

**ALASKA LEGISLATURE COMMITTEE FILES 1991-1992 86/2**  
**7196 HOUSE RESOURCES**

and credibility of study results. The benefits to both industry and the whaling communities are obvious. Industry operators can tailor their operations to cause the least possible interference with the subsistence hunt; the whaling community can, in turn, reinforce with hard scientific evidence its long held view that the bowhead whale population is healthy and can sustain an annual take of up to fifty animals. Both of these benefits have been realized from studies conducted over the past several years. I would be happy to supply additional information on these efforts to the committee. I can provide for the record, a detailed report of cooperation and consultation undertaken between industry and the whaling communities and final study reports from recent science and monitoring programs, if you would like to include them.

The final matter which I would like to touch on concerns the extent to which industry consults and incorporates the knowledge of local residents in dealing with oil spill preparedness and response. This committee recently received written testimony saying that ". . . local knowledge of experience[d] whaling captains and hunters and researchers continue[s] to be overlooked. I would like to see our local experts actively participate in the assessment of the oil industr[y's] ability to clean up an oil spill. This includes monitoring oil spill clean up drills that the state calls for occasionally to see if the oil industry is ready to respond to a spill."

There has been similar testimony from several other witnesses at previous hearings on this Resolution.

Local captains, hunters and residents have shared in the development of our Arctic programs. In the summer of 1989, ARCO recruited and provided oil spill response technician training (a 40 hour course) to ten residents each in the villages of Nuiqsut and Kaktovik. Members of these two teams included whaling captains (such as Mickey Agiak and George Kaleak of Kaktovik) and crew members (such as Isaac Nukapigak and Tony Cabinboy of Nuiqsut). Each of these individuals plus other team members fully participated in on-site oil spill response drills and demonstrations under all types of environmental conditions (open water, broken ice, and solid ice) at two different Beaufort Sea offshore exploratory drilling locations in 1989 and 1990. In late summer 1990 the initial phases of training were completed for a third ten-member team which included representatives from the Barrow volunteer fire department. Presently, the Alaska Clean Seas Co-op and response organization is continuing and expanding the village response team program in North Slope Borough communities.

This training program serves both the needs of oil companies operating in the area and the continuing needs of North Slope communities. Trained team members have reviewed contingency plans and have offered suggestions that resulted in specific improvements. The North Slope Borough has been an active partner in staging and supporting the training program.

I wish to conclude by stating that ARCO Alaska, Inc. and other offshore Arctic operators, fully intends to maintain the patterns of consultation and cooperation we have established over the years. As has been discussed by some individuals recently, a more formal regional citizens advisory group for

the Beaufort and Chukchi lease sale areas may be established. ARCO would welcome and support such a development.

Thank you for the opportunity to share this information with you. If you have any questions, I would be happy to respond.

# ALASKA STATE LEGISLATURE

Representative Eileen Panigo MacLean  
Co-Chair House Finance Committee  
P.O. Box 830  
Barrow, Alaska 99723



WHILE IN JUNEAU  
Box V  
Juneau, Alaska 99811  
465-4525  
465-4833

## HOUSE OF REPRESENTATIVES

District 22

North Slope  
Borough

Anaktuvuk Pass  
Atkasuk  
Barrow  
Kaktovik  
Nulqsut  
Point Hope  
Point Lay  
Wainwright

Northwest Arctic  
Borough

Ambler  
Buckland  
Deering  
Kiana  
Kivalina  
Kobuk  
Kolzebue  
Noatak  
Noorvik  
Selawik  
Shungnak

### MEMORANDUM

DATE: 4/3/91

TO: Representative Bill Hudson, Chair  
Oil and Gas Committee

FROM: Representative Eileen P. MacLean, Co-Chair  
House Finance Committee

*E.P.M.*

RE: Request for Scheduling

I would like to request that HJR 36, regarding off-shore oil exploration, development, and tanker transportation activities in the Beaufort and Chukchi seas, be scheduled for a hearing in the Oil and Gas Committee as soon as possible.

While I support responsible onshore development of the Arctic National Wildlife Refuge, I am deeply concerned about offshore oil and gas activities, which could potentially decimate marine mammals and foul the environment, if a mishap were to occur.

As early as this summer, the Department of Interior proposes to conduct oil and gas lease sales of forty million acres of these waters, without the ability to adequately respond to, contain, or clean up a significant oil spill in arctic water under commonly occurring environmental conditions.

Congress has acknowledged that effective oil spill response options for remote arctic waters remain undemonstrated and therefore mandated preparation of an extensive report on a variety of issues relating to offshore oil spill contingency planning in the Arctic, with particular attention to be given to Native concerns.

The Resolution raises concern about the lease sales proceeding in the Arctic before the Congress, and the public have the opportunity to review the report.

The bill further encourages the Department of Interior to give the Beaufort and Chukchi seas the same scrutiny as waters in the lower 48 states, which were declared off limits to oil and gas leasing and development activities in June 1990.

If you have any questions regarding the resolution, please contact me or Deborah Driver, my Legislative Assistant.

Thank you very much for your Co-Sponsorship of the resolution.

# STATE OF ALASKA

## DEPARTMENT OF NATURAL RESOURCES

OFFICE OF THE COMMISSIONER

WALTER J. HICKEL, GOVERNOR

400 WILLOUGHBY AVENUE  
JUNEAU, ALASKA 99801-1796  
PHONE: (907) 465-2400  
FACSIMILE: (907) 586-2754

April 12, 1991

The Honorable Bill Hudson, Chair  
House Special Committee for Oil and Gas  
P.O. Box V  
Juneau, AK 99811

Dear Representative Hudson:

Subject: HJR 36, which relates to off-shore oil exploration, development, and tanker transportation activities in the Beaufort and Chukchi seas.

Position: The Department of Natural Resources opposes this resolution. The statements it contains are so strong that, if the resolution is enacted, it will directly affect the state's ability to continue oil and gas leasing offshore or near water bodies. We ask the Committee and the Legislature to carefully consider the unsubstantiated statements in this resolution, as well as the subsequent implications for the state's own oil and gas leasing program, before moving it to the next committee of referral.

Many federal offshore areas in Alaska have already been leased. The Hickel administration has taken a strong stance with the federal government to ensure that federal sales are as protective of subsistence activities and have as high a standard for oil spill prevention as state sales. A resolution of this type does not help these efforts.

The resolution appears to mix concerns about tanker accidents such as the Exxon Valdez with concerns about the risks of offshore oil and gas exploration and development. Before the Legislature commits itself to these statements it should make certain they are substantiated.

Recommendation: Allow the federal Minerals Management Service (MMS) an opportunity to appear before the committee and explain the results of noise studies and other studies that relate to the resolution's statements, as well as to describe federal oil spill prevention and clean-up requirements for offshore Alaska exploration and development. Recognize the high standards of protection and prevention established by the state for offshore oil and gas exploration, development and transportation. Amend the resolution accordingly.

Sincerely,

  
Harold C. Heinze  
Commissioner

**STATE OF ALASKA  
1991 LEGISLATIVE SESSION**

BILL NO. HJR 36

Revision Date: \_\_\_\_\_ Department Affected: Natural Resources  
 Title: Off Shore Oil Exploration BRU: Petroleum Management  
Development & Transportation Components: \_\_\_\_\_  
 Sponsor: Rep. Maclean, Rep. Hudson  
 Requestor: House Oil & Gas Committee COMPONENT SERIAL NO. \_\_\_\_\_

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 92	FY 93	FY 94	FY 95	FY 96	FY 97
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND&STRUCTURES						
GRANTS,CLAIMS						
MISCELLANEOUS						
<b>TOTAL OPERATING</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

CAPITAL						
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REVENUE	*	*	*	*	*	*
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FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
<b>TOTAL</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

Estimate of Current year impact:

ANALYSIS: (Attach a separate page if necessary)

- \* If this Resolution is enacted, it could directly affect state oil and gas leasing policy and revenues.

Prepared by: Carol Wilson Phone: 465-2400  
 Division: Commissioner's Office Date: 11-Apr-91

Approved by Commissioner: Harold Heinze *H. Heinze* Date: 11-Apr-91  
 Agency: Department of Natural Resources

Distribution (by preparer) : Legislative Finance, legislative Sponsor, Requestor, OMB, & Impacted Agency(ies).

January 15, 1991

Pamela A. Bergmann  
Regional Environmental Assistant  
Office of Environmental Affairs  
U.S. Department of the Interior  
1689 C Street, Room 119  
Anchorage, Alaska 99501-5126

Dear Pamela:

The meeting in Kotzebue was very helpful. The schedule for reviewing your report to Congress does not leave us much time to comment, but we appreciate any opportunity to express our concerns regarding oil development and transportation in the Arctic.

Based on the Kotzebue meeting, we will not focus on oil tankers, but instead we will address oil issues in a broader context. Furthermore, you indicated that you are more interested in a listing of concerns. If more detail is needed, please contact us.

We also wish to receive a review copy of the draft report prior to its completion and submittal to Congress.

Below is a list of our major concerns relative to oil development and transportation in the Arctic:

A. Exploration Phase

1. Successful exploration will result in development activities, regardless of the extent of knowledge concerning environmental and social impacts. While we are not opposed to exploration, we do not believe that exploration should proceed until the environmental and socioeconomic impacts of such activities are better understood and effective measures for

mitigating those impacts have been developed and are in place.

2. Oil spill response technology in the Arctic is unproven and at present inadequate. Too little thought has been given to oil spill cleanup under Arctic conditions by the industry and the federal government.

#### B. Development Phase

1. Impacts, both positive and negative, on communities that serve as the base of operations or support for development activities need to be thoroughly assessed. This is especially critical for smaller Native communities.
2. Impacts on larger communities, such as regional centers like Kotzebue, that are not physically close to the lease area but still function as a supply center or support base must also be addressed. Often, the extent of the area impacted by OCS activities is greater than the federal government or industry recognizes.
3. The potential for oil spills increases and a spill could occur at any time, under any conditions.

#### C. Production Phase

1. The likelihood of a spill of major proportions increases substantially during the production phase. Again, a spill can occur under any circumstances and at any time of year.
2. Oil spill response technologies are unproven in the Arctic. Even MMS points out that the present technology and industry capabilities are inadequate for a spill in ice-covered waters (Chukchi Sea OCS Lease Sale #126 DEIS).
3. The industry and the federal government don't appear to be as diligent as warranted about identifying and mitigating adverse impacts from OCS activities in environmentally sensitive and climatically harsh regions. Areas of concern include offshore regions that host migratory marine mammals as well as onshore areas that provide habitat for a variety of species important as subsistence resources.
4. A conscientious and meaningful effort to provide opportunities for training and employment of local

residents should be considered an integral part of any planning activities for oil development in the Arctic.

5. Options for transporting oil from the Arctic must be carefully and thoroughly evaluated. Before any decisions are reached as to transporting oil by tanker, for example, a thorough assessment of the applicability of existing facilities should be conducted. To the extent possible, existing infrastructure should be utilized for future oil production.
6. If oil is transported by tanker, adequate oil spill response equipment must be available in a number of locations along the coast of Alaska, as far south as the Aleutians or the Alaska Peninsula, to ensure rapid deployment and effective cleanup. (This is an example of how more widespread OCS impacts are than the federal government and industry seem to acknowledge).

D. Subtitle C, Section 8902 Report Annotated Outline

1. A description of subsistence resources and the likely impacts on subsistence as a result of an oil spill needs to recognize the geographic extent of subsistence activities. Impacts from an oil spill will not be confined to marine mammals, fish and seabirds, and the coastal residents who use them, but will impact inland and terrestrial species and subsistence activities as well. This is due to the traditional sharing of subsistence resources by the Iñupiaq people. Coastal peoples trade their subsistence resources for those obtained by upriver and inland peoples. Thus, a severe reduction in coastal resources will increase the pressures on and the demand for inland resources. Furthermore, inland people travel to the coast to hunt and fish, supplementing subsistence resources they obtained inland. Finally, migration of animals, such as caribou, can be disrupted in one location due to development activities but result in negative impacts elsewhere. This can happen if, for example, the caribou alter their migration routes, making it more difficult for subsistence hunters to find them and to obtain enough animals for their needs.
2. The report also needs to recognize the seasonality of the rural economy (cash and subsistence). A major oil spill and cleanup effort in the spring and summer will occur at the busiest time of year in rural Alaska. This is when nearly all major con-

struction takes place, as well as commercial fishing and other significant economic activities (such as tourism). Extensive local hiring efforts to combat an oil spill will compete directly with the already high demands for labor during this time of year. Summer is also a critical time of year for subsistence activities. During this time, it would be very disruptive if not impossible to mount a sizeable cleanup operation out of a community like Kotzebue. The services and facilities of a regional center are generally taxed by normal summer activities, let alone a massive cleanup effort or staging operation. Consideration needs to be given in project planning to mounting a large scale effort while minimizing detrimental impacts to the local community(ies). Furthermore, local projects could be severely impacted if a large number of resident laborers opt for higher paying jobs with industry should a spill occur. Given the brevity of the construction season, loss of one summer could be ruinous to a project.

3. Alaska should be afforded a timely and meaningful opportunity to review oil exploration, development and production plans for Canadian activities, particularly if oil is to be transshipped through Alaskan or American waters, or piped across Alaska.
4. The Northwest Arctic Borough should be consulted throughout all phases of oil exploration, development and production. As we have stated above, the Borough is likely to experience impacts from oil activities, even if the activity is to the north in the Beaufort Sea. The Borough has done extensive planning through its coastal management, comprehensive planning and economic development programs, and has numerous policies in place relevant to the types of impacts that may result from various aspects of oil development.
5. Section III.B.1. addresses public sector contingency plans for oil spills. Consideration should be given in this section to the Northwest Arctic Borough (and the North Slope Borough) coastal management programs. Although these plans are not likely to focus specifically on oil spills, they do consider the resources, both human and natural, of the coastal areas within each jurisdiction. They also identify critical areas where development should either be restricted or prevented. This is germane, for example, to the location of onshore facilities such as staging areas.
6. Section III.B.2.c.ii. talks about local contingency plan requirements of the Northwest Arctic Borough

for oil activities in the North Slope Borough. We assume this refers to oil activities in the Northwest Arctic Borough. The Northwest Arctic Borough has no jurisdiction in the North Slope Borough.

NANA Regional Corporation commented on the DEIS for the Chukchi Sea Lease Sale #126. The majority of our comments and concerns are as equally relevant to this matter as they were to the proposed lease sale. Pertinent portions of these comments are summarized here for your information.

Our major concern centers on the unproven ability of the oil industry to safely drill in Arctic waters, to prevent significant accidents or oil spills, and lastly to clean up a spill of any magnitude effectively and quickly.

In fact, the DEIS for Lease Sale #126 is quite pessimistic about the ability of the oil industry to clean up an oil spill in Arctic waters, particularly in the presence of ice. As noted in Appendix L of the DEIS, MMS' own evaluation of the response and cleanup capabilities of the industry found that the majority of the equipment tested performed below ratings. In the case of application in the Chukchi Sea, summer sea conditions would preclude effective use of response equipment for 9% to 24% of the time. Ice cover, which typically occurs 9 months of the year, eliminates standard application of most mechanical response equipment.

The scenarios for mobilizing spill response teams and equipment center on transporting said teams from Barrow, Deadhorse or the Canadian Arctic. However, the minimum response times often exceed the critical initial response time required to contain and clean up the oil. In other words, the response teams will arrive too late. And once they get to the scene of the spill, they will be using equipment and techniques that, by MMS' own admission, are likely to be ineffective and made even more so by the extreme weather and sea conditions that are common to the Beaufort and Chukchi Seas.

There is a real danger in transporting oil by tanker in waters that are covered by ice substantial portions of the year. A tanker that becomes grounded or damaged by pack ice will produce an oil spill of the greatest magnitude under the worst possible conditions for an effective spill response and cleanup. One technique discussed in the Lease Sale #126 DEIS for dealing with oil spills in pack ice is to burn the oil when it reaches the top of the ice. However, as the DEIS notes, the requirements for dealing with a multitude of melted pools of ice and oil would be a "logistical nightmare". Moreover, oil spilled in the early winter is likely to remain underneath the ice for the entire winter before the ice starts melting. There was little discussion addressing the effects of significant quantities of oil trapped underneath pack ice for extended periods of time. It was noted, however, that oil trapped in pack ice may move considerable distances before the ice melts, further complicating the oil spill cleanup. Moreover, such trapped

oil may be slower to lose its volatile and therefore toxic components.

To quote the findings of the DEIS, "industry could effectively clean up an oil spill in moving ice only if the spill is a platform blowout that could be set on fire without endangering platform integrity." The implications of this statement are that the industry is severely limited in its ability to respond to oil spills of any other source or cause. In light of the severe weather conditions commonly experienced in Arctic waters, this admission is quite unsettling. As noted in the DEIS (page II-55), even recovery of most of the oil spilled from a platform is unlikely.

We hope that these comments are useful in your efforts to respond to the mandates of the Oil Pollution Act of 1990. If we may be of further assistance or can provide additional information, please contact me at the letterhead address or call 265-4100.

Sincerely,

John A. L. Rense  
Vice President, Resources

cc: Walter Sampson  
Vice President, Lands

Chuck Greene, Mayor  
Northwest Arctic Borough

EB/111



# Alaska Environmental Lobby, Inc.

P.O. Box 22151 Juneau, Alaska 99802

907-463-3366  
Fax 907-463-3312

## POSITION PAPER HJR 36

The Alaska Environmental Lobby supports HJR 36, relating to off-shore oil exploration, development, and tanker transportation activities in the Beaufort and Chukchi seas. The resolution states the following:

1.) The Alaska State Legislature believes that the oil industry has yet to conclusively demonstrate the ability to adequately respond to, contain, or clean up a significant oil spill in arctic waters under commonly occurring environmental conditions. The oil industry's incapability was clearly demonstrated in Prince William Sound; the problems faced in the relatively calm waters of the Sound would be magnified in the Arctic seas. In a hearing on this resolution, a resident of Kaktovik told of at least one incident when an oil clean-up training session had been cancelled because it was "too windy".

2.) The Alaska State Legislature believes that lease sales in the Beaufort and Chukchi Seas must be approached in an extremely cautious way with complete participation by the people residing in the impacted areas who are most knowledgeable about arctic conditions. Also, in public testimony, several community members from Barrow and Kaktovik supported this resolution describing the unpredictability of the Arctic environment, as well as the effects industry has on marine life and a subsistence lifestyle.

3.) The Alaska State Legislature believes that the report mandated by Congress, in the Oil Pollution Act of 1990, should be reviewed and an environmental assessment of off-shore industrial operations in the Arctic be conducted before further oil and gas exploration and development activities take place in the Beaufort and Chukchi Seas. Simply put, not enough attention has been given to Arctic seas and it is only fair that the Arctic is given the same scrutiny as other states before lease sales proceed. Until this is done, the proverbial cart is before the horse.

In conclusion, the resolution emphasizes the need for more research on Arctic conditions, both in terms of oil spill contingency plans and impacts on marine life. The Lobby feels this is an important issue in a state dependent upon oil for revenue. This resolution gives environmental concerns and community involvement priority.

prepared for AEL by Krista Maciolek, 4/26/91.

**BRISTOL BAY NATIVE ASSOCIATION**

P.O. BOX 310  
DILLINGHAM, ALASKA 99576  
PHONE (907) 842-5257

April 25, 1991

Representative Bill Hudson  
Chairman, House Oil & Gas Committee  
P.O. Box V  
Juneau, Alaska 99811

Dear Representative Hudson:

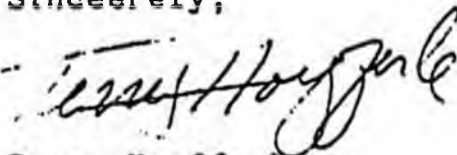
I am writing to you on behalf of the members of the Bristol Bay Native Association in support of HJR 36 which is currently in your committee.

BBNA adamantly opposes offshore oil development. Recent and current developments in national oil policy make this a pressing issue, particularly in Alaska where our coastal weather conditions and recent experience with the Exxon Valdez clean up are vivid in our being. While certain differences exist between the Siberian/Bering Sea weather factory and conditions of the Japanese Current/North Pacific zone, and between the biosphere of Bristol Bay and that of the Chukchi Sea, the overriding fact of our total dependence on the sea remains the same.

Please pass HJR 36 out of the oil and gas committee as soon as possible - while its influence on national oil policy might be the greatest.

Thank you.

Sincerely,

  
Terry Hoeffler  
Executive Director

cc: Representative George Jacko  
Senator Fred Zharoff  
Members, House & Senate Oil & Gas Committees  
Senator Ted Stevens  
Senator Frank Murkowski  
Congressman Don Young

NORTH SLOPE BOROUGH

RESOLUTION SERIAL NO. 12-91

A RESOLUTION SUPPORTING PASSAGE OF A RESOLUTION BY THE STATE LEGISLATURE OPPOSING OFFSHORE OIL AND GAS ACTIVITIES

WHEREAS, Offshore industrial activity presents a grave threat to the arctic marine environment and the Inupiat subsistence culture, and

WHEREAS, it would be of great importance to the North Slope Borough in representing its positions to have a resolution passed by the State Legislature opposing continued offshore industrial activity;

NOW THEREFORE BE IT RESOLVED:

The North Slope Borough Assembly supports passage of the attached resolution introduced by Representative Eileen MacLean and co-sponsored by others by the Alaska State Legislature.

INTRODUCED: April 2, 1991

ADOPTED: April 2, 1991

*D. Linn Lewis*  
PRESIDENT  
Date: 4-2-91

ATTEST:

*Angela Johnson*  
CLERK  
Date: 4-3-91

*John K. ...*  
MAYOR  
Date: 4-3-91

# **NORTHWEST ARCTIC BOROUGH**

**P.O. BOX 1110**

**KOTZEBUE, AK 99752**

**(907) 442-2500 / FAX 442-2930**

April 5, 1991

Rep. Eileen Panigeo MacLean  
Rm. 507, Capitol  
P.O. Box V  
Juneau, Ak 99811

RE: House Joint Resolution No.38 Before the House Special Committee  
on Oil and Gas, Resources

Dear Ms. MacLean,

The Northwest Arctic Borough has reviewed the joint house resolution introduced by Representatives MacLean, Hudson, Jacko, Koponen, Donley, Finkelstein, Brown, Ivan, Kubina and Ulmer relating to off-shore oil exploration, development, and tanker transportation activities in the Beaufort and Chukchi Seas.

We believe that the oil industry currently does not have the capability to effectively and adequately respond to, contain, or clean up a significant oil spill in arctic waters of the Beaufort and Chukchi Seas, let alone respond to, contain, or clean up an oil spill in the "ice-free" waters of Prince William Sound. Other spills in Cook Inlet and in the continental states along with the example of Prince William Sound, point out the glaring insufficiency and inefficiency of the oil industry's preventative safety measures and responses to spills in warm, ice-free and readily accessible waters.

The Arctic waters in the Beaufort Sea and even-more-so in the Chukchi Sea, breed some of the most inhospitable weather conditions in the world and the industry's oil spill response options for remote arctic waters remain undemonstrated and have been acknowledged by the Alaska Oil Spill Commission, the Arctic Research Commission, and the Minerals Management Service.

There remains no viable late season response options in the event of a well blowout in the late season drilling time table. In the event of a late season blowout, no one can drill a diversion well once the ice pack moves in. The industry and other illustrious dreamers claim that ice-breakers can keep a drill site relatively ice-free to drill, but whose ice breakers, the United States? Our ice breaking capabilities remain something to be desired of, as demonstrated by the two gray whales trapped in the ice off Barrow. An oil spill under these conditions will have multi year devastating effects on the sensitive arctic

Page two  
letter in Support of House Joint Resolution No. 36

environment, wildlife resources, the minute elements of the fragile food chain and the subsistence lifestyles of the Inupiat people.


There exist many unanswered questions and oil spill scenarios to allow additional oil lease sales to occur and yet the distinguished Secretary of the Interior is preparing to offer over 40 million acres in offshore tracts to the oil industry.

We firmly believe that the Secretary of the Interior should not proceed with the planned lease sales in the Arctic until he, the Congress, and the public have the opportunity to review the comprehensive report on the state of oil spill contingency planning in arctic waters. The Oil Pollution Act of 1990, P.L. 101-380, 104 Stat. 484, mandates the Secretary of the Interior to produce such a report no later than May 1991.

In conclusion, the Northwest Arctic Borough fully supports and is in favor of enacting House Joint Resolution No. 36 which would petition the Secretary of Interior to cancel or hold off the planned offshore lease sales in the Arctic until he, the Congress and the public have the opportunity to review the report that was mandated by Congress.

Thank you for the opportunity to respond to a sensible and logical resolution as introduced and referred to the House Special Committee on Oil and Gas, Resources.

Sincerely,

  
Chuck J. Greene  
Mayor



Alaska Eskimo Whaling Commission  
P.O. Box 570  
Barrow, Alaska 99723  
Phone: (907) 852-2392

April 2, 1991

Representative Eileen MacLean  
Co-Chair House Finance Committee  
Box V  
Juneau, Alaska 99811

Dear Eileen:

The Alaska Eskimo Whaling Commission supports your resolution relating to off-shore oil exploration, development and tanker transportation activities in the Beaufort and Chukchi seas.

Those who are most affected by industrial activities have been voicing their doubts about the ability of the oil companies to clean and contain an oil spill under Arctic sea-ice conditions. One hunter, in particular, came to ARCO's recent public meeting in Barrow and said he was trained as a local oil spill response team member, but felt that his training was very inadequate and the equipment was insufficient after seeing the amount of equipment used in Valdez.

This is unsettling at best, since our identity as Inupiaq people is so closely tied to our subsistence way of life. If you need any help from AEWK regarding this resolution, please don't hesitate to call. Good luck, and thank you for all that you are doing for us.

Sincerely,

Beverly Patkotak Grinage  
Executive Director

ARCTIC MARINE RESOURCES COMMISSION  
725 Christensen Drive  
Anchorage, Alaska 99501

Phone: 279-6519 FAX: 258-6688

April 2, 1991

Representative Eileen MacLean  
Co-Chair House Finance Committee  
Box V  
Juneau, Alaska 99811

Dear Representative MacLean:

The Arctic Marine Resources Commission (AMRC) board met yesterday, and unanimously supported your resolution regarding offshore oil exploration in the Beaufort and Chukchi seas.

Board members of the AMRC are:

Chairman:

Gordon Ito - Chukchi Sea Fishermen's Co-op, Kotzebue

Vice Chairman:

Marie Adams - Alaska/Inuvialuit Beluga Whale Committee, Barrow

Secretary/Treasurer:

Jerry Ivanoff - Bering Sea Fishermen's Association, Unalakleet

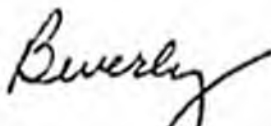
Board member:

Burton Rexford - Alaska Eskimo Whaling Commission, Barrow

As you are aware, the main purpose of the AMRC is to provide a structured forum for handling issues that arise between local interests and resource companies targeting oil and gas development in Arctic waters.

We believe your request is critical for the protection of our marine resources, and hope that it passes the Legislature successfully. If you need any assistance from the AMRC, please don't hesitate to call Jon Zuck at 279-6519.

Sincerely,



Beverly Parkotak Grinage  
for the Arctic Marine Resources Commission

## STATEMENT OF OLIVER LEAVITT

Good evening. My name is Oliver Leavitt. I am an Inupiat whaling captain and a resident of Barrow, Alaska. I am also the President of the North Slope Borough Assembly and the Vice President of Arctic Slope Regional Corporation.

The questions we are considering here this evening have to do with the use of the Arctic Ocean for the development and transportation of oil and the impact of these activities on our survival as a people.

As a lifelong resident of the North Slope of Alaska, I have witnessed many changes over the last twenty years. Many of these changes -- increased economic opportunity for our people, significantly improved educational facilities and opportunities, and substantially improved living conditions -- have resulted from the discovery and development of the oil resources on the North Slope. We appreciate these changes in our lives that have resulted from oil development on the North Slope.

Prior to the development of the oil resources at Prudhoe Bay, our people were extremely concerned about the effects of oil development on the fish and land wildlife resources on which our people depend. Over the years, we have become convinced that onshore oil and gas development can occur in a manner that does not adversely affect these fish and wildlife resources.

However, our concerns about offshore activities, including oil and gas exploration, production and transportation in the Arctic Ocean, have not been relieved. These activities, using unproven technology and accompanied by insufficient oil spill clean-up equipment, pose a direct threat to our marine subsistence resources.

We have seen our bowhead whales move farther offshore when industrial activity is taking place. We have seen the disastrous consequences of a tanker spill in the relatively calm waters of Prince William Sound, an area free of pack and shore ice.

Far from being convinced that oil can be developed or transported safely in Arctic waters, we remain deeply troubled by the prospect of increased oil and gas activities in the Arctic Ocean. We therefore welcome this study by the United States Department of the Interior and applaud the action of the Congress in directing this study.

As I stated, the discovery and development of oil on the North Slope has brought unprecedented economic opportunity to our people. We also are acutely aware of the importance of these oil resources to our nation and to our national security. However, we must stress the importance of balancing these energy needs against the reality that subsistence hunting continues to provide the principal source of food and livelihood in the majority of our Arctic Native villages.

A substantial portion of our subsistence resources are taken from the waters of the Arctic Ocean. This subsistence hunting, especially the hunt of the bowhead whale, not only provides nutrition to our people, it is the life blood of our living Inupiat culture.

We believe a delicate balance can and must be struck between the competing interests of oil development and the subsistence use of marine resources. However, achieving this balance requires that the exploitation of oil resources in the Arctic proceed according to two fundamental imperatives.

First and foremost, to the greatest extent feasible, oil development and transportation activities should be focused on land rather than in the OCS. Over the past twenty years, we have witnessed an ever-improving ability of the oil industry to explore for and develop oil resources on the North Slope in a manner that does not adversely impact the freshwater fish and the non-marine wildlife resources on which we depend.

We now believe that onshore oil and gas exploration and development can occur in an environmentally sensitive manner. We therefore would urge that oil and gas exploration and development activities be focused onshore rather than offshore in northern Alaska.

We also strongly recommend that transportation of oil and gas resources in the Arctic Ocean be limited to the minimum distances necessary to transport those resources to onshore transportation networks, utilizing the Trans-Alaska Pipeline System or other onshore transportation facilities.

We are all well aware of the risks associated with the offshore transportation of oil. These risks are greatly multiplied when oil is transported through Arctic sea ice. The technology for this type of transportation is unproven and the risks of an oil spill are significant.

Given the very brief window provided by the open water season in the Arctic, any offshore transportation plan ultimately will include transportation through sea ice.

Any spill of crude oil in the Arctic Ocean could devastate the subsistence resources upon which most of our villages rely as their primary food source. As you will come to understand as you listen to the comments made here this evening, even a brief interruption in the availability of these reserves would place many of our villages at serious risk from lack of adequate nutrition.

A clear, simple and acceptable alternative to tankering is provided by over-land transportation systems. Any plan to

transport oil in the Arctic, be it transportation by the United States or by Canada, should be based on the use of an over-land system.

If for any reason an over-land system is not feasible, we strongly urge the use of double hull tankers accompanied by ice breakers and a barge equipped with containment and clean-up equipment. This system should substantially reduce the possibility of a significant and disastrous oil spill.

The second imperative is that, in addition to transportation, any oil exploration or development undertaken in the OCS should occur only in the immediate presence of state-of-the-art containment and clean-up equipment.

We are told that the risks of an oil spill from offshore exploratory drilling are small. Nonetheless, they do exist.

During the gray whale rescue a few years ago, we saw first hand the near impossibility of moving heavy equipment from Prudhoe Bay to Barrow during ice cover. Had this incident been a blowout from an exploratory well, the results could have been disastrous.

The extreme conditions created by Arctic weather and sea ice make it imperative that all companies -- and countries --

operating in the Arctic OCS be required to have response and containment equipment immediately available, and that the available equipment be capable of handling a spill of a worst-case magnitude.

In conclusion, it is our view that the most effective means of dealing with an oil spill in the Arctic Ocean is to keep one from happening. This can be accomplished by confining oil development and transportation to land.

If an offshore spill does occur, from whatever source, whether tankering or drilling and whether the source is under the United States or Canadian jurisdiction, state-of-the-art containment and clean-up equipment must be immediately available.

Finally, your study should clearly document the health risks our people face if we are forced to confront a spill in our marine hunting grounds. A contingency plan must be developed for providing adequate food, preferably traditional foods, to our people in the event of a catastrophe.

I hope that these points are of use to you in conducting your study and I thank you for the opportunity to speak to you today. I would be happy to answer any questions that you may have.

REPORT TO CONGRESS  
OIL POLLUTION ACT OF 1990  
SUBTITLE C, SECTION 8302

ANNOTATED OUTLINE

I. INTRODUCTION

Background and Objectives of Report

Describe legislative requirement and report objectives and assumptions.

II. EXISTING CONDITIONS IN THE BEAUFORT AND CHUKCHI SEA AREAS

A. Natural/Physical Environment

Briefly describe the characteristics of the natural/physical environment in the Beaufort and Chukchi Sea areas that are taken into account during oil exploration, development, production, and transportation as well as during oil-spill response planning and response (e.g., weather, ice conditions, and water depth).

B. Native Interests and Concerns

1. Background Information

a. Demographics

Briefly describe the locations and numbers of Native people who could potentially be affected by an oil spill in the Beaufort and Chukchi Seas. The section should focus on Native people in coastal communities in the North Slope Borough, Northwest Arctic Borough, and the Bering Strait Coastal Resources Service Area (from Cape Prince of Wales north).

b. Subsistence Resources

Briefly describe subsistence resources at risk (e.g., whales, seals, walruses, polar bears, and migratory waterfowl), and generally identify their seasonal distributions. Briefly describe subsistence hunting activities (emphasizing offshore hunting), subsistence regulations (i.e., harvest quotas for bowhead whales) and the importance of those resources to Native people (e.g., food, clothing, crafts, cultural traditions).

## 2. Native Concerns Regarding Oil Spills and Oil-Spill Cleanup Activities

Briefly describe Native concerns regarding oil spills and oil-spill cleanup activities. Native concerns may include, but are not limited to, potential: disruptions to subsistence activities (e.g., disruptions resulting from noise or the physical presence of vessels or humans); reductions in wildlife populations (e.g., reductions due to alteration of normal distribution patterns or due to wildlife killed by a spill); limitations in access to wildlife resources; contamination of food; and disruption of lifestyles. In addition, the existence and adequacy of emergency relief and general assistance, and Native participation in preparedness and response activities may also be a Native concern.

### C. Oil Exploration, Development, Production, and Transportation

#### 1. Canada

Briefly describe the status of Canadian plans for developing the Amalagak field and subsequent transportation of oil produced from the field (identify open-water months when transportation could occur). Also describe other relevant exploration, development, production, and transportation activities associated with Canadian oil fields that could result in a spill that enters the Beaufort or Chukchi Seas.

#### 2. United States

- a. Outer Continental Shelf
- b. State Waters
- c. Onshore (only facilities where oil spills could enter the Beaufort or Chukchi Seas)

Identify and briefly summarize existing and proposed oil exploration, development, production, and transportation activities.

### III. EXISTING OIL SPILL MEASURES

#### A. Oil Spill Prevention

Oil Exploration, Development, Production, and Transportation Regulations and Stipulations

#### 1. Oil Exploration, Development, and Production

Briefly describe Federal, state/provincial, and local regulations and stipulations (in the United States and Canada) for oil spill prevention.

## 2. Oil Transportation

Briefly describe United States and Canadian Federal and state/provincial regulations for preventing oil spills associated with oil pipelines and oil tankers. Also briefly describe regulations concerning the location of tanker traffic in the Beaufort and Chukchi Seas, regulations requiring double hulls for tankers, and regulations regarding limits of liability for oil spills from tankers.

### B. Oil Spill Contingency Planning/Coordinated Actions

#### 1. Public Sector Contingency Plans

##### a. International Contingency Plans

- i. United States/Canada
- ii. United States/U.S.S.R.
- iii. International Convention
- iv. Arctic Nations Memorandum of Understanding

##### b. National Contingency Plans

- i. Canada
- ii. United States

##### c. Regional Contingency Plans

United States (i.e., Alaska  
Regional Response Team's  
contingency plan)

##### d. State/Provincial Contingency Plans

- i. Yukon Territory and Northwest Territory
- ii. State of Alaska

##### e. Local Contingency Plans

- i. U.S. Coast Guard Marine Safety Office  
Plan for Western Alaska
- ii. Borough and/or Village Plans

## 2. Contingency Plan Requirements for Private Industry

### a. Federal Requirements

- i. Minerals Management Service Requirements for Oil Exploration, Development and Production Activities on the Outer Continental Shelf
- ii. Canada Oil and Gas Lands Administration Requirements for Offshore Oil Exploration, Development, and Production
- iii. Bureau of Land Management Requirements for Oil Transportation through the Trans-Alaska Pipeline

### b. State/Provincial Requirements

- i. Alaska Department of Environmental Conservation Requirements for Oil Transportation and Oil Exploration, Development, and Production on State Lands and in State Waters
- ii. Canadian Provincial Requirements, if Applicable

### c. Local Requirements

- i. North Slope Borough Requirements for Oil Exploration, Development, Production, and Transportation on North Slope Borough Lands
- ii. Northwest Arctic Borough Requirements for Oil Exploration, Development, Production, and Transportation on North Slope Borough Lands (if Applicable)
- iii. Canadian Local Requirements, if Applicable

Each section should briefly summarize contingency planning requirements and any requirements that affect private interests.

## 3. Private Industry Contingency Plans

- a. Oil Company Contingency Plans for Exploration, Development, Production, and Transportation

- b. Oil Spill Cooperatives
  - i. Alaska Clean Seas
  - ii. Alyeska Pipeline Service Company
  - iii. Cook Inlet Resource Organization
  - iv. Marine Spill Response Corporation
  - v. Beaufort Sea Oil Spill Equipment Cooperative
  - vi. Canadian West Coast Cooperative
  - vii. Canadian East Coast Cooperative

Each of the contingency plans should be briefly described, including resources for containing and recovering discharges of oil. In addition, a summary of any Native involvement in the plan's preparation (if any) should be included as well as how the plan addresses Native interests (if it does).

C. Oil Spill Response

- a. Minor Discharge of Oil (i.e., less than 10,000 gallons)

United States

- a. Oil Industry
  - b. U.S. Coast Guard
  - c. State of Alaska
- b. Medium Discharge of Oil (i.e., 10,000 to 100,000 gallons)
    - i. International (if Applicable)
    - ii. United States
      - a. Oil Industry
      - b. U.S. Coast Guard
      - c. State of Alaska
    - iii. Canadian Organizations (if Applicable)
      - a. Oil Industry
      - b. Canadian Coast Guard

- c. Major Discharge of Oil (i.e., over 100,000 gallons)
  - i. International
  - ii. United States
    - a. Oil Industry
    - b. U.S. Coast Guard
    - c. State of Alaska
  - iii. Canadian Organizations
    - a. Oil Industry
    - b. Canadian Coast Guard

This section should briefly describe how a response would be organized and implemented for containing and recovering minor, medium, and major discharges of oil in the Beaufort and Chukchi Seas, and any provisions for Native involvement.

- D. Research on Oil Spill Response Technologies for the Arctic
  - 1. International
  - 2. United States
  - 3. State of Alaska

This section should briefly describe existing and planned research on oil-spill response technologies for the Arctic. Approximate funding amounts and sources should also be included.

#### IV. RECOVERY OF DAMAGES

##### A. International

Identify and describe any international damage assessment provisions. Describe any provisions that would allow Native people to recover damages from an oil spill.

##### B. National

Identify and describe the Federal natural resource damage assessment process. Identify and describe any other Federal process(es) that would allow Native people to recover damages from an oil spill.

**C. State of Alaska**

Identify and describe the State of Alaska's damage assessment process and any other State of Alaska process that would allow Native people to recover damages from an oil spill.

**V. IDENTIFICATION OF ISSUES**

**A. Contingency Plans/Coordinated Actions**

Identify Native issues associated with contingency plans/coordinated actions (e.g., Native involvement in developing and exercising contingency plans; adequacy of the contingency plans).

**B. Recovery of Damages**

Identify areas within existing damage assessment/recovery legislation where Native interests are taken into account. Discuss provisions for emergency relief.

**C. Other Issues**

Identify other relative issues.

**VI. FINDINGS**

**A. Contingency Plans/Coordinated Actions**

Summarize findings based on information in Sections III and V.

**B. Recovery of Damages**

Summarize findings based on information in Sections IV and V.

**C. Other Issues**

Summarize findings based on information in Sections III and V.

## SALE 124 EIS

(3) Locally Available Spill-Cleanup Equipment: The MMS, Alaska OCS Region, requires a lessee who wishes to drill to have an initial spill-response capability of 1,000 bbl per day. To date, during drilling of exploration wells in the Beaufort Sea, this requirement has been met with equipment warehoused at Deadhorse by ABSORB and with equipment positioned onsite by individual lessees.

(4) Mobilization Time: The MMS, Alaska OCS Region, requires that initial mobilization and deployment of response equipment be undertaken within 6 to 12 hours of a spill, geography permitting. However, the spiller must be prepared to respond before the spill reaches shore (in less than 6 hours, if necessary). Only onsite equipment and that which could be transported from Deadhorse by helicopter could meet this guideline for deployment for most of the sale area. The limited geographic and temporal presence of open water and slow vessel speeds in broken ice would preclude timely transport of spill equipment by sea. For large spills—those that could exceed the local cleanup-response capability—the MMS, Alaska OCS Region, requires that additional equipment be made available onsite within 48 hours. Additional response equipment to handle a large spill would be available from a multitude of sources.

Equipment stored at Deadhorse or airlifted to Deadhorse would be capable of meeting the criteria of the 48-hour-response time set by MMS. Additional, slower arriving equipment would still be useful in case of a major spill; but MMS would not consider such equipment in judging whether oil-spill-contingency plans met the MMS 48-hour-response criteria. Once spill-cleanup equipment reaches Deadhorse or Prudhoe Bay, it could be transported relatively quickly to the spill site only if it could be carried by helicopter and then only if weather permitted. A helicopter could reach any point in the sale area within 3 hours.

(5) Effectiveness of Oil-Spill Cleanup At Sea: The 6-to-12-hour and 48-hour response times required of drilling lessees by the MMS, Alaska OCS Region, are mobilization and deployment requirements. Cleanup would continue as long as necessary, without any timeframe or deadline. For example, a winter spill in pack ice might require initial onsite response followed by further cleanup of oil melting out and pooling on top of the ice in late spring or summer.

Mechanical cleanup at sea is usually much more effective on low-viscosity or medium-viscosity oils than on high-viscosity oils. A low-viscosity oil could be a diesel or a fresh, light crude. A medium-viscosity oil could be a lubricating oil or a light, flowing emulsion. A high-viscosity oil would be a weathered crude, bunker oil, or thick emulsion. An oil such as Prudhoe Bay crude would initially have low viscosity but would quickly weather and form a high-viscosity emulsion.

Because of natural dispersion, oil slicks in the open ocean are seldom tracked for more than about 10 days before the oil becomes too dispersed to locate or identify as a slick (USDOL, MMS, Gulf of Mexico [GOM] OCS Region, 1983). Out of necessity or otherwise, natural dispersion has frequently been the chosen response technique in Alaskan waters.

Uncontained burning also is a possible spill remedy. Experiments suggest that burn efficiencies on the order of 50 to 60 percent may be possible if the spill can be immediately set on fire (Laperriere, 1984). However, any delay in ignition would decrease combustion efficiency. The effectiveness of mechanical recovery and in situ burning of spilled oil at sea decreases rapidly with increasing sea state (roughness of the sea), while the effectiveness of dispersants and natural dispersion increases. Mechanical cleanup becomes nonfunctional between International Sea States 3 and 4. Question 1

During the months of July through September in the small fraction of the Beaufort Sea Planning Area with open water, sea states of 3 or greater occur from 13 to 30 percent of the time, and sea states of 4 or greater occur 9 to 18 percent of the time. Ice cover the remainder of the year would eliminate both high sea states and standard uses of most mechanical-cleanup equipment.

The review of the historical record of oil-spill cleanup at sea as contained in Section IV.B.5 of the Final Regional EIS (USDOL, MMS, GOM OCS Region, 1983) is incorporated by reference; a summary of this review follows. Offshore containment and cleanup are major tasks. Weather, sea conditions, and crew fatigue become critical factors; and cleanup at sea is generally only marginally effective. Recovery of oil usually ranges between 5 percent and 15 percent of that spilled. For example, in the Exxon Valdez oil spill, at-sea recovery of oil was estimated by Exxon at 0.01 percent through the first 2 weeks and 7 percent through the first 3 weeks (Oil Spill Intelligence Report, 1989a,b). Inshore (harbor) containment and cleanup operations generally occur in calmer waters and closer to logistical bases. Inshore operations are, therefore, more effective, with recovery of spilled oil on the order of 20 to 50 percent.

Historical demonstrations of the effectiveness by actual spill-response efforts in the Beaufort Sea are few and disappointing. Crowley Barge Tanker 570 spilled 1,600 barrels of heating fuel near Flaxman Island on August 20, 1988, apparently after ice ruptured one tank on the barge, with the leak not being immediately detected. Oil-spill-response equipment was mobilized from Barrow and Deadhorse, but an overflight was unable to locate any spilled fuel and none was recovered. In September 1985, an exploration spill of 2,440 bbl of diesel occurred from the Minuk I-53 artificial island in the Canadian Beaufort Sea during an intense storm (Birchard and Nancarrow, 1986). Plans were made only to apply dispersants and only if the slick approached shore. The slick did not approach shore, and 4 days after the storm ceased the slick had disappeared through natural dispersion and evaporation. No fuel was recovered. Canadian researchers released a total of 63 bbl of crude in field dispersant tests in the Canadian Beaufort Sea in August 1986 (Swiss and Vanderkooy, 1988). Application of even extremely high, up to a 1:2 dispersant-to-oil ratio, did not increase the rate of dissipation of the crude over that caused by natural dispersion on an untreated control slick.

(6) Effectiveness of Oil-Spill Cleanup in Ice: When a spill is dispersed far from its source or when ice is moving, containment and cleanup are more difficult. Planning of effective surface response with mechanical equipment to spills in pack ice has generally required that an icebreaker (or icebreaking-supply ship) be locally stationed in summer as a dedicated oil-recovery vessel (see Appendix M). An on-station icebreaker also would be necessary in winter.

In situ burning of spilled oil during heavy ice periods may be a more promising approach. Exposed oil would be ignited whenever possible. Existing response capabilities are more effective on landfast ice than on broken or pack ice. Spills in the latter two sorts of ice would be easiest to burn if the spill were contained within a small area close to its source. The ice itself can be useful in restricting the spreading of the oil, keeping the oil thicker and more amenable to burning. Experiments conducted to date indicate that in situ burning should be a more effective technique for spill response in the Arctic than is mechanical recovery in more temperate climates.

The presence of landfast ice may actually improve response effectiveness by limiting the movement and spread of the oil and by providing a safe work platform for the cleanup. The only documented success story for offshore spill response in the Beaufort Sea was a planned experimental spill under landfast ice in the Canadian Beaufort Sea (Buist, Pistruzak, and Dickens, 1981). In this exercise, a total of 119 bbl of crude were spilled under landfast ice three times during the winter to simulate undersea oil blowouts. The following spring, 79 percent of the residual weathered (unevaporated) oil was manually recovered or burned as the oil surfaced on the ice prior to breakup. In winter 1977, 140 bbl of No. 2 diesel were spilled from an onshore tank at Nome, saturating adjacent snow and soil, with some diesel penetrating the ice cover of the Snake River (Allen, 1978). One-third of the spill was recovered, half of this amount by rope mops extended below the ice cover on the Snake River.

Spill-response efforts in the pack ice zone covering 90 percent of the sale area are undocumented and more problematic, particularly in winter. The January 1984 Cepheus spill of aviation fuel into broken ice in Anchorage harbor illustrates one problem with spill response in broken ice (USDOL, MMS, Alaska OCS Region, 1985a). The Coast Guard attempted to monitor movement of 5,000 bbl of spilled fuel by several techniques, only to conclude that none of the available state-of-the-art techniques could distinguish spilled aviation fuel from broken ice. None of the fuel was recovered.

Subarctic Prince William Sound is much more logistically accessible and protected than the open pack-ice zone in the Beaufort Sea Planning Area; yet even shoreline cleanup operations for the Exxon Valdez spill were stopped in mid-September 1989 out of concern for worker safety during the cold and dark winter.

In the Bering Sea, the F/V Milos Reefer grounded on St. Matthew Island in November 1989, spilling at least 5,600 bbl of its 9,000 bbl of mostly bunker and diesel fuel (Akre, 1989a,b,c). Poor weather and logistics ended up prohibiting a response, even though response vessels did reach the site. The initial response vessel, the USCG cutter Mideast, took 6 days to get to the site; the second response vessel, the Fireball, coming from Kodiak with the bulk of the response equipment, arrived onsite 11 days after the spill. No cleanup or offloading of the still-leaking ship was attempted in 1989 because of the severe weather and approach of winter, and any further efforts have been deferred until summer 1990, following the retreat of the Bering Sea seasonal ice pack.

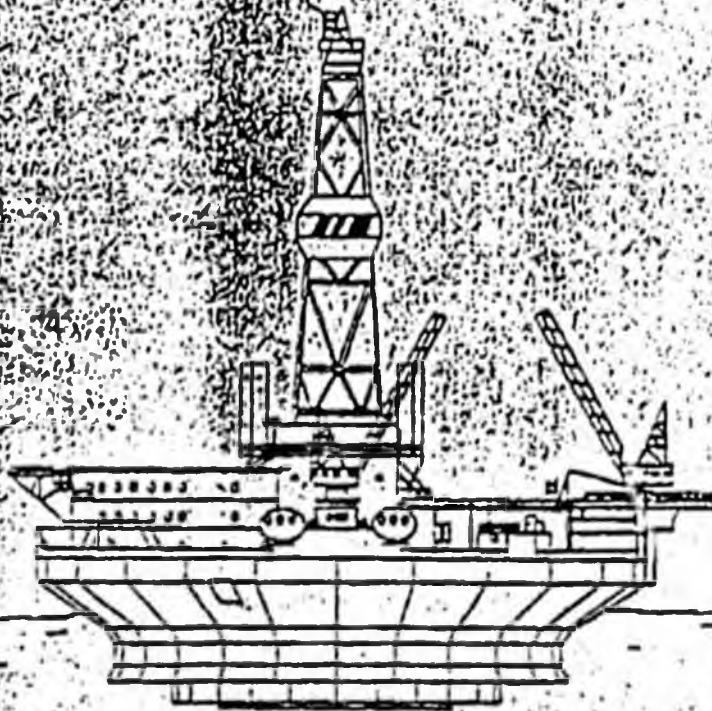
This confidence in burning is unsupported by any evidence

and winter is easier than broken ice - which presents safety risks as well as technical difficulties

EXPLORATION PLAN

# Exploration Plan

OCS Lease Sale Areas 109 and 97  
Chukchi and Beaufort Seas, Alaska



Prepared for  
**Texaco Producing Inc.**  
Anchorage, Alaska

Prepared by  
**ENSR Consulting and Engineering**  
Anchorage, Alaska

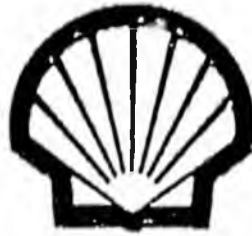
April 1990

TEXACO

During the ice-free period (July through October), storm surges do occur in the prospect areas. However, severe surges appear uncommon; a surge of 3.5 m (19 ft) occurred at Barrow in October 1963 and was thought to depict a 125-year event. Surges of 2 to 3 m (6 to 10 ft) are considered 10-year events (Brower *et al.*, 1988).

### 10.5 Visibility and Ceiling

There is a probability that fog may occur in the area throughout the year. This probability is higher in nearshore areas owing to the temperature difference between land and water masses. During the period when sea ice covers the area, the percent frequency of fog is 10 percent nearshore decreasing to less than 5 percent offshore. However, during open-water periods, this percent frequency rises. For instance, in the period of June through September the percent frequency may be as high as 30 offshore and 20 nearshore (Brower *et al.*, 1988). Tables 10-11 through 10-14 provide a summary of visibility and ceiling data for the prospect areas during the months of June through September.



Exploration Plan

OCS Lease Sale Area 109

Chukchi Sea, Alaska

# Remote Offshore Prospects

Shell Western E&P Inc.

601 West Fifth Avenue • Suite 810  
Anchorage, Alaska 99501

December 1988

## SHELL

of the time (Wise, et al., 1981). Sustained winds of 50 to 56 knots, with higher gusts, have been recorded (Wilson, et al., 1982).

Offshore winds are also reported by the U.S. Naval Weather Service and are summarized on Tables 10-7 through 10-10 for the months of June through September. During the early summer (June and July) winds typically are out of either a general northerly or southerly direction. During August and September, they are more commonly out of the northeast. Mean speed are typically in the range of 10 to 15 knots.

### 10.4 Storm Occurrences

In the Chukchi Sea lease area, storm events are possible throughout the entire open water period from mid-June through November. October is the month of the most frequent storms in the Chukchi Sea. Storm movement is generally parallel to the Chukchi Sea coastline moving from the Bering Sea towards the Beaufort Sea.

Thirteen storm surges have been documented (Brower, et al., 1977) between 1960 and 1977 for the Chukchi and Beaufort Seas. The most severe recorded storm in the vicinity of Barrow produced westerly winds with sustained speeds of 42 knots and gusts to 64 knots, waves to 10 feet high, and a storm surge of 10 feet.

### 10.5 Visibility and Ceiling

Fog may be present in the Sale 109 area at anytime throughout the year (Brower, et al., 1977). During the period when sea ice covers the Chukchi Sea, fog occurs about 10 percent of the time. However, during open-water periods, fog becomes more common. In May through September, fog may occur between 20 and 30 percent of the time. Tables 10-11 through 10-14 provide a summary of visibility and ceiling data for the offshore areas during the months of June through September.

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Anchorage, Alaska

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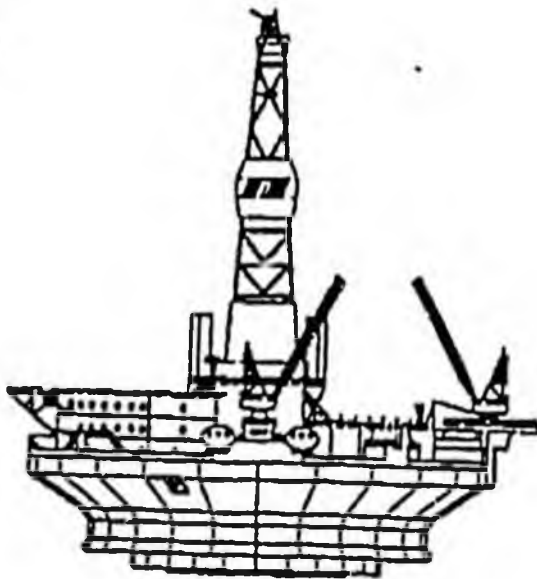
A Report Prepared for

REGIONAL SUPERVISOR  
FIELD OPERATION  
MINERALS MANAGEMENT SERVICE



CHEVRON U.S.A. INC.  
6001 BOLLINGER CANYON ROAD  
SAN RAMON, CALIFORNIA 94583-9432

# EXPLORATION PLAN WEST MAKTAR PROSPECT Beaufort Sea, Alaska



HARDING LAWSON ASSOCIATES  
801 EAST 57TH PLACE  
ANCHORAGE, ALASKA 99518

JULY 1990

CHEVRON

Harding Lawson Associates

Table 10-1. Mean and Extreme Air Temperature Summary for Barter Island, Alaska (°F)

Month	Mean Temperature	Mean Maximum Temperature	Mean Minimum Temperature	Highest Recorded Temperature	Lowest Recorded Temperature
January	-14.3	-7.8	-20.8	39.0	-54.0
February	-20.3	-14.1	-26.5	37.0	-59.0
March	-15.4	-8.6	-22.3	36.0	-51.0
April	-0.8	7.2	-8.8	43.0	-38.0
May	20.8	26.0	15.4	52.0	-16.0
June	34.2	38.1	30.2	68.0	13.0
July	39.9	45.1	34.7	78.0	24.0
August	39.1	43.7	34.3	72.0	24.0
September	31.5	35.1	27.8	64.0	4.0
October	15.3	20.3	10.2	46.0	-26.0
November	-0.1	5.7	-6.1	37.0	-51.0
December	-12.1	-6.5	-18.9	37.0	-51.0
ANNUAL	9.8	15.4	4.1	78.0	-59.0

Source: AEIDC, 1986.

10.3 Sky Cover and Visibility

Cloudy weather is prevalent along the Beaufort Sea coast. For over half of each year, the West Maktar Prospect area has low clouds with more than 50 percent coverage. Low clouds are defined as having bases less than 8,000 feet (2,600 meters) (AEIDC/NCC, 1988). Low clouds with more than 50 percent coverage occur most frequently in the summer. During August, September, and October, 50 percent and greater cloud coverage averages 23 days per month. Mostly clear skies are defined as total cloud coverage of 25 percent or less (AEIDC/NCC, 1988). Mostly clear skies occur an average of only 5 days per month during the same period (AEIDC/NCC, 1988).

Sky cover and visibility can be closely related. Low visibility can be caused by low clouds as well as dense fog, heavy precipitation, dust, and smoke. In general, visibility is good for most of the year near West Maktar Prospect. In Marine Area B, aircraft are restricted to Instrument Flight

CHEVRON

Harding Lawson Associates

Rules (IFR) flying an average of 45 days per year. Low visibility conditions can restrict even IFR aircraft operations. The frequency of low visibility conditions near West Maktar Prospect is presented in Table 10-2. The occurrence of "poor" and "optimum" visibility conditions is also presented in Table 10-2.

As shown by Table 10-2, periods of low visibility do not occur often, but are most frequent during August and September. Offshore operations are most likely to be affected by low visibility during these months. Poor visibility, which may restrict offshore operations, occurs much more frequently and uniformly throughout the year. Poor visibility is most frequent in July and August. In general, optimum conditions occur most frequently in the winter.

Darkness, while usually not a problem itself, aggravates the visibility restrictions caused by other conditions. The sun does not crown the horizon in the Beaufort Sea from mid-November to mid-February. A few hours of twilight are experienced from November to December and from mid-January to mid-February. Total darkness is experienced throughout December and part of January (ARCO Alaska, Inc., 1985).

Table 10-2. Frequency of Visibility Conditions Near West Maktar Prospect

Month	Low Visibility Conditions (days)	Poor <sup>a</sup> Visibility Conditions (days)	Optimum <sup>b</sup> Visibility Conditions (days)
January	3	10	6
February	2	10	4
March	<2	10	6
April	<2	11	5
May	<2	11	3
June	2	10	4
July	2	12	5
August	3	12	3
September	3	11	2
October	<2	9	3
November	2	9	5
December	<u>2</u>	<u>11</u>	<u>5</u>
TOTALS	19+	126	51

<sup>a</sup> Any one of the following constitutes poor conditions: Low cloud ceiling (LCC) <300 feet or visibility <1 nautical mile.

<sup>b</sup> Optimum conditions: LCC > 5000 feet (or no LCC), visibility ≥ 5 nautical miles, and wind 11-21 knots.

Source: AEIDC/NCC, 1988

**Testimony on HJR 36**

**Robert R. Griffeth**

**Senior Consultant, Environmental Affairs-Offshore**

**ARCO Alaska, Inc.**

**April 26, 1991**

My name is Bob Griffeth. I am a member of the Environmental Sciences Department staff at ARCO Alaska, Inc. Thank you for this opportunity to offer some commentary on HJR 36.

Among the duties I perform in my assignment with ARCO are organizing and presenting the environmental orientation programs associated with exploratory drilling projects; overseeing the marine mammals scientific and monitoring programs for offshore exploratory operations; coordinating and maintaining cooperative programs with North Slope Inupiat villages; and serving as principal liaison with North Slope villages oil spill response teams.

Much of the testimony and discussion focusing on House Joint Resolution 36, which this committee is considering, directly touches areas of my professional activities. Therefore, I would like to take this opportunity to comment on three particularly relevant areas: (1) The recent history of cooperative programs between offshore oil and gas industry operators and North Slope Native communities. (2) The design and results of marine mammals science and monitoring programs. And (3) the village oil spill response teams which serve as observers, advisers, and participants for industry's offshore oil spill contingency planning and response preparedness.

Since the earliest days of petroleum exploration and development on the North Slope, industry has recognized both the advisability and desirability of fostering programs of mutual benefit to itself and to the resident Inupiat communities. In the early years, these efforts were primarily directed to training and employment opportunities. Such programs remain strong and active today. In other instances the basis for cooperation keys off of joint business ventures between industry and the Native regional and village corporations. Here again, joint venture programs continue to be an essential and vital feature of industry-local resident relations.

In more recent times, the overriding concerns of the area have come to be offshore oil exploration activities that are viewed by some as potentially harmful to marine mammal subsistence resources or in conflict with Native subsistence pursuits. The bowhead whale hunt has been the focal point of this concern for North Slope residents and industry operators alike since both parties are, at times, environmentally constrained to simultaneously operate during the open water conditions when the annual fall whale migration through the Beaufort Sea occurs.

For the past five years, a Cooperative Program for the Beaufort Sea (commonly referred to as the Oil/Whalers Agreement) has been in effect between the Alaska Eskimo Whaling Commission, the whaling captains' associations of Nulqsut and Kaktovik (which, along with Barrow, constitute the only Beaufort whaling villages) and industry. Prior to the open water season, whaling captains and industry representatives meet to work out a communications system between the parties that prevents use conflicts

between active whaling crews and industry operations. This cooperative effort has succeeded. It has also produced additional benefits to both parties. Industry has been allowed to proceed with exploratory activity and in the process has become very familiar with, and keenly sensitive to, both the practical and cultural dimensions of the Inupiat subsistence hunt. Safety assistance has also been provided to whaling crews in distress on certain occasions. Most of all, the focus on whaling and the fall bowhead migration has created a situation in which industry has proved itself both willing and able to work cooperatively with the Native subsistence communities on what is chief among their concerns about offshore exploration.

While this example touches on the experience gained from cooperative efforts between industry and Inupiat whalers from the Beaufort Sea communities; other efforts have involved environmental projects, archaeological and cultural matters, and local community activities. Without question, however, our highest mutual priority continues to be gaining a better understanding of the dynamics of the offshore arctic environment and scientific and monitoring studies of marine mammals there.

ARCO, and other industry offshore operators, have recognized that the local expertise and deep knowledge possessed by subsistence hunters absolutely must be incorporated in any study or monitoring programs. Effectively, this is done in two ways. First, by consulting with both whaling captains' associations and the North Slope Borough's Department of Wildlife Management in the design and scientific assessment of results of studies. Second, by including experienced Inupiat monitors in the actual field work associated with the studies. This approach has vastly enriched the quality

and credibility of study results. The benefits to both industry and the whaling communities are obvious. Industry operators can tailor their operations to cause the least possible interference with the subsistence hunt; the whaling community can, in turn, reinforce with hard scientific evidence its long held view that the bowhead whale population is healthy and can sustain an annual take of up to fifty animals. Both of these benefits have been realized from studies conducted over the past several years. I would be happy to supply additional information on these efforts to the committee. I can provide for the record, a detailed report of cooperation and consultation undertaken between industry and the whaling communities and final study reports from recent science and monitoring programs, if you would like to include them.

The final matter which I would like to touch on concerns the extent to which industry consults and incorporates the knowledge of local residents in dealing with oil spill preparedness and response. This committee recently received written testimony saying that ". . . local knowledge of experience[d] whaling captains and hunters and researchers continue[s] to be overlooked. I would like to see our local experts actively participate in the assessment of the oil industr[y's] ability to clean up an oil spill. This includes monitoring oil spill clean up drills that the state calls for occasionally to see if the oil industry is ready to respond to a spill."

There has been similar testimony from several other witnesses at previous hearings on this Resolution.

Local captains, hunters and residents have shared in the development of our Arctic programs. In the summer of 1989, ARCO recruited and provided oil spill response technician training (a 40 hour course) to ten residents each in the villages of Nuiqsut and Kaktovik. Members of these two teams included whaling captains (such as Mickey Agiak and George Kaleak of Kaktovik) and crew members (such as Isaac Nukapigak and Tony Cabinboy of Nuiqsut). Each of these individuals plus other team members fully participated in on-site oil spill response drills and demonstrations under all types of environmental conditions (open water, broken ice, and solid ice) at two different Beaufort Sea offshore exploratory drilling locations in 1989 and 1990. In late summer 1990 the initial phases of training were completed for a third ten-member team which included representatives from the Barrow volunteer fire department. Presently, the Alaska Clean Seas Co-op and response organization is continuing and expanding the village response team program in North Slope Borough communities.

This training program serves both the needs of oil companies operating in the area and the continuing needs of North Slope communities. Trained team members have reviewed contingency plans and have offered suggestions that resulted in specific improvements. The North Slope Borough has been an active partner in staging and supporting the training program.

I wish to conclude by stating that ARCO Alaska, Inc. and other offshore Arctic operators, fully intends to maintain the patterns of consultation and cooperation we have established over the years. As has been discussed by some individuals recently, a more formal regional citizens advisory group for

the Beaufort and Chukchi lease sale areas may be established. ARCO would welcome and support such a development.

Thank you for the opportunity to share this information with you. If you have any questions, I would be happy to respond.



# United States Department of the Interior



MINERALS MANAGEMENT SERVICE

ALASKA OUTER CONTINENTAL SHELF REGION  
949 E. 36TH AVENUE, ROOM 110 ANCHORAGE, AK 99508-4302

APR 23 1991

Representative Bill Hudson,  
Chairman  
House Special Committee on  
Oil and Gas  
Alaska State Legislature  
P.O. Box V  
Juneau, Alaska 99811

Dear Representative Hudson:

I appreciated the opportunity to testify to the committee on the proposed HJR 36 on April 22, 1991. I am enclosing a copy of information relating to the Minerals Management Service's regulatory program, environmental studies, and other background material, some of which I presented and discussed during my testimony and which I believe the committee will find useful in its further discussions regarding HJR 36.

I would be glad to answer any questions or provide any additional information.

Sincerely,

*Irven F. Palmer, Jr.*  
Irven F. Palmer, Jr.  
Regional Director

cc:ing

Enclosure

**MINERALS MANAGEMENT SERVICE  
INFORMATION RELEVANT TO PROPOSED HJR 36**

**Background**

Offshore oil and gas leasing, exploration and development and production is not new to the Beaufort and Chukchi Seas. The State of Alaska has conducted 13 lease sales which included offshore lands in the Beaufort Sea and has more planned. The Federal Government has held four sales in the Beaufort Sea including the joint Federal/State sale in 1979 and one in the Chukchi Sea.

Twenty-five exploratory wells have been drilled in the Beaufort and Chukchi Seas on Federal leases; over 100 wells have been drilled on State submerged lands in the Beaufort Sea and over 60 wells have been drilled in the Canadian Beaufort Sea. The Endicott Development Project on State submerged lands has been producing offshore oil since 1987.

**Oil Pollution Act Report**

One of the recommendations of HJR 36 is that Federal offshore lease sales in the Arctic not proceed until the Secretary, the Congress, and the public have had the opportunity to review a report required by Section 8302 of the Oil Pollution Act of 1990 (OPA). The OPA does not require, and the Congressional history of the OPA does not suggest, that the Outer Continental Shelf (OCS) leasing program be delayed pending completion of the report. The report will not provide new information on the lease sales planned for this summer.

The current plan is that a draft will be available for public review in May and the final report delivered to the Congress in August.

The OPA directs the report to cover three subjects: recovery of damages, contingency plans, and coordinated actions in the event of an oil spill in the Arctic Ocean. The language of Section 8302 shows that the principle impetus for the report is concern over spills resulting from tankering of crude oil from the Canadian Beaufort, and the administrative and legal mechanisms for recovery of damages from such oil spills.

The report will include information on Federal, State, local and Canadian and private contingency plans and requirements, but will not address the adequacy of spill-response preparedness, current state-of-the-art technology for spill response, or the effects of industrial noise or spills on wildlife in the region.

**Environmental Studies and Assessments**

The Minerals Management Service (MMS) has spent over \$245 million dollars in environmental studies for the Alaska OCS Region since 1974. Over one half of that total has been directed at the Arctic. Approximately \$22 million has been spent on studies directly related to bowhead whales.

The MMS studies program has addressed a comprehensive list of subjects:

- o Oil-spill fates and effects;
- o Social, and economic and subsistence effects;
- o Living resources;
- o Endangered species;
- o Environmental monitoring;
- o Pollutant transport;
- o Environmental geology; and
- o Ecosystems.

Organizations other than the MMS have also funded OCS-related studies. The National Marine Fisheries Service (NMFS), the State of Alaska, the North Slope Borough, the Alaska Eskimo Whaling Commission, the Union of Soviet Socialist Republic, Canada and the oil industry have funded almost \$24 million on bowhead whale studies through 1989.

The MMS has prepared seven Environmental Impact Statements (EIS's) for OCS lease sales in the Beaufort and Chukchi Seas. These EIS's have gone through extensive public review and comment, and are based on the most current scientific data and information.

The EIS's are comprehensive analyses of the potential effects of oil and gas activities on the natural and human environments. Through the EIS process, including State and public review, the MMS identifies and mitigates potential effects.

The MMS has also prepared environmental assessments (EA's) on each of the 21 exploration plans (EP's) which have been submitted for the Beaufort Sea and the 3 plans for the Chukchi Sea. The EA's analyze potential environmental effects, and incorporate any information that may have become available since the last EIS.

Arctic waters have been subjected to considerable environmental assessment. Since the OPA report is limited in scope, as directed by the Congress, it will not modify the results of those assessments.

## **EFFECTS OF NOISE ON MARINE MAMMALS**

There have been several studies on the effects of industrial noise on marine mammals, particularly bowhead whales.

Studies on the effects of industrial noise on marine mammals conclude that while marine mammals react to industrial noise, the reactions are localized and short term.

The MMS has evaluated the potential effects of oil and gas activities on marine mammals in the EIS's prepared for OCS sales, most recently Sales 124 and 126.

The Sale 124 EIS concludes that potential effects to marine mammals from noises are low.

The EIS analyses are conservative. The EIS does not assume that special mitigating measures will be in place or that spilled oil will be contained, removed, or cleaned up. The MMS has developed mitigating measures specifically for the protection of bowhead whales and subsistence hunting, including effects from noise. These measures include requirements for site-specific monitoring for the presence of whales and effects on their behavior. The MMS also requires that lessees consult with, and coordinate their activities with local subsistence communities to avoid and minimize interference. Limitations are also placed on seismic operations during the bowhead whale migration and lessees are warned to keep their operations, including vessels and aircraft, at specified distances from marine mammal and bird concentrations.

The NMFS, after reviewing the available scientific information on noise effects on bowhead whales, concluded in the Arctic Regional Biological Opinion "that although some impacts [from noise] to individuals [bowhead whales] may occur, anticipated proposed exploratory activities will not produce noise levels expected to reduce appreciably the likelihood of survival and recovery of the bowhead whales by reducing the reproduction, numbers, or distribution of the species."

In their final regulations for the non-lethal incidental taking of marine mammals adopted in July 1990 for oil and gas exploration and seismic activities in the Beaufort and Chukchi Seas, the NMFS further concluded there would be no significant impact on the populations of marine mammal and that there would be no unmitigable adverse impacts on the availability of the species for subsistence use if certain conditions are met. The conditions required by the NMFS regulations are site-specific monitoring programs and coordination between industry and subsistence communities similar to MMS lease terms.

#### Postlease Regulatory Program

The MMS has a stringent regulatory program to ensure that offshore oil and gas operations are conducted in a safe and environmentally-sound manner.

This program establishes specific requirements and standards for offshore operations, includes a comprehensive permitting process involving a thorough review of each proposal, and a compliance and inspection program to ensure that each activity is conducted in accordance with regulatory and lease requirements.

Major components of the program include well control and spill prevention.

Before any exploration or development activity can begin, an EP or development and production plan must be approved by the MMS. Each plan undergoes public review and comment and an EA is prepared. The State must also concur that the plan is consistent

## Inspection and Compliance

The MMS has a very stringent inspection program in Alaska.

In the Alaska OCS Region, we maintain an inspector on each offshore drilling rig on a continuous or near-continuous basis to ensure that all applicable requirements are being met and that the well is being drilled in a safe manner. We observe all critical operations such as mandatory testing of blowout preventors.

## Oil Spills

There have been no blowouts resulting in the release of crude oil from nearly 10,000 exploratory wells drilled on the OCS. The blowouts which have occurred were gas blowouts mostly in areas where shallow gas is prevalent.

Because of the Exxon Valdez spill, many question industry's ability to respond to a major oil spill, such as a blowout from an exploratory well in the Arctic.

It is important to distinguish between oil spills resulting from tanker accidents and spills that could occur from offshore oil and gas operations.

In contrast to tankers, OCS exploration and development and production operations are confined to specific locations where we require onsite spill-response teams and equipment tailored to the type of activity, environmental conditions, and maximum anticipated spill.

Spills from OCS exploratory drilling and production activities would not result in large instantaneous spills such as a tanker spill.

Spill response would be much more effective on a smaller continuous spill that provides continuous fresh oil in moderate volumes than a response to a single massive release of oil, such as occurred from the Exxon Valdez.

The MMS has taken prudent and effective steps to significantly reduce the risk of a spill and to ensure that industry utilizes the best available equipment and technology to drill and produce oil in the Arctic, and to respond to a spill.

There have been substantial improvements in oil-spill-response technology as a result of research and testing by the MMS in concert with Environment Canada and others, and as a result of the State's Tier II program.

In situ burning is a major response strategy for the Arctic, particularly for environmental conditions which might preclude or limit a mechanical response.

Research and testing of in situ burning in test tanks, offshore field trials, and under actual spill conditions have provided documentation on the effectiveness of in situ burning.

Other recent initiatives such, as Alaska Clean Seas' expanded equipment inventories and response organizations, the Regional Response Team's Memorandum of Understanding for preapproval to use in situ burning in the Beaufort and Chukchi Seas, and development of other guidelines and checklists, have improved and facilitated response capabilities and preparedness in the Arctic.

### Conclusion

Based on the past drilling and production history in the Arctic and the comprehensive environmental studies and evaluations which have been conducted, the MMS is confident that offshore oil exploration and development in the Beaufort and Chukchi Seas can continue to be conducted in an environmentally-sound manner.

There is ample information regarding the risks of oil and gas operations to proceed with the proposed Beaufort and Chukchi lease sales.

Regulatory requirements for oil-spill-response preparedness, advances in technology in oil-spill response, including in situ burning, and a stringent regulatory and inspection program to prevent oil spills assure that operations are conducted in an environmentally-sound manner.

The MMS requires that industry demonstrate an acceptable level of spill-response preparedness and that current technology is suitable for the maximum anticipated spill which could occur from such activities.

Several oil and gas lease sales and exploration drilling have been conducted in the Beaufort and Chukchi Seas starting with the joint Federal/State Beaufort Sea lease sale in 1979 and there has been a very thorough analysis of all potential effects, including State and local involvement, leading up to each proposed Beaufort and Chukchi lease sale.

The MMS believes that proceeding with the decision-making process for planned Arctic OCS lease sales using the mandated and administrative coordination processes in place is appropriate and little would be gained by delaying the sales for review of the report being prepared under the requirements of Section 8302 of the OPA of 1990. Simply put, the report is not going to shed much light on most of the issues raised in HJR 36.

# STATE OF ALASKA

**DEPT. OF ENVIRONMENTAL CONSERVATION**

WALTER J. HICKEL, GOVERNOR

## HJR 36 - BEAUFORT AND CHUKCHI SEA EXPLORATION DRILLING MORATORIUM

### Level of Activity

To date, there have been few exploratory drilling operations in the Chukchi Sea and Beaufort Sea Outer Continental Shelf (OCS).

- Chukchi Sea:**
- \* Drilling only during summer open water period.
  - \* Shell Western has drilled in 1989, 1990, and plans to drill in 1991.
  - \* Texaco may drill in 1992.
- Beaufort Sea:**
- \* Nearshore drilling in winter and offshore drilling in summer open water period.
  - \* Arco drilled during winter of 1990 and may drill in winter of 1991.
  - \* Amoco may drill offshore during summer of 1991.

### Oil Spill Prevention and Response

The U.S. Department of the Interior, Minerals Management Service (MMS) requirements establish a level of response preparedness similar to those outlined in draft State oil-spill regulations and HB 587.

- Spill Drills:**
- \* Two oil spill response drills each year.
  - \* North Slope Borough and State agencies are invited to attend all drills. DEC staff have attended all drills.
- Monitoring & Inspection**
- \* An MMS Inspector is stationed on offshore drill ships to inspect spill prevention and emergency response systems.
  - \* MMS inspects onsite response equipment on a daily basis, and attendant vessel equipment weekly.

\* MMS inspects offsite equipment inventories annually, prior to the open-water drilling season.

\* Companies are required to have a scheduled maintenance program for response equipment. MMS inspects company records for compliance with the maintenance schedule.

**Spill Technology:** \* MMS sponsored the Alaska Arctic Offshore Oil Spill Response Technology Workshop in November-December 1988.

\* MMS, in cooperation with Environment Canada and U.S. Coast Guard, has initiated a major effort to refurbish the only spill response test facility in the United States (OHMSETT) to test Arctic spill containment and cleanup technologies.

**Local Involvement:** \* The industry's spill response co-operative, Alaska Clean Seas, is working with the Arctic Slope Regional Corporation to train residents of North Slope villages in oil spill response and cleanup.

\* The Arctic Marine Resources Commission participates as a member of DEC's HB 587 Technical Implementation Work Group.

HJR

39

# Alaska State Legislature

REPRESENTATIVE  
**RICHARD FOSTER**  
BOX 1028  
NOME, ALASKA 99782

PO BOX V  
JUNEAU, AK 99811  
(907) 485-3789



## House of Representatives

5 April 1991

Representative Cliff Davidson  
Chairman, Resource Committee  
MS3100

RE: HJR 39; Regarding a Bowhead Whale Allocation for  
the Community of Diomede.

Greetings Cliff:

Please accept this request to calendar HJR 39 before  
the House Resource Committee as time permits.

HJR 39 is an attempt to assist the community of Diomede  
in obtaining an allocation from the International  
Whaling Commission (IWC) for a bowhead whale. All  
whales allocated to Alaskan communities are channeled  
through the Alaska Eskimo Whaling Commission (AEWC).  
Individual community allocations are then distributed  
at the annual whaling convention in Barrow. Eligible  
communities send designated commissioners to this  
convention to make the determinations. The AEWC does  
endorse Diomede's plea for an allocation and supports  
HJR 39.

The IWC meets during May this year in Iceland. By that  
time, AEWC and the community of Diomede hope to have  
completed a necessary subsistence needs study and it  
would be my intention to have HJR 39 accompany their  
testimony. Your assistance in this is appreciated.

Please call John Walsh for detail or further  
information on this issue.

**\*\* PRESS RELEASE \*\***

5 April 1991

From: John Walsh  
Rep. Richard Foster's Office  
Juneau

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RE: Introduction House Joint Resolution 39; Regarding  
Bowhead Whale Allocation for City of Diomede

Today, April 5, Representative Richard Foster introduced legislation supporting the City of Diomede's request for a bowhead whale allocation. The resolution has been assigned to House Resource committee for consideration. Following committee review, the full House will vote before sending it across to the Senate.

Beverly Grinage, Executive Director with the Alaska Eskimo Whaling Commission (AEWC), has worked closely with Rep. Foster's staff to insure proper format and detail. Upon passage in the Alaska Legislature, the resolution will be transmitted to the International Whaling Commission (IWC) meeting in Iceland May 1991. The IWC determines allocations of bowhead whales to the AEWC, which then distributes among eligible whaling communities.

In preparation for the May IWC meeting, the AEWC has commissioned a subsistence study with funds provided by the Bureau of Indian Affairs. This study is essential in establishing the traditional use of bowhead whale by the people of Little Diomede.

Rep. Foster stated, "I want to do all I can to assist my friends in Little Diomede in obtaining a bowhead whale. The late Mayor of Diomede, Thomas Menadelook, a renown whaler in the Bering Straits pushed hard for a bowhead allocation and I hope that this resolution will assist in achieving his goal."

Rep. Eileen MacLean was listed as first co-sponsor of HJR 39. Foster expects more colleagues to sign on soon. Any letters of support can be addressed to Rep. Foster, Box V, Juneau, AK. 99811.

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## ## ## ##



Alaska Eskimo Whaling Commission  
P.O. Box 570  
Barrow, Alaska 99723  
Phone: (907) 852-2392

JAN 22 11

JOHN  
WHAT CAN  
WE DO TO  
HELP? R

January 4, 1991

The Honorable Richard Foster  
P.O. Box 1630  
Nome, Alaska 99762

Dear Representative Foster:

Our Office has been trying for years to get funding for a subsistence needs study for Little Diomedé so they can receive a bowhead whale quota allocation. We have sent grant requests to various granting agencies including BIA and the National Marine Fisheries Service. With pressure from Senator Ted Stevens, the BIA Office in Juneau finally committed themselves to giving us partial funding for a total of \$40,000. The subsistence needs study requires \$127,000.

This study has to be conducted before the International Whaling Commission (IWC) can consider Little Diomedé as a bowhead whaling community, and the next IWC meeting will be held this May. We are hoping the needs study can be funded, and completed by May so that the Little Diomedé case is presented to the IWC at that time, otherwise we'll have to wait another three years before this case is brought to the IWC again.

We are hoping to enlist your support, and if possible, help the village of Little Diomedé by giving the study the necessary funding it requires. As you may know, bowhead whale hunting is important to the entire community, both physically and culturally. Our Office would appreciate any assistance you can give this crucial need. If you have any questions, please call me at 852-2392.

Sincerely,

*Beverly Grinage*

Beverly Grinage  
Executive Director

cc: City of Little Diomedé  
Toby Anungazuk, Jr., AEWK Commissioner, Wales

FEB 21 1991

**DIOMEDE CITY COUNCIL**  
DIOMEDE, ALASKA VIA NOME 99762  
686-8001

FEBRUARY 12, 1991

The Honorable Richard Foster  
P.O. Box 1630  
NOME, ALASKA 99762

Dear Representative Foster:

The Little Diomed City Council recently passed a resolution requesting a quota allocation for one Bowhead Whale per year from the Alaska Eskimo Whaling Commission (AEWC).

We have been requesting a quota allocation for many years, without any success. We have traditionally hunted the bowhead whale, but because of our isolation we were unable to present our case for a whale quota back when the other whaling villages presented their cases to the International Whaling Commission (IWC).

The AEWC has expressed their support to our request, but they have been unable to obtain the necessary funding for a subsistence needs study.

The International Whaling Commission requires that a subsistence needs study be conducted at Little Diomed before they can consider the quota allocation request.

The needs study requires \$127,000.00. The Bureau of Indian Affairs, Juneau Area Office, has agreed to give partial funding of \$40,000.00. This was accomplished with the help of Senator Ted Stevens, but another \$87,000.00 is required to conduct the needs study prior to the IWC meeting scheduled for May.

The quote of \$127,000.00 for the needs study was give to AEWC by Stephen R. Braund & Associates. They conducted the needs studies for Barrow and the other whaling communities.

We want to sing our whaling songs, enjoy Nalukataq, and eat black mukluk again. If there is anyway that you can help us find funding for the needs study we would be very grateful. Thank you.

Sincerely,

*Dwight Millington Sr.*, City Clerk  
Patrick Omiak Sr. *FOR*  
Mayor

Enclosure: Resolution 90-11

Honorable Richard Foster  
I will mail you a copy  
of Res. 90-11 AS SOON AS  
I FIND IT  
*Dwight Millington Sr.*

## ALASKA ESKIMO WHALING COMMISSION

## ALASKA ESKIMO WHALING CAPTAINS ASSOCIATION ANNUAL CONVENTION

## RESOLUTION 88-01

WHEREAS, the Department of Interior has commissioned a need study to determine Eskimo needs for bowhead whales by examining historic whaling activities; and

WHEREAS, this study has documented historic whaling activities by the residents of Little Diomedé Island, and

WHEREAS, the residents of Little Diomedé Island have petitioned the Alaska Eskimo Whaling Commission to become members and receive a bowhead whale quota;

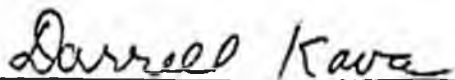
THEREFORE BE IT RESOLVED, that the AEWK accept Little Diomedé a member of the Commission and that AEWK requests the United States Department of Interior to join with AEWK in asking the National Oceanic and Atmospheric Administration to revise its regulations to include Little Diomedé Island as a recognized whaling village in order to allow AEWK to assign Little Diomedé a bowhead whale quota.

Introduced & Adopted: February 19, 1988

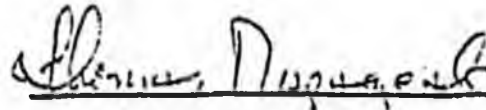
ATTEST:



Chairman



Secretary



Vice Chairman

## CITY OF DIOMEDE

## RESOLUTION NO.90-11

A RESOLUTION OF DIOMEDE CITY COUNCIL REQUESTING A BOWHEAD WHALE QUOTA FOR INALIK (DIOMEDE).

WHEREAS, the allied peoples of Inalik (Little Diomede), ImaqYiq (Big Diomede) and Nuugaq (Naukan) have since time out of mind followed the whale; and

Whereas, today these people live in their traditional homes only on the American Island of Little Diomede at the village of Inalik; and

WHEREAS, at the time quotas were placed on agviit (Black Whale) our isolation meant we were unable to present our case for a whale quota as we followed the ways of our ancestors without contact with the mainland on our island home at Inalik; and

WHEREAS, we have always been a people of the whale; listen to our evidence; listen to our testimony; walk among the whale bones on our island.

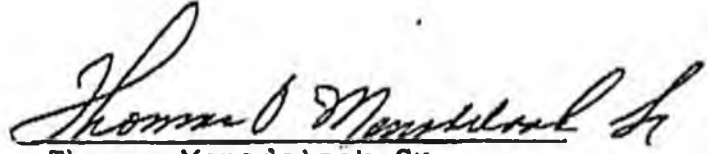
- 1) In Chapters XIX and XX of his book DRUMS of DIOMEDE the missionary-teacher Arthur Hansin Eide on pages 185-205 documents whaling and Nalukataq. In the pictures in his book Eide shows the blessing of the boats, the whale camps on the ice, eleven whale boats returning to the village at Little Diomede, "cutting up the spirit whale", the "beginning of Nallukatak (sic)" muktuk enjoyed by all.
- 2) Our people's blood is mainly from ImaqYiq, also from Inalik, Nuugaq and Uqiuvak, with some from Tapqaq, Tikigaq, Qawiarag, Kingigin, Siugaq. The oldest male Diomedes, Kiminaak was born on the ship Belvedere near Herschel Island in Canada in 1905. His father was Aiyerga, a great whaler from ImaqYiq, who had signed on with this Yankee boat for the spring bowhead hunt. When Kiminaak moved to Little Diomede in 1926 he remembers the whaling at Inalik. His uncle Kayouktuk whaled at Inalik. Kiminaak whaled with Kayouktuk. He remembers: Okpealuk took a whale in 1919, Omiak was striker; another in 1928, in 1938-39 Ahkingas and Sinyakis took whales, in 1953 Omiak lost one, struck by Paul Omiak; then Kiminaak moved to Nome.
- 3) Ahkinga's grandson Kakaduk (Roger Kunayak) remembers the stories. He has whaled in Barrow for black whale. Omiak's son Pat Omiak remembers the stories. He has whaled in Gambell and Barrow with his relation. Ahkinga's son Anolak, Oscar Ahkinga remembers the stories. He has whaled at Barrow and Diomede for black whale. Sons and grandsons of our old whalers still whale. Only now we have to hunt the black whale with our relation at Wales, Gambell, Barrow. At Diomede we can only hunt the gray, the meinke whales.





4) We are tired of hunting only the gray whale at our island. Every year we hunt and land gray whale but we can not hunt the black whale. We know, but sad, can not sing our whaling songs, enjoy Nalukataq, enjoy black muktuk like our brothers.

NOW THEREFORE BE IT RESOLVED THAT: the Diomedé City Council, the Native Village of Diomedo, the Village of Inliak, the island of Little Diomedé be granted a quota of at least one black whale.

PASSED and APPROVED by the DIOMEDE CITY COUNCIL of LITTLE DIOMEDE this 5th day of December, 1990.

  
Thomas Menadelook Sr.  
Mayor

  
ATTEST:   
Dwight Milligock Jr.  
City Clerk

Directed to : Eskimo Whaling Commission  
Eskimo Whaling Captaining Association  
Mayor of the North Slope Borough

Office of  
**CHARD FOSTER**  
DISTRICT 23  
P. O. Box V  
Anchorage, Alaska 99811

Anchorage Daily News Friday, March 1, 1991 E7

## Whaling captains allocate '91 harvest, seek quota increase

The Associated Press

**BARROW** — Eskimo whaling captains have allocated this year's whale harvest among the state's coastal villages, and they said they will ask the International Whaling Commission to increase Alaska's whale quota at its May meeting.

Whalers also reiterated worries about potential offshore oil and gas drilling and plans to respond to oil spills in the Arctic.

The whaling captains wound up

a three-day meeting in Barrow last week by approving the same allocation formula for the 1991 bowhead whale hunt that existed last year. The whaling villages will be allowed to land 41 whales and may take 47 strikes to land them.

Under the allocation, Savoonga and Gambler each will get four whales, Wales will get one, Kivalina two, Point Hope six, Wainwright five, Barrow 15 and Nulikuit and Kaktovik two each.

Whaling captains say they plan to ask for an increase in the Alaska quota when the International Whaling Commission meets in May in Iceland. They said they will propose raising the total to 72 strikes to land 54 whales.

Dr. William Evans, the outgoing U.S. commissioner on the International Whaling Commission, praised Eskimo whalers in Alaska for the way they have managed the

whale hunt under I.W.C. guidelines.

"The aboriginal subsistence management scheme has been in place for eight years, and we have continued to see improved quotas," Evans said.

"We also more importantly have seen improved population estimates, improved science, increases in the population, and a level of cooperation between science, management and the user community

that is unique in the world."

The whaling captains, meanwhile, reiterated concerns about the state's support for offshore oil and gas drilling.

"Together ... we must continue to push for an independent environmental assessment of the safety of drilling in arctic waters," said North Slope Borough Mayor Jessie Kaleak. Kaleak is a whaling captain.

**OBITUARIES**

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Times

# WASTED HARVEST

Alaska 618 367 228 501

As thousands starve around the world, millions of pounds of high-protein fish are being killed in the north Pacific

STORIES BY JOE HUNT

**H**uge factory trawlers raking the seabeds off Alaska are too deadly efficient. So far this year, they have killed and wasted enough fish to feed each Alaskan a high-protein dinner for more than three months.

Some say this waste — in a world where many go hungry — is a national scandal. Others counter it is just the cost of doing business.

The vessels trail thousand-foot nets to scour the ocean bottom in the Bering Sea and the Gulf of Alaska and haul in tons of pollock, cod and other bottom fish.

About 10 percent of the fisheries' 5 billion-pound quota is thrown overboard. Dead.

The fleet has wasted 159 million pounds of edible fish in the first 11 weeks of this year, says the North Pacific Fisheries Management Council.

Larry Cotter is chairman of the bycatch committee for the fisheries council, which sets the regulations for the trawling industry.

"In my own opinion, we are wasting an enormous amount of fish," Cotter said. "That is unconscionable. If they learned about this Outside, it would become a national scandal, a disgrace."

But discarding fish is an economic reality of the fishery, dictated by world markets and prices, said Bert Larkins, director of the American Factory Trawler Association. If trawlers could avoid catching unwanted species or fish too small to process they would, he said.

"There is not only the social stigma of throwing fish back," Larkins said. "There's also an economic penalty because it takes a lot of manpower to do that."

"Any entrepreneur who is throwing away a percentage of his raw product is desperately looking for a way to utilize his whole catch. There's a real incentive for him to do that."

The trawlers target pollock, cod, sole, flatfish and other bottom fish for sale in Japan.

But their nets are indiscriminate.

A trawler net trails a vessel like sock. Its mouth may be more than 200 feet across, with weighted wheels to roll it along the muddy bottom and floats at the top to keep its mouth open.

Federal law requires that tons of high-value crab, herring, halibut and salmon, inadvertently caught and killed in the nets, be thrown back as bycatch.

But trawlers also toss back fish they are authorized to take. Industry insiders excuse the waste, saying the fish are the wrong size for processing machinery, that they are damaged in the enormous net-loads hauled from the bottom or because no profitable markets exist.

During the Bering Sea bottom fish season, which started Jan. 1, federal observers recorded 144 million pounds of cod, sole, flounder, flatfish and other species tossed overboard. Another 15 million pounds have been discarded in the Gulf of Alaska.

The public tends to focus on the bycatch, but

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# Waste

MONDAY, 10/17/90

Continued from page A1

the waste of low-value bottom fish is the bigger moral issue, Cotter said.

He estimates 400 million to 500 million pounds of bottom fish will be tossed overboard by the end of the season.

This is in addition to a cap of 16 million pounds of halibut, 4 million tanner crab, 200,000 king crab and 833 tons of herring the trawl fleet will be allowed to catch and toss back this year.

Assuming one-third of that poundage represents fileted meat, that is roughly enough to provide every Alaskan with 1 pound of filets a day for a year.

"The real rape in the ocean right now is waste," Cotter said. "Prohibited species catch is the sexy part of waste, but finfish discard is absolutely appalling.

"The factory trawler is without question the most efficient harvesting machine on this planet. But when it comes to processing what it catches, it's extremely inefficient."

Trawlers net so many fish, operators can be picky about what they keep, processing only the most profitable grade of fish and tossing back the rest, he said.

Pollock filet machines are set for a certain size of fish. So far this year, the industry has tossed back 60 million pounds that was too small or too large to be efficiently processed, he said.

"It's a crime the amount of fish discarded," said Mandy Merklein, a fisheries observer on contract with the National Marine Fisheries Service. "It doesn't seem right we have to discard that much fish. Even the processors hate it. No one is happy about it."

Merklein is a veteran of 20 trips on foreign and American vessels in the Bering Sea and the Gulf of Alaska.

"I've been on boats where I've thrown more overboard in value than what we kept," Merklein said. "It just seems so stupid. What it really comes down to is bottom-dragging is not very clean."

An observers' primary job is to document the waste, providing weekly reports on bycatch to ensure trawlers do not exceed their quotas. In 1990, the first year observers were required aboard American trawlers in the North Pacific, 513 observers monitored 286 vessels.

THE AMERICAN factory trawler industry in Alaska is still in its infancy, having taken over the fishery from a well-established foreign fleet in the last 10 years. Council members, biologists and fishermen say the industry is learning how to target its preferred catch without killing and wasting unwanted fish.

Officials say they are optimistic many of the problems will be solved during the 1990s. But the process seems unbearably slow, they admit — especially when raging controversies are so widespread.

- Fishermen are edgy about a plummeting halibut population, reducing their harvest year after year. Meanwhile, factory trawlers will take 16 million pounds of halibut this year.

- Interception of king salmon on the high seas has brought the impact of factory trawlers home to the Bristol Bay, Cook Inlet and Southeast Alaska where rivers are prized for world-class sport fishing. During the first 3 months of the Bering Sea fishery this year, 28,000 juvenile king salmon were killed and thrown back. Another 31,000 were killed in the Gulf of Alaska.

- Bering Sea crab fishermen, starting their comeback after the crash of the king crab population in the early 1980s, are angry because trawlers are allowed to kill 200,000 of the highly sought crab and 4 million of the lower-priced tanner crab each year.

- The government's requirement that crab, salmon, herring and halibut be thrown back is viewed as market protection by some and waste by others. Critics say they would rather those species be sold, with the profits used to fund research to reduce waste.

- Onshore processing plants, providing jobs in Alaska's coastal communities, say they are mostly shut out by the Seattle-based factory trawlers. The feud has spawned a proposal that would require a 50-50 split between onshore and offshore processors.

Controversies are popping up faster than solutions can be found. "The tendency over the last few years is things seem to be getting more polarized, worse really," said Larkins of the American Factory Trawler Association.

Virtually nobody condones the waste. If the trawlers do not find a solution, the fisheries council may someday force action.

"I think we need to consider implementing a program that prohibits discards," Cotter said. "We may have to say 'If you catch it, you have to process it.'"

Trawlers could install meal plants to grind up the unsalable fish, creating fertilizer and animal feed, he said.

Discarding fish is more of a social or aesthetic problem than a threat to the species, Larkins said. It is popular to con-

demn the waste because there are starving people in the world, but none of those fish would make it to the struggling Third World countries that need them, he said.

"It's not as if those fish being thrown back are being taken out of somebody's mouth," he said. "They would never have had them in the first place."

Larkins said as long as there is no biological threat to the species, the waste is not a moral issue. It is similar to the waste in the timber industry or in vegetable farming, he said. "Whether or not you catch them and throw them back or leave them in the water in the first place, to me there's not much difference," Larkins said.

Other fishermen also discard fish, Larkins said. Halibut longliners commonly throw back cod and other species, he said. Longliners in Southeast Alaska cannot target king salmon without also snagging and wasting dogfish, he said.

Dr. Jim Brooks, deputy director of the National Marine Fisheries Service in Juneau, said nothing is wasted in the sea. Discarded fish become nutrients, fodder for other species in a complex food chain, he said.

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**UNTARGETED SPECIES** are thrown overboard in fisheries in Alaska waters, the Gulf of Mexico and the North Atlantic. "We could be talking about 3 (billion) or 4 billion pounds a year," said Harry Upton of the Center for Marine Conservation in Washington, D.C.

The Gulf of Mexico shrimp trawl fishery alone accounts for 1.1 billion pounds of unprocessed waste, he said.

"I think in fisheries we're looking at some extreme problems that have been neglected," he said. "It's not something people have taken up the cause for yet."

The combined political muscle of the fishing industry on both coasts has made change come slowly, he said.

The Magnuson Fishery Conservation and Management Act of 1976, which set up the American trawl fleet by putting all waters within 200 miles of the coast under U.S. control, spells out the process for regulating fisheries in federal waters.

The act, enforced by the National Marine Fisheries Service, requires regulators to consider biological, economic and social factors. The economic impact on the industry often overrides social concerns, Upton said.

"My feeling is we've shifted too far to

the benefit of the user groups and the public interest in some cases has been neglected," he said.

The Magnuson Act, after 14 years of practice, essentially "replaced foreign overfishing by domestic overfishing," concluded a report released April 1 by the Center for Marine Conservation. The act set high principles and showed promise for a well-organized U.S. fishery, the study said. But it has exacerbated U.S. fisheries problems, it concluded.

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**THE NORTH** Pacific Fisheries Management Council does not have the necessary staff to handle the many issues it faces, said Arni Thomson, director of the Alaska Crab Coalition. "And if the analysis doesn't get done, then who wins? The factory trawlers," he said.

United Fishermen of Alaska, the largest organization of commercial fishermen in the state, has asked the Department of Fish and Game to assist the council with its scientific analysis to speed up the process. Thomson is chairman of the group's Bycatch Committee.

Cotter said Alaska's bycatch problem is caused by fishermen who do not want their rivals on the high seas to profit by catching prohibited species. Their least-of-two-evils is to allow the valuable fish to be wasted.

"The reason is political," Cotter said. "That's all there is to it." Cotter said.

The millions of pounds of bycatch in Alaska waters is incidental to the 5-billion-pound quota of pollock, cod, sablefish and other bottomfish expected to be harvested this year. But to the crabbers, halibut longliners and salmon fishermen, it is money out of their pockets, Thomson said.

The crab fleet took in \$100 million last year by harvesting 4 million king crab. Trawlers discarded 300,000 king crab, most of them dead, worth about \$7.5 million. That directly reduced the amount of king crab Alaska fishermen could catch, Thomson said.

"We still don't think there is enough protection for king crab," he said. "King crab stocks are still depressed in the Bering Sea."

The Alaska bottomfish industry boomed in the 1980s after the crash of the king crab population. Crabbers harvested 20 million king crab in 1980. But the crab fishery collapsed in following years, providing a harvest of only 540,000 crab in

1982 before closing completely in 1983. Scientists still cannot explain the reasons for the steep decline in the population.

Crabbers turned their efforts to bottom fish and began delivering their catch to a well-established fleet of foreign processors. With the Magnuson Act backing them, the American trawl fleet mushroomed and forced out the foreign fleet.

The Seattle-based trawl industry, with an efficient fleet of 60 factory trawlers and four monstrous factory ships, quickly overwhelmed the fishery.

Industry officials say intense competition prompted some fishermen to cut corners and aggressively fish without regard to bycatch and waste. Conscientious processors move out of an area if they discover a large percentage of a bycatch species in a haul, they say.

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**THE DECLINE** of halibut stocks in the North Pacific since 1988 often is blamed on the trawler industry. The Bering Sea is the North Pacific's nursery for halibut and the decline of those fish coincides with the increase in trawler pressure.

The trawl fleet is allowed to take and throw back 11.6 million pounds of halibut in the Bering this year as it pursues its legal species. At an average of 3½ pounds each for juvenile halibut, the figure represents more than 3 million fish.

While critics blame trawlers, International Pacific Halibut Commission biologists say they believe the decline is a natural fluctuation. A complex formula compensates for the halibut killed by the trawlers and reduces the annual quota given to longliners.

Trawlers are not to blame for the drop, but their halibut bycatch will hurt the longliners more each year as numbers continue to dwindle, said Bob Crumble, senior biologist with the halibut commission. The available harvest of halibut statewide by 1996 may be below 25 million pounds, a third of the peak in 1988, he said.

"It may be that quantities available over the next four to five years could be fairly painful for people," Crumble said.

"We believe this natural downturn we see now is going to continue for several more years. We don't know how far the decline will continue or when it will begin back up again."

Greg Seider, director of United Fishermen of Alaska, said he is not so sure trawlers are innocent in the halibut decline.

"None of it is going down real well," he said. "It's really easy to say it's the trawlers, but prove it. That's the rub, because we really haven't seen the resources dedicated to really get a handle on it."

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**CRITICS** and defenders of the trawl fishery and the drawn-out regulatory process remain optimistic. Better technology, regulations and fishing methods, along with developing markets for fish now discarded could drastically reduce waste.

"I think we're still kind of new to the game and we're still trying to figure out a way to do it," said Bruce Buls, a spokesman for the American Factory Trawlers Association.

"We're looking for some mechanism to get the dirty fisherman out of the fishery, temporarily if not permanently."

Cotter and Larkins agree on the long-term solution. Both said they want a system that rewards efficient trawlers while penalizing those with a large bycatch.

The current system penalizes the entire fleet. When the bycatch limit for any prohibited species is reached in a given region, the entire fleet must quit fishing in that area. The system proposed by Cot-

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ter and Larkins would force offending vessels to sit out all or part of the season while their competitors continued fishing.

"The way I envision it, the dirty vessels will not be able to survive and will go bankrupt," Cotter said. "Eventually, we will have a rational fishery, but I think it will take five years to get there and in the process there will be a lot of bankruptcies."

Larkins said he would like to take what he calls the "penalty box" concept one step further, tying the bottom fishery to the shore-based halibut and crab fishery. Each of those fisheries would be closed to further entries, under one industry-sponsored proposal. Those grandfathered in to the program would receive a certificate giving them a set percentage of each year's allocation.

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A **TRAWLER** wanting to fish in halibut waters would have to buy a halibut allocation from longliners. The halibut would be processed and not thrown back, and the trawler would strive to make its halibut allocation last as long as possible by fishing the waters selectively.

"Once you get a certificate, if you want to expand your market, you go out and buy someone else's certificate," Larkins said. "This way the marketplace decides where the best benefit of these fisheries lies. You don't have to make political judgments.

"It's got to come down to where the individual fisherman has some kind of incentive to fish as cleanly as possible."

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**THE PROBLEM** is worldwide, although other countries have explored op-

tions for solving the problem. For example, New Zealand uses a trade-off program to reduce its high-seas waste problem.

Captains have the option of selling their bycatch to the government or paying to keep it, using a complex trade-off formula which takes into account the value and quotas of the target species, said Dr. Malcolm Haddon.

Haddon is a biologist with the Ministry of Agriculture and Fisheries in Auckland, a port on New Zealand's North Island. Trawler operators sort their catch and use separate freezers for different species, he said.

"The fishermen get a minimal price for bringing it in, but it encourages them to bring it in and not dump it," he said. The low price deters operators from targeting the bycatch species, he said. All transactions must be individually ap-

proved and the program is coordinated by computer.

"People monitor the bycatch trade to be certain that it's honest," he said. "It's not the answer to everybody's prayers, but it does avoid waste."

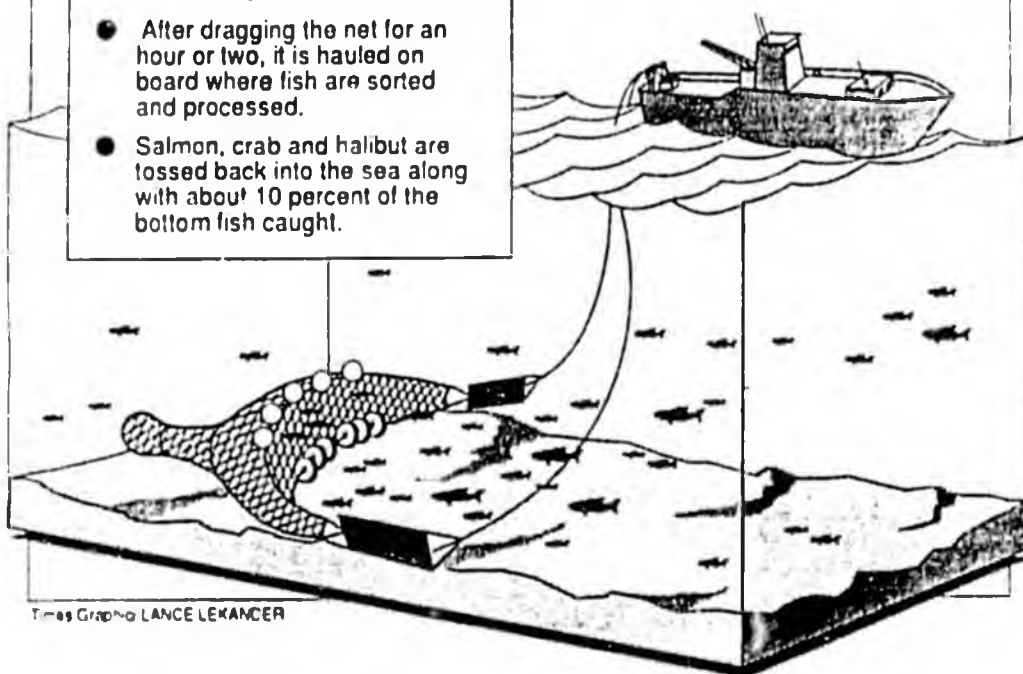
In New Zealand's peak season, 30 to 40 commercial boats fish offshore. Government observers are assigned to about half the boats to monitor the catch and stop operators from illegally transferring fish to another vessel.

Upton, of the Center for Marine Conservation in Washington, said he sees a hard fight ahead for the industry to find its balance in the Bering Sea fishery.

"In the Northeast, we fished the resource to hell," Upton said. "We haven't done that yet in Alaska, but the danger signals are there. I think we're going to solve these issues in time. Unfortunately, we're learning the hard way."

- Trawl nets roll on large, weighted wheels over the muddy bottom.
- Doors act like airfoils, pulling out the sides of the net and creating a mud screen that scares fish into the middle.
- Floats hold the mouth of the net open, creating a cone with an opening 200 ft. across.
- After dragging the net for an hour or two, it is hauled on board where fish are sorted and processed.
- Salmon, crab and halibut are tossed back into the sea along with about 10 percent of the bottom fish caught.

Factory trawlers crisscross the Bering Sea and the Gulf of Alaska catching and processing 5 billion pounds of bottom fish.



Times Graphic LANCE LEXANDER



Above, crew members aboard the F/V Silver Sea based in Chignik sort a Pacific cod haul. Vessels must return salmon, halibut and crab bycatch. Right, observers measure the sole, cod and pollock catch in a trawl net on the F/V Sulak.



PHOTOS COURTESY MANDY MERKLEIN

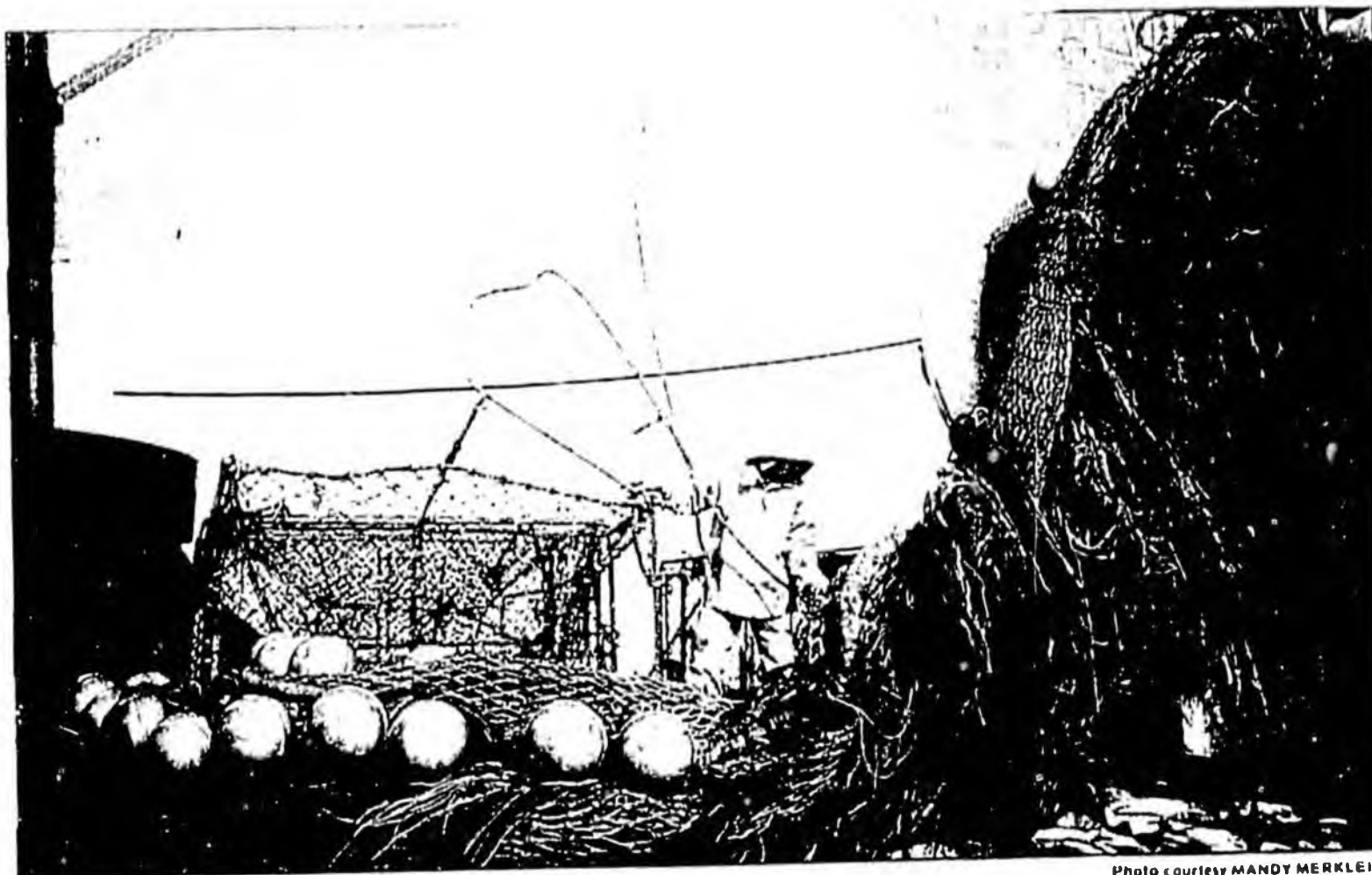


Photo courtesy MANDY MERKLEIN

A crew member on the F/V Silver Sea pulls a crab pot from a net. Crab pots caught in the nets reduce the catch.

4-7-91  
Times

## Bottom fishing takes toll on state's salmon

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By **JOE HUNT**

TIMES WRITER

Juvenile king salmon, most bound for Alaska's prized sport fishing rivers, have become the latest casualty of a trawler fleet raking the high seas for a billion-dollars' worth of bottom fish.

Trawlers fishing the Bering Sea north of Dutch Harbor have taken more than 28,000 kings in the first 3 months of the fishery this year, tripling the take during the same period last year. Another 31,000 kings have been caught in trawl nets in the Gulf of Alaska.

That could be just the tip of the salmon lost to the trawl fleets both in and outside of U.S. waters.

Another 60,000 to 200,000 salmon are thought to be intercepted in a unmonitored triangle of international waters between Alaska and the Soviet Union, according to federal estimates.

"People should understand clearly we have a very large salmon bycatch problem outside U.S. waters in the doughnut hole," said Larry Cotter, chairman of the Bycatch Committee for the North Pacific Fisheries Management Council.

Salmon is one of several species the fleet is prohibited from keeping. The management council allows the unintended catch of millions of pounds of halibut, herring, salmon and crab each year. By law, these are counted and tossed back. Most are killed in the process.

This bycatch is only a small percentage of the 5-billion-pound quota of pollock, cod, sablefish and other bottomfish expected to be harvested this year.

The high salmon kill has brought the impact of factory trawlers home to those Alaskans whose lives are tied to the annual return of world-class king salmon.

"I think they are nothing but high-seas pirates," said Tom Elias, president of the Alaska Sportfishing Association.

He said it makes the current dispute between setnet fishermen and Kenai River guides look insignificant. Shore-based set nets in Cook Inlet intercept thousands of Kenai River kings each year, prompting a feud over the best use of the 20- to 90-pound fish.

Recent returns to the Kenai River have been perilously low. Any further drop in numbers could force the setnet and sport fisheries to shut down to protect the run. But Elias said, "One factory trawler can do more damage in a week than all the setnetters could probably do in a season."

Sportfishermen have been screaming about the annual salmon kill for years, Elias said. It has long been documented that foreign factory ships in U.S. waters caught large numbers of salmon. But the American trawlers which took over the fishery did not face that same accountability until 1990 when observers were placed on U.S. vessels.

Alaska fisheries are proving complex and interwoven.

Getting to the bottomfish is not without a high cost in lost halibut, herring, tanner crab, king crab and salmon. Federal observers, placed on 286 factory trawler and longline vessels in the North Pacific last year, report the bycatch figures.

This is only the second year observers have been counting the salmon take from the domestic fleet in the Bering.

"We don't know if this year was some kind of anomaly or an annual occurrence," said Bruce Buis, spokesman for the American Factory Trawlers Association in Seattle. "We're hoping it was. We don't want to catch that salmon. We can't use them."

King salmon that otherwise would return to rivers in Bristol Bay, Cook Inlet or Southeast Alaska are instead being intercepted as juveniles far into ocean waters.

The dead fish, untargeted and unwanted, are discarded by the ton. Economic

studies have shown mature kings caught by sportsmen in the rivers can represent a few hundred dollars to more than \$1,000 each to the tourism industry.

Unlike the other prohibited species, there is no cap on the amount of salmon that can be caught and no incentive for trawlers to avoid catching them. Hitting the 11.6-million-pound halibut limit in the Bering Sea will force the entire fleet to shut down for the season in that region, but trawlers can fish freely among schools of salmon without threat of closure.

That needs to change, Elias said. "They're harvesting the fish by their most efficient means with total disregard for other species," Elias said.

Trawlers need a cap on salmon bycatch, forcing the industry to target bottom fish in a more calculated though less efficient way, he said.

Poor returns of king salmon have forced fishing closures in several Alaska rivers during the last few years, including the Kenai, Nushagak and Naknek rivers.

The declining runs, coupled with this year's high reported bycatch, has the state watching the trawl fleet closely, said David Carlile, the biologist who serves as Alaska's technical liaison to the North Pacific Fisheries Management Council. The council regulates the seasons, fishing methods and limits in the bottomfish industry. State biologists have only an advisory role in the federal fishery.

The salmon bycatch created such a stir that the Alaska Board of Fisheries asked the council to place an immediate ban in the region north of Unalaska where most of the salmon were caught. The move was mostly symbolic, Carlile said.

By the time the fisheries board made its request, trawlers had already moved on to fish in other areas, he said. It did, however, add emphasis to the state's concern. Placing a cap on the salmon bycatch will undoubtedly be one of many suggestions forwarded by the state to the council, he said.

Another answer would be to roll the season back a month, he said. About 60 percent of the king salmon were caught

in the first two weeks of the season which began Jan. 1. Salmon are most vulnerable in the deep sea fishery during the winter months, he said.

"If you roll the start of the fishing season to February, that may well reduce the catch of chinook (kings)," Carlile said.

In the Gulf of Alaska, the king catch remained low throughout the winter and skyrocketed from 5,000 to 31,000 in March.

Buls said the industry may support a later start to the season, but does not like the idea of another bycatch quota. The cap system promotes reckless fishing practices, Buls said.

The trawling association would like to see the system replaced with one that

penalizes individual boats for overfishing the bycatch species rather than one that shuts the entire industry down.

"We're looking for something to get the dirty fisherman out of the fishery, temporarily if not permanently," he said.

"Everyone's desperate to get in as much fishing as they can before the bycatch shuts the fishery down. So screw it, they fish all they can," he said. The dirty fisherman "thinks 'I'm going to make hay while the sun shines.' That's the problem," he said.

The trawl fleet may be just one of many factors in the reduced king salmon returns, Carlile said. This year's high salmon bycatch may also be nothing more than an indicator of a large return to come.

A large salmon bycatch in past years was followed two years later with high salmon returns to some Alaska rivers, he said. He admitted, however, that the evidence is sketchy at best.

Scientists are studying the scale patterns of the salmon and doing genetic analysis to determine which rivers the kings were from. Scale patterns from salmon caught by the foreign fishing fleet in the late 1970s showed 60 percent of Bering Sea kings were from western Alaska, 17 percent from Southcentral rivers and 9 percent from the Southeast.

Tagged salmon were retrieved from ships in the Gulf of Alaska throughout the 1980s. The majority came from Southeast Alaska rivers, while several came from Cook Inlet.

## Total catch of bottom fish discarded

Listed by species as of March 17, 1991; only the Bering Sea

SPECIES	TOTAL RETAINED	TOTAL DISCARDED
Arrowtooth Flounder	110,000	5,284,400
Atka Mackerel	24,549,800	1,786,400
Greenland Turbot	52,800	539,000
Other Flatfish	1,716,000	13,875,400
Other Red Rockfish	46,200	6,600
Other Rockfish	114,400	495,000
Pacific Cod	563,200	7,037,800
Pacific Ocean Perch	116,72,000	5,207,400
Other species	930,600	926,200
Pollock	1,150,296,400	68,637,800
Rock Sole	30,665,800	30,742,800
Sablefish	1,108,800	11,000
Squid	30,800	189,200
Yellowfin Sole	81,400	7,436,000

### BYCATCH CAPS FOR TRAWL FISHERIES

	Halibut	Herring	Red King Crab	Tanner crab
Bering Sea	11.6 million lbs.	1.8 million lbs.	200,000	4 million lbs.
GOA	4.4 million lbs.	N/A	N/A	N/A

SOURCE: North Pacific Fisheries Management Council

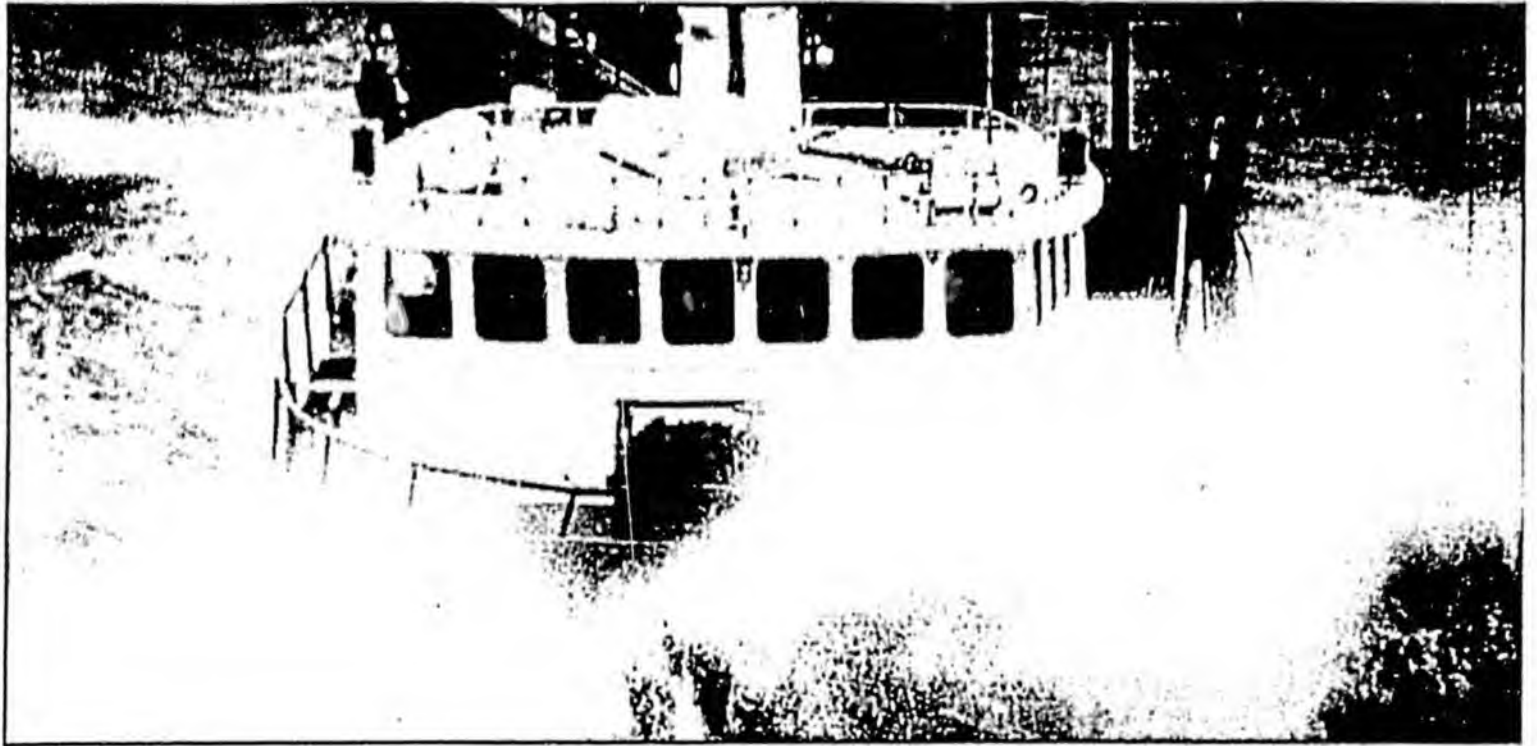
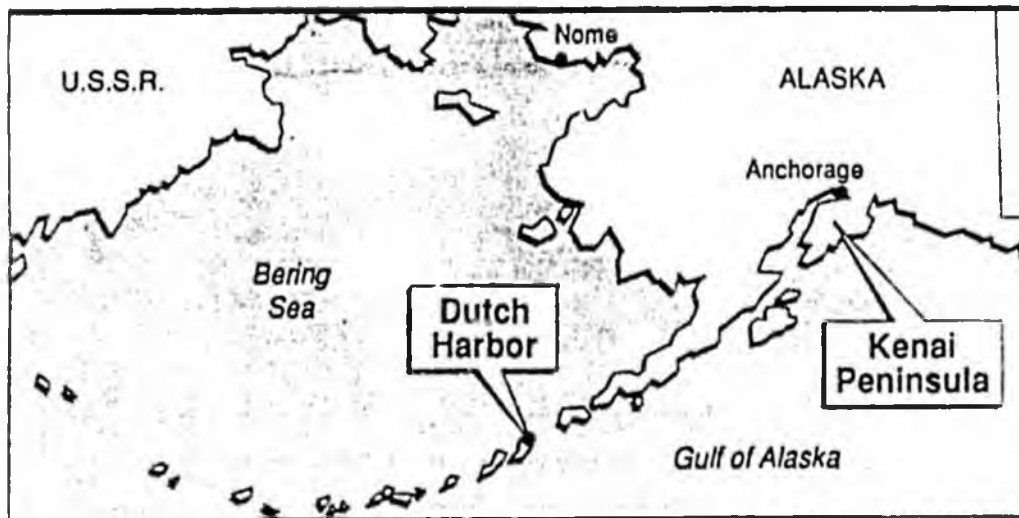


Photo courtesy MANDY MERKLEIN

A small bottom trawler targeting yellow fin sole is pictured in the rough Bering Sea. This fishery is often closed early in the season because of the large bycatch of crab and halibut.



# Trawlers take heavy toll on king salmon

THE ASSOCIATED PRESS

**ANCHORAGE** - Trawlers in the Bering Sea and the Gulf of Alaska have killed about 64,000 king salmon as bycatch already this year, more than double the number they discarded in 1990, and fishery managers are calling for emergency action.

"Those numbers are absolutely unacceptable," said Rick Lauber, chairman of the North Pacific Fisheries Management Council, which regulates the trawler industry.

"No one is going to argue that point. I can't say what we are going to do about it, but I know if there is something we can do legally this

year, we will."

The council meets again the week of April 21 in Kodiak.

"We all knew this was coming and I am furious that nobody ever did anything," said Clem Tillion, a council member and special fisheries assistant to Gov. Walter J. Hickel. "We are going to raise hell. This is the fourth year they have been hammered."

The Alaska Factory Trawlers Association was at a loss to explain the big increase.

"This just came up last week," said Bert Larkins, executive director

Please turn to Trawlers, Page 8

## Trawlers...

Continued from Page 1  
of the Seattle-based group. "We certainly are scratching our heads. I sure can't give you any reason."

But Steve Penoyer, regional director for the National Marine Fisheries Service, said the numbers are high when compared to last year but are not higher than past years.

This is only the second year regulations have required full-time observers on large trawlers. But regulators have bycatch figures dating back to 1977, when most of the trawlers were operated by foreign and joint ventures, and observer numbers were not systematically kept.

The record high of 114,790 king salmon killed as bycatch was reported in 1980 for the Bering Sea. Four years later, an estimated 74,360 salmon were reported thrown overboard in the Gulf of Alaska. King salmon have a lifespan of up to seven years, so rivers may just now be feeling the impact of the 1984 deaths.

Before the 1978 Magnuson Act, which gave control of waters within 200 miles of the coastline to the United States, bycatch numbers were "markedly higher," said Dave Carlisle, a state Fish and Game Department biometrician.

Because some of the dead fish this year were tagged, scientists can trace their origins to rivers across the Pacific Northwest.

One fish was from the Upper Snake River in Idaho, Tillion said. Others were from waterways in

Washington, Oregon, California and Alaska. Tagged fish from Halibut Cove and the Crooked Creek Hatchery, both in Cook Inlet, were found.

Emergency actions could include shutting down the trawlers or curtailing their fishing. That may be premature, Penoyer said, until the reports filed by observers are analyzed or the cause of the increase pinpointed.

Even without emergency action, the council is expected to adopt regulations for the 1992 season that would cap the number of king salmon killed by trawlers, but sport fishermen want slaughter stopped now.

"This has been going on for years," said Tom Elias, president of the Alaska Sport Fishing Association. "There has been a drop in the production of king salmon. There are just less coming back every year because the giant trawler fleets are getting more efficient and more effective."

Last year, the Kenai River was closed to all but catch-and-release fishing the last four days of July because sonar readings showed the target number of 19,000 spawning salmon was 500 short, said Loren Flagg, executive director of the Kenai Peninsula Fishermen's Association, which represents setnet fishermen.

The trawlers, which inadvertently

scoop up halibut and salmon in their quest for bottomfish like pollock, use huge nets on or near the bottom of the sea. Regulations require them to throw the salmon and halibut back because they would glut the fish market if sold. Few survive.

Limits have been set on how many halibut the trawlers can destroy, but there is no such limit for salmon.

The salmon bycatch numbers began high in the Bering Sea with the start of the trawler season in January. By early April, about 29,000 salmon had been thrown overboard.

By mid-March, the trawlers reached their limits for bottomfish and halibut and began migrating to the Gulf of Alaska to join other trawlers there. About the same time, the bycatch number for salmon in the Gulf skyrocketed.

Preliminary figures show that by early April, an estimated 35,000 salmon had been killed there. State biologists still are awaiting some of the observers' reports, but made projections on current patterns.

In Juneau, a resolution has passed in the Alaska Senate and will be considered by the House next week calling for both emergency action and regulations for the 1992 trawler season that would save more king salmon.

# Northwest lawmakers criticize U.S. driftnet policies

By SCOTT SONNER

THE ASSOCIATED PRESS

WASHINGTON — Reps. Jolene Unsoeld and Peter DeFazio are attacking the Bush administration's stand on driftnet fishing but U.S. negotiators say the critics are ignoring studies being made to drive the nets from the North Pacific.

Unsoeld, D-Wash., said the United States is standing idly by while driftnet fishermen from Japan, Taiwan and Korea use the "30 mile-long curtains of death" that destroy hundreds of thousands of salmon, marine mammals and seabirds.

The United Nations will invoke a ban on driftnets in June 1992. But Unsoeld wants President Bush to seek his own international moratorium because the U.N. plan has too many loopholes.

Unless Congress and the administration keep the pressure on these countries, they will look for an "out." This wasteful and destructive prac-

tice will live on — and the senseless killing will go," she said in a House floor speech last week.

The nets are used primarily by Asians to harvest squid. But critics say the nearly invisible, mesh monofilament nets act as a vacuum indiscriminately stripping the ocean of seabirds, dolphins, turtles and tuna.

Unsoeld and DeFazio, D-Ore., blasted a new driftnet agreement the U.S. has reached with Taiwan because it reduces the number of U.S. observers counting the catch on Taiwanese driftnet vessels.

Administration officials and an aide to Rep. John Miller, R-Wash., said they were surprised by the criticism.

In making public the agreement, Miller praised the deal for strengthening safety requirements for the observers and improving their access to the vessels. But Unsoeld press secretary Doug Levy said Miller appar-

*'The Japanese are not only strip mining the ocean with their nets, they are stealing our salmon.'*

— Rep. Peter DeFazio, D-Ore.

ently was trying to find some good news in a bad deal from a Republican administration.

Larry Snead, director of the Office of Fisheries Affairs for the State Department's Bureau of Oceanic, International Environmental and Scientific Affairs, said a reduction in the number of U.S. observers from 14 to 11 will have no effect on driftnets.

"That's hogwash," said DeFazio, D-Ore. "The administration is allowing them to deploy their fleet with less observers as if this is not a con-

tinuing problem.

"The Japanese are not only strip mining the ocean with their nets, they are stealing our salmon," he said.

Ruddy Moscoso, a spokesman for the National Marine Fisheries Service, is pleased with the steps being taken to halt driftnetting and said the charges from Unsoeld and DeFazio are unfounded.

"If the criticism is that the agreements have not been in our best interest or have not been done in good

faith or as well as they could have been, we feel the charge is not accurate," Moscoso said Friday.

"We think the agreements have been effective and continue to be effective," he said. "It certainly is not the intent of the United States to require or lead a charge to dismantle another country's fishery without assessing the impacts of the fishery."

Moscoso refused to answer directly when asked if he felt the Northwest lawmakers were trying to play on an emotional issue by continuing to hammer the administration's position on driftnets.

"I can't really say anything about that, but that is a pretty fair assumption," he said.

Ray Sanders, a senior staff person for the American Institute in Taiwan, said Taiwan should be commended for taking its own steps to cut the size of its driftnet fleet by denying new driftnet licenses, buying

back existing licenses and buying back driftnet vessels.

"Now they have to have transponders on their vessels. They are subject to inspection by authorities and the U.S. Coast Guard, they are eligible to have scientific observers on their decks and then there's the sheer economics of it. A lot of these guys are involved in tuna fishing and the canners are not taking tuna from drift netters because they can't be assured it is dolphin safe," Sanders said.

The United States cut off direct diplomatic relations with Taiwan in 1979 so the AIT, a private non-profit corporation, conducts negotiations on behalf of U.S. officials.

Sanders said the new enforcement tools in the agreement with Taiwan "more than offset" the cut in observers. He said the number of Taiwanese driftnet vessels has dropped from about 200 to approximately 130 over the past few years.

Resolution 1237-R

A RESOLUTION SUPPORTING THE ALASKA LONGLINE FISHERMAN'S ASSOCIATION (ALFA) REQUEST THAT TRAWLING BE PROHIBITED IN THE GULF OF ALASKA EAST OF 140 DEGREES WEST LONGITUDE.

Whereas, the Stellar sea lion populations in the Eastern Gulf are stable and possibly increasing. Evidence suggests that trawling may be implicated in the precipitous decline of Stellar populations in all other parts of their range. The Stellar Sea Lion Recovery team has indicated the critical importance of comparing the effects of various fisheries on sea lion populations. Designating the Eastern Gulf a trawl-free zone will provide an ideal laboratory for researchers to conduct comparison studies; it will also provide maximum protection to the one area in which Stellar populations remain healthy.

Whereas, the Eastern Gulf has been a hook and line zone for close to 100 years. Most fisheries are fully utilized by the hook and line fleet and have been since 1983 or before. The intended level of effort by factory trawlers in the Eastern Gulf this spring is unprecedented, but can only be expected to increase given the extent to which the factory trawl fleet is overcapitalized. The expansion of the trawl fleet into waters of the Eastern Gulf will place undue pressure on fish stocks and displace traditional users.

Whereas, the foreign trawl fleet decimated slope rockfish stocks during the 1960's, an attack from which stocks in the Eastern Gulf have not yet recovered. Rougheye and shortraker rockfish stocks also remain depressed. Now the American factory trawl fleet is threatening the same rockfish stocks. The 1991 allowable biological catch (ABC) and the total allowable catch (TAC) for rougheye/shortraker in the Eastern Gulf is only 580 metric tons; according to the new federal definition of "overfishing", if the ABC is reached or exceeded all fisheries having an impact on the "overfished" stock will be closed--in other words, the Eastern Gulf longline sablefish fishery could be cancelled before it is opened. Since rockfish are long-lived (up to 100 years), have a low rate of production, and are area-specific, NMFS' solution of "borrowing" rockfish quota from the Central Gulf is short-termed at best. Rockfish stocks are highly vulnerable to exploitation and should not be subject to increased fishing pressure.

Whereas, at the recommendation of the International Pacific Halibut Commission, the North Pacific Fishery Management Council postponed the longline sablefish fishery until May 15, 1991 to reduce halibut bycatch. Factory trawlers, with a 100% halibut bycatch mortality rate, intend to target grey cod this spring in the Eastern Gulf (retaining their allowed 15% sablefish bycatch).