates worldwide, the feasibility of producing heavier crudes will come within reach.

Ten new production break-throughs were unveiled at the Edmonton conference. In some countries, heavy crude is already in production. Depending on the depth at which it is found, it most definitely promises to be a cheaper product than oil from highly-touted shale.

As the nation takes stock of its oil reserves, the unexplored sedimentary basins in Alaska loom in importance. Many of them may soon be "off limits" to drilling because of Federal land withdrawals. One of these, and by far the most highly rated, is the Arctic National Wildlife Range.

To date, drilling companies have written off as a "dry hole" anything short of a giant field.

The unexplored sedimentary basins in Alaska loom in importance.

THE ENERGY POTENTIAL OF THE
ARCTIC NATIONAL WILDLIFE RANGE

In estimating the most promising areas for discovering future giant oil and gas fields in Alaska, nearly all knowledgeable petroleum geologists will rate as number one, the Arctic National Wildlife Range. This 8.9 million acre reserve is located on the North Slope, adjacent to the Prudhoe Bay oil field. All of the same structures that underlie Prudhoe Bay continue east under a good portion of the Range.

The most promising area for finding another giant oil and gas field is in the Arctic National Wildlife Range.

In January, 1973, Don C. Hartman, Alaska's State Geologist, prepared a report on the geology and mineral evaluation of the Arctic National Wildlife Range. Hartman sounded the alert that an "enormous oil and gas reserve may be trapped in the Marsh Creek anticline, just south of Camden Bay on the Arctic Coast."

No seismic tests or core drilling have ever taken place in the Range, but Hartman recommended that the area be thoroughly explored. "It is strongly urged that this exploration be done before the Wildlife Range is withdrawn from all such activities. It is especially recommended that exploration for oil and gas in the Coastal Plain be allowed."

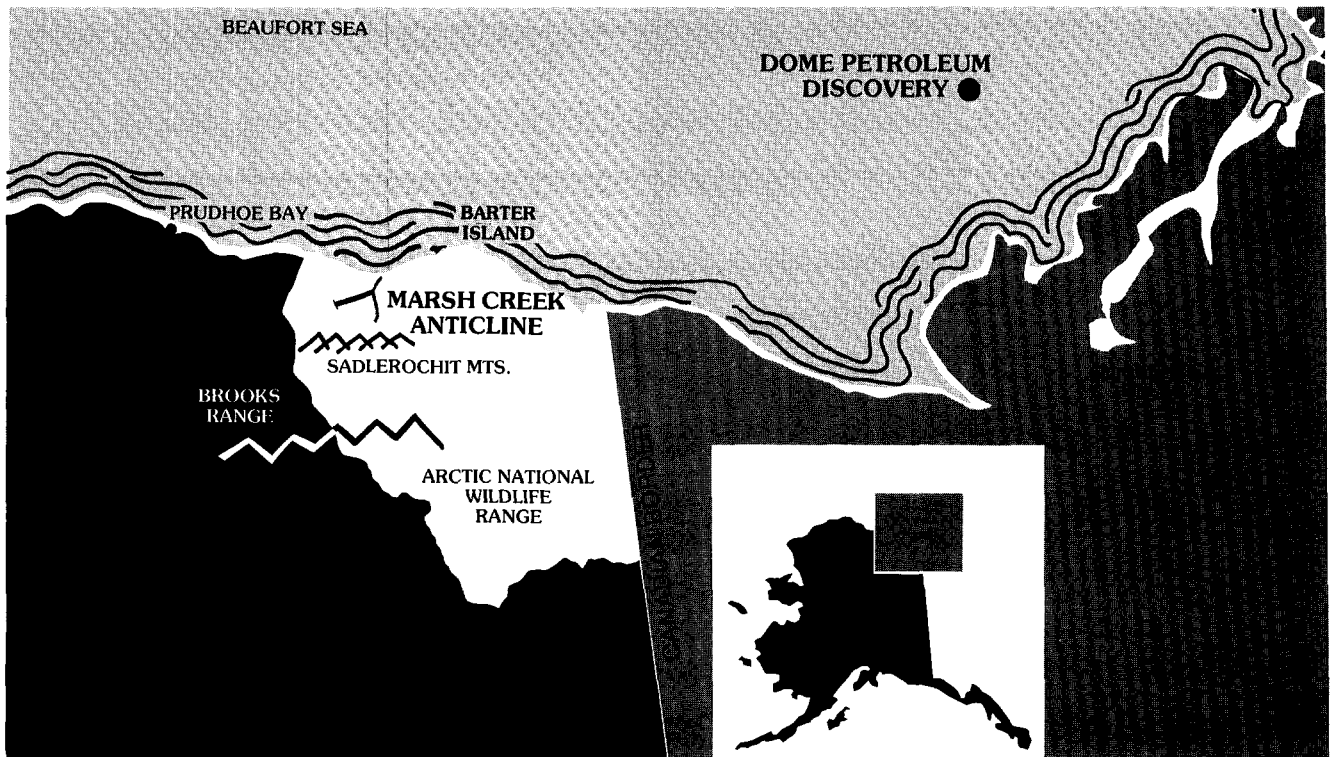
A reserve of 14 billion barrels of recoverable oil can be calculated.

The sandstone, siltstone and shale of the Sadlerochit formation house nearly all of the calculated reserves of the Prudhoe Bay oil field. In the Wildlife Range, up to 1800 feet of Sadlerochit are exposed, making it a "prime target for oil and gas exploration," wrote Hartman.

**The study was buried
and never became
public.**

The Marsh Creek anticline offers a potential oil bearing structure of an incredible 46 miles in length with a width of 3 miles. Based on the reservoir rock, Hartman estimates that a reserve of nearly 14 billion barrels of recoverable oil can be calculated, which exceeds the potential of the super-giant Prudhoe Bay field.

In the spring of 1976, USGS geologists C. G. Mull and B. A. Kososki prepared a report on the hydrocarbon potential of the Arctic National Wildlife Range for the U. S. Fish and Wildlife Service. The study for "official use only" rocked the Department of the Interior, but it was buried and never became public.



Agreeing that the Marsh Creek anticline may include significant hydrocarbon accumulations and warrants further evaluation, the Mull-Kososki study shows an area further east as having even greater potential. This region underlies the Arctic Coastal Plain south of Barter Island.

The squelched report states "all of the reconnaissance geological and geophysical criteria point to this area as having a hydrocarbon resource potential that could approach that of the Prudhoe Bay area."

The report stressed that regional reflection seismic geophysical methods must be conducted in the area to determine the importance of the hydrocarbon accumulations in the Barter Island area. This was not what Interior Secretary Cecil Andrus wanted to hear.

This was not what Secretary Andrus wanted to hear.

A sanitized version of the report was eventually made public in 1978, with Arthur Grantz replacing B. A. Kososki as Mull's co-author. The new version was released with a companion press release, in which Secretary Andrus stated categorically that the Wildlife Range "is unlikely to hold a 'super giant' accumulation such as Prudhoe Bay." He went on to say that "the remote region's spectacular but vulnerable wildlife resources outweigh the possibility that significant amounts of oil and gas exist there in commercially attractive concentrations."

Subsequent pages of the press release, however, hinted at the great potential of the Range, and when the authors were interviewed by the Associated Press in Anchorage, the story came out that there could well be another Prudhoe Bay in the Range.

Under the terms of the Act which created the Wildlife Range in 1959, Andrus can open it to seismic testing and drilling, but he has staunchly refused to do so. But how credible are his reasons?

Government biologists express concern over the Porcupine caribou herd, estimated to number over 100,000. The herd winters south of the Brooks Mountain Range and summers to the north near the potential oil bearing areas.

Calving, the most sensitive and vulnerable time for the herd, takes place along the Arctic Coastal Plain from the Canadian border west to Marsh Creek, from early May to early June. Exploratory drilling activities, however, take place in the winter months, because of the summertime risk of melting permafrost.

Alaska's Governor Jay S. Hammond, who came to Alaska as a wildlife biologist in the 1940's, told the Western Governors Conference in June 1979, "There would be little hazard to the caribou." During earlier "less sensitized oil exploration activities" on the Alaska Peninsula, his studies showed that "rather than a decline in the herd, there was a ten-fold increase."

About 750 human beings enter the range each year.

Animals known to exist on the Northern portion of the Arctic Range year-round include bears, wolves, foxes, Dall sheep, moose and muskoxen. Summer residents include the caribou, eagles and snow geese.

About 750 human beings, including hunters, back packers, bureaucrats and the mostly-Eskimo residents of the villages of Kaktovik and Barter Island, enter the Range each year.

The U.S. Fish and Wildlife Service hedge when they are asked for accurate inventories of the amount of wildlife on the Range. The credibility of their "ball-park" estimates is challenged by those who visit. One delegation of Congressmen flew into the Range and landed this summer (1979). They saw a total of two rabbits.

Former Interior Secretary Walter J. Hickel had a similar experience: "As Secretary, I flew over a great portion of the Range by helicopter and fixed-wing aircraft in August of 1970. We counted less than a dozen caribou, two bears and a moose. It was not a scientific inventory by any means, but I have wondered ever since, should we keep under lock and key 9 million acres, home of a sparse wildlife population? In all likelihood, there would be very little adverse impact from the introduction of seismic work and test wells."

Does exploration in the Arctic mean harmful exploitation? Most long-time residents with many years of living and working in this unusual and challenging terrain say no. The most evident proof: the activity on the North Slope to date and the construction of the Trans Alaska Pipeline. (See Section V).

Jay Cordell Moore, a petroleum consultant from Springfield, Illinois, writing about the Arctic Wildlife Range, says, "The best evidence available at this time indicates that a seismic survey of the new high resolution type, which causes little or no damage to the ecology, could be completed within six months from the time the first 'echo' is received."

Should we keep under lock and key 9 million acres, home of a sparse wildlife population?

Exploration in the Arctic does not mean harmful exploitation.

**An oil structure of
50,000 acres would
involve just one half
of one percent of
the Range.**

He goes on to say that, "Even if oil or gas should be present, and if wells are drilled, the wildlife need not be disturbed." He points out that a structure covering 50,000 acres would be only just over one half of one percent of the total Range.

Obviously Secretary Andrus does not believe it is worthwhile to find out what resources are actually there. In a fund-raising appeal for the Sierra Club Legal Defense Fund, in September, 1979, Congressman Morris Udall writes, "We must remind the American people of what Secretary of the Interior Cecil Andrus tells us about the Alaska Arctic Game Range: Whatever oil and gas is there would last for maybe a week, maybe two weeks, maybe a month at the consumption rate of the American people. Are we willing to trade that pristine wilderness for a two-week supply of oil and gas that might or might not be there?"

The Secretary's figures don't wash. Either he is being deceived by his subordinates, or he is deliberately misleading the public.

For sake of argument, when one totals the potential oil estimated in the two studies mentioned above: the Don Hartman report on the Marsh Creek anticline (14 billion barrels of recoverable oil) and the Mull-Koski report on the Barter Island areas (9.6 billion, or Prudhoe Bay equivalent), the combined sum is 23.6 billion barrels.

This total figure may be speculative, but consider what it would mean to the nation. At the present level of U. S. consumption, (18,842,000 barrels per day), that one corner of Northeast Alaska could provide America's entire oil needs for over 3½ years. A far cry from Cecil Andrus's estimate of two weeks.

In terms of foreign imports, the Range could replace them entirely for ten years, saving the nation approximately \$70 billion (1979 figure) each year. Over a ten year period, the reduction in balance of payments would be an incredible \$700 billion, and probably more.

The authors of this report do not imply that the 23.6 billion barrel figure is a sure thing. But it is a possibility, thereby questioning the reliability of the Secretary's statements.

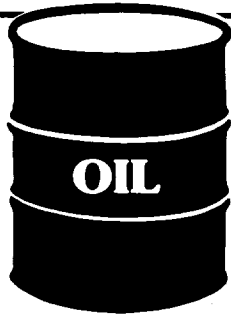
To further illustrate his zealous commitment to his position, when questioned by Senator Henry Jackson about the Carter Administration's recommendation for the reclassification of the Arctic Wildlife Range as a Federal Wilderness with no development allowed, Andrus suggested that the same oil reserves could probably be tapped through offshore drilling in the Beaufort Sea. A curious suggestion, as the oil potential areas are some 30 miles inland.

That one corner of northeast Alaska could replace all foreign oil imports for ten years.

OTHER ENERGY RESOURCES IN ALASKA

There is a wide range of energy resources in Alaska in addition to oil. The following graphic illustrates the potential of Alaska's energy resources, including oil, natural gas, coal, hydro, solar, uranium and geothermal.

ALASKA'S ENERGY RESOURCE INVENTORY



USGS ESTIMATES: 22 to 59
BILLION BARRELS
STATE OF ALASKA
ESTIMATES: 68 to 138
BILLION BARRELS
(estimated recoverable re-
serves, on and offshore)

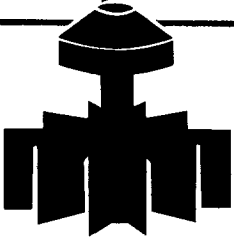


NATURAL GAS

USGS: 55 to 158 trillion
cubic feet
State of Alaska: 439.6 trillion
cubic feet
(estimated recoverable re-
serves, on and offshore)

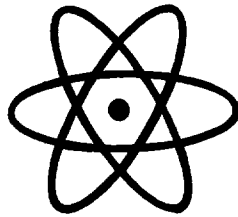


1.8 to 6 trillion tons
Estimates of recoverable coal
are in the vicinity of one
trillion tons. At the current
rate of production, that would
last America for over 1000
years.



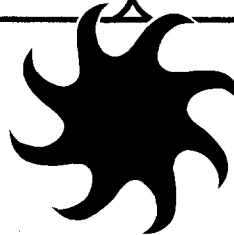
HYDRO- ELECTRIC POWER

76 potential sites
Estimated total output: 172
billion kilowatt hours per
year.



URANIUM

Theoretical estimates:
243,000 tons of U_3O_8 .
No proven reserves, but
areas showing radioactive
trace elements are found
throughout the State.



SOLAR

May have more potential in
Alaska than most Americans
may imagine. Long daylight
hours in summer balance
long winter nights. Reserve
base is, as yet, impossible to
quantify. As elsewhere world-
wide, solar remains a distant
hope, not part of the short-
term answer.



GEO- THERMAL

492,572 acres of Alaska have
been classified by the U.S.
Bureau of Mines as known
geothermal resource areas.
Another 10.8 million acres
are termed "geothermal re-
sources provinces."

NATURAL GAS

In addition to the wide-ranging estimates of Alaska's potential recoverable natural gas mentioned above, there are 26 trillion cubic feet at Prudhoe Bay already located and waiting for a means of transportation to market.

A pipeline project, endorsed by President Carter, would move this valuable resource through Canada to the Mid-Western states. The \$15 billion project remains entangled in financing and legal problems. The earliest delivery date of the first North Slope gas is predicted to be 1984.

Most experts in government and the petroleum industry believe that there are great additional natural gas reserves in the Beaufort Sea and along the Arctic Coastal Plain.

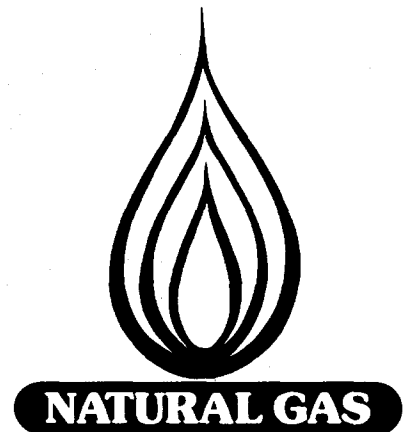
In addition, there are areas in which gas hydrates are found. This phenomenon, pursued with great interest by the Russians in their Arctic, is best described in layman's language as gas which has been frozen and greatly condensed in low-temperature areas.

Although some oil companies have demonstrated interest in hydrates, the extent of the resource in Alaska and the definitive technology for its development are not yet agreed upon.

Other "new" sources of gas being located elsewhere in the world, including gas in geopressured zones and Devonian shale, may also have great potential in Alaska. But these sources will wait until the more readily retrievable natural gas supplies have been utilized.

North Slope gas is rich in gas liquids, the feedstock for the petrochemical industry. Leaders in the Alaska legislature are attempting to bring these resources to the attention of the major national petrochemical firms in the hope that they be fully utilized within the State and not burned to power the Prudhoe Bay field or move the methane through a pipeline.

**Great natural gas reserves
are predicted to be in the
Beaufort Sea.**



COAL

**The energy equivalent
of 73 Prudhoe Bays.**

Alaska has enormous reserves of coal, the dimensions of which can only be described as astronomical. Ross Schaff, State Geologist, estimates there are somewhere between 1.8 to 6 trillion tons of coal reserves in Alaska. "That's the energy equivalent of 73 Prudhoe Bays," he says.

Alaska coal is low in sulphur, therefore environmentally more acceptable than most other U.S. coal. Soft in nature, it adapts readily to synthetic fuel processing.

Readily accessible to ocean transport are 400 to 700 million tons of strippable sub-bituminous coal in the Beluga coal field on Cook Inlet and 100 million tons of similar coal are adjacent to the Alaska Railroad at Healy (about 250 miles from a deep-water port).



One hundred million tons of bituminous coal in the Matanuska coal field are best suited to underground mining; shipping distance by rail to a port is about 55 miles. The vast reserves of both bituminous and sub-bituminous coal in Arctic Alaska on the North Slope (estimates range as high as 3.3 trillion tons) are presently remote from shipping facilities.

**By providing coal to
other nations, Alaska
can reduce worldwide
competition for
petroleum.**

Although Alaska may have nearly half of U.S. coal reserves, the rest of the states, primarily Wyoming and Montana, have ample supplies for many years. By providing energy to other nations on the Pacific Rim, however, Alaskan coal can reduce the world-wide competition that continues to drive up the price of petroleum.

COAL-OIL MIXTURE (COM)

Coal-oil mixture (COM) is a process whereby coal is crushed and ground to a size of 10-400 microns and mixed with oil. The resultant mixture can be used by conventional oil burning equipment. Tests have been conducted using a mixture containing 45% coal and 55% oil. These tests indicate a potential 40% savings in oil consumption. Research continues and is aimed at developing a COM fuel that could be as high as 80% coal by weight.

The export of a coal-oil mixture could have a moderating impact on OPEC pricing strategy.

Fixed power generating plants can use COM in place of oil thus providing a near-term solution to the heavy demands for reduction in the use of oil for power generation. At the same time, COM can provide a clean and efficient means of converting plants to the use of a coal-based energy source.

The large supplies of Alaska coal and oil which are available at tidewater could provide the raw materials for developing COM production facilities. The primary markets for COM may be in the Far East. Supplying this market could relieve the world-wide demand for crude oil and have a moderating effect on OPEC pricing strategy.

SYNTHETIC FUELS

Synthetic fuels such as oil from coal, oil shale and alcohol from vegetal matter (and also from coal) will help, but they can only fill the gap slowly. South Africa has struggled to produce liquid fuel

from coal and is still far short of domestic requirements. Oil shale treatment requires vast quantities of water that is already scarce in the oil shale fields. Brazil, after intensive effort, finds that alcohol produced from crops provides less than a third of the energy expended in its production.

The potential coal resources in Alaska, along with half the U. S. fresh water supply, could provide the necessary combination for extensive synthetic fuel production. Unfortunately, synthetic fuels are still expensive and should remain in the "long term" category. Reliance on synthetic fuels will not provide a solution to the immediate energy crisis and may actually divert attention from better alternatives.

WATER POWER

**25 to 35 percent
of the undeveloped
hydro potential in
the U.S.**

The Alaska Power Administration and the Federal Power Commission estimate hydropower potential in Alaska amounts to 25% to 35% of the total undeveloped potential of all the United States. Potential hydropower sites in Alaska range from small sites suitable for very localized use to the 34 billion kilowatt-hours per year that could be produced by the Rampart project on the Yukon River.

To understand what this amount of power represents, the average U.S. family uses approximately 9,000 kilowatt hours per year. In other words, Rampart alone could provide the electricity requirements for over 3 million households, the equivalent of greater Los Angeles or all eight of the Mountain States.

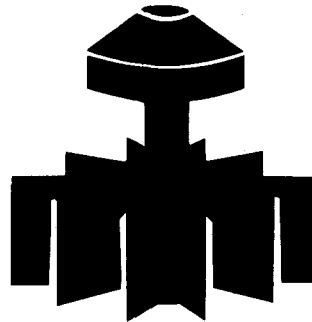
Other sites with large potential are Yukon Taiya (21 billion kwh/year), Wood Canyon (21.9 billion kwh/year) and Holy Cross (12.3 billion kwh/year).

Development of these, as well as forty-six other potential hydropower sites, is precluded by impending Federal Wilderness withdrawals. Of the 172 billion kwh/year potentially available in seventy-six Alaskan hydropower sites, nearly ninety-four percent or 161 billion kwh/year cannot be used unless the huge Federal land withdrawals are greatly modified.

However, efforts are being made to design and construct the Devil's Canyon project near Anchorage, which, if fully utilized, could produce seven billion kwh/year and substantially reduce consumption of oil and natural gas in Alaska.

It is certainly doubtful that the historical pattern of industrial use of electricity will require utilization of a major portion of Alaska's hydro potential within the State, but rapidly increasing costs of energy may make the export of Alaska-generated power feasible by high voltage DC transmission to energy-deficient states.

The vast, unused hydropower in Alaska may also be called upon to furnish hydrogen from water, to thus supply needed liquid fuels free from foreign control, and unlike oil from coal or oil shale, remain relatively free from cost escalation subsequent to construction. In Alaska the costs of hydroplant construction are

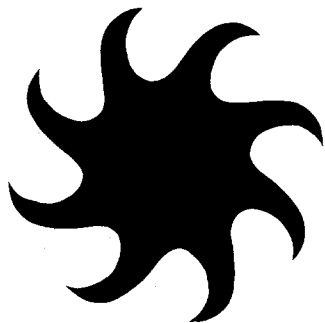


Nearly 94% of it cannot be used unless the Federal land withdrawals are modified.

High voltage DC transmission of Alaska-generated power may soon be feasible.

higher than in other states but the cold weather is an exploitable asset; the steep thermocline, i.e. the difference between air and water temperatures, can be an important source of power.

GEOHERMAL, TIDAL, WIND AND SOLAR POTENTIAL



With the enormous reserves of oil, natural gas, coal and hydro power in Alaska, alternate resources such as geothermal, solar, wind and tidal are seen by almost all authorities only as components of small scale or distant future energy development.

Alaska has staggering quantities of geothermal potential, being part of the volcanic "ring of fire" which circles the Northern Pacific. The State government is drilling a test well at Pilgrim Springs near Nome, hoping to demonstrate how near-surface heat can be utilized for some of Alaska's tiny rural communities. The main hurdle for the wider use of geothermal is its remoteness from large population centers.

**In the short term
future, alternate
energy sources will
provide a small
fraction of the
potential.**

Tidal movement in Cook Inlet, rising and falling some thirty-seven feet twice a day, is the second greatest in the world after the Bay of Fundy. This force can be harnessed for local power for the Anchorage area, if the costly installations are built and amortized in tandem with cross-water causeways.

Wind and even solar power have potential for isolated areas but promise nothing dimension-wise to compete with conventional energy sources.

SECTION III

WHY ISN'T THE ENERGY INDUSTRY MORE BULLISH ON ALASKA?

The oil industry is widely regarded, especially by its opponents, as the most effective, well-financed lobby in the nation. From the Alaskan viewpoint, however, the participation of the oil industry in the battle to awaken the American people to the potential of Alaska's energy resources has been low-key, even timid.

Smarting under the accusation of being an "enemy of the people and despoiler of the environment," many oil companies have chosen to abandon Alaska, and the U.S. as a whole, and go where they are welcome, such as the Middle East, the North Sea, Indonesia, and most recently, mainland China.

When grilled by national periodicals or television newsmen, very few company executives "come out swinging" to open up Alaska.

A team of interviewers from Commonwealth North talked with major oil company representatives and filed the following report:

The economics of petroleum development in Alaska are more severe than they are in almost any other area of the world. The decisive issue for most U.S. companies lies in the rate of return on investment. That rate is severely hampered in Alaska. The main culprit is not climate or other hostile natural conditions. It is government.

"Alaska is one of the prime areas left in the whole USA," says John Saint,

**Many oil companies
have chosen to
abandon Alaska.**

**The main culprit is
government.**

**The legislature has
increased taxes on
the oil industry
13 times.**

Vice President and General Manager of Sohio BP in Alaska, "It is also one of the most expensive, and one of the most uncertain as to taxation and the restraints under which we must operate."

There is no question that the industry has been bitten. The legislature of the young state, 20 years old last January, has increased taxes on the oil industry 13 times.

A \$75,000 report, financed by the Alaska legislature and conducted by Merrill, Lynch, White, Weld, studied the impact of these taxation policies on the oil industry. The findings released April 13, 1979 were as follows:

- (1) The comparative state tax burden in Alaska is nearly twice as great as that imposed by any other state. In the majority of cases, it is closer to three times the burden.
- (2) In those states where the ad valorem tax is equal to or greater than that levied by Alaska, the severance tax is significantly lower or non-existent.
- (3) The sum of ad valorem and severance taxes in Alaska exceeds the corresponding sum in every one of the other major oil producing states.
- (4) Alaska imposes an income tax on petroleum companies which is nearly three times as much as the second highest major oil producing state.

It is not just the high rate of taxes which has discouraged investment by the oil industry in Alaska, it is the instability of the tax

policy, and the fact that it has been changed so many times. The industry has thereby perceived an insensitivity by the legislature and the bureaucracy to the economic risks associated with investment in the admittedly difficult Alaskan terrain and climate.

"We haven't reached the point of saying the atmosphere in Alaska is so bad that under no circumstances will we put any money in there," says Sohio Chairman Alton T. Whitehouse, "but certainly we are headed in that direction."

A study by Arthur Andersen and Company, which reinforces the White, Weld conclusions, reports that Alaska "imposes the largest tax burden of any of the major oil and gas producing states." It indicated that the margin of the tax burden was substantially greater in 1979 than they had found in a similar study only a year earlier.

Robert R. Richards, economist and President of Alaska Pacific Bank, draws the conclusion that "The necessary investment of risk capital will be forthcoming only if the tax level and degree of tax structure uncertainty is regarded as reasonable by business."

Richards continues, "Observing industry activity in Alaska, there is reason to believe that taxation has passed the optimum. The only reason a sharper fall-off in the investment activity has not occurred is because the North Slope lease holders are locked-in to a certain extent."

Taxation policy, high capital investment, instability of governmental policy and delays.

In addition to State taxation policy, high capital investment, red tape, climatic challenges, lack of a transportation infrastructure and bureaucratic delays have forced the oil companies to ignore many oil fields that would be readily producible elsewhere in the United States.

There are more wells drilled each year in the states of Utah, Michigan and even New York than in Alaska.

An exploratory well costs between \$10 and \$20 million in Alaska. In the rest of the U.S., the average is \$250,000 to \$2 million. In the South 48, it takes two or three months preparation before drilling can start. If oil is found, production can begin in three to four months. In Alaska, the process takes years, both before and after discovery. No wonder there are more oil wells drilled each year in such unlikely states as Utah, Michigan and New York than in Alaska.

To be able to produce petroleum economically in Alaska, the industry claims it cannot develop most of the oil it locates. It must discover a giant field, defined as containing half a billion barrels of recoverable oil or more. There are only four such giant fields in the United States, one of which is at Prudhoe Bay.

The influence of "extreme preservationists," both in the Federal government and the state government have frustrated many an Alaskan oil man. "They make it almost impossible to operate in a viable fashion," they say.

One oil man remarked, "We often wonder who is controlling this? The environmentalists seem to have much more say on things they know a lot less about than we do."

Some companies have left the State, and their management say there is no way they would come back into Alaska. It's just not worth it to them.

But in spite of costs, red tape and jousting with preservationists, the bottom line is the availability of land on which to drill. Apart from land recently transferred from the Federal government to Alaska's Native Community (10.5 million acres, less than one quarter of their entitlement), only one third of one percent of the State is in private ownership.

On State-owned land the lease sales of oil and gas potential acreage offered by the State of Alaska has come to an abrupt halt.

In the latter part of 1974 all lease sales stopped, and the State's sale of submerged lands in Katchemak Bay in Cook Inlet to the oil industry was withdrawn, requiring a \$25 million pay back.

The picture from the Federal side has been no better, with the one exception of the Northern Gulf lease sale of 1976.

Recently the State held a small sale in the Copper River Basin. But critics labeled it as a cosmetic gesture, responding to public pressure.

"The object of the exercise was not to discover oil, but to

The bottom line comes down to the availability of land on which to drill...only one third of one percent of the land is in private ownership.

The object of the exercise was not to discover oil, but to solve a political problem.

solve a political problem. It was necessary to have a lease sale after a complete shut-down for five years," wryly remarks a high oil company observer.

"With so many regulations and restrictions placed on us by the State," another oil man said, "it's obvious they don't really want any more oil discovered."

INDUSTRY PROJECTIONS OF POTENTIAL ALASKA OIL PRODUCTION

Alaska production could reach 5 million barrels per day, the equivalent of half of all foreign oil imports.

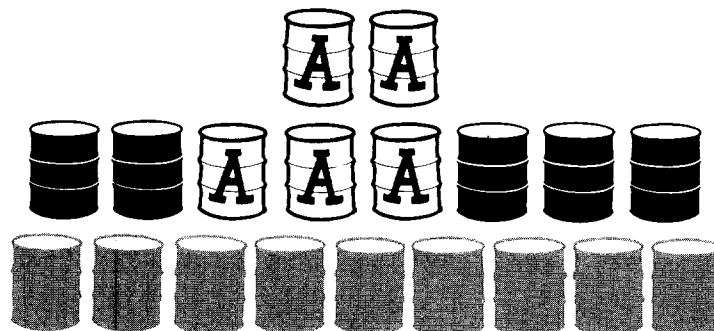
Some of the executives working for the major producers on the North Slope would be content to see the Trans Alaska Pipeline filled to full capacity, two million barrels per day. That is 500,000 barrels over current production. They hesitate to predict that Alaska's daily production could surpass the two million mark.

Others believe that Alaska production could reach 4.5 million to 5 million barrels a day. This boost to the nation would be the equivalent of half of all foreign oil imports.

ALASKAN PRODUCTION

FOREIGN SOURCES

U.S. SOUTH 48



LATE 1980's

To accomplish this goal would require all-out government encouragement and cooperation, a turn-of-events not anticipated by many in the private sector.

Pessimism prevails. Even if the land were available, maximum production would require a streamlined Federal permit system, removing the web after web of entangling restrictions. This intricate maze of government is a relatively recent phenomenon. Since 1970, Congress has passed the following laws:

The National Environmental Policy Act
The Clean Air Act
The Clean Air Act Amendments
The Clean Water Act
The Clean Water Act Amendments
The Marine Mammal Protection Act
The Critical & Endangered Species Act
The Historic Preservation Act
The Solid Waste Disposal Act
The Federal Water Pollution Control Act Amendment
The Coastal Zone Management Act
The Federal Lands Policy Management Act

Some observers wonder if the lack of enthusiasm in the oil industry is partly based on corporate decisions in Houston and New York to hold back the production of Alaska crude until the international situation drives the prices up even higher.

Some Alaskans wonder if oil production is being held up until prices go even higher.

An oil company representative told one of Alaska's U.S. Senators recently, "In 1990, oil will be \$90 a barrel. Then you'll see Alaska developed." Most oil men interviewed, even off the record, insist that such opinions do not govern corporate policy.

"In 30 years of helping decide company policy on these matters," said one, "we have never decided to hold back on

An adversary relationship between government and the oil industry.

production. Without exception our philosophy is to hurry up, never to delay. In some cases we probably would have been smarter to back off, but like in any business, there is always a compelling need for cash flow."

Privately, some oil firm executives predict "such a damn panic" in five or ten years that the laws will be altered. Others hope for a change in the political climate so that the leadership will either change its philosophies or its personalities.

"It's hell on wheels to get things going here in Alaska now," said one. "The adversary relationship between government and the oil industry is known worldwide. That makes it awfully tough to get corporate backing and the commitment of financing."

Many oil industry executives perceive the Alaska State government to be neutral or negative on almost everything industry does. The Department of Natural Resources, in particular, has a reputation for developing road blocks rather than assisting industry in overcoming obstacles.

A recent glimmer of light has appeared in the Department's activity in support of a lease sale in the Beaufort Sea, north of Prudhoe Bay and the Arctic Wildlife Range. Some oil men hope this represents a new spirit of State cooperation with industry.

The Department of Commerce and Economic Development has dedicated almost all of its efforts towards commercial fishing and the "renewable resource economy" of Southeast and coastal Alaska.

"We have seen the Department (of Commerce) show great interest in subsidies for fishing, timber, and even petrochemicals, but they have never done anything to encourage oil and gas discovery and development in Alaska," said one production executive in disgust.

"It is no mystery why the energy industry is not bullish on Alaska. It's hard to be positive and creative when you're met by hostility and obstructionism at every turn" said a beleaguered oil company government relations representative. "You'd think we were the enemy. Well, if we're the enemy, who's going to produce the resources America needs? If they think government is the answer, they'd better think again. Even the Soviet Union has reversed itself and let the individual prospector loose. Since then, the discovery rate has gone up amazingly."

If they think government can produce oil, they'd better think again.

SECTION IV

WHAT IS MOTIVATING THE FEDERAL GOVERNMENT IN ITS POSTURE TOWARDS ALASKA?

**The preservationists
have taken over.**

Those who place primary emphasis on the preservation of wilderness, regardless of other values or needs, have taken over the principal decision-making positions in government regarding the future of Alaska.

These power centers include the Domestic Council in the White House; the Secretary of the Interior and his immediate staff; the staffs of key congressional committees in both the U.S. House and the Senate and the Chairman of the House Interior Committee and his staff.

President Jimmy Carter does not hesitate to acknowledge the muscle and money dedicated by the nation's preservationist organizations to his election. Political debts have been paid with appointments of former full-time employees and lobbyists of the nation's preservationist organizations to key positions in government.

**Political debts have been
paid with appointments to
key positions in government.**

H. Peter Metzger, journalist and author on energy issues, has made a study of this phenomenon. "Though they number only several hundred in all," he estimates, "the jobs they hold are very powerful: fourteen key White

House assistants - including the President's key speechwriter, come out of the (conservation and consumer movements)...former anti-energy activists are now four Assistant Attorneys General in the Department of Justice and are Assistant Secretaries in the Departments of Health, Education and Welfare, Commerce, Interior, Agriculture, and Housing and Development.

"All three members of the Council on Environmental Quality come from their ranks," he continues. "And a half dozen of the most active critics of the Nixon-Ford policy on the exploration of the continental shelf are now Carter bureaucrats in various agencies.

"True believers all, they exude party line and exclude from serious consideration any person or opinion which doesn't conform with theirs."

The publisher of the Energy Daily, Llewellyn King, writes about the impact of this group on Washington, D.C.: "There is a feeling that bigotry, clothed in righteousness, has taken over and is fouling the processes of government."

The network of the "preservation-first: appointees in government has virtually throttled the efforts by the Alaskan people to tell their story to Congress. The showdown of whether or not the State's resources will be utilized has come in the form of a battle over the re-classification of Federal lands in Alaska.

**"Bigotry, clothed
in righteousness,
has taken over."**

**"They were mad as hell
that the natives were
going to get that much
land."**

**Alaskans feel they are
being robbed of their
statehood.**

It began when the long struggle by Alaska's Native population (Eskimos, Indians and Aleuts) for a settlement of their aboriginal land claims was resolved. On December 18, 1971 President Richard Nixon signed the Settlement Act which promised that 44 million of Alaska's 365 million acres would be deeded to the Native community.

Alaska's Senator Mike Gravel remembers how infuriated the conservation lobby became during the Congressional debate over the bill. "They were mad as hell that the Natives were going to get that much land," he recalls. "That's why the Senate-House Conference Committee added section 17 (d) (2)."

This provision, known to Alaskans as simply "d-2," has become a symbol of what Alaskans are fighting. Caving into conservationist pressure, the Conference Committee gave the Secretary of the Interior the option to withdraw "up to, but not to exceed 80 million acres of Alaska" as national parks, forests, wildlife refuges and wild and scenic rivers. Most Alaskans now view this compromise as the "hole in the dike" through which outside interests would break down the victories won in the battle for Statehood, destroying the source of an on-going, stable economy.

Polls show the statewide sentiment runs over 75% against d-2, and is continuing to climb.

Two of the champions of Alaska statehood, Congressmen Wayne Aspinall and Leo O'Brien, agree. Aspinall, a Democrat from Colorado, was Chairman of the pivotal House Interior and Insular Affairs Committee in 1958 when the Alaska Statehood Bill was passed.

"I think what Congress is trying to do to the public lands of Alaska at this time is a breach of faith with approval of Statehood," Aspinall said recently.

"While it is true that the public lands belong to the Federal government generally," he continued, "it also is true that there was an implied promise that the lands and other natural resources of Alaska should be used to help support Statehood. We thought the (Federal) land would be taken up in private ownership, that was our hope -- that people would go up and homestead."

**An implied promise
that the lands be
used to support
statehood.**

O'Brien, a Democrat from New York, also served on the Interior Committee. In a blistering letter to the editor of the Albany Times Union, he wrote, "...the current shenanigans in Washington not only would break a congressional pledge, but shatter a pact with the people of Alaska... those who place the needs of man behind the howls of wolves, may feel no compunction about faith-breaking with Alaska. But as one who had a role in the pledge of two decades ago, I want no part of it."

For the conservationists, d-2 is their top national priority. Congressman Morris Udall is their champion. He and Ohio's John Seiberling are spearheading a campaign to place, not 80 million acres in the four systems as permitted in the Settlement Act, but over 120 million acres in restrictive classifications. Their vehicle is known as the Udall-Anderson Bill.

"I'm all for wilderness areas. I love to drive through them."

A majority of Americans want wilderness areas surveyed for energy and mineral resources.

The strongest, most effective conservation campaign in history.

The battle over wilderness is understood by very few Americans. "I'm all for wilderness areas," one senior New Jersey woman remarked recently. "I love to drive through them."

The irony is that no one can drive through a Federal Wilderness. No roads are allowed, no human activity is encouraged. Only back-packing and similar pastimes are permitted.

Three national surveys taken last year by Yankelovich, Skelly and White, Opinion Research Corporation and Cambridge Report 17, all confirm that a majority of Americans want wilderness areas to be surveyed for energy and mineral resources before deciding what to do with them.

And yet, the Udall-Anderson d-2 bill rings Alaska with enormous chunks of wilderness, totalling in size an area larger than California, before any credible inventories have taken place.

A 1979 Louis Harris poll discovered that 87% of Americans oppose what Harris calls the "Alaska Preservation Act" if the withdrawals contain rich energy and mineral resources.

To achieve passage of the Udall-Anderson bill, lobbyists mounted what Sierra Club Executive Director Mike McCloskey calls "the strongest, most effective conservation campaign in the history of this nation." The 435 members of the U.S. House were subjected to intense pressure, both in their offices in Washington D.C. and from a grassroots campaign among their constituents in their home districts.

Using crass political leverage, Congressmen were told bluntly, "We won't target you in the next election, if you'll vote for our Alaska bill."

"The environmentalists have become computerized and sophisticated," says Joe Chomski, a Washington D.C. attorney who specializes in land and energy issues. "They have an excellent intelligence network."

In short, they know who are the good friends and supporters of most Congressmen. And they know how to work them over.

The White House put its full weight behind the Udall bill. Congressional liaison personnel swarmed over Capitol Hill and President Carter spent hours on the telephone. According to Alaska's Congressman Don Young, who fought the bill bitterly, the President personally called forty undecided House members, promising pork barrel projects in exchange for their vote on the Alaska Lands Bill.

In mid-May 1979, when the final vote was in, only 65 Congressmen withstood the pressure and voted against the legislation.

The Representatives who most strongly favored the bill came from Northern Tier states, beginning with Minnesota and Wisconsin, spreading to the eastern seaboard and including the heavy industrial areas such as Ohio, New Jersey and West Virginia.

These states have in common a long history of intense resource development prior to the era of environmental concern and very few residents who have ever visited Alaska.

The President personally telephoned 40 House Members, promising pork barrel projects.

The Congressmen from large states such as California and Pennsylvania voted along rural and urban lines, once again illustrating that those most beleaguered by constituents upset with pollution problems at home found a "cheap environmental vote" in the Alaska bill.

Both of the House Committees (Interior and Merchant Marine and Fisheries) which reviewed the Udall bill rejected it. In these Committees, 80% to 90% of the Members had visited Alaska and had some first-hand knowledge. Failing in Committee, Udall succeeded in using his influence to bring his bill before the full House.

As the bill generated a great deal of heat, lobbying and counter-lobbying, many Congressmen threw up their hands, saying, "Who can we believe?"

A subtle strategy emerged. The word was spread that the only source Congress could trust concerning the potential resources in Alaska was the United States Geological Survey and the Bureau of Mines.

A subtle strategy emerged.

Relying on this information only, members of Congress who support d-2 feel justified that they have not "locked up Alaska." In fact, Congressman Udall claims that 225 million acres of Alaska are "slated for development and exploitation," and 95% of all proven or speculative oil, gas and coal deposits have been purposely excluded from the d-2 land withdrawals.

The facts show otherwise. No Alaska lands are "open for exploitation." All resource development activities on Federal lands in Alaska require an Environmental Impact Statement and are carefully reviewed by the Federal management agency responsible. But the emphasis on the USGS and the Bureau of Mines is interesting and alarming. It documents the influence of the devotees of wilderness preservation at all costs.

In 1978, Alaska's senior Senator Ted Stevens discovered that an optimistic evaluation of Alaska's mineral potential prepared by the Bureau of Mines had been hushed up and shredded on the orders of Interior Secretary Andrus. This report never reached Congress.

To this day, the staff of the Alaska office of the Bureau of Mines fears that if it releases any more optimistic statements on Alaska's resources during this Administration, their jobs will be in jeopardy. No wonder. They need only observe what has happened in their sister agency, the U.S. Geological Survey.

Charges of "politicization" of the USGS by the Carter Administration surfaced when its Director was fired on July 26, 1977. Vincent E. McKelvey was the first USGS Director in the Survey's 98 year history to be dismissed.

**Charges of
politicization of
the USGS.**

The Wall Street Journal analyzed the firing with a column that praised the life-long geologist. It said in part: "Dr. McKelvey does not now and never has suited the Malthusian regulators who designed Jimmy Carter's energy plan. While you are trying to bulldoze a \$100 billion tax/energy conservation program through Congress, it does not help to have the government's top expert on such matters

running around talking about the vast resource base in the United States."

**Most of the supporters
of the Udall position
don't realize they
are locking up Alaska.**

The firing set off tremors throughout the USGS and the "scientific bureaucracy" in general. The Survey, which had blissfully escaped politics for almost a century, found itself under close scrutiny by high level political appointees who entered government with an ideological bias.

Joan M. Davenport, Assistant Interior Secretary for Energy and Minerals, was the "executioner" of the McKelvey firing. She was 34 years old at the time. Before joining the Interior, she served as Acting Director of the Office of Technological Analysis for the EPA and had been recruited from the ranks of Ralph Nader's organizations.

**"They are turning a
young, healthy giant
into a crippled monster."**

The real tragedy is that most of the supporters of the Udall position on Capitol Hill do not know that they are locking up Alaska. They have been told, and they believe, they have left plenty of room for development.

"What they don't understand is that they are turning a young, healthy giant into a crippled monster," former Interior Secretary Walter Hickel maintains.

One-third of the State will be in wilderness or park classifications that will allow no resource development. Nearly another third

of the State will be in wilderness study category, meaning that it will be placed on "hold" for three more years, and possibly kept in that status permanently. In order to force the Udall bill through the Senate, Secretary Andrus has threatened to extend the three year study time to twenty years.

The final third will be owned by the State of Alaska and the Alaska Native Corporations who will face a cumbersome, sometimes hopeless, process for gaining surface access to their lands. The prospect of trying to transport resources across surrounding Federal Wilderness areas will stifle, if not kill, nearly all hope of using the majority of Alaska's on-land energy reserves.

The Congressional scheme for Alaska enmeshes the entire State in an incredible tangle of procedures, permits and public hearings that will drive the already expensive costs of energy production in Alaska so high that it will not compete.

Looking at a map of the State, chopped into seemingly hundreds of fragments, "It will be a management nightmare," Bert Silcock, former U.S. Director of the BLM, said.

Other states are beginning to realize that the Alaska situation is not unique. The same strategy gradually is being applied to the nation as a whole, especially the western states.

It was some three years ago when the Sierra Club first targeted Alaska and d-2 as their number one priority. The Alaska population became infuriated, and the animosity continues to grow. The irony is that most Alaskans are dedicated outdoorsmen, committed to protecting the

An incredible tangle of procedures, permits and public hearings.

Most Alaskans are dedicated outdoorsmen, committed to protecting the wildlife and the beauty of the state.

wildlife and the beauty of the State. These were the main attractions for them to move to Alaska in the first place.

"We want to bring mining to a halt in Alaska," Secretary Andrus admitted.

Much of the ill-feeling stems from first-hand knowledge of the areas Congress wants to lock up. Many of the withdrawals have very sparse, if any, scenic or wildlife values. They have been deliberately designed to blockade access to rich mineral deposits.

The most glaring example is the Sun copper deposit owned by Anaconda. This rich deposit is a major part of \$9 billion worth of precious resources in the Ambler District; it was included in a wilderness withdrawal after it was brought to the attention of the Secretary.

"We want to bring mining to a halt in Alaska," Secretary Andrus admitted during a 1978 meeting with former Secretary Hickel in Anchorage.

Half-truths, outright lies and interminable delaying tactics.

During the struggle to get a permit to build the Trans-Alaska pipeline in the early 1970's, many dedicated conservation-minded Alaskans parted ways with the conservation organizations over the half-truths, outright lies, and interminable delaying tactics of the national lobbying efforts. Bumper stickers proliferated reading "Sierra Go Home."

"We finally won the pipeline battle," remarks one longtime Alaskan ruefully, "but the Sierra Club didn't go home. It just moved into government."

SECTION V

THE ENVIRONMENTAL COST OF DEVELOPMENT

In discussing the energy and resource potential of Alaska with almost any Congressman or Senator, he will agree that it should be developed. The caveat is that development take place with due regard for the beauty of the land and needs of the environment.

In listening to the debate, all sides accept this caveat as a given.

"In its forthcoming deliberations, the Senate...will need to strike a balance between the preservation of our nation's valuable wilderness areas and the development of our economic resources," writes New York Senator Daniel Patrick Moynihan.

While presenting awards to four Georgia Congressmen who voted for the Udall-Anderson d-2 bill, William E. Mankin, representing a group called Georgians for Alaska said, "These members of Congress have met the very difficult challenge of providing balance to the development and the conservation of Alaska's bountiful natural resources."

Jack Hession, Alaska representative of the Sierra Club, states, "The Sierra Club and the other national environmental organizations have acknowledged the national interest in energy development in Alaska by designing the bill (d-2) in such a way that this kind of energy development can go forward."

**Everyone echoes the dual
destiny of Alaska...
but who really means it?**

Oil company representatives and spokesmen for chambers of commerce and other development-minded organizations all echo the dual potential and destiny of Alaska. The question the public must decide is who really means it?

A credible answer can only be found through observation of "not what they say, but what they do."

Although the advocates of wilderness pay lip service to energy development, they fight against it almost without exception.

When the record is examined, the preservationists as a whole endorse only those sources of energy which they consider to be renewable; i.e. solar, wind and tidal power. They do not support the renewable resource of water -- (hydro), because they oppose the construction of large-scale dams. They tolerate, grudgingly, the use of geothermal steam (in small amounts, if the noise pollution isn't too great) and the creation of syn-fuels, if they can be produced without strip-mining or using large quantities of fresh water.

Their major platform for a national energy policy staunchly remains the non-production of energy and the cutting back on its use.

"One wonders if we were running out of oxygen, if they would insist that we all breathe less?" one unsympathetic critic asks.

There are no known cases in which the wilderness advocates ardently endorse oil and gas production in Alaska or in any other domestic location. The record is clear. Although they pay lip service to energy development, they fight against the production of the conventional sources of energy, almost without exception.

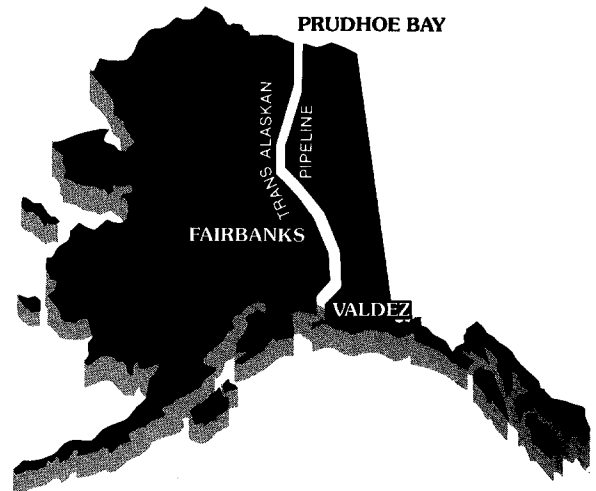
To examine the record of the other end of the spectrum, the oil industry, the most credible answers come from examining their recent projects. In Alaska, the obvious example is the Trans Alaska Pipeline, a massive engineering project, in fact the largest ever financed by free enterprise.

When the companies who discovered oil on the North Slope were ready to start production, they set out to build a pipeline in 1970. At the outset, they hoped to brush aside many legitimate questions raised both by environmentalists and by long-time Alaskans who understood the unusual challenges of construction in the Arctic.

The companies wanted to bury some 90% of the entire line, which almost all participants now agree would have been both an environmental and engineering disaster. The toughest problem was that certain kinds of permafrost would melt when hot oil moved through the line. Once liquid, they would fail to support the pipe and cause cracking and spillage.

Finally the companies drilled the entire pipeline route to determine where these dangerous permafrost ice lenses were located. In those areas the line was designed to be built above ground.

After answers to this and other legitimate environmental questions were found, Alyeska Pipeline Service Company built the pipeline, 789 miles from Prudhoe Bay to the ice-free port of Valdez. Termed an "engineering marvel" by the oft-critical New York Times in an October 1979 article,



**Legitimate questions
were raised about
the unusual challenges
of construction in the
Arctic.**

the pipeline is effusively described by some admirers as a modern addition to the seven wonders of the world.

What was the cost of this project to the environment and to the economy?

Observers, including a number of nationally-known environmentalists who were named by the Federal government as watchdogs throughout the project, have gone on record saying the Trans-Alaska Pipeline is unrivaled world-wide in terms of adapting to the unique Arctic and sub-Arctic environment.

But the question of the cost of the project, almost \$8 billion, remains a controversy. Were the pages and pages of environmental stipulations necessary? Were the battalion after battalion of Federal, State and private sector overseers really necessary?

The environmental hysteria cost at least \$3 billion.

Ed Patton, who served as President of Alyeska throughout the construction of the line, says, "The environmental hysteria and its attendant delay of the construction of the project cost at least \$3 billion."

What does it mean to waste even \$1 billion? The term is so commonplace but so misunderstood. To illustrate how much one billion is, Governor Dixie Lee Ray of Washington puts it like this: "A billion seconds ago we were still fighting World War II. A billion minutes ago, Jesus Christ was still alive. A billion hours ago, man was living in caves."

Bill Aley, an Area Engineer on the pipeline project involved in environmental surveillance for a large portion of the line, recounts

the day by day battle with "professional environmentalists" who constantly made outrageous demands on the construction crews.

"The cost of delay was so exorbitant, that the builders just had to give in," recalls Aley. "When a pint of oil spilled out of a crank case, the companies were forced to file numerous oil spill reports and stop everything to clean it up. The absurdities reminded me of the Soviet Union where everyone watches everyone else and reports back to Moscow."

What most Americans did not realize was that as the price of the pipeline rose from the original \$900 million figure to nearly \$8 billion, the added costs became a cost of doing business, ultimately passed on to the consumer.

That extra \$3 billion contributed to the rising cost of gasoline at the pump, and cut into the revenues of the State of Alaska. The State's royalties are based on the wellhead value of the oil which is determined after the cost of transportation has been deducted.

The widely promoted fears of the risks to Alaska's wildlife population were largely fiction. For example, out of a total land area of 586,000 square miles, the line used only 8.2 square miles of wildlife habitat.

The caribou herds have not been adversely affected; in fact, they have flourished along the pipeline route. The Central Arctic herd, numbering 5,000 in 1969, now has a population of 7,000 and is in very healthy condition.

"The absurdities reminded me of the Soviet Union."

The pipeline used a total of 8.2 square miles of habitat.

For cost comparisons, environmental acceptance and urgency of construction, it is interesting to look back at the Alcan Highway project during World War II. The nation's security was threatened by a powerful enemy already active. A 1600 mile, passable highway was constructed through mostly uncharted wilderness from Edmonton, Alberta to Fairbanks, Alaska in just sixteen months.

After over thirty-five years of service, little if any detrimental impact on the environment is observed by the thousands of annual travelers.

Most oil company representatives in Alaska, however, have resigned themselves to the belief that the over-cautious excesses of the Trans-Alaska Pipeline have set the pattern for how all major developmental projects will have to be conducted in the decades ahead. The cost of protecting the environment, regardless of how extreme or outlandish the requirements may be, are just another factor in the cost of doing business.

"We could produce energy so much cheaper if they would let us."

"It bothers me when there is such flagrant waste of money and resources," said one. "We could produce energy so much cheaper if they would let us."

But most others have thrown up their hands in despair. They simply factor in the price of kow-towing to the extremist demands in all projections for future energy development in Alaska.

SECTION VI

THE NATIONAL MEDIA "BLACK-OUT"

Many Alaska observers suspect the national media to be prejudiced against their State. Research for this report shows that the problem is not prejudice. It's ignorance, born from the absence of first-hand knowledge.

Long distance telephone interviews with energy and environmental writers on The New York Times, Wall Street Journal, Christian Science Monitor, Newsweek, Nation's Business, United Press International (UPI), and the Associated Press (AP) revealed the most common source of information available regarding Alaskan affairs was that presented by preservationist organizations, primarily the "Alaska Coalition" and the Sierra Club.

**It's not prejudice,
it's ignorance.**

Other frequently mentioned sources of Alaska-oriented information were the U.S. Department of Interior, the Environmental Protection Agency, U.S. House Interior Committee, and the U.S. Senate Energy and Natural Resources Committee.

If the correspondents had a specific need, they generally reported they sought data from Alaska's congressional offices, and one person reported he had talked with Alaska's Department of Natural Resources Commissioner; however, the source of unsolicited Alaska-based information was described as being entirely provided by the national environmental organizations.

None of the news media representatives interviewed in Washington D.C. mentioned Alaska's citizen groups, such as the Citizens for the Management of Alaska's Lands, or the State of Alaska's d-2 information office as a source of information, solicited or otherwise.

A convincing summary of the information source scene regarding Alaska in Washington D.C. is the statement provided by a member of one of the nation's wire services in response to the question, "What are some of the sources of information available to you concerning Alaska?" The response: "The Interior Department, House Interior Committee, Senate Energy Committee, and environmental groups vitally interested in the future of Alaska. The State of Alaska may have an office here--other states do--you might check and see, I don't know."

In review, at the national news media level, the information regarding Alaska has basically been prepared and presented by the Federal government and national environmental organizations, which quickly reduces to the environmental element alone, because it has become a primary source of the information used by the Department of Interior, House Interior Committee, Senate Energy Committee, Environmental Protection Agency, and individual members of the U. S. House and Senate.

A one-sided information flow.

The dangers inherent as a consequence of a one-sided information flow are clearly evident in the legislation relating to the Alaska lands issue. Artfully employing the old technique of the "false dilemma," preservationist leaders have convinced the media and the vast majority of Congress and essential bureaucrats of the necessity of "saving" Alaska.

The "false dilemma" technique of disputation, described originally by Greek philosophers prior to 5 B.C., involves presenting an issue as a dichotomy, that is, a situation in which

only two mutually exclusive choices are possible. If one is rejected, the other must be accepted.

The key element in the effective use of the "false dilemma" is the selection of an alternative which is abhorrent and sure to be rejected, thereby guaranteeing acceptance of the remaining alternative. Thus, in the case of Alaska lands, the preservationists have chosen to present the issue as one in which Alaska will be "ruined" unless it is "preserved."

"Ruin" is not the logical alternative to "preserve."

Given the restricted options available as presented through the one-sided information flow, there is little wonder that many people reject "ruining" Alaska.

A much publicized example of the "false dilemma" was a statement by Congressman Morris Udall which was carried nationwide by the press. In a letter to Interior Secretary Cecil Andrus, Udall urged him to place an emergency freeze on Federal land in Alaska because "people with bulldozers and picks and shovels" were poised to tear up the land.

The truth is that any development activity on Federal land in Alaska requires an Environmental Impact Statement and upwards of 26 permits.

Fortunately the true options are much more positive. Wise resource development is one of the best examples of having one's cake and eating it too. In strong contrast to the "either/or" options presented by the preservationists, a great middle ground is available regarding wise resource use. Chief among these is the recognition that "ruin" isn't the logical alternative to "preserve."

From the North Slope of Alaska to the Gulf Coast of Louisiana, examples abound in which mankind and the other elements of nature can mutually benefit from resource development.

In Alaska, caribou stay close to the Alaskan oil pipeline for shade in the summer and for protection from the wind and snow in winter. They feed on the tender grasses planted along the pipeline right-of-way.

The "false dilemma" has been effectively employed by the preservationists.

In off-shore Louisiana, the legs of the drilling rigs are a new home for organisms which provide food for the larger marine life. This has contributed to the fact that Louisiana fishermen now harvest six times the catch prior to off-shore development.

Clearly, the "false dilemma" has been effectively employed by preservationists in their efforts to "lock up" Alaska, however the vast majority of Americans have been ill-used through employment of the technique.

SECTION VII

WHAT SHOULD THE FEDERAL GOVERNMENT BE DOING?

If the Federal government persists in energy policies which result in rising dependence on imported oil, the American people face a future filled with chronic shortages and ruinous prices.

In a very real sense, the most recent windfall to OPEC was engineered in Washington, D.C. The OPEC nations merely formalized what had been made possible by spiraling U.S. consumption and lagging development.

There are very real problems connected with all the short and midterm options available to the U.S., but they are not insoluble. The heart of the matter is this: the government machinery which Congress has created to deal with energy is unworkable.

The government machinery created by Congress is unworkable.

It is time for the U.S. Administration to do four major things: (1) Stop moralizing and berating the American citizen for his energy consumption. (2) Allow the free market to determine the cost of energy, (3) Remove regulatory barriers so producers and consumers can respond accordingly, and (4) Encourage the exploration and production of domestic energy in potentially resource-rich areas such as Alaska and the Atlantic and Pacific outer continental shelves.

Stop moralizing; price energy at its full cost; remove regulatory barriers; encourage production.

PRESIDENT'S ENERGY PLAN

President Carter proposes to reduce U.S. imports to 4.5 million

**By 1990, the President
hopes to reduce foreign
oil imports to 4.5
million barrels per day.**

barrels per day in the next ten years and to finance a massive \$142 billion conservation and synthetic fuels program with revenues from new taxes on de-controlled crude oil.

The heart of the President's plan is the creation of an Energy Security corporation with unprecedented power and authority to spend \$88 billion (recently reduced to \$22 billion) during 1980-90 to boost development of 2.5 million barrels of oil per day from substitute fuels.

Other elements of the program would establish a three-member Energy Mobilization Board empowered to expedite permitting and construction of critical energy facilities; provide new incentives for development of heavy oil, unconventional gas, and oil shale; require utilities to cut current oil consumption by fifty percent; set up a residential and commercial conservation program designed to save 500,000 barrels of oil per day by 1990; provide \$2.4 billion per year in aid to low-income families; and supply a total of \$16.5 billion during 1980-90 for improvements in mass transit and automobile fuel efficiency.

CRUDE OIL DECONTROL

The President exercised his authority to decontrol crude oil prices June 1, 1979; however, he also asked Congress for a "Windfall profits tax" designed to recover fifty percent of the increased revenues flowing from higher prices.

Petroleum economist Richard J. Gonzalez has urged Congress to dismiss "the mistaken theory" that windfall profits will be realized by U.S. producers if crude price controls are removed. He charges that government controls have caused far greater windfall losses for producers during the past 20 years than the maximum gains that could be realized from immediate removal of price controls.

Some say that government controls have caused windfall losses for producers.

The President must know that unless individuals see an opportunity to generate a reasonable return on their investments, consumers are doomed to a future of steadily rising prices and shrinking energy supplies. Those profits, are the source of exploration capital. Most of this money is re-invested in new energy supplies and facilities, as has been the pattern historically.

Profits, a word ridiculed by the "new elite," are the source of exploration capital.

The opposite equation is equally simple: static or falling profits mean less available capital and thus less exploration and reduced supplies of new energy sources which already are at a level far below consumer needs.

Whereas a windfall profits tax threatens to balloon government bureaucracy at the expense of those who actually produce energy, other alternatives are being suggested. One of the most interesting is a "plow-back device" which would require oil companies to dedicate inflated profits to additional energy exploration and production.

The OPEC nations claim (not without logic) that the uninflated price for crude oil has declined since 1974 based on what they pay for goods and services. This is due to depreciation of the U.S. dollar as well as inflation in the OECD economy. They claim the adjusted price of crude has declined from \$11.45 in 1974 to \$9.62 in 1978.

REGULATORY EFFECTS

The net effect of the Federal regulatory system on the national energy scene is nearly inexplicable and the impact on Alaska is multiplied because of remoteness, challenging climate, and the resulting higher costs. Federal permitting and environmental requirements have become increasingly stringent. The trend raises a major obstacle in the way of the President's vow to speed domestic development. The net results of onerous and voluminous regulations are simply added costs and delay. In many cases drilling and production have completely stopped.

In many cases drilling and production have completely stopped.

Added to the Federal regulations is the increasing share of authority by states which have their own coastal zone management programs. CZM boards have veto authority over exploration and development of a lease off their coast, even if the lease is in Federal waters.

Complying with regulations sometimes becomes confusing because of the overlapping authorities claimed by State and Federal agencies.

Perhaps the best example of regulatory effects is the SOHIO Pactex line which was designed to move Alaskan and Asian crude oil east from California. It is contended by

California's Governor Jerry Brown and his appointees that SOHIO pulled out just before they were ready to grant final permits because the company found a better profit elsewhere.

The facts show otherwise. The coup de grace was the time delay, the stuff of which life, money, and even environmental achievements are made.

SOHIO ran the gauntlet of 700 permits, spent \$50 million and five years. If the permits had been issued, the project would merely have moved from the regulatory to the litigation phase.

The fundamental question is the nearly impossible permit process itself. It is so formidable that few major energy projects can survive it. Unless Federal officials act in concert to cage this regulatory monster, the best laid energy plans will be doomed to failure.

**Federal officials must
act in concert to cage
this regulatory monster.**

INDUSTRY GOVERNMENT RELATIONS

Thumping the tub of political rhetoric, the President has widened the distrust between the man on the street and the U.S. oil industry.

"We are requiring the oil industry to cooperate," he said. "if they do not cooperate voluntarily, we will not hesitate to use the authority that I have to require the oil companies to meet the basic energy needs of our nation."

Simplistic jawboning has not, and will not, convince the public that the energy crisis is nothing

**It's time the servant
of the people stepped
aside and let Americans
get back to work.**

but a hoax. If the Federal government removes its blinders, it will discover a major cause why energy projects are not moving. The free market system that created our civilization has been bound, gagged and put to the whip.

It is time for the old rivalries to die and it's time to change direction with intelligence. These rivalries are a perilous anachronism; young against old, preservationist against producer, the new elite against the old guard.

Preservationists and some government officials say, "Don't use Alaska's resources now, wait until we need them." The truth is the nation needs them now as the national economic engine is faltering. Even if exploration were to begin immediately, it would be years before Americans would benefit from the use of America's own energy resources.

SECTION VIII

WHAT SHOULD THE ALASKA STATE GOVERNMENT BE DOING?

State governments nationwide appear to be in a no-win situation. Conflict between State and Federal government appears inevitable. The resources available to any given state to deal with large-scale energy issues are indeed minimal when considering the resources of the Federal bureaucracy.

The exception to this rule is when a given state has a great deal of resources on its State-owned land. Alaska has probably the most of any state in history. The leverage is there, if the Alaska government chooses to use it.

**The leverage is there,
if the Alaska govern-
ment chooses to use it.**

State government easily gets caught in a squeeze play as it must operate within the Federal law, be responsible to Federal mandates, and at the same time respond to the needs of private citizens, local energy requirements, and private economic development.

Often the general population cannot understand "what's going on" back in Washington D.C. The State must attempt to communicate its analysis to all those concerned. Through its staff, and communication with key national officials, the State must assume the responsibility to challenge unwise and arbitrary Federal policies and clearly develop State related responses.

**State's rights, like muscles,
become weak and flabby unless
they are exercised.**

State's rights may be guaranteed under the U.S. Constitution, but, like muscles, they become weak and flabby if not exercised by the states themselves.

**If Alaska acquiesces on d-2,
it will have abrogated its
responsibility as a state.**

The issues relating to Federal ownership of lands, a problem unique to the western states, impacts Alaska more than any other state. The central problem is to have access to its own land. It is clearly the responsibility of the State to identify those access problems which will inhibit its citizens from being responsive to national and local energy opportunities.

Herein lies the crux of the d-2 battle in Congress. If the State of Alaska acquiesces to the current Washington, D.C. position, it not only will hurt itself, but also will abdicate its responsibility as a state, equal under law to all others.

Oil reserves, like wildlife, do not follow state, Federal and private boundaries. It is clearly necessary for a spirit of cooperation to exist between State and Federal government when considering lease sales of public lands and OCS areas.

Federal economic development policies for states are vastly different, depending on the Federal departments involved. The Department of Commerce has a different policy on development than the Department of the Interior. The State would do well to work more closely with the Department of Commerce as its views are more closely aligned with most Alaskans.

Alaska State government does not have a policy for economic development for the energy industry that clearly defines the boundaries within which industry must operate. Industry has no confidence in announced policies that have been changed whenever it became expedient.

No company is willing to invest in Alaska unless they can forecast their future costs with some confidence. The uncertainty discourages companies from investing capital or even investigating opportunities when they do not have confidence in their ability to proceed if economic projects are identified.

No company will invest unless it can forecast its future costs.

Unless the State has clearly identified goals, it is impossible to ascertain when they have been achieved. The State should be expected to devise such a program. In a state as heavily influenced by government control of the land and resource revenues as Alaska, how can the private sector respond if it doesn't know which way the government is going?

A program must be developed to market the opportunities available in Alaska to those investors capable of developing what is desired. Disadvantages must be identified and solved. Advantages must also be identified and promoted.

An atmosphere of trust between government and industry must be created. This is even more important at the State level than at the Federal. Each must view the other as a resource to be called upon and assisted. Nothing can be achieved unless a positive, creative relationship is established. Areas of conflict must be identified and resolved. Very little can be achieved without this elementary cooperative attitude.

An atmosphere of trust must be created.

Very little effort is made to understand the impact of various legislation on private enterprise. State government must understand the difference between incentives

State government must understand the difference between incentives and subsidies.

and subsidies. States are competitive as well as private companies. And the most effective State governments are those which lay down clear policies on environmental protection, taxes and incentives, and then hold true to those policies. Most companies ask for little more than fairness and consistency.

SECTION IX

WHAT CAN THE PRIVATE SECTOR DO?

Most observers in the private sector agree that if government obstacles to increasing domestic energy production were removed, the private sector could get the job done.

But this is not the total story. Free enterprise, left to itself, without any tempering from government to guarantee fairness and responsibility, has proven on occasion to be callous and even self-destructive. Land has been desecrated and wildlife populations nearly lost. Resources, even those on which industry depends for its survival, have been over-harvested, and in some cases, destroyed.

Public distrust of oil companies is not entirely based on fiction.

And yet, the nation faces a legitimate shortage of oil and gas. No alternative energy sources can come on-line fast enough to check the wild escalation in the cost of living and double digit inflation fueled by the cost of imported fossil fuels.

What then can the private sector do to rebuild a basis of trust with the people and the government, through which it can establish its own credibility and "get the job done?"

The following are several suggestions prepared by the authors of this report:

Public distrust of oil companies is not entirely based on fiction.

No alternative energy sources can come on-line fast enough to check the wild escalation in the cost of living.

**The public disenchantment
can lead to either
anarchy or nationalization
of industry.**

(1) Although public disenchantment with governmental solutions is growing, an increase in confidence in the private sector is not occurring. The public is becoming increasingly critical and distrustful of public and private institutions. This can easily lead to either anarchy or nationalization of industry. The private sector must accept its responsibility for this disturbing trend and act vigorously to reverse it.

(2) The private sector has the ability and the resources, if the need were perceived as meriting high corporate priority, to accomplish much more in the education of the American people on the real life meaning and significance of:

- A. The costs of government regulation; who pays for it and how the payment is made?
- B. Productivity; a word not understood but by a small fraction of the citizenry.
- C. Research and development; its role and how it is funded.
- D. Capital investment; its role and sources in our economy.
- E. Inflation; what it really is, what really causes it, and what can and cannot reduce it.
- F. Profits; their sources and actual size in America, their uses, their essential place in a non-socialistic, free society.
- G. Social Services; how much should be provided and administered by government, the price tag, and alternatives.

H. Redistribution of income;
its virtues and vices. Can
it be accomplished by
government? The mechanisms
through which it has worked
in the past and where and
why it has failed.

Few of the foregoing subjects
are understood by even a minority
of Americans. Our schools and media
in recent years have done little to
dispel this ignorance and its natural
product, prejudice. Indeed, both
the academic world and the media
establishment have contributed to
that ignorance.

In like manner, the govern-
ment has reinforced America's
economic illiteracy to the
advantage of government growth
as the "solver" of economic
questions. While an increasing
number of Americans criticize the
lack of results and incompetence
of governmental management, the
number who dispute government's
role in economic management is
decreasing nation-wide.

In short, unless the private
sector reverses this trend, it will
continue to the point where our
nation flirts with bankruptcy.
Leaders of industry, not just
their public relations staff, must
dedicate themselves to the solution
of this problem. The idea that it
can be cured with a one-shot
advertising campaign has its roots
in the erroneous assumption that
the vital role of the market place
is understood by a large segment
of the population. It simply is
not.

The growing tendency on the
part of American business to "if
you can't beat 'em, join 'em" is

**It is an erroneous as-
sumption that the market
place is understood by
the population.**

Soliciting government solutions to corporate problems damages the credibility of businessmen who espouse a lessening of governmental regulations.

against the national interest and a death knell for free enterprise. It is still within the power today of American corporate management to eschew the short-term gains of enlisting government intervention into the private sector.

Soliciting governmental solutions to corporate problems not only contributes to increased regulation, but also damages the credibility of business leaders when they espouse a lessening of governmental regulations.

Another version of buckling to the power of government is the practice of corporate managers to lend massive political and financial support to the re-election of incumbents whose philosophies and actions have been inimical to the free market. Suicidal is the correct adjective for this game, and more businessmen are playing than ever before. An example is the percentage of monies spent by Political Action Committees (PAC's) which went to incumbents, whether they exhibited an anti-business posture or not.

In working with government, industry must move beyond criticism. Government does not have the experience or talent available to large corporations. Personnel are often young and do not understand. It is in industry's interest to involve themselves more at the lower levels of government to resolve these problems and educate those who are inexperienced and yet willing to learn.

The authors of this report have stated the above in the belief that they are not mere philosophical meanderings, but are as concrete as the cost of sales and the prime rate.

In the long run, they are even more important. Unless the private sector bestirs itself to devote massive resources to their accomplishment, the system of free enterprise will eventually atrophy to the point where cost of sales and the prime rate are no longer significant elements in our economic life. After all, they have been irrelevant to governmental economic management for decades.

SECTION X RECOMMENDATIONS FOR ACTION

Alaska holds no panacea for the entire national energy crisis, but it could provide one-quarter to one-half of the oil currently being imported from overseas. Its natural gas and coal reserves could also assist enormously in taking the pressure off domestic energy supplies. The authors of this report urge immediate action by government and the private sector in the following ways:

1. Congress must resist the pressure from the national preservationist lobby to lock up Alaska, and reserve final judgement until there have been thorough and credible inventories of the resources of the State.
2. President Carter should direct the Secretary of the Interior to expedite the leasing of onshore and offshore Federal lands in Alaska that have high oil and gas potential, so that these resources can help fill the dangerous energy gap America faces in the mid and late 1980's.
3. The American people should demand that the Federal government back off and let the private sector produce the energy the nation needs. This means:
 - A. Streamline the permit system that now has Alaska and other parts of America in a hammerlock.
 - B. Provide incentives for energy production in difficult, isolated areas such as Alaska.
 - C. Hold the line on environmental protection, but understand the world of difference between true environmentalism and no-growth preservationism. The former will help care for and clean up the country. The latter could destroy its vitality.
 - D. Get the government out of the energy exploration business. Individuals find resources, governments rarely do.
 - E. Allow the free market to determine the price of energy. Instead of raising taxes on the energy industry to feed government,

create a plow-back device so that inflated profits are dedicated to additional energy production.

4. The energy industry, faced with a deep credibility gap with the American people, must begin to put the health and economic life of the nation first. Corporate leaders must "come out swinging" to inform the public that:
 - A. In the near-term future, without domestic oil, gas and coal production, the nation will flirt with bankruptcy.
 - B. In spite of mistakes and abuses in the past, free enterprise has proven to be the best mechanism to solve a problem of this dimension.
 - C. The industry's commitment to care for the environment is not just corporate public relations. Even enormous projects such as the Trans-Alaska Pipeline, providing a half billion barrels of oil per year to the "South 48," can be built without harming the wildlife or the land.
5. The State of Alaska must take a much more aggressive posture towards:
 - A. The stifling and repressive actions which are being instigated by the Federal government.
 - B. The honest ignorance of the vast majority of Americans who have no idea of Alaska's potential to help solve the national crisis.
 - C. The creation of a transportation infrastructure within the State so that resources in the interior are competitive with world prices.
 - D. The establishment of a fair, consistent taxation policy.

- E. Creative initiatives and incentives
for the responsible development of
Alaska's energy potential.
- 6. The national media must take a full, hard
look at the Alaska situation for what it is.
Few, if any, national journalists are investi-
gating it objectively.

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BIBLIOGRAPHY

Rather than encumber the text of this report with footnotes, the main resource documents are listed below. The facts and figures on national energy use and projected costs have been reviewed by Dick Lindahl, Energy Statistician for the U.S. Library of Congress. For specific source reference to items mentioned in the report, please contact Malcolm Roberts, Executive Director, Commonwealth North, 935 West Third Avenue, Anchorage, Alaska 99501, (907) 276-1414.

Alaska Division of Energy and Power Development, Department of Commerce and Economic Development, Alaska Regional Energy Resources Planning Project - Phase 1, Volume 1 October 1977.

Alaska Field Operations Center, Alaska's Mineral Potential, 1978.

Anderson, Arthur & Co., Prudhoe Bay Field and Trans-Alaska Pipeline System, February, 1979.

DeGolyer and MacNaughton, Twentieth Century Petroleum Statistics, 1978.

Department of The Treasury, Effects of Oil Imports on National Security, March, 1979.

"Electrical World", 29th Annual Electrical Industry Forecast, September, 1978.

Grantz, Arthur and Mull, C.G., Preliminary Analysis of the Petroleum Potential of the Arctic National Wildlife Range, Alaska, USGS Open-File Report 78-489, Menlo Park, California 1978.

Hartman, D. C., Geology and Mineral Evaluation of the Arctic National Wildlife Range, Northeast Alaska, 1973.

International Petroleum Encyclopedia, The Petroleum Publishing Company, Tulsa, Oklahoma, 1978.

Klein, Robert M. et al, Energy & Mineral Resources of Alaska & The Impact of Federal Land Policies on Their Availability, Oil & Gas, June, 1974.

Kosowski, B. A.; Reiser, H. N.; Cavit, C. D.; Detterman, R. L., A Gravity Study of the Northern Part of the Arctic National Wildlife Range, Alaska, United States Government Printing Office, Washington: 1978.

Miller, Betty M. et al, USGS Circular No. 725, Geological Estimates of Undiscovered Recoverable Oil and Gas Resources in the United States, 1978.

Moore, J. C., Exploration/Drilling, "Oil & Gas Journal", August, 1979.

Mull, C. G. and Kososki, B. A., Hydrocarbon Potential of the Arctic National Wildlife Range Alaska, U. S. Department of the Interior Geological Survey, 1976.

National Foreign Assessment Center, International Energy Statistical Review, July, 1979.

Richards, Robert R., The Impending Fiscal Crisis Facing Alaska State Government and Its Relationship to the Future Stability and Growth of the Alaska Economy, March, 1979.

Schurr, Sam H. et al, Energy in America's Future, The Johns Hopkins University Press, 1979.

Stobaugh, Robert; Yergin, Daniel, Energy Future, Random House, New York, 1979.

United States Department of Energy, Energy Information Quarterly Report, July 6, 1979.

United States Department of Energy, Weekly Petroleum Status Report, July, 1979.