

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

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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.

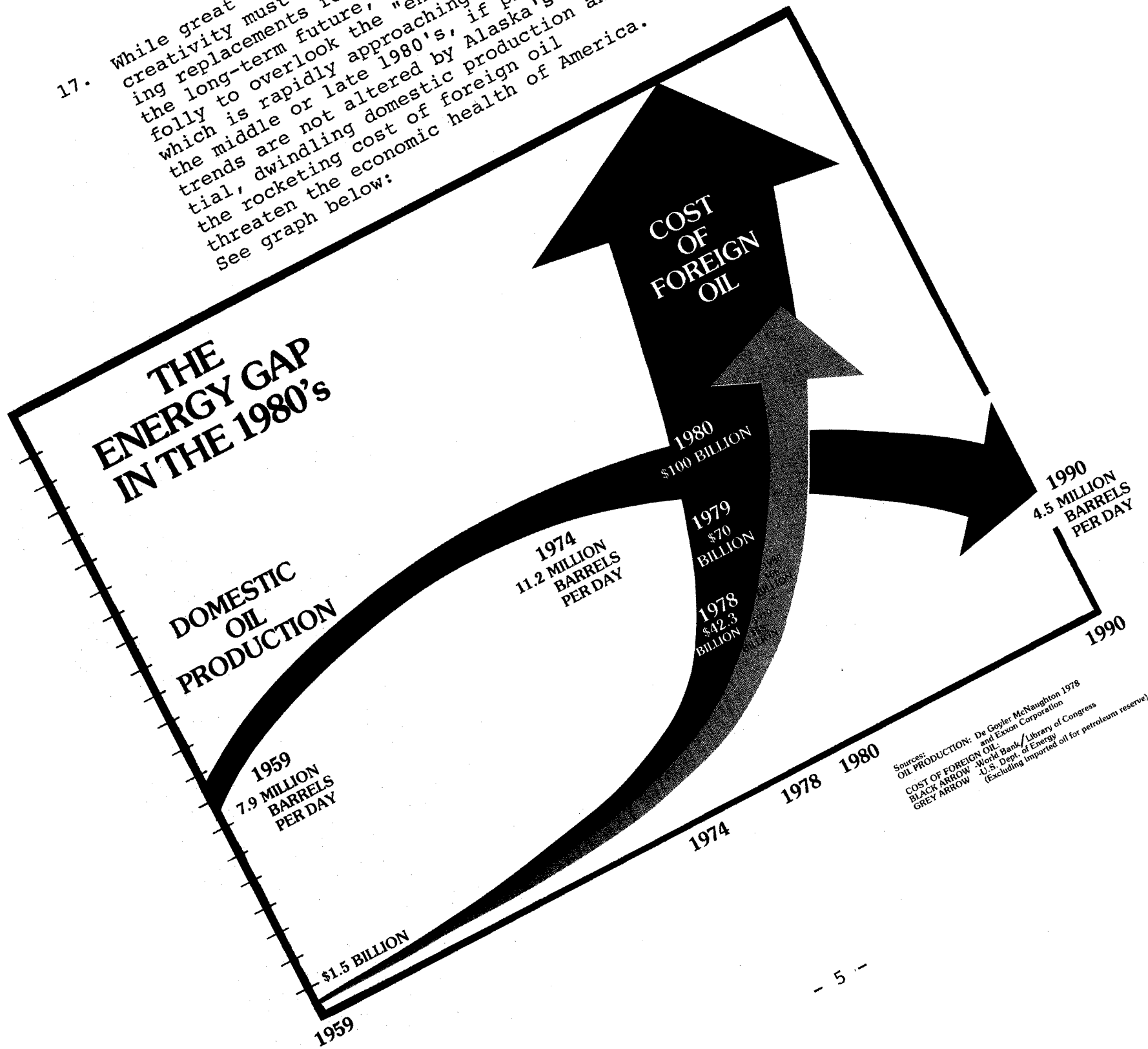
**Congress is about to lock up energy potential lands
in Alaska before they have been explored and inventoried.**

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.

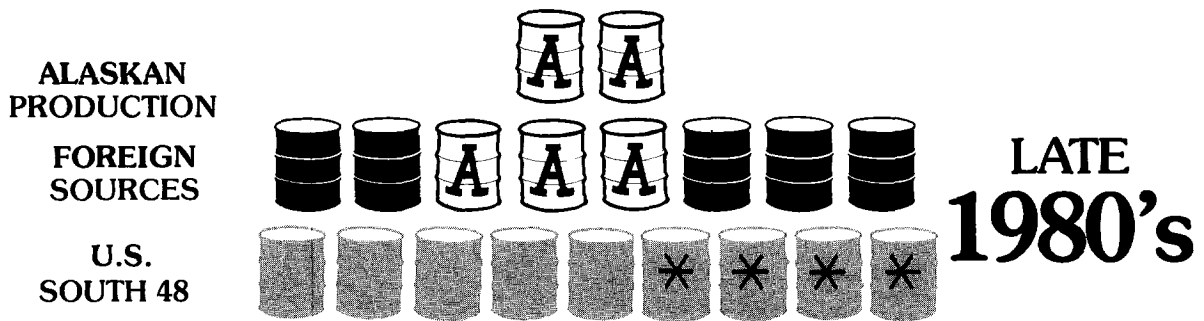
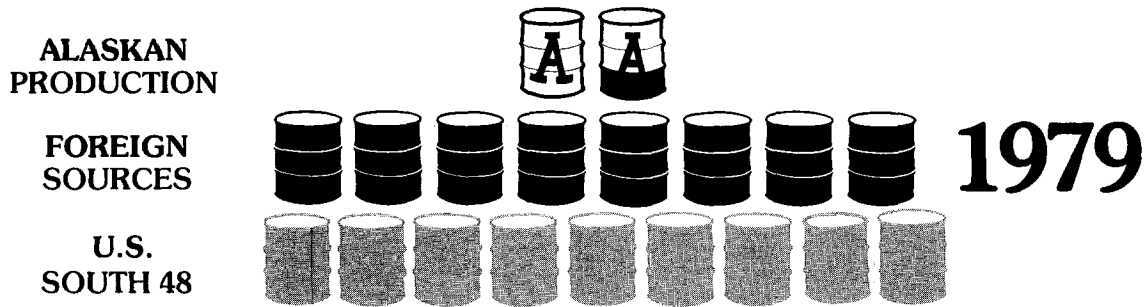
17. While great amounts of capital and creativity must be dedicated to finding replacements for oil and gas for the long-term future, it would be folly to overlook the "energy-gap" which is rapidly approaching. By the middle or late 1980's, if present trends are not altered by Alaska's potential, dwindling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

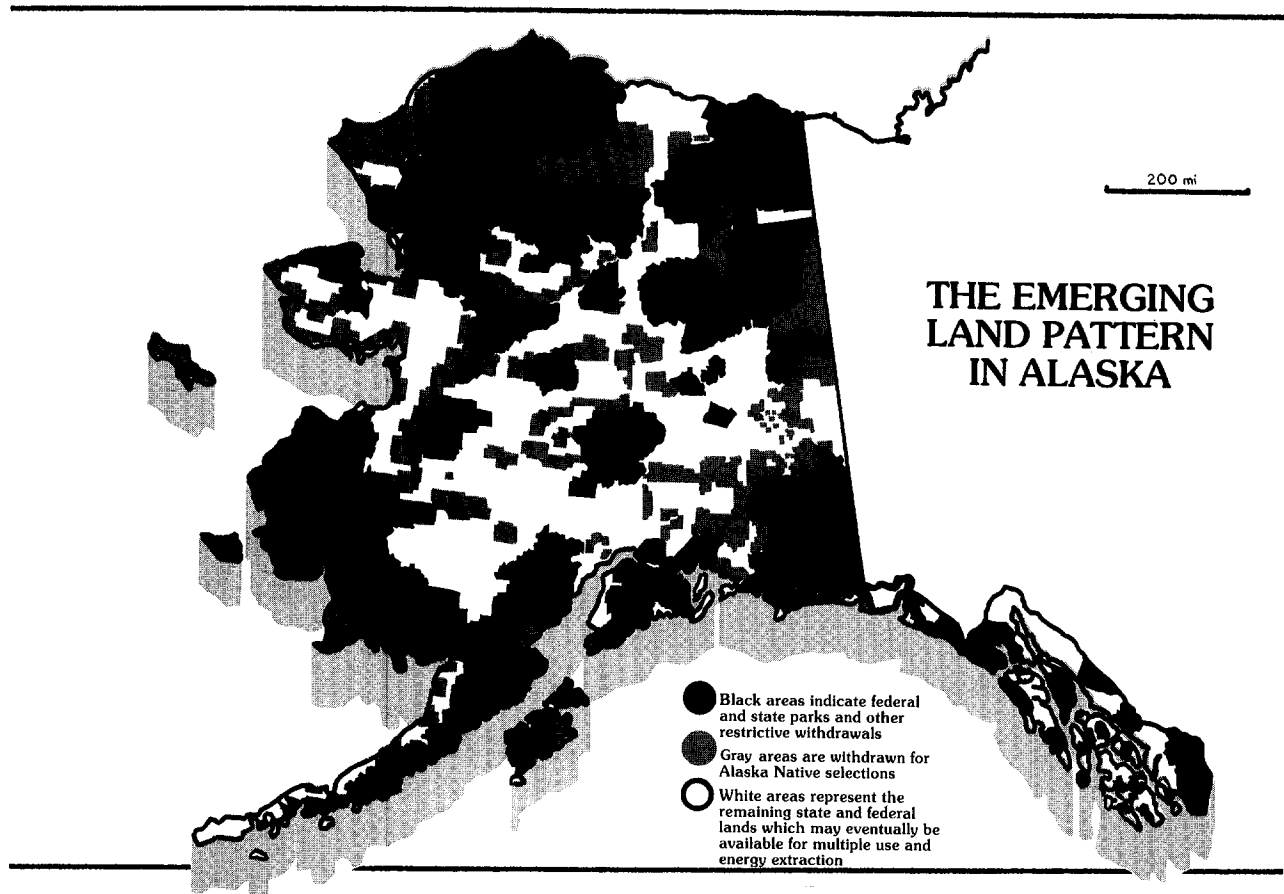
As oil and gas account for three-quarters of all energy consumed in the U.S., Alaska has enormous potential to alleviate the national crisis.

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 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.

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

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	Stratigraphic test*
Kodiak Tertiary-----	0	
Bristol Bay -----	0	
Norton Sound-----	0	
Central Chukchi Sea-----	0	
North Chukchi Sea -----	0	
Hope -----	0	
Zemchug - St. George complex-----	1	Stratigraphic test
Selawik-----	2	

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