ALASKA LEGISLATURE COMMITTEE FILES 1997-1998 8672

9693 SENATE RESOURCES

# HJR

# 34

# SENATE COMMITTEE REPORT

DATE: 4/18/97

FURTHER:

DATE TURNED IN TO OFFICE: 4/28/97

Resources Committee considered HOUSE JOINT RESOLUTION NO. 34

Relating to proposed regulations of the North Pacific Fishery Management Council creating a new discriminatory halibut fishery in Alaska.

and recommends:

[ ] be **replaced** with _____ CS _____(_____)

[ ] adopt **previous** _____ CS _____(_____)

[ ] attached amendment(s)

[ ] adopt Letter of Intent by _____ Committee

[ ] further referral to the _____ Committee

**Senate Bill:**
[ ] same title
[ ] new title

**House Bill:**
[ ] same title
[ ] technical change
[ ] new: SCR#_____

| *SIGNING DO PASS* | *DP* | *OTHER RECOMMENDATIONS* | *NR* | *DNP* | *AM* |
|---|---|---|---|---|---|
| Hakin L. Taylor | ✓ | | | | |
| Drew D. Brian | ✓ | | | | |
| Lyda Green | ✓ | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| *CHAIR:* Rick Halford | ✓ | *CHAIR:* | | | |

**NEW FISCAL NOTE(S):**

| Department | Date | Zero | Fiscal |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**PREVIOUS FISCAL NOTE(S):***

| Department | Date | Zero | Fiscal |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**[ ] APPROPRIATION -- no fiscal note**

***Include fiscal notes accompanying Governor s bill**

# ALASKA STATE LEGISLATURE

House of Representatives
Special Committee on Fisheries

## HJR 34
## PROPOSED NPFMC HALIBUT SUBSISTENCE REGULATIONS

## SPONSOR STATEMENT

The North Pacific Fishery Management Council (NPFMC) was recently requested to create a new fishery for halibut in state and federal waters off Alaska. This request was partly initiated in response to recent enforcement problems associated with retention of undersized halibut and use of illegal gear. In December on 1996, the Council initiated the regulatory process which included several management options. A Council newsletter indicated that revised regulations likely would be implemented in 1998.

The proposed management options are attached to this statement.

Halibut are regulated in the North Pacific through the International Pacific Halibut Treaty, which created the International Pacific Halibut Commission, and the Northern Pacific Halibut Act of 1982, which clarified the responsibilities of the Halibut Commission and the Council. The 1982 Act indicated that the basic responsibility of the Commission is to maintain the health of the resource by evaluating available biological data and establishing management goals and area quotas. The NPFMC was authorized to establish regulations within the guidelines of the Halibut Commission for the harvesting of halibut. Recommendations and regulations proposed by both the Halibut Commission and the Council require concurrence by the Secretary of Commerce.

Neither the Halibut Commission nor the Council have ever identified a specific subsistence halibut fishery. Throughout most coastal areas, the taking of halibut for personal consumption has been taken under the recreational fishery regulations or as halibut retained during a commercial fishery. The recent establishment of halibut IFQ's has resulted in less opportunity for those who do hot have an IFQ to utilize commercial gear for harvesting for personal consumption.

Room 434, State Capitol, Juneau, Alaska 99801-1182 (907) 465-4230 or 465-2487 Fax 465-4956

This resolution promotes modification of existing regulations under the authority of the NPFMC to allow the creation of special areas, methods and means and bag limits to provide ample opportunity for Alaskans to harvest halibut for personal consumption. This resolution does not favor the creation of a new fishery which violates the basic principles in Alaska's Constitution regarding common use and access to Alaska's resources. This resolution opposes the NPFMC adoption allocation regulations based on race or residency.

This resolution also expresses grave concern that this unilateral action by the Council could result in further erosion of Alaska's jurisdictional authority by expanding an already contested federal preemption effort embodied in Title VIII of ANILCA. Particular concern is expressed over the possible creation of a new commercial fishery under the guise of subsistence harvesting -- one of the options being considered by the Council.

We contend that the Council can accommodate special area needs for regulatory exceptions without dismantling the existing allocation framework and without creating a new fishery.

# FISCAL NOTE

No. 1
Bill Version: HJR 34
(H) Publish Date: 4/9/97

TATE OF ALASKA
97 LEGISLATIVE SESSION

BILL NO.

Dept. Affected Legislative Affairs Agency
BRU: ALL
Components: ALL
Serial #

itle: Relating to proposed regulations of the NPFMC creating a new discriminatory halibut fishery in Alaska

ponsor: House Special Committee on Fisheries
equestor: House Special Committee on Fisheries

XPENDITURES/REVENUES: (THOUSANDS OF DOLLARS)

| PERATING | FY 98 | FY 99 | FY 00 | FY 01 | FY 02 | FY 03 |
|---|---|---|---|---|---|---|
| ersonal Services | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| ravel | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| ontractual | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| upplies | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| quipment | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| and & Structures | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| rants, Claims | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| iscellaneous | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| OTAL OPERATING | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| APITAL | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| EV UE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

UNDING: (THOUSANDS OF DOLLARS)

| | | | | | | |
|---|---|---|---|---|---|---|
| eneral Fund | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| ederal Fund | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| ther | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| OTAL | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

OSITIONS:

| | | | | | | |
|---|---|---|---|---|---|---|
| ull-Time | 0 | 0 | 0 | 0 | 0 | 0 |
| art-Time | 0 | 0 | 0 | 0 | 0 | 0 |
| emporary | 0 | 0 | 0 | 0 | 0 | 0 |

NALYSIS: (ATTACH A SEPARATE PAGE IF NECESSARY)
ee attached analysis

Prepared by: Representative Bill Hudson
Co-Chair, House Resources Committee

Date: April 7, 1997
Phone: 465-6820
Phone:

Motion Suggested By Legislature
Adopted as third option

Proposed Motion

**Propose New Alternative 3: Provide for Personal Consumptive Use of Halibut Within Existing Regulatory Framework.**

**Option 1: Define Legal Gear**

**Sub-option A: Number of hooks per line.**

**Sup-option B: 1-3 Skates up to 60 hooks each**

**Sub-option C: Any gear type**

**Option 2: Modify Legal Gear**

**Sub-option A: Statewide**

**Sub-option B: By Halibut Quota Area**

**Sub-option C: By Sub-Area**

**Option 3: Define Minimum Size of Halibut**

**Sub-option A: No minimum size shall be imposed for personal use.**

**Sub-option B: Revise the commercial halibut minimum size regulations to allow the retention of halibut under 32 inches caught with authorized commercial halibut gear in area 4E for personal use.**

**Option 4: Allow Trade and Barter of Personal use Halibut**

**Sub-option A: Trade and Barter allowed**

**Sub-option B: Trade and Barter not allowed**

*Halibut Subsistence*

As a result of increased IFQ and CDQ enforcement efforts in coastal communities, Native Alaskans requested that the Council take action to allow for the legal harvest of halibut for subsistence. In December 1996, the Council appointed a Halibut Subsistence Committee to provide recommendations to the Council. In February 1997, the Council received the report of the committee and initiated a regulatory amendment that would include the following management options for analysis. Revised regulations likely would be implemented in 1998.

OPTION 1. Define subsistence.

Halibut subsistence regulations are needed to allow the continued practice of long-term customary and traditional practices of fishing halibut for food for families in a non-commercial manner for non-economic consumption. Subsistence is defined as 'non-commercial fishing for food.'

OPTION 2. Define eligibility for halibut subsistence.

Suboption A. Members of Alaska Native Federally-recognized Tribes with customary and traditional use of halibut. (Subsistence Committee definition)

Suboption B. Alaska rural residents as defined in ANILCA and identified in the table entitled 'Alaska Rural Places and Native Groups with Subsistence Halibut Uses,' and will also include other communities for which customary and traditional findings are developed in the future. (ANILCA definition)

Suboption C. Tribal members and non-Native permanent residents of Native villages who have legitimate subsistence needs. (Migratory Bird Treaty Act definition)

OPTION 3. Define legal gear.

Legal halibut subsistence gear is defined as (1) hook-and-line gear (including set and hand-held gear) with a range of 10 hooks, 30 hooks, and 60 hooks and (2) rod-and-reel gear. An individual would be limited to one skate of gear up to 1,800 ft long (not including the buoy line), with hooks set 18-20 ft apart, with a legibly marked buoy.

Suboption. Allow Tribal governments to contract with NMFS to register designated fishermen to fish for the community using:
A. 1 - 3 skates of gear, up to 60 hooks each
B. any gear type

OPTION 4. Define minimum size.

Suboption A. No minimum size be imposed for subsistence harvests of halibut.
Suboption B. Revise the commercial halibut minimum size regulations to allow the retention of halibut under 32 inches caught with authorized commercial halibut gear in Area 4E for subsistence use.

OPTION 5. Allow the customary and traditional trade of subsistence halibut.

Suboption A. Allow the customary and traditional trade of subsistence caught halibut.

Suboption B Allow the barter of subsistence caught halibut, limited to an annual amount (1) $200, (2) $400, or (3) $600

Allow low monetary, non-commercial sale of halibut to legalize current practice of compensating subsistence fishermen for fuel or other fishing expenses in exchange for fish. The analysis would define 'barter,' 'non-commercial,' 'low monetary value,' and 'customary trade' and analyze the enforcement and monitoring costs of allowing barter.

OPTION 6. Sale of subsistence halibut.

Suboption A. Allow the commercial sale of subsistence-caught halibut.
Suboption B. Prohibit the commercial sale of subsistence-caught halibut.

OPTION 7 Collect subsistence harvest estimates through cooperative agreements with Tribal, State, and Federal governments.

Staff contact is Jane DiCosimo.

## Halibut Charter Boat Management

The Council reviewed a draft analysis of management alternatives for the guided halibut sport fishery (charter boats, lodges, and outfitters) prepared by Council staff and the University of Alaska's Institute for Social and Economic Research (ISER). After reviewing the draft analysis, and hearing testimony from charter boat representatives and other industry members, the Council directed staff to conduct further analysis and bring the document back for review at the April meeting in Anchorage. A final decision has been postponed until the June meeting in Kodiak. The primary alternatives being considered by the Council remain: (1) status quo - no action; (2) implementation of a system of recordkeeping and reporting for the charter fleet; (3) a moratorium on further entry into the charter fishery; (4) a cap on the amount of halibut allocated to the guided sport fishery, either statewide or by more specific management areas (an explicit percentage allocation of the quota between guided sport and commercial halibut fisheries, with the option for IFQ purchase by the charter vessels in the event of a fishery closure); and, (5) any combination of the alternatives listed above.

Between now and April, further analysis of these alternatives will be performed, with attention to the following items identified by the Council:

1. Evaluation of the changes in non-guided catches of halibut and the potential impacts of guided and commercial catches on non-guided anglers as identified in the problem statement.

2. Additional model runs (allocation projections) based on a long-term average halibut biomass/quota projection - this will be determined in consultation with IPHC staff.

3. A review of recreational fisheries managed under a cap and the experience of those fisheries with measures designed to extend seasons.

4. Inclusion of economic multipliers (input/output model) to evaluate the economic impact of commercial fishing beyond ex-vessel price to the end-user level.

5. Expansion of the discussion (as much as possible) of how the alternatives relate to Executive Order 12962 "Recreational Fisheries Considerations."

# Alaska State Legislature

**Senator Mike Miller**
**President of the Senate**

During session:
PO Box 55004
North Pole, AK 99705
voice: (907) 488-0862
fax: (907) 488-4271

During session:
State Capitol
Juneau, AK 99801-1182
voice: (907) 465-4976
fax: (907) 465-3883

**Representative Gail Phillips**
**Speaker of the House**

During session:
State Capitol
Juneau, AK 99801-1182
voice: (907) 465-2689
fax: (907) 465-3472

During session:
PO Box 1168
Homer, AK 99603
voice: (907) 235-2921
fax: (907) 235-8824

March 26, 1997

Post-it™ brand fax transmittal memo 7671 | # of pages ▸

| | |
|---|---|
| To Amy | From |
| Co. | Co. |
| Dept. | Phone # |
| Fax # | Fax # |

Mr. Richard B. Lauber, Chairman
North Pacific Fishery Management Council
605 West 4th Avenue, Suite 306
Anchorage, AK 99501-2252

Dear Mr. Lauber:

The Alaska State Senate and House leadership have been recently appraised of the proposed North Pacific Fishery Management Council (NPFMC) halibut regulations which will be considered at your upcoming April meeting. The leadership of both the Alaska State Senate and House are extremely concerned about the regulatory options being presented for possible adoption.

From the perspective of the legislature, these proposed regulations are going to further polarize an already divided citizenry regarding special subsistence allocations or provisions. As you are undoubtedly aware, the Lt. Governor, the legislature and Alaska's Congressional delegation have been searching for ways to resolve the growing crisis situation evolving over the implementation of the federal subsistence priority on federal public lands. Alaska is now faced with potential federal preemption regulations over much of our state lands and waters, including state navigable waters. These regulations have sufficed to escalate the apprehensions of Alaskans and to increase tensions amongst Alaskans throughout the state.

It is clear that many aspects of the proposed halibut regulatory options were patterned after provisions in ANILCA, many of which have been identified as unacceptable and in need of change by both the legislature and the Lt. Governor. Alaskans have been united in their stand against racially described qualifying criteria for any allocation of Alaska's resources. There has also been strong public support for prohibiting any commercial sale of subsistence caught resources. Both of these controversial issues are at the heart of the proposed halibut subsistence regulatory options being presented by the Council.

We have a request for additional information and for permission to address the Council on this subject at its upcoming April meeting. It would be helpful if you or your legal counsel could provide us with answers to the following questions:

1. Under what authority can the NPFMC, which is not identified in the Halibut Treaty, adopt the proposed regulatory options which are in conflict with our State's Constitution?

2. Under what authority can the Council adopt allocation criteria based on race which are in conflict with the State's Constitution?

3. Under what authority can the Council adopt allocation criteria based on residency?

4. If the Council has the authority to adopt these regulations for a halibut subsistence fishery, is it logical to presume that the Council could do the same thing for king crab, tanner crab, groundfish and some salmon species which are harvested primarily in the EEZ?

5. How and why would the Council consider adopting regulations in total conflict with Alaska's Constitution?

6. Is the Council aware that the adoption of these regulations will result in the inability of the State to assist in any enforcement of regulations which are in violation of the State Constitution?

7. Why didn't the Council consider additional option to include doing nothing?

8. Why didn't the Council consider an additional option under Option 2 to include eligibility for taking halibut under personal consumptive use regulations making it applicable to any Alaskan?

9. Why didn't the Council consider accommodating these type of uses through existing seasons, bag limit and methods and means adjustments rather than creating an entirely new fishery?

10. How will this new fisheries quota affect existing area allocations?

The leadership of the Senate and House would like to testify at the upcoming hearing in Anchorage. One of us will present testimony on behalf of the Senate and House majorities. It would be beneficial for us if we could schedule a specific time for that presentation so that we are not away from the legislature for a protracted period of time. Your assistance in scheduling an appropriate time for the Council would be appreciated.

We all encourage the Council to progress slowly and deliberately on this issue and not take any actions that would result in further social or resource use conflicts. Quite

frankly, we would strongly urge the Council to delay the creation of any special subsistence regulations until Congress and the State have crafted a long term and permanent solution to the existing crisis. We are convinced that the adoption of any of the proposed options is only going to contribute to a further erosion of the state's fisheries management jurisdictions.

Sincerely,

Mike Miller
President of the Senate

Gail Phillips
Speaker of the House

MM/GP:rjs

cc: The Honorable Senator Ted Stevens
The Honorable Senator Frank Murkowski
The Honorable Representative Don Young
The Honorable Governor Tony Knowles

# MEMO

Dt: 3/13/97

To: Senate/House Leadership

Fr: Ron Somerville

Re: NPFMC Subsistence Halibut Proposals

The attached material includes a North Pacific Fisheries Management Council set of regulatory options for implementing a subsistence halibut fishery in Alaska and the Halibut Subsistence Committee's report to the Council.

The reason for bringing this to the attention of the leadership is to advise you of the expanding subsistence conflicts, despite the fact that Title VIII of ANILCA does not extend to federal waters beyond the state's territorial sea. In addition, this proposal will inevitably set in motion new procedures for creating new subsistence allocations and potentially the commercial sale of subsistence caught resources within the EEZ.

If the leadership wishes to express a position on this issue to the NPFMC, it needs to do that before the April meeting.

**Problems:**

1. There is questionable authority for the NPFMC to adopt a racially defined regulatory allocation system.

2. ANILCA subsistence provisions do not extend to federal waters in the EEZ.

3. It is questionable that the adoption of a halibut subsistence regime by the NPFMC will end the subsistence debate. Conceptually, this system will expand to cover all qualified subsistence users and subsistence resources.

4. Some of the data used to justify and identify this fishery are flawed and discriminate against the majority of Alaskans.

5. This creates the potential for the establishment of a commercial market of subsistence caught resources similar to that created in ANILCA.

6. If the Council can adopt this system for halibut, it only seems logical that similar systems can be created for tanner crab, king crab, groundfish and possibly some salmon.

7. At present, the state assists in the enforcement of halibut regulations through the state courts as the Board of Fisheries adopts the halibut regulations by

reference. The State Constitution, however, does not allow discrimination based on race, as is being proposed by the Council. This will create serious enforcement problems throughout the state coastal areas as NMFS enforcement abilities are severely limited.

8. The problems which led to these regulatory problems can more easily and less contentiously be handled by modifying existing regulations (i.e. retention of undersized commercially caught halibut for personal consumption and regulatory changes for specific areas allowing special seasons for specialized methods and means of harvesting for personal consumption).

**Options:**

1. Do nothing.

2. Support all or portions of the proposed subsistence proposal.

3. Oppose the creation of any subsistence halibut system based on race or residency.

4. Request that the NPFMC delay any creation of a new subsistence fishery until some resolution is reached on the conflicts between the federal government and the state over continued state management and potential changes to ANILCA.

5. Provide testimony for the April meeting of the NPFMC suggesting that the Council pursue regulatory changes which provide additional opportunities for harvesting and retaining halibut for personal consumption.

# North Pacific Fishery Management Council

Richard B. Lauber, Chairman
Clarence G. Pautzke, Executive Director

Telephone: 907-271-2809

605 West 4th Avenue, Suite 306
Anchorage, AK 99501-2252

Fax: 907-271-2817

#1-97 NEWSLETTER 2/18/97

***Please, note our NEW home page address!***

NPFMC — *http://www.fakr.noaa.gov/npfmc/npfmc.htm*

## February Council Meeting in Anchorage - 126th Plenary Session

The Council's February meeting was kicked off by a joint meeting on February 4 with the Alaska Board of Fisheries. The Board and Council met to discuss groundfish and crab management issues in the waters off Alaska. Details of this and other issues are provided below.

## Council and Board Ink Protocol

The Council and the Alaska Board of Fisheries have been seeking ways to keep each other informed on cross-jurisdictional issues that impact fisheries in State and Federal waters. In December, after a conference call concerning the Board's latest actions to initiate a State waters Pacific cod fishery in the Gulf of Alaska, both bodies decided it was time to establish a joint committee to develop a protocol for future interactions. The joint committee met in January and then presented their recommended protocol to both bodies. The Board approved it at their late January meeting, and the Council approved the protocol at their meeting last week, after discussions with the Board on Tuesday, February 4.

The protocol covers all fisheries where there are cross-jurisdictional concerns. The Board and Council will meet annually in Anchorage in February to cover all issues of mutual interest. In the meantime, a joint committee composed of three members from each body will meet more often, perhaps quarterly if necessary, to work through issues of mutual concern and keep each other posted on management initiatives by the other. They will also sift through management proposals to determine which might be of interest to the other body. The intent of the protocol is to provide long-term cooperative, compatible management systems that maintain the sustainability of the fisheries resources in State and Federal waters. A copy of the protocol is available at the Council office.

*IN THIS NEWSLETTER*

# REPORT
# HALIBUT SUBSISTENCE COMMITTEE
## January 22, 1997

The Halibut Subsistence Committee met in Anchorage on January 22, 1997 to provide to the Council their recommendations for developing halibut subsistence regulations. Committee members Robin Samuelsen (Chairman), Harold Martin, Matt Kookesh, Robert Sundown, Flore Lekanoff, Jack Lorrigan for Theodore Borbridge, Jude Henzler, and David Bill were in attendance. The meeting agenda and documents distributed at the meeting are attached to this report. The Council, IPHC, NOAA GC, NMFS, NMFS Enforcement, ADF&G, and Alaska Department of Law provided staff support.

Jane DiCosimo, Council staff, provided background as to the purpose and goal of the meeting. She related the findings of agency staff at their November 1996 meeting. At the December 1996 Council meeting, the Council indicated its intention to develop regulations to provide for halibut subsistence harvests during 1997 for effect in 1998.

Bob Wolfe, ADF&G Subsistence Division staff, distributed tables and figures of noncommercial halibut harvests by community and Native Group with subsistence halibut uses. The committee adopted the table of rural communities with customary and traditional use of halibut and associated Alaska Native group as developed by the Alaska Board of Fisheries for identifying eligible participants for halibut subsistence harvests. Those Native groups not on the approved list could petition for subsistence privileges.

Dr. Don McCaughran, IPHC staff, discussed a possible revision of the Halibut Convention to separate subsistence from sportfish regulations. He reported that discussions to renegotiate the treaty for other reasons were currently underway. At present, the treaty language does not specifically address subsistence harvests and subsistence users are restricted to sportfish limits of two fish per person per day and rod and reel gear with a limit of two hooks per reel. He also explained that the 32 inch minimum commercial size was imposed by the IPHC to maximize yield in weight and was not imposed for personal use since yield for that sector is maximized in numbers. **The committee recommended that the North Pacific Council encourage the State Department to petition the United States and Canada to amend the Halibut Convention to recognize subsistence rights for aboriginal users.**

The committee discussed the level of halibut removals for subsistence (approximately 300,000 lb) compared with bycatch removals from commercial fishing (approximately 15.5 million lb).

Steve Meyer, NMFS Enforcement, reported that he is required by law to enforce the current halibut commercial and sportfish regulations. The committee noted that the IPHC acknowledged that halibut subsistence harvests did not affect the conservation of the halibut resource. **The committee recommended that the National Marine Fisheries Service not enforce regulations prohibiting halibut subsistence harvests while the Council is developing subsistence regulations.**

The committee described the need and intent for halibut subsistence regulations to allow the continued practice of long-term traditions of fishing halibut for food for their families in a non-commercial manner for non-economic consumption, and defined subsistence as "non-commercial fishing for food."

The committee recommended that eligibility for halibut subsistence be defined as "**members of Alaska Native Federally-recognized Tribes with customary and traditional use of halibut**." The committee decided to accept as eligible those Tribes that were identified by the Alaska Board of Fisheries as having customary and traditional (CAT) halibut uses (Attachment 2). The Tribes are identified with a specific coastal community. The organized Tribal entity within a community would be responsible for deciding which individual members were eligible from Tribal enrollment. An individual's Tribal membership card and a subsistence permit would qualify

that person to subsistence fish for halibut from the community in which he/she is enrolled. Using Tribal enrollment would also allow the community to allow members from other Tribes to join their community and fish. Those Tribes not on the BOF list, but with reasonable access to the fishery and that may have a tradition or need to harvest halibut for subsistence may petition for eligibility. The process and criteria for petitioning would be discussed further by the committee at a subsequent meeting.

The committee discussed a proposal to include "other rural residents in areas of Alaska with halibut uses." The committee discussed the opportunities for non-Tribal Alaskans to harvest halibut and concluded that the two fish per day sportfish limit would meet their needs for supplying their families with halibut for food. The determining factor in this conclusion was the stated need to recognize existing, traditional practice at current levels of halibut removals. The management plan for a halibut subsistence program should legalize the current halibut removals and fishing practices by Tribal members. Expansion of subsistence harvests to non-traditional users may create resource concerns within the IPHC regarding increased levels of halibut removals and localized depletion in some rural and urban communities.

The committee recommended that hook-and-line gear (including set and hand-held gear) with a maximum of 60 hooks, along with rod-and-reel gear be allowed as legal halibut subsistence gear. An individual would be limited to one skate of gear up to 1,800 ft long (not including the buoy line), with hooks set 18-20 ft apart, with a legibly marked buoy. More than one fisherman may fish from the same boat.

The committee recommended that no minimum size be imposed for subsistence harvests of halibut. The committee recognized that the levels of halibut subsistence removals, including fish less than 32 inches, compared with commercial and sportfish removals, are not a conservation concern to the IPHC. The committee further recommended that the commercial minimum size regulations be revised to read, "except in Area 4E where halibut under 32 inches caught with authorized commercial halibut gear may be retained for subsistence use." This minimum size exemption would allow for retention of undersized halibut with legal CDQ halibut harvests in Area 4E only, in accordance with local beliefs that releasing any fish is too damaging to the entire stock from which it came.

The committee discussed seasonal and bag limit restrictions for halibut subsistence, but deferred any recommendations to the Council on legal advice that the aforementioned restrictions are within the purview of the IPHC. Interest was expressed for a twelve month season in the Southeast and no bag limit.

The committee recommended that halibut subsistence users be allowed existing levels of bycatch. They recommended unlimited black cod bycatch, noting that there was a black cod subsistence fishery under State designation and that low levels of bycatch occurred in halibut subsistence fishing. They also recommended that halibut subsistence users be allowed to retain rockfish bycatch, and that the Council and State analyze appropriate bycatch levels.

The committee considered a suggestion that monitoring of halibut subsistence removals for stock assessment purposes could be best achieved through cooperative agreements between federal agencies and the Tribes.

The committee discussed trade and barter of subsistence halibut and endorsed and recommended the sharing and exchange (barter) of halibut since this is a vital part of the traditional subsistence halibut fishery, but that the commercial sale of subsistence-caught halibut not be allowed. The committee further indicated an interest in allowing low monetary, non-commercial sale of halibut to legalize current practice of compensating subsistence fishermen for fuel or other fishing expenses in exchange for fish. The Council may wish to consider allowing trade and barter only among Native Tribal members, limiting the monetary exchange, or other limitations.

The committee expressed interest in continuing to meet to provide recommendations to the Council on the development of halibut subsistence regulations.

## Noncommercial Halibut Harvests (Lbs. Rd Wt) by Residents of Alaska Rural Places in Areas with Subsistence Halibut Uses

Source: Household Surveys, Division of Subsistence, ADF&G

| | Halibut Coastal District | Survey Year | Removed from Commercial Gear | Other Non-Commercial Gear | Rod and Reel Gear | Gear Not Ascertained | Total Halibut Harvest | Estimated Per Capita Harvest |
|---|---|---|---|---|---|---|---|---|
| **District 2C** | | | | | | | | |
| Angoon | 2C | 1987 | 2,930 | * | 13,314 | | 16,244 | 35 |
| Coffman Cove | 2C | 1987 | 172 | * | 6,821 | | 6,993 | 38 |
| Craig | 2C | 1987 | 3,891 | * | 17,125 | | 21,016 | 18 |
| Edna Bay | 2C | 1987 | 1,760 | * | 4,060 | | 5,820 | 84 |
| Elfin Cove | 2C | 1987 | 956 | * | 1,513 | | 2,470 | 41 |
| Gustavus | 2C | 1987 | 552 | * | 12,133 | | 12,685 | 83 |
| Haines | 2C | 1987 | 5,809 | * | 26,190 | | 31,999 | 20 |
| Hollis | 2C | 1987 | 41 | * | 940 | | 982 | 12 |
| Hoonah | 2C | 1987 | 11,674 | * | 23,176 | | 34,850 | 50 |
| Hydaburg | 2C | 1987 | 4,127 | * | 7,929 | | 12,056 | 32 |
| Hyder | 2C | 1987 | 1,351 | * | 3,584 | | 4,935 | 63 |
| Kake | 2C | 1987 | 4,386 | * | 13,523 | | 17,909 | 28 |
| Kasaan | 2C | 1987 | 21 | * | 511 | | 532 | 13 |
| Klawock | 2C | 1987 | 1,265 | * | 31,955 | | 33,220 | 42 |
| Klukwan | 2C | 1987 | 0 | * | 193 | | 193 | 1 |
| Metlakatla | 2C | 1987 | 4,095 | * | 12,442 | | 16,537 | 11 |
| Meyers Chuck | 2C | 1987 | 0 | * | 3,075 | | 3,075 | 103 |
| Pelican | 2C | 1987 | 5,038 | * | 13,048 | | 18,086 | 76 |
| Petersburg | 2C | 1987 | 15,596 | * | 142,902 | | 158,498 | 42 |
| Point Baker | 2C | 1987 | 862 | * | 766 | | 1,628 | 47 |
| Port Alexander | 2C | 1987 | 708 | * | 3,695 | | 4,402 | 41 |
| Port Protection | 2C | 1987 | 505 | * | 2,252 | | 2,757 | 47 |
| Saxman | 2C | 1987 | 141 | * | 3,352 | | 3,492 | 13 |
| Sitka | 2C | 1987 | 16,418 | * | 240,708 | | 257,126 | 32 |
| Skagway | 2C | 1987 | 0 | * | 4,941 | | 4,941 | 8 |
| Tenakee Springs | 2C | 1987 | 608 | * | 5,257 | | 5,865 | 52 |
| Thorne Bay | 2C | 1987 | 13,179 | * | 11,450 | | 24,628 | 51 |
| Whale Pass | 2C | 1987 | 106 | * | 1,325 | | 1,431 | 28 |
| Wrangell | 2C | 1987 | 13,963 | * | 58,600 | | 72,563 | 26 |
| **TOTAL 2C** | **2C** | | **110,156** | * | **666,779** | **0** | **776,934** | **31** |
| | *(Percent Gear)* | | *14.2%* | * | *85.8%* | *0.0%* | *100.0%* | |

** In 2C, household surveys did not ask about "other non-commercial gear".*

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **District 3A** | | | | | | | | |
| Akhiok | 3A | 1992 | 41 | 1,845 | 32 | | 1,918 | 24 |
| Chenega Bay | 3A | 1992 | 469 | 1,973 | 2,154 | | 4,596 | 68 |
| Cordova | 3A | 1991 | 33,391 | 154 | 33,906 | | 67,451 | 29 |
| Karluk | 3A | 1990 | 0 | 3,273 | 1,073 | | 4,346 | 53 |
| Kodiak City | 3A | 1991 | 64,164 | 53,985 | 274,893 | | 393,042 | 27 |
| Larsen Bay | 3A | 1990 | 4,905 | 1,882 | 8,115 | | 14,902 | 103 |
| Nanwalek | 3A | 1991 | 0 | 1,954 | 5,856 | | 7,810 | 48 |
| Old Harbor | 3A | 1991 | 2,240 | 10,575 | 4,967 | | 17,782 | 89 |
| Ouzinkie | 3A | 1990 | 6,868 | 3,451 | 2,951 | | 13,270 | 66 |

## Noncommercial Halibut Harvests (Lbs Rd Wt) by Residents of Alaska Rural Places in Areas with Subsistence Halibut Uses

Source: Household Surveys, Division of Subsistence, ADF&G

| | Halibut Coastal District | Survey Year | Removed from Commercial Gear | Other Non-Commercial Gear | Rod and Reel Gear | Gear Not Ascertained | Total Halibut Harvest | Estimated Per Capita Harvest |
|---|---|---|---|---|---|---|---|---|
| Port Graham | 3A | 1991 | 2,212 | 6,445 | 3,101 | | 11,758 | 73 |
| Port Lions | 3A | 1993 | 850 | 2,353 | 8,065 | | 11,268 | 63 |
| Seldovia | 3A | 1991 | 5,424 | 100 | 17,178 | | 22,702 | 67 |
| Tatitlek | 3A | 1991 | 92 | 852 | 1,613 | | 2,557 | 31 |
| Yakutat | 3A | 1987 | 3,031 | * | 29,844 | | 32,875 | 56 |
| **TOTAL 3A** | **3A** | ** | **123,687** | **88,842** | **393,749** | **0** | **606,278** | **32** |
| | *(Percent Gear)* | | *20.4%* | *14.7%* | *64.9%* | *0.0%* | *100.0%* | |

** In Yakutat, household surveys did not ask about "other non-commercial gear".*

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **District 3B** | | | | | | | | |
| Chignik Bay | 3B | 1991 | 8,380 | 2,708 | 1,737 | | 12,825 | 134 |
| Chignik Lagoon | 3B | 1989 | 1,237 | 738 | 0 | | 1,975 | 48 |
| Chignik Lake | 3B | 1991 | 2,173 | 1,849 | 0 | | 4,022 | 16 |
| Cold Bay | 3B | Est | | | | 5,920 | 5,920 | |
| False Pass | 3B | 1988 | 1,971 | 403 | 1,137 | | 3,511 | 27 |
| Ivanof Bay | 3B | 1989 | 0 | 1,091 | 638 | | 1,729 | 54 |
| King Cove | 3B | 1992 | 7,685 | 1,696 | 454 | | 9,835 | 18 |
| Nelson Lagoon | 3B | 1987 | | | | | 0 | 0 |
| Perryville | 3B | 1989 | 420 | 5,398 | 1,506 | | 7,324 | 63 |
| Sand Point | 3B | 1992 | 11,037 | 12,265 | 1,427 | | 24,729 | 31 |
| **TOTAL 3B** | **3B** | ** | **32,904** | **26,148** | **6,899** | **5,920** | **71,871** | **35** |
| | *(Percent Gear)* | | *45.8%* | *36.4%* | *9.6%* | *8.2%* | *100.0%* | |
| **District 4A-D** | | | | | | | | |
| Akutan | 4A-D | 1990 | 2,926 | 8,082 | 548 | | 11,556 | 114 |
| Atka | 4A-D | 1994 | 427 | 3,949 | 551 | | 4,926 | 58 |
| Nikolski | 4A-D | 1990 | 0 | 11,837 | 0 | | 11,837 | 244 |
| St. George | 4A-D | 1994 | 1,205 | 4,929 | 0 | | 6,132 | 34 |
| St. Paul | 4A-D | 1994 | 8,671 | 49,682 | 125 | | 58,479 | 139 |
| Unalaska | 4A-D | 1994 | 14,106 | 12,580 | 117,226 | | 143,911 | 79 |
| **TOTAL 4A-D** | **4A-D** | ** | **37,335** | **91,059** | **118,449** | **0** | **246,841** | **90** |
| | *(Percent Gear)* | | *15.1%* | *36.9%* | *48.0%* | *0.0%* | *100.0%* | |
| **District 4E** | | | | | | | | |
| Chefornak | 4E | Est | | | | 12,800 | 12,800 | 40 |
| Gambell | 4E | ** | | | | | ** | |
| Mekoryak | 4E | Est | | | | 7,080 | 7,080 | 40 |
| Newtok | 4E | Est | | | | 8,280 | 8,280 | 40 |
| Nightmute | 4E | Est | | | | 6,120 | 6,120 | 40 |
| Savoonga | 4E | ** | | | | | ** | |
| Tokscok Bay | 4E | Est | | | | 16,800 | 16,800 | 40 |
| Tununak | 4E | 1986 | | | | 40,754 | 40,754 | 124 |
| Wales | 4E | ** | | | | | ** | |
| Aleknagik | 4E | ** | | | | | ** | |
| Clark's Point | 4E | ** | | | | | ** | |
| Dillingham | 4E | 1984 | | | | | 0 | 0 |

## Noncommercial Halibut Harvests (Lbs Rd Wt) by Residents of Alaska Rural Places in Areas with Subsistence Halibut Uses

Source: Household Surveys, Division of Subsistence, ADF&G

| | Halibut Coastal District | Survey Year | Removed from Commercial Gear | Other Non-Commercial Gear | Rod and Reel Gear | Gear Not Ascertained | Total Halibut Harvest | Estimated Per Capita Harvest |
|---|---|---|---|---|---|---|---|---|
| Egegik | 4E | 1984 | 0 | 0 | 286 | | 286 | 3 |
| King Salmon | 4E | -- | | | | | -- | |
| Kipnuk | 4E | -- | | | | | -- | |
| Kongiganak | 4E | -- | | | | | -- | |
| Levelock | 4E | 1989 | | 528 | | | 528 | 5 |
| Manokotak | 4E | -- | | | | | -- | |
| Naknek | 4E | -- | | | | | -- | |
| Nome | 4E | -- | | | | | -- | |
| Pilot Point | 4E | 1987 | 229 | 0 | 70 | | 299 | 5 |
| Port Heiden | 4E | 1987 | 0 | 197 | 0 | | 197 | 2 |
| South Naknek | 4E | 1992 | 116 | 28 | 0 | | 144 | 1 |
| Alakanuk | 4E | -- | | | | | -- | |
| Bethel | 4E | -- | | | | | -- | |
| Brevig Mission | 4E | -- | | | | | -- | |
| Chevak | 4E | -- | | | | | -- | |
| Eek | 4E | -- | | | | | -- | |
| Elim | 4E | -- | | | | | -- | |
| Emmonak | 4E | -- | | | | | -- | |
| Golovin | 4E | -- | | | | | -- | |
| Goodnews Bay | 4E | -- | | | | | -- | |
| Hooper Bay | 4E | -- | | | | | -- | |
| Kotlik | 4E | -- | | | | | -- | |
| Koyuk | 4E | -- | | | | | -- | |
| Kwigillingok | 4E | -- | | | | | -- | |
| Napakiak | 4E | -- | | | | | -- | |
| Napaskiak | 4E | -- | | | | | -- | |
| Oscarville | 4E | -- | | | | | -- | |
| Platinum | 4E | -- | | | | | -- | |
| Quinhagak | 4E | -- | | | | | -- | |
| Scammon Bay | 4E | -- | | | | | -- | |
| Shaktoolik | 4E | -- | | | | | -- | |
| Sheldon Point | 4E | -- | | | | | -- | |
| St. Michael | 4E | -- | | | | | -- | |
| Stebbins | 4E | -- | | | | | -- | |
| Teller | 4E | -- | | | | | -- | |
| Togiak | 4E | -- | | | | | -- | |
| Tuntutuliak | 4E | -- | | | | | -- | |
| Twin Hills | 4E | -- | | | | | -- | |
| Ugashik | 4E | 1987 | | | | | 0 | 0 |
| Unalakleet | 4E | -- | | | | | -- | |
| White Mountain | 4E | -- | | | | | -- | |
| TOTAL 4E | 4E | -- | 0 | 0 | 286 | 91,834 | 92,120 | 54 |
| | *(Percent Gear)* | | *0.0%* | *0.0%* | *0.3%* | *99.7%* | *100.0%* | |

*Note: Round Weight (Not Eviscerated, Head On) = Usable Wt (Eviscerated, Head Off) / 7519*

## Noncommercial Halibut Harvests (Lbs Rd Wt) by Residents of Alaska Rural Places in Areas with Subsistence Halibut Uses

Source: Household Surveys, Division of Subsistence, ADF&G

| | Halibut Coastal District | Survey Year | Removed from Commercial Gear | Other Non-Commercial Gear | Rod and Reel Gear | Gear Not Ascertained | Total Halibut Harvest | Estimated Per Capita Harvest |
|---|---|---|---|---|---|---|---|---|
| **DISTRICT SUMMARY** | | | | | | | | |
| District 2C | 2C | ** | 110,156 | * | 666,779 | 0 | 776,934 | 31 |
| District 3A | 3A | ** | 123,687 | 88,842 | 393,749 | 0 | 606,278 | 32 |
| District 3B | 3B | ** | 32,904 | 26,148 | 6,899 | 5,920 | 71,871 | 35 |
| Districts 4A-D | 4A-D | ** | 37,335 | 91,059 | 118,449 | 0 | 246,841 | 90 |
| District 4E | 4E | ** | 0 | 0 | 286 | 91,834 | 92,120 | 54 |
| **TOTAL DISTRICTS** | | ** | 304,081 | 206,049 | 1,186,162 | 97,754 | 1,794,045 | 36 |
| | *(Percent Gear)* | | *16.9%* | *11.5%* | *66.1%* | *5.4%* | *100.0%* | |

** In 2C, household surveys did not ask about "other non-commercial gear".*

## Alaska Rural Places and Native Groups in Areas with Subsistence Halibut Uses

Source: Alaska Department of Fish and Game

| Place | Organized Entity | Halibut Coastal District | Use Pattern 1 = regular 2 = periodic 3 = undocumented |
|---|---|---|---|
| **Alaska Rural Places*** | | | |
| Angoon | Municipality | 2C | 1 |
| Coffman Cove | Municipality | 2C | 1 |
| Craig | Municipality | 2C | 1 |
| Edna Bay | Census Designated Place | 2C | 1 |
| Elfin Cove | Census Designated Place | 2C | 1 |
| Gustavus | Census Designated Place | 2C | 1 |
| Haines | Municipality | 2C | 1 |
| Hollis | Census Designated Place | 2C | 1 |
| Hoonah | Municipality | 2C | 1 |
| Hydaburg | Municipality | 2C | 1 |
| Hyder | Census Designated Place | 2C | 1 |
| Kake | Municipality | 2C | 1 |
| Kasaan | Municipality | 2C | 1 |
| Klawock | Municipality | 2C | 1 |
| Klukwan | Census Designated Place | 2C | 1 |
| Metlakatla | Census Designated Place | 2C | 1 |
| Meyers Chuck | Census Designated Place | 2C | 1 |
| Pelican | Municipality | 2C | 1 |
| Petersburg | Municipality | 2C | 1 |
| Point Baker | Census Designated Place | 2C | 1 |
| Port Alexander | Municipality | 2C | 1 |
| Port Protection | Census Designated Place | 2C | 1 |
| Saxman | Municipality | 2C | 1 |
| Sitka | Municipality | 2C | 1 |
| Skagway | Municipality | 2C | 1 |
| Tenakee Springs | Municipality | 2C | 1 |
| Thorne Bay | Municipality | 2C | 1 |
| Whale Pass | Census Designated Place | 2C | 1 |
| Wrangell | Municipality | 2C | 1 |
| Akhiok | Municipality | 3A | 1 |
| Chenega Bay | Census Designated Place | 3A | 1 |
| Cordova | Municipality | 3A | 1 |
| Karluk | Census Designated Place | 3A | 1 |
| Kodiak City | Municipality | 3A | 1 |
| Larsen Bay | Municipality | 3A | 1 |
| Nanwalek | Census Designated Place | 3A | 1 |
| Old Harbor | Municipality | 3A | 1 |
| Ouzinkie | Municipality | 3A | 1 |
| Port Graham | Census Designated Place | 3A | 1 |
| Port Lions | Municipality | 3A | 1 |
| Seldovia | Municipality | 3A | 1 |
| Tatitlek | Census Designated Place | 3A | 1 |

## Alaska Rural Places and Native Groups in Areas with Subsistence Halibut Uses

Source: Alaska Department of Fish and Game

| Place | Organized Entity | Halibut Coastal District | Use Pattern 1 = regular 2 = periodic 3 = undocumented |
|---|---|---|---|
| Yakutat | Municipality | 3A | 1 |
| Chignik Bay | Municipality | 3B | 1 |
| Chignik Lagoon | Census Designated Place | 3B | 1 |
| Chignik Lake | Census Designated Place | 3B | 1 |
| Cold Bay | Municipality | 3B | 1 |
| False Pass | Municipality | 3B | 1 |
| Ivanof Bay | Census Designated Place | 3B | 1 |
| King Cove | Municipality | 3B | 1 |
| Nelson Lagoon | Census Designated Place | 3B | 1 |
| Perryville | Census Designated Place | 3B | 1 |
| Sand Point | Municipality | 3B | 1 |
| Akutan | Municipality | 4A-D | 1 |
| Atka | Municipality | 4A-D | 1 |
| Nikolski | Census Designated Place | 4A-D | 1 |
| St. George | Municipality | 4A-D | 1 |
| St. Paul | Municipality | 4A-D | 1 |
| Unalaska | Municipality | 4A-D | 1 |
| Chefornak | Municipality | 4E | 1 |
| Gambell | Municipality | 4E | 1 |
| Mekoryak | Municipality | 4E | 1 |
| Newtok | Census Designated Place | 4E | 1 |
| Nightmute | Municipality | 4E | 1 |
| Savoonga | Municipality | 4E | 1 |
| Toksook Bay | Municipality | 4E | 1 |
| Tununak | Census Designated Place | 4E | 1 |
| Wales | Municipality | 4E | 1 |
| Aleknagik | Municipality | 4E | 2 |
| Clark's Point | Municipality | 4E | 2 |
| Dillingham | Municipality | 4E | 2 |
| Egegik | Municipality | 4E | 2 |
| King Salmon | Census Designated Place | 4E | 2 |
| Kipnuk | Census Designated Place | 4E | 2 |
| Kongiganak | Census Designated Place | 4E | 2 |
| Levelock | Census Designated Place | 4E | 2 |
| Manokotak | Municipality | 4E | 2 |
| Naknek | Census Designated Place | 4E | 2 |
| Nome | Municipality | 4E | 2 |
| Pilot Point | Municipality | 4E | 2 |
| Port Heiden | Municipality | 4E | 2 |
| South Naknek | Census Designated Place | 4E | 2 |
| Alakanuk | Municipality | 4E | 3 |
| Bethel | Municipality | 4E | 3 |
| Brevig Mission | Municipality | 4E | 3 |

## Alaska Rural Places and Native Groups in Areas with Subsistence Halibut Uses

Source: Alaska Department of Fish and Game

| Place | Organized Entity | | Halibut Coastal District | Use Pattern 1 = regular 2 = periodic 3 = undocumented |
|---|---|---|---|---|
| Chevak | Municipality | | 4E | 3 |
| Eek | Municipality | | 4E | 3 |
| Elim | Municipality | | 4E | 3 |
| Emmonak | Municipality | | 4E | 3 |
| Golovin | Municipality | | 4E | 3 |
| Goodnews Bay | Municipality | | 4E | 3 |
| Hooper Bay | Municipality | | 4E | 3 |
| Kotlik | Municipality | | 4E | 3 |
| Koyuk | Municipality | | 4E | 3 |
| Kwigillingok | Census Designated Place | | 4E | 3 |
| Napakiak | Municipality | | 4E | 3 |
| Napaskiak | Municipality | | 4E | 3 |
| Oscarville | Census Designated Place | | 4E | 3 |
| Platinum | Municipality | | 4E | 3 |
| Quinhagak | Municipality | | 4E | 3 |
| Scammon Bay | Municipality | | 4E | 3 |
| Shaktoolik | Municipality | | 4E | 3 |
| Sheldon Point | Municipality | | 4E | 3 |
| St. Michael | Municipality | | 4E | 3 |
| Stebbins | Municipality | | 4E | 3 |
| Teller | Municipality | | 4E | 3 |
| Togiak | Municipality | | 4E | 3 |
| Tuntutuliak | Census Designated Place | | 4E | 3 |
| Twin Hills | Census Designated Place | | 4E | 3 |
| Ugashik | Census Designated Place | | 4E | 3 |
| Unalakleet | Municipality | | 4E | 3 |
| White Mountain | Municipality | | 4E | 3 |
| **Alaska Native Groups**** | | | | |
| Angoon | Angoon Community Association | Tlingit | 2C | 1 |
| Craig | Craig Community Association | Tlingit | 2C | 1 |
| Haines | Chilkoot Indian Association | Tlingit | 2C | 1 |
| Hoonah | Hoonah Indian Association | Tlingit | 2C | 1 |
| Hydaburg | Hydaburg Cooperative Assocation | Haida | 2C | 1 |
| Juneau | Aukcuan Traditional Council*** | Tlingit | 2C | 1 |
| Juneau | Central Council Tlingit & Haida Indian Tribes | Tlingit-Haida | 2C | 1 |
| Juneau | Douglas Indian Association | Tlingit | 2C | 1 |
| Kake | Organized Village of Kake | Tlingit | 2C | 1 |
| Kasaan | Organized Village of Kasaan | Haida | 2C | 1 |
| Ketchikan | Ketchikan Indian Corporation | Tlingit | 2C | 1 |
| Klawock | Klawock Cooperative Association | Tlingit | 2C | 1 |
| Klukwan | Chilkat Indian Village | Tlingit | 2C | 1 |

## Alaska Rural Places and Native Groups in Areas with Subsistence Halibut Uses

Source: Alaska Department of Fish and Game

| Place | Organized Entity | | Halibut Coastal District | Use Pattern 1 = regular 2 = periodic 3 = undocumented |
|---|---|---|---|---|
| Metlakatla | Metlakatla Indian Community, Annette Island Reserve | Tsimshian | 2C | 1 |
| Petersburg | Petersburg Indian Association | Tlingit | 2C | 1 |
| Saxman | Organized Village of Saxman | Tlingit | 2C | 1 |
| Sitka | Sitka Tribe of Alaska | Tlingit | 2C | 1 |
| Skagway | Skagway Village | Tlingit | 2C | 1 |
| Wrangell | Wrangell Cooperative Association | Tlingit | 2C | 1 |
| Akhiok | Native Village of Akhiok | Alutiiq | 3A | 1 |
| Chenega Bay | Native Village of Chanega | Alutiiq | 3A | 1 |
| Cordova | Native Village of Eyak | Eyak-Alutiiq | 3A | 1 |
| Karluk | Native Village of Karluk | Alutiiq | 3A | 1 |
| Kenai | Kenaitze Indian Tribe | Dena'ina | 3A | 1 |
| Kenai | Village of Salamatoff | Dena'ina | 3A | 1 |
| Kodiak City | Lesnoi Village (Woody Island) | Alutiiq | 3A | 1 |
| Kodiak City | Native Village of Afognak | Alutiiq | 3A | 1 |
| Kodiak City | Shoonaq' Tribe of Kodiak*** | Alutiiq | 3A | 1 |
| Larsen Bay | Native Village of Larsen Bay | Alutiiq | 3A | 1 |
| Nanwalek | Native Village of Nanwalek | Alutiiq | 3A | 1 |
| Nanilchik | Nanilchik Village | Dena'ina | 3A | 1 |
| Old Harbor | Village of Old Harbor | Alutiiq | 3A | 1 |
| Ouzinkie | Native Village of Ouzinkie | Alutiiq | 3A | 1 |
| Port Graham | Native Village of Port Graham | Alutiiq | 3A | 1 |
| Port Lions | Native Village of Port Lions | Alutiiq | 3A | 1 |
| Seldovia | Seldovia Village Tribe | Dena'ina-Alutiiq | 3A | 1 |
| Tatitlek | Native Village of Tatitlek | Alutiiq | 3A | 1 |
| Yakutat | Yakutat Tlingit Tribe | Tlingit | 3A | 1 |
| Chignik Bay | Native Village of Chignik | Alutiiq | 3B | 1 |
| Chignik Lagoon | Native Village of Chignik Lagoon | Alutiiq | 3B | 1 |
| Chignik Lake | Chignik Lake Village | Alutiiq | 3B | 1 |
| False Pass | Native Village of False Pass | Aleut | 3B | 1 |
| Ivanof Bay | Ivanoff Bay Village | Alutiiq | 3B | 1 |
| King Cove | Agdaagux Tribe of King Cove | Aleut | 3B | 1 |
| King Cove | Native Village of Belkofski | Aleut | 3B | 1 |
| Nelson Lagoon | Native Village of Nelson Lagoon | Aleut-Alutiiq | 3B | 1 |
| Perryville | Native Village of Perryville | Alutiiq | 3B | 1 |
| Sand Point | Pauloff Harbor Village | Aleut | 3B | 1 |
| Sand Point | Native Village of Unga | Aleut | 3B | 1 |
| Sand Point | Qagan Toyagungin Tribe of Sand Point Village | Aleut | 3B | 1 |
| Akutan | Native Village of Akutan | Aleut | 4A-D | 1 |
| Atka | Native Village of Atka | Aleut | 4A-D | 1 |
| Nikolski | Native Village of Nikolski | Aleut | 4A-D | 1 |

## Alaska Rural Places and Native Groups in Areas with Subsistence Halibut Uses

Source: Alaska Department of Fish and Game

| Place | Organized Entity | | Halibut Coastal District | Use Pattern 1 = regular 2 = periodic 3 = undocumented |
|---|---|---|---|---|
| St. George | Pribilof Islands Aleut Communities of St. Paul Island & St. George Islands | Aleut | 4A-D | 1 |
| St. Paul | Pribilof Islands Aleut Communities of St. Paul Island & St. George Islands | Aleut | 4A-D | 1 |
| Unalaska | Qawalingin Tribe of Unalaska | Aleut | 4A-D | 1 |
| Chefornak | Village of Chefornak | Yup'ik | 4E | 1 |
| Gambell | Native Village of Gambell | Sibenan Yup'ik | 4E | 1 |
| Mekoryak | Native Village of Mekoryak | Cup'ik | 4E | 1 |
| Newtok | Newtok Village | Yup'ik | 4E | 1 |
| Nightmute | Native Village of Nightmute | Yup'ik | 4E | 1 |
| Nightmute | Umkumiute Native Village | Yup'ik | 4E | 1 |
| Savoonga | Native Village of Savoonga | Sibenan Yup'ik | 4E | 1 |
| Toksook Bay | Native Village of Toksook Bay | Yup'ik | 4E | 1 |
| Tununak | Native Village of Tununak | Yup'ik | 4E | 1 |
| Wales | Native Village of Wales | Inupiat | 4E | 1 |
| Aleknagik | Native Village of Aleknagik | Yup'ik | 4E | 2 |
| Clark's Point | Village of Clark's Point | Yup'ik | 4E | 2 |
| Dillingham | Native Village of Dillingham | Yup'ik | 4E | 2 |
| Dillingham | Native Village of Ekuk | Yup'ik | 4E | 2 |
| Egegik | Egegik Village | Alutiiq-Yup'ik | 4E | 2 |
| Egegik | Village of Kanatak | Alutiiq-Yup'ik | 4E | 2 |
| Kipnuk | Native Village of Kipnuk | Yup'ik | 4E | 2 |
| Levelock | Levelock Village | Yup'ik | 4E | 2 |
| Manokotak | Manokotak Village | Yup'ik | 4E | 2 |
| Naknek | Naknek Native Village | Alutiiq-Yup'ik | 4E | 2 |
| Nome | King Island Native Community | Inupiat | 4E | 2 |
| Nome | Nome Eskimo Community | Inupiat | 4E | 2 |
| Pilot Point | Native Village of Pilot Point | Alutiiq-Yup'ik | 4E | 2 |
| Port Heiden | Native Village of Port Heiden | Alutiiq | 4E | 2 |
| South Naknek | South Naknek Village | Alutiiq-Yup'ik | 4E | 2 |
| Alakanuk | Village of Alakanuk | Yup'ik | 4E | 3 |
| Bethel | Orutsararmuit Native Village | Yup'ik | 4E | 3 |
| Brevig Mission | Native Village of Brevig Mission | Inupiat | 4E | 3 |
| Chevak | Chevak Native Village | Cup'ik | 4E | 3 |
| Council | Native Village of Council | Inupiat | 4E | 3 |
| Eek | Native Village of Eek | Yup'ik | 4E | 3 |
| Elim | Native Village of Elim | Yup'ik | 4E | 3 |
| Emmonak | Chuloonawick Native Village | Yup'ik | 4E | 3 |
| Emmonak | Emmonak Village | Yup'ik | 4E | 3 |
| Golovin | Chinik Eskimo Community | Inupiat-Yup'ik | 4E | 3 |
| Goodnews Bay | Native Village of Goodnews Bay | Yup'ik | 4E | 3 |
| Hooper Bay | Native Village of Hooper Bay | Cup'ik | 4E | 3 |
| Hooper Bay | Native Village of Paimiut | Cup'ik | 4E | 3 |

## Alaska Rural Places and Native Groups in Areas with Subsistence Halibut Uses

Source: Alaska Department of Fish and Game

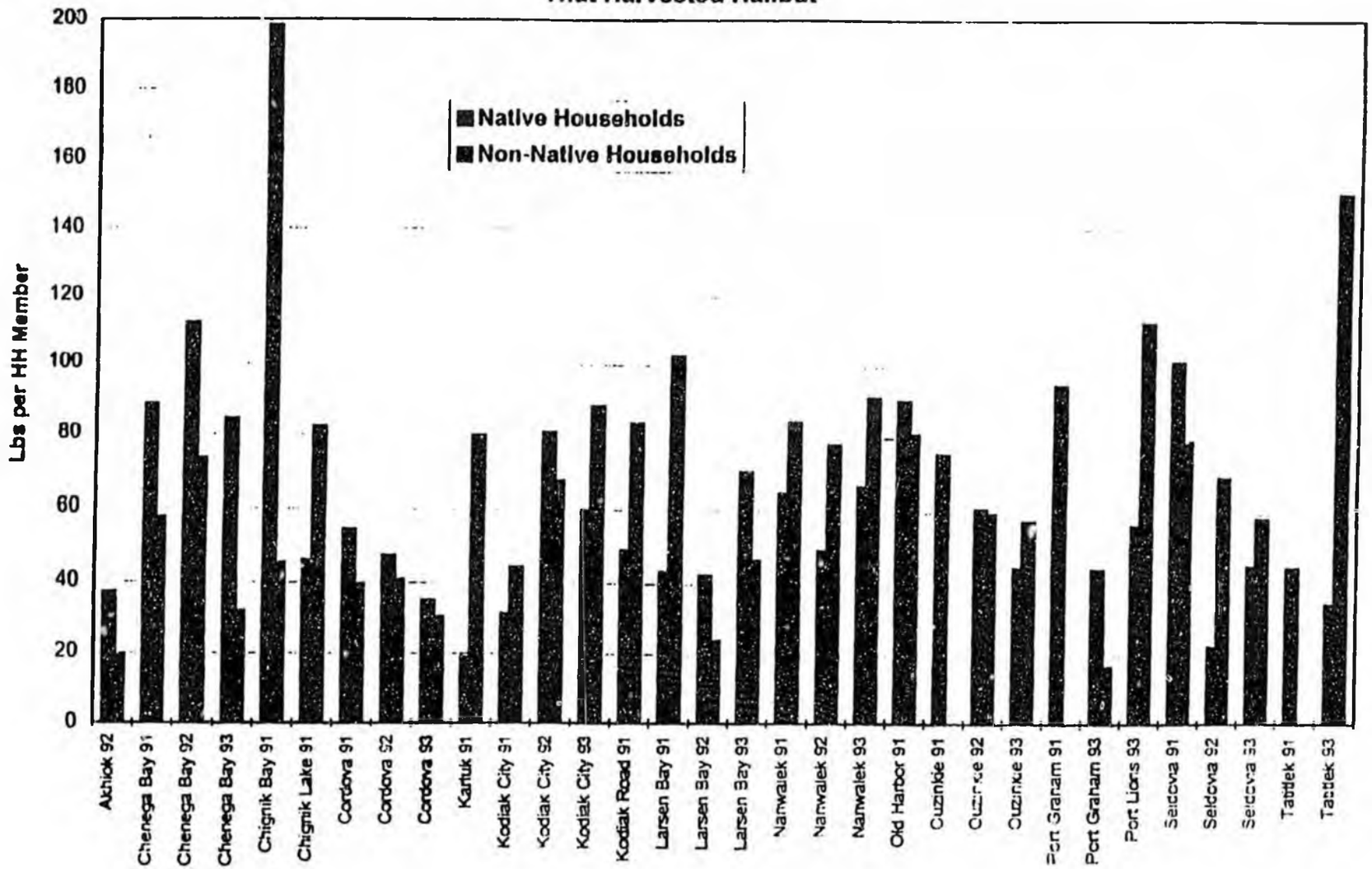
| Place | Organized Entity | | Halibut Coastal District | Use Pattern 1 = regular 2 = periodic 3 = undocumented |
|---|---|---|---|---|
| Kongiganak | Native Village of Kongiganak | Yup'ik | 4E | 3 |
| Kotlik | Native Village of Hamilton | Yup'ik | 4E | 3 |
| Kotlik | Village of Bill Moore's Slough | Yup'ik | 4E | 3 |
| Kotlik | Village of Kotlik | Yup'ik | 4E | 3 |
| Koyuk | Native Village of Koyuk | Inupiat | 4E | 3 |
| Kwigillingok | Native Village of Kwigillingok | Yup'ik | 4E | 3 |
| Napakiak | Native Village of Napakiak | Yup'ik | 4E | 3 |
| Napaskiak | Native Village of Napaskiak | Yup'ik | 4E | 3 |
| Oscarville | Oscarville Traditional Village | Yup'ik | 4E | 3 |
| Platinum | Platinum Traditional Village | Yup'ik | 4E | 3 |
| Quinhagak | Native Village of Kwinhagak | Yup'ik | 4E | 3 |
| Scammon Bay | Native Village of Scammon Bay | Yup'ik | 4E | 3 |
| Shaktoolik | Native Village of Shaktoolik | Inupiat-Yup'ik | 4E | 3 |
| Sheldon Point | Native Village of Sheldon's Point | Yup'ik | 4E | 3 |
| Solomon | Village of Solomon | Inupiat | 4E | 3 |
| St. Michael | Native Village of Saint Michael | Yup'ik | 4E | 3 |
| Stebbins | Stebbins Community Association | Yup'ik | 4E | 3 |
| Teller | Native Village of Mary's Igloo | Inupiat | 4E | 3 |
| Teller | Native Village of Teller | Inupiat | 4E | 3 |
| Togiak | Traditional Village of Togiak | Yup'ik | 4E | 3 |
| Tuntutuliak | Native Village of Tuntutuliak | Yup'ik | 4E | 3 |
| Twin Hills | Twin Hills Village | Yup'ik | 4E | 3 |
| Ugashik | Ugashik Village | Alutiiq-Yup'ik | 4E | 3 |
| Unalakleet | Native Village of Unalakleet | Inupiat-Yup'ik | 4E | 3 |
| White Mountain | Native Village of White Mountain | Inupiat | 4E | 3 |

* Places where subsistence (wild food harvest and use) is a principal characteristic of the community's economy and way of life.

** Indian entities recognized and eligible to receive services from the United States Bureau of Indian Affairs. cf., Federal Register, February 16, 1995, v. 60, no. 32, p. 9249-9255.

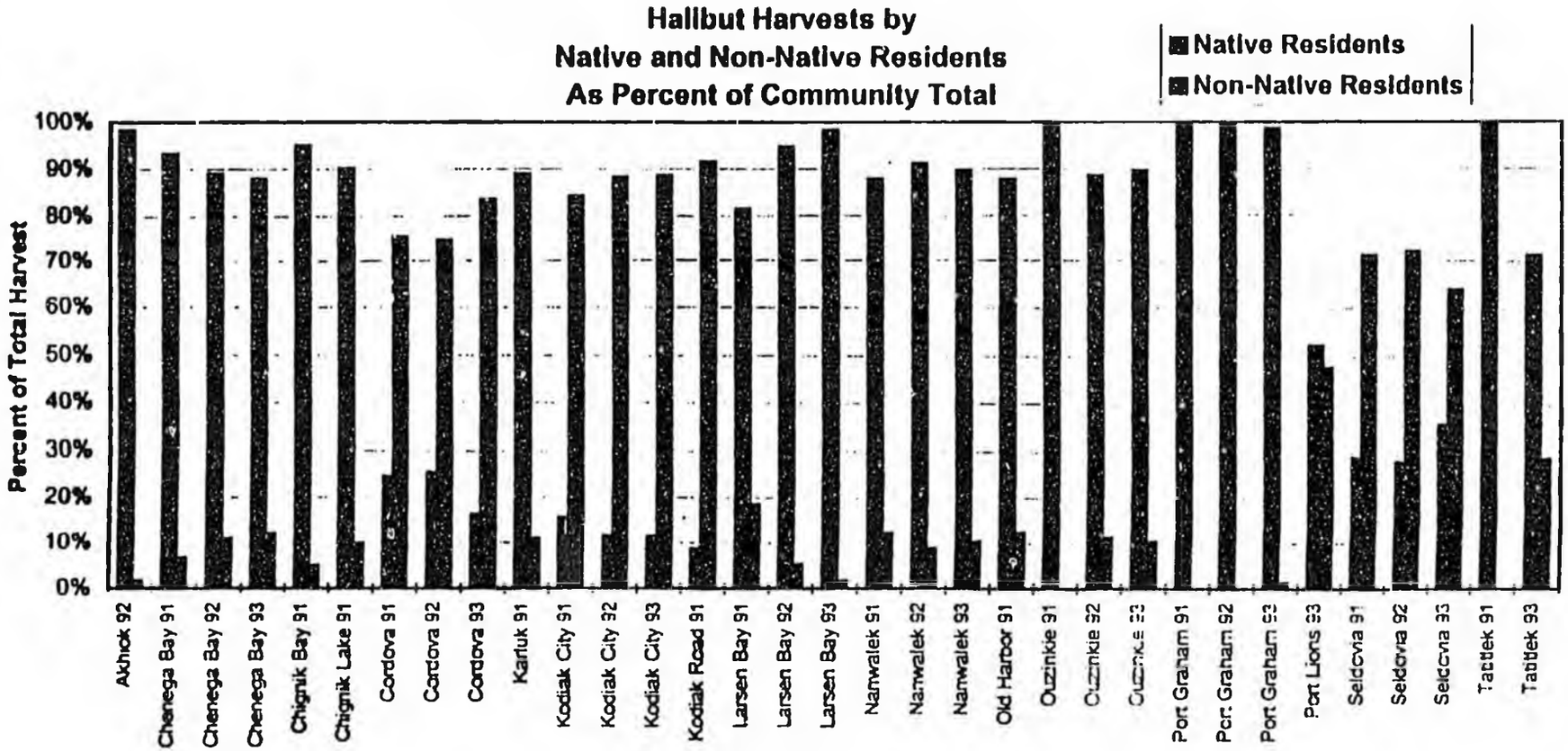
*** Applying for recognized status.

## Mean Halibut Harvests by Native and Non-Native Households That Harvested Halibut




Source: Robert Wolfe, Division of Subsistence, ADFG

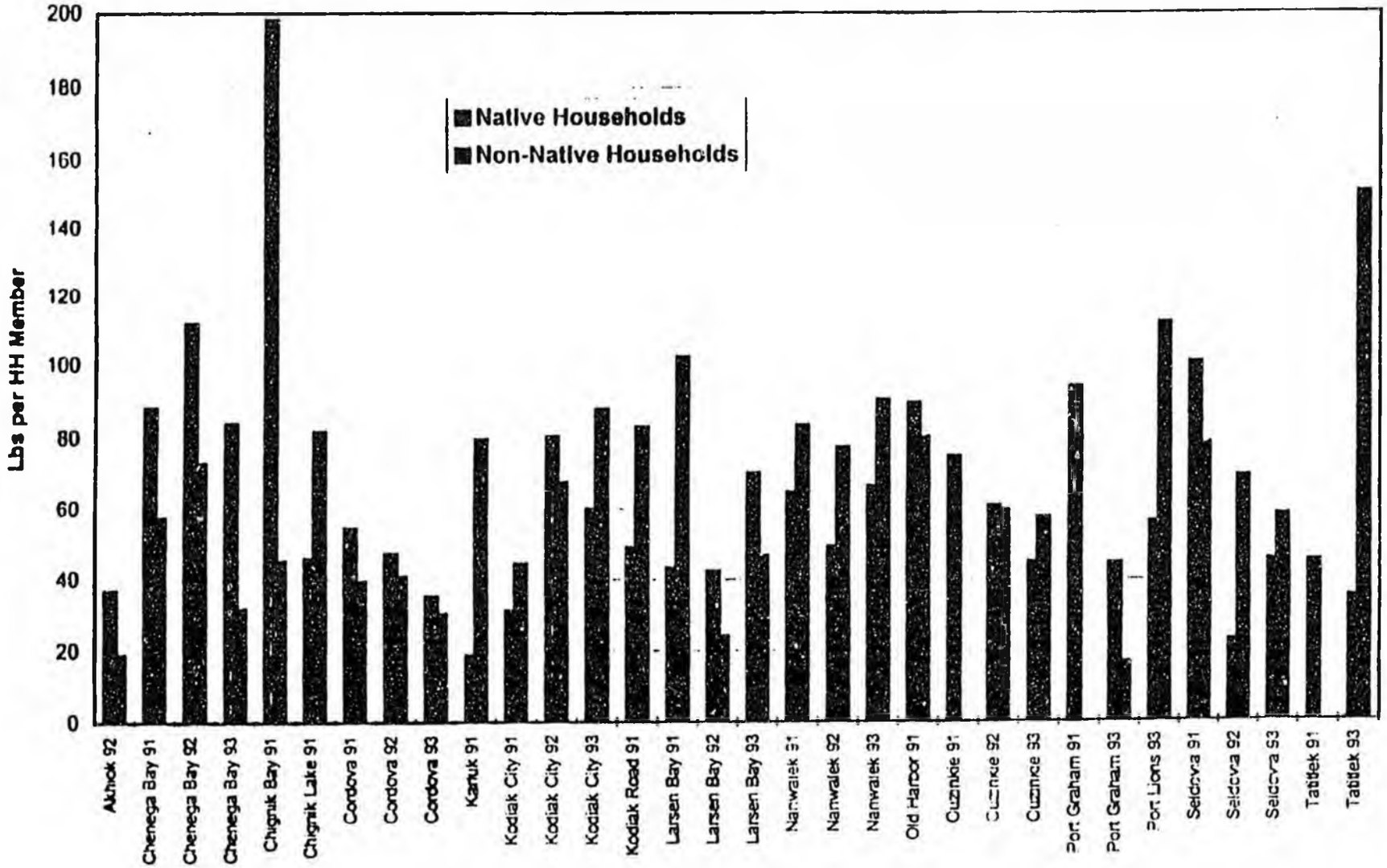
halibh1/16/97




Source: Robert Wolfe, Division of Subsistence, ADFG

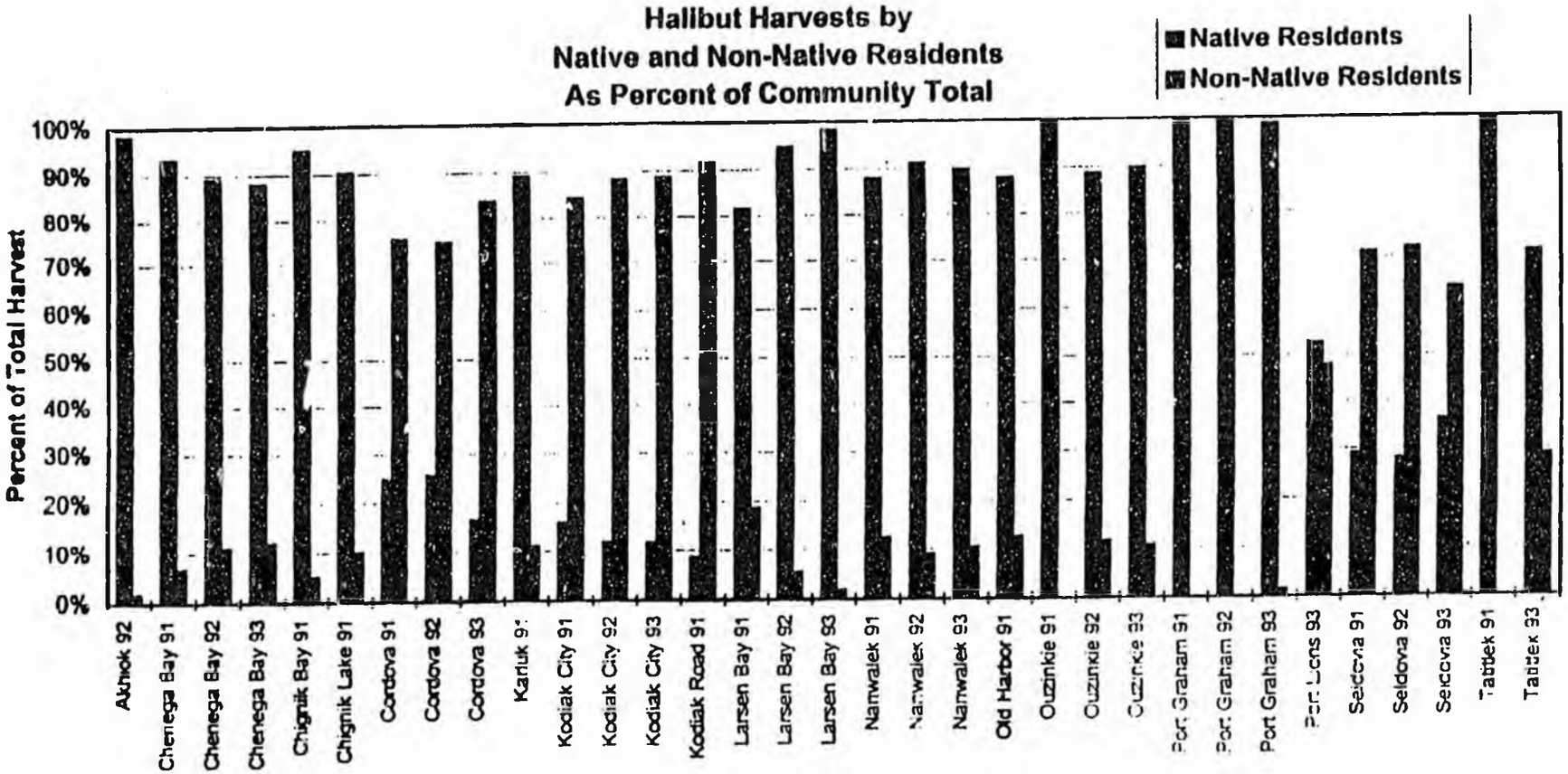
hallhh1/10/97

## Mean Halibut Harvests by Native and Non-Native Households That Harvested Halibut




Source: Robert Wolfe, Division of Subsistence, ADFG

halibh1716/97




Source: Robert Wolfe, Division of Subsistence, ADFG GOA communities

hallhh1/16/97

SOUTHEAST NATIVE SUBSISTENCE COMMISSION
320 West Willoughby Avenue, Suite 300
Juneau, Alaska 99801

CONCEPTS

- Subsistence halibut. "Subsistence use of halibut" refers to the noncommercial harvest and use of halibut for food by Alaska Natives and other rural residents in areas of Alaska with halibut uses.
- Eligibility. Alaska Natives and other rural residents in areas with halibut uses.
- Rural residents are persons whose principal domicile is in a rural Alaska area.
- Rural areas for the purpose of subsistence halibut regulations are areas where subsistence (wild food production and use) is a principal characteristic of the area's economy and way of life.
- Gear. Hook and line gear (including set and hand-held gear), with a maximum of 50 hooks.
- Special provisions. The commercial sale of subsistence-caught halibut is not allowed. The noncommercial sharing and exchange of subsistence-caught halibut is allowed.
- Permits. Subsistence permits may be required in particular areas if necessary for identifying subsistence fishers or special area provisions.
- Local area management plans. Local area management plans may be developed on an area basis to deal with special management issues such local stock depletion.

# KIPNUK TRADITIONAL COUNCIL

BOX 57 • KIPNUK, ALASKA 99614
(907) 896-5515 • FAX (907) 896-5240

## HALIBUT REGULATION PROPOSAL

In absence of subsistence regulations on the halibut fishery in and around the Cape Avinoff region and after having observed a National Marine Fisheries Enforcement Officer in Tokscok Bay this past season, the Kipnuk Traditional Council, on behalf of the local commercial and subsistence fishermen, want to submit the following proposal to be seriously considered to become part of the Commercial Halibut Regulations for the Cape Avinoff Region subsistence halibut fishermen in particular:

1. No limit on number of hooks to be used. (Sportfishing regulations should not be used to develop subsistence regulations.)

2. No bag limit for subsistence caught halibut. (Sportfishing regulations should not be used to develop subsistence regulations.) Traditional and culture methods are used by families in our villages to determine how much they need for subsistence purposes, and should not be regulated because of these present conditions.

3. Subsistence catch of halibut should not be considered a part of the Commercial fishery established quota.

**REASONS:**

1. Traditionally, our people use three hook lines and many still make traditional hooks although some use regular 1 hook rod and reel.

2. Weather is not always reliable and every trip counts, especially to catch as many halibuts they can catch. The halibut (both dried and frozen) is one of the main food groups gathered by local residents besides herring.

3. With commercially caught herring and halibut being the main economic resource for our community, we do not want subsistence caught halibut to be counted as part of the quota for commercial halibut fishing.

**CONCLUSION:**

Our resolution and its supplement that we submitted to IPHS, NPHS through Coastal Villages Fishing Cooperative is self explanatory and can be used for reference on this proposal. Therefore, on behalf of the local fishermen, both commercial and subsistence, we recommend that our proposal be seriously considered to become part of the Commercial Halibut Regulation under a term, 'subsistence clause."

**NOTE:** The Kipnuk Traditional Council is submitting this proposal in conjunction and agreement with the Toksook Bay Traditional Council. Our proposal is identical to the proposal submitted by the Toksook Bay Traditional Council, because our way of life is the same. We are closely related as families of the coast, with the same language with traditions and cultures that have a concern for the natural resources we depend on for food. Thank you for considering our proposal.

# NATIVE VILLAGE OF TUNUNAK

Tununak IRA Council
P O Box 77
Tununak, Alaska 99681
(907)652-6527 • Fx. 652-6011


## Halibut Regulation Proposal

In absence of subsistence regulations on halibut fishery in and around Nelson Island region and after having encountered a National Marine Fisheries Enforcement Officer in just past summer season, the Native Village of Tununak, on behalf of the local commercial and subsistence fishermen, want following suggestive ideas to be seriously considered to become part of the Commercial Halibut Regulation for Nelson Island Region subsistence halibut fishermen in particular

1. No limit on number of hooks to be used. (Sportfishing regulations should not be used to develop subsistence regulations)

2. No bag limit for subsistence caught halibut. (Sportfishing regulations should not be used to develop subsistence regulations)

3. Not count subsistence catch as part of quota.

### REASONS:

1. Traditionally, our people use three hook lines and many still make traditional hooks although some use regular 1 hook rod and reels, many prefer 3 hook lines for jigging.

2. Weather is not always reliable and every trip counts especially to catch as many halibut they can catch. The halibut (both dried and frozen) is the main food gathered by local residents besides herring fish.

3. With commercial herring and halibut being the main economic source for our community, we do not want subsistence caught halibut to be counted as part of the quota for commercial halibut fishing.

### CONCLUSION:

Our resolution and its supplement that we submit to IPHS, NPHS through Coastal Villages Fishing Cooperative is self explanatory and can be used for reference on this proposal. Therefore, on behalf of the local fishermen, both commercial and subsistence, we recommend that our proposal be seriously considered to become part of the Commercial Halibut Regulation under "subsistence clause."

NATIVE VILLAGE OF MEKORYUK
INDIAN REORGANIZATION ACT COUNCIL
P.O. Box 66
Mekoryuk, Alaska 99630
(907) 827-8828
Fax (907) 827-8133

# MEKORYUK NATIVE COMMUNITY

## HALIBUT REGULATION PROPOSAL

In absence of subsistence regulations and halibut fishery in and around Nunivak Island region. On behalf of the local commercial and subistence fishermen, want the following suggestive ideas to be seriously considered to become part of the Commercial Halibut Regulations for Nelson Island Region subsistence halibut fishermen in particulars:

1. No limit on number of hooks to be used. (Sports fishing reulations should not be used to develop subsistence regulations).

2. Not count subsistence catch as part of the quota.

**REASONS:**

1. Traditionally, our people use two hook line and many still make traditional hooks although some use regular hook rod and reel. many prefer three-hook lines (jigging).

2. Weather is not always reliable and every trip counts especially to catch as many halibuts they can catch. The halibut (both dried and frozen) is the main food gathered by local residents.

3. With commercial halibut being the main economic source for our community, we do not want subsistence caught halibut to be counted as part of the quota for commercial halibut fishing.

**CONCLUSION:**

Therefore, on behalf of the local fishermen, both commercial and subsistence, we recommend that our proposal be seriously considered to become part of the Commercial Halibut Regulation under "subsistence clause."

# Nightmute Traditional Council

P.O. Box 90021
Nightmute, AK 99690
(907)647-6215 Fax(907)647-6112


## HALIBUT REGULATION PROPOSAL

In absence of subsistence regulations on halibut fishery in and around Nelson Island region and after having encountered a National Marine Fisheries Enforcement Officer in just part summer season, the Nightmute Traditional Council, on behalf of the local commercial and subsistence fishermen, want following suggestive ideas to be seriously considered to become part of the Commercial Halibut Regulations for Nelson Island Region subsistence halibut fishermen in particular:

1. No limit on number of hooks to be used. (Sport fishing regulations should not be used to develop subsistence regulation.)

2. No bag limit for subsistence caught halibut. (sport fishing regulations should not be used to develop subsistance regulations)

3. Not count subsistence catch as part of the quota.

**REASON:**

1. Traditionally, our people use three hook lines and many still take traditional hooks although some used regular hook rod and reel, many prefer three-hook lines. (jigging)

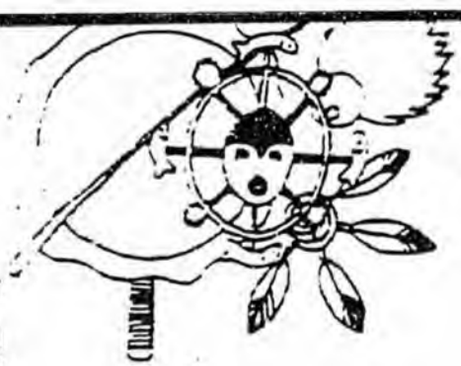
2. Weather is not always reliable and every trip counts especially to catch as many halibuts they can catch. The halibut (both dried and frozen) is the main food gathered by local residents besides herring fish.

3. With commercial herring and Halibut being the main economic source for our community, We do not want subsistence caught halibut to be counted as part of the quota for commercial halibut fishing.

**CONCLUSION:**

Our resolution and its supplement that we submit to NPFC, NPFC through Coastal Village Fishing Cooperative is self explanatory and can be used for reference on this proposal.

Therefore, on behalf of the local fishermen, both commercial and subsistence, we recommend that our proposal be seriously considered to become part of the Commercial Halibut Regulation under "subsistence clause."



# Toksook Bay Traditional Council

TOKSOOK BAY NATIVE COMMUNITY

## HALIBUT REGULATION PROPOSAL

In absence of subsistence regulations on halibut fishery in and around Nelson Island region and after having encountered a National Marine Fisheries Enforcement Officer in just past summer season, the Toksook Bay Traditional Council, on behalf of the local commercial and subsistence fishermen, want following suggestive ideas to be seriously considered to become part of the Commercial Halibut Regulations for Nelson Island Region subsistence halibut fishermen in particular:

1. No limit on number of hooks to be used. (Sportfishing regulations should not be used to develop subsistence regulations)

2. No bag limit for subsistence caught halibut. (Sportfishing regulations should not be used to develop subsistence regulations)

3. Not count subsistence catch as part of the quota.

**REASONS:**

1. Traditionally, our people use three hook line and many still make traditional hooks although some used regular 1 hook rod and reel, many prefer three-hook lines.(jigging)

2. Weather is not always reliable and every trip counts especially to catch as many halibuts they can catch. The halibut (both dried and frozen) is the main food gathered by local residents besides herring fish.

3. With commercial herring and halibut being the main economic source for our community, we do not want subsistence caught halibut to be counted as part of the quota for commercial halibut fishing.

**CONCLUSION:**

Our resolution and its supplement that we submit to IPHS, NPHS through Coastal Village Fishing Cooperative is self-explanatory and can be used for reference on this proposal. Therefore, on behalf of the local fishermen, both commercial and subsistence, we recommend that our proposal be seriously considered to become part of the Commercial Halibut Regulation under "subsistence clause".

P.O. Box 37048, Toksook Bay, Alaska 99637-7048 (907) 427-7114 FAX (907) 427-7714

**Newtok Traditional Council**
P O Box 5545 • NEWTOK, ALASKA 99550 • Telephone (907)237-2314 • Fax (907)237-2429

## HALIBUT REGULATION PROPOSAL

In absence of subsistence regulations on halibut fishery in and around Nelson Island region and after having encountered a National Marine Fisheries Enforcement Officer in just this past summer season, the Newtok Traditional Council, on behalf of the local commercial and subsistence fishermen, want following suggestive ideas to be seriously considered to become part of the Commercial Halibut Regulations for Nelson Island Region subsistence halibut fishermen in particular

1. No limit on number of hooks to be used. (Sportfishing regulations should not

2. No bag limit for subsistence caught halibut. (Sportfishing regulations should not be used to develop subsistence regulations).

3. Not count subsistence catch as part of the quota

Reasons

1. Traditionally, our people use three hook line and many still make traditional hooks although some used regular hook rod and reel, many prefer three-hook lines. (jigging)

2. Weather is not always reliable and every trip counts especially to catch as many halibuts they can catch. The halibut (both dried and frozen) is the main food gathered by local residents besides herring fish.

3. With commercial herring and halibut being the main economic source for our community, we do not want subsistence caught halibut to be counted as part of the quotas for commercial halibut fishing.

CONCLUSION:

Our resolution and its supplement that we submit to IPHS, NPHS through Coastal Village Fishing Cooperative is self-explanatory and can be used for reference on this proposal. Therefore, on behalf of the local fishermen, both commercial and subsistence, we recommend that our proposal be seriously considered to become part of the Commercial Halibut Regulation under "subsistence clause"

**Title: Halibut as a Customary and Traditional Subsistence Resource of Alaska Natives**
Submitted by: Southeast Native Subsistence Commission

WHEREAS, halibut is a customary and tradition resource for Alaska Natives; ancient Tlingit halibut hooks were designed to allow only harvestable-sized fish to be taken; and

WHEREAS, halibut continue to be a vital subsistence food source in coastal Native communities, an essential food at cultural celebrations, and important for sharing with elders and others who cannot harvest for themselves; and

WHEREAS, ANILCA Title VIII provides for the harvesting of fish and wildlife resources for subsistence usage in a non-wasteful manner; and

WHEREAS, Natives have been cited for harvesting halibut because of exceeding the bag limit of two fish per day and for using a long line with multiple hooks; and

WHEREAS, these regulations are not reflective of Native communities' customary and traditional methods, means, bag limits, and sharing; and

WHEREAS, these regulations are ethnocentric and have been difficult to change, due to lack of action from the concerned government agencies: the State of Alaska, National Marine Fisheries Service, the North Pacific Fisheries Management Council, and the International Pacific Halibut Commission.

NOW, THEREFORE, BE IT RESOLVED that the General Assembly of the Alaska Federation of Natives respectfully request that managing agencies recognize and acknowledge that halibut is a customary and traditional subsistence resource and that they allow Alaska Natives to use efficient means of harvest, including multiple hooks, rod and reel, and long line gear.

BE IT FURTHER RESOLVED, that this resolution be sent to the State of Alaska Board of Fisheries, to the National Marine Fisheries Service, to the North Pacific Fisheries Management Council, and the International Pacific Halibut Commission.

Approved for submission by participants at the Bering Sea Fishermen's Association workshop on Wednesday October 16th @ 1 P.M.

Attest: Dan Albrecht, Program Director
Bering Sea Fishermen's Ass'n

| To MATT KOKESH | From K WESTIKA |
|---|---|
| Co./Dept. | Co. |
| Phone # | Phone # |
| Fax # | Fax # |

Sixty-First Annual General Assembly
CENTRAL COUNCIL OF TLINGIT AND HAIDA INDIAN TRIBES OF ALASKA
April 17-20, 1996
Juneau, Alaska

Resolution 96-13
Title: HALIBUT IS A CUSTOMARY & TRADITIONAL SUBSISTENCE RESOURCE OF ALASKA NATIVES
Submitted by: Angoon T&H Community Council

WHEREAS, halibut is a customary and traditional resource for Alaska Natives; ancient Tlingit halibut hooks were designed to allow only harvestable-sized fish to be taken: and

WHEREAS, ANILCA provides for the harvesting of fish and wildlife resources for subsistence usage in a non-wasteful manner; and

WHEREAS, Natives have been cited for harvesting halibut because of exceeding the bag limit and for using a long line with multiple hooks; and

WHEREAS, Natives have had to endure regulations that only allow 2 halibut and a hand-held line with two hooks; and

WHEREAS, these regulations are not reflective of Native communities' customary and traditional methods, means and bag limits; and

WHEREAS, these regulations are ethnocentric and are difficult to change, due to lack of action from both the State and the International Pacific Halibut Commission (IPHC) which will not address this issue until the State does.

NOW, THEREFORE, BE IT RESOLVED that the General Assembly of Tlingit and Haida Central Council respectfully request the assistance of Alaska's delegation in Washington D.C. to amend the Northern Pacific Halibut Act, "To recognize and acknowledge halibut as a customary and traditional subsistence resource, and to assure subsistence harvesting of halibut by Alaska Natives is protected."

BE IT FURTHER RESOLVED that the Central Council also request the Board of Fisheries endorse this resolution with a follow-up letter of support.

BE IT FURTHER RESOLVED that copies of this resolution be sent to Southeast Native Subsistence Commission, the International Pacific Halibut Commission, Board of Fisheries.

Official Business

**COMMITTEE:**

SENATE RESROUCES

**DATE:** 5/7/97

**Subject of meeting:**

HJR 35 Encourage Fed Tax Change For Gas Pipeline

# SIGN-IN

**PLEASE PRINT!**

| NAME | ADDRESS (MAILING) & (ZIP) | PHONE | REPRESENTING | DO YOU WANT TO TESTIFY? |
|---|---|---|---|---|
| Paul Fuhs | | | Yukon Pacific | Yes |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

# HJR

# 35

# SENATE COMMITTEE REPORT

DATE: 5/2/97

FURTHER:

DATE TURNED IN TO OFFICE: 5/7/97

Resources Committee considered HOUSE JOINT RESOLUTION NO. 35

Encouraging federal legislation to improve federal fiscal terms for a trans-Alaska gas pipeline.

and recommends:

[ ] be **replaced** with _____ CS _____(_____)

[ ] adopt **previous** _____ CS _____(_____)

[ ] attached amendment(s)

[ ] adopt Letter of Intent by _____ Committee

[ ] further referral to the _____ Committee

**Senate Bill:**
[ ] same title
[ ] new title

**House Bill:**
[ ] same title
[ ] technical change
[ ] new: SCR#_____

| *SIGNING DO PASS* | *DP* | *OTHER RECOMMENDATIONS* | *NR* | *DNP* | *AM* |
|---|---|---|---|---|---|
| | ✓ | | | | |
| | | | | | |
| | ✓ | | | | |
| | ✓ | | | | |
| | | | | | |
| | ✓ | | | | |
| *CHAIR:* | ✓ | *CHAIR:* | | | |

**NEW FISCAL NOTE(S):**

| Department | Date | Zero | Fiscal |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**PREVIOUS FISCAL NOTE(S):***

| Department | Date | Zero | Fiscal |
|---|---|---|---|
| N. Resources | 4/13 | X | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**[ ] APPROPRIATION -- no fiscal note**

***include fiscal notes accompanying Governor's bill**

# ALASKA STATE LEGISLATURE

*Session:*
State Capitol
Juneau, Alaska 99801-1182
(907) 465-3779 - Phone
(907) 465-2833 - Fax

*Interim*
145 Main St. Loop Suite 221
Kenai, Alaska 99611
(907) 283-7223 - Phone
(907) 283-3075 - Fax

REPRESENTATIVE MARK D. HODGINS
House District 9

## Sponsor Statement

# HJR 35

### Encouraging federal legislation to improve federal fiscal terms for a trans-Alaska gas pipeline.

**HJR 35** is a statement by the 20th Alaska Legislature urging Alaska's congressional delegation to enact legislation that would seek to improve the competitiveness of the trans-Alaska gas pipeline.

The State of Alaska recently commissioned a report, by Dr. Pedro Van Meurs, on the economic viability of the trans-Alaska gas line. Dr. Van Meurs found that the project would need some state and federal fiscal adjustments in order to stimulate the project investment structure. **HJR 35** will encourage Alaska's congressional delegation to sponsor the fiscal legislation necessary to complete the federal portion of the fiscal package.

There is already ample justification to adopt favorable legislation for the gas line from a federal perspective. The trans-Alaska gas line project would establish a substantial new source of taxable income. Billions of dollars would be generated in federal corporate income tax. Based on a scenario of $3.50 per million cubic feet (mcf) and an estimated cost of $12 billion the project would generate approximately $26.7 billion in tax income for the federal government over a 30 year period. The project could also improve the United States trade deficit with Asian countries.

We have heard, repeatedly, that the Asian market window for natural gas sales will begin around 2005. The Asian market is eager to purchase north slope gas and Alaska must proceed immediately with the gas project if we are to participate in this market window. Fierce competition among suppliers is expected from foreign gas projects and therefore Alaska needs to offer a coordinated proposal at a competitive price. Given the short time frame for establishing an economically viable project, it is important to begin the formation of a fiscal platform as soon as possible. By coordinating our efforts we will shorten the timetable needed to bring this project on line and thereby increase Alaska's ability to establish a place in the competitive LNG market.

The need for a unified message from Alaska is critical in portraying fiscal and political stability as well as instilling confidence within the Asian marketplace. It is imperative that the Federal government, State of Alaska, and Local governments work together toward a unified position that will enhance the economic competitiveness to bring this project from concept into actuality. **HJR 35** will assist in that capacity.

# FISCAL NOTE

STATE OF ALASKA
1997 LEGISLATIVE SESSION

BILL NO.

No. 1
Bill Version: HJR 35
(H) Publish Date: 4/16/97

Title: Encouraging Federal Legislation to improve federal fiscal terms for TAGS

Sponsor: House Special Comm. on Oil & Gas

Requestor:

Dept. Affected
BRU:
Components:
Serial #

EXPENDITURES/REVENUES: (THOUSANDS OF DOLLARS)

| OPERATING | FY 98 | FY 99 | FY 00 | FY 01 | FY 02 | FY 03 |
|---|---|---|---|---|---|---|
| Personal Services | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Travel | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Contractual | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Supplies | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Equipment | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Land & Structures | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Grants, Claims | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Miscellaneous | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| TOTAL OPERATING | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| CAPITAL | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| REVENUE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

FUNDING: (THOUSANDS OF DOLLARS)

| | | | | | | |
|---|---|---|---|---|---|---|
| General Fund | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Federal Fund | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Other | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| TOTAL | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

POSITIONS:

| | | | | | | |
|---|---|---|---|---|---|---|
| Full-Time | 0 | 0 | 0 | 0 | 0 | 0 |
| Part-Time | 0 | 0 | 0 | 0 | 0 | 0 |
| Temporary | 0 | 0 | 0 | 0 | 0 | 0 |

ANALYSIS: (ATTACH A SEPARATE PAGE IF NECESSARY)
see attached analysis

Prepared by: Co-Chair Scott Ogan
House Resources Committee
Scott Ogan

Date: 4/13/97
Phone: 465-3715
Phone:

**COMMITTEE COPY**

# DETAILED OVERVIEW OF ECONOMIC RESULTS OF SUGGESTIONS
## (Based on $ 12 billion scenario)

| | CURRENT | SUGGESTED |
|---|---|---|
| CORPORATE: | | |
| Project ROR at $ 3.00 | 9.7% | 11.2% |
| Project ROR at $ 3.50 | 10.8% | 12.1% |
| Project ROR at $ 3.90 | 11.6% | 12.9% |
| Project ROR at $ 4.50 | 12.6% | 13.8% |
| | | |
| Project ROE at $ 3.50 | 14.6% | 18.1% |
| Project ROE at $ 3.90 | 15.8% | 19.7% |
| | | |
| Netback price at $ 3.50 | $ 0.55/Mcf | $ 1.15/Mcf |
| Netback price at $ 3.90 | $ 0.95/Mcf | $ 1.55/Mcf |
| | | |
| GOVERNMENT: | | |
| Federal Take at $ 3.50 | 26.1% | 24.5% |
| State Take at $ 3.50 | 12.6% | 17.3% |
| Federal Take at $ 3.90 | 26.1% | 23.7% |
| State Take at $ 3.90 | 14.3% | 21.1% |
| | | |
| Fed NPV@7%-$3.50-Fin | $ 3537 mm | $ 2961 mm |
| State NPV@7%-$3.50-Fin | $ 2450 mm | $ 2356 mm |
| Fed NPV@7%-$3.90-Fin | $ 4209 mm | $ 3517 mm |
| State NPV@7%-$3.90-Fin | $ 3097 mm | $ 3322 mm |

Aug 96 $3.62

owning -

Net Present Value

# SUGGESTIONS FOR NEW TERMS FOR THE ALASKA NORTH SLOPE LNG PROJECT

## EXECUTIVE SUMMARY

Dr. A. Pedro H. van Meurs
February 12, 1997

# TABLE OF CONTENTS

# SUGGESTIONS FOR NEW TERMS FOR THE ALASKA NORTH SLOPE LNG PROJECT

## 1. INTRODUCTION

The North Slope of Alaska contains natural gas reserves of about 35 trillion cubic feet. Most of these reserves are contained in the Prudhoe Bay field. One of the ways in which these reserves can be produced is through the export of the gas in the form of LNG ( liquid natural gas).

A possible LNG project could be an important source of revenues for the State of Alaska and would create significant employment and business opportunities. It is therefore important for the State of Alaska to analyze the possible optimal fiscal conditions under which this project would become a reality.

The Revenue Department of the State of Alaska requested the consultant to provide a report on possible new fiscal and other terms for the Alaska North Slope LNG project. The study is based on a comparative analysis of international LNG terms and conditions. This executive summary reflects the main conclusions and recommendations of this analysis.

## 2. PROJECT DESCRIPTION

3.5 MODULE INCREMENTS

A possible initial LNG project could produce and export about 14.5 million tons of LNG per year. This level might be reached over a six year period increasing sales volumes by about 2.5 million tons per year. The project would use initially the gas reserves of the Prudhoe Bay field. A large conditioning plant, a large diameter gas pipeline and a liquefaction facility in Valdez would be required. A fleet of about 14 LNG tankers would ship high Btu gas to East Asian markets starting in the 2005 - 2010 period. This project configuration was used as the basis for the recommendations in this executive summary.

Alternative configurations of the project are also possible. A gas pipeline could be built to the northwestern Alaska coast and ice-breaking LNG tankers could be used for the gas export. The Point Thomson gas reserves could be used from the start of the project.

The ramp-up speed is an important economic variable in the project and could be faster than the 6 years assumed in the basic project configuration.

# CORRECTION

THE FOLLOWING DOCUMENT(S)
HAVE BEEN REFILMED TO
ASSURE LEGIBILITY OR PAGINATION

# TABLE OF CONTENTS

# SUGGESTIONS FOR NEW TERMS FOR THE ALASKA NORTH SLOPE LNG PROJECT

## 1. INTRODUCTION

The North Slope of Alaska contains natural gas reserves of about 35 trillion cubic feet. Most of these reserves are contained in the Prudhoe Bay field. One of the ways in which these reserves can be produced is through the export of the gas in the form of LNG ( liquid natural gas).

A possible LNG project could be an important source of revenues for the State of Alaska and would create significant employment and business opportunities. It is therefore important for the State of Alaska to analyze the possible optimal fiscal conditions under which this project would become a reality.

The Revenue Department of the State of Alaska requested the consultant to provide a report on possible new fiscal and other terms for the Alaska North Slope LNG project. The study is based on a comparative analysis of international LNG terms and conditions. This executive summary reflects the main conclusions and recommendations of this analysis.

## 2. PROJECT DESCRIPTION

3.5 MODULE INCREMENTS

A possible initial LNG project could produce and export about 14.5 million tons of LNG per year. This level might be reached over a six year period increasing sales volumes by about 2.5 million tons per year. The project would use initially the gas reserves of the Prudhoe Bay field. A large conditioning plant, a large diameter gas pipeline and a liquefaction facility in Valdez would be required. A fleet of about 14 LNG tankers would ship high Btu gas to East Asian markets starting in the 2005 - 2010 period. This project configuration was used as the basis for the recommendations in this executive summary.

Alternative configurations of the project are also possible. A gas pipeline could be built to the northwestern Alaska coast and ice-breaking LNG tankers could be used for the gas export. The Point Thomson gas reserves could be used from the start of the project.

The ramp-up speed is an important economic variable in the project and could be faster than the 6 years assumed in the basic project configuration.

# 3. PRINCIPLES OF FISCAL RESTRUCTURING

A sound fiscal system for oil and gas resources provides the appropriate balance between two interests of the State:

- the need to encourage an attractive level of economic activity, and
- the need to extract the highest possible share of the economic rent.

The combination of the two objectives results in an optimal rate and timing of the development of the resources for the State.

## *3.1 ENCOURAGEMENT OF ECONOMIC ACTIVITY*

In order to encourage economic activity in the development of the North Slope gas resources the fiscal terms and conditions have to result in a profitability of investments that is competitive with other investment opportunities in the petroleum sector on an international basis. The level of profitability has to be commensurate with the risk.

The more lenient the fiscal terms, the higher the level of economic activity that can be expected, assuming that the resource base is inherently economic on a "no-government take" basis. The fiscal terms should not be more attractive than what is necessary to achieve the desired economic activity.

## *3.2 THE GOVERNMENT TAKE*

The government take in Alaska comes in the form of bonuses, rentals, royalties, severance tax, corporate income tax and property tax. In other jurisdictions in the world, there is also a wide variety of other mechanisms to obtain a share of the economic rent, such as production sharing, participation, R-factor or ROR based profit sharing and special taxes.

What is important in fiscal restructuring is to achieve the highest possible level of the government take as well as creating the optimal structure of the government take.

### 3.2.1 LEVEL OF GOVERNMENT TAKE

The level of the government take is determined by the competitive conditions.

In the case of the Alaska North Slope LNG project the competitive conditions do not only apply to the profitability of the investment opportunities, but relate also to the market access of the gas. The fiscal system has to enable investors to conclude the necessary gas sales in the East Asian region.

One of the consequences is that the fiscal structure Alaska LNG project as a whole - the upstream and well as the downstream - has to be considered.

### 3.2.2 STRUCTURE OF THE GOVERNMENT TAKE

With respect to the structure of the government take there are two important issues, which are progressivity and back-end loading.

#### *3.2.2.1 PROGRESSIVITY*

A progressive fiscal system is a system whereby the government take is modest in case of conditions of low profitability and high in case of high profitability. A progressive fiscal system achieves the highest level of economic activity in conjunction with the highest level of economic rent extraction.

A regressive fiscal system is a system whereby the government take is high in case of conditions of low profitability and low in the case of high profitability. A regressive system results in a situation where marginal projects will not be undertaken and whereby the government is not earning the highest possible economic rent in case of high profitability.

The most efficient way to promote optimal economic activity with effective economic rent collection is therefore to adopt a progressive system.

It should be noted, however, that progressive systems have a drawback for governments. They result by their very nature in important swings in government revenues if there are important changes in prices or costs. In order to properly manage a progressive fiscal system a government has to have a "buffering" system in place, such as a special fund to which government contributes when prices are high and which the government could use in case prices are low.

At the same time it should also be noted that large corporations look for "upside" in an investment and a severe reduction of the upside would reduce the investors interest in the project.

In economic environments where gas prices or development costs are difficult to predict a progressive system is much less risky to the investor than a regressive system, because the project will automatically show acceptable profitability over a much wider range of economic possibilities. Progressive fiscal systems therefore reduce project risk.

#### *3.2.2.2 BACK-END LOADING*

A back-end loaded fiscal system means that the government take during the first years of the cashflow is less than the government take during the latter part of the cashflow. A front-end loaded system has a high government take during the initial years.

Back-end loaded systems permit the investor to recover most or all of his investment prior to being subject to a high government take. The advantages of this approach are that it:

- reduces project risk because the payout period is shorter, and
- it increases the rate of return.

Back-end loaded systems usually result in a better balance between the investor's and the government's objectives. The discount rate used by investors to evaluate an investment opportunity is typically higher than the discount rate used by government in order to assess its income stream of government revenues. Therefore a government could obtain a higher overall government take, at the government's discount rate, provided the government take is back-end loaded.

## 4. CURRENT FISCAL TERMS

### *4.1 DESCRIPTION*

The description includes all fiscal provisions. For the economic analysis of the Alaska LNG project one would only apply the fiscal provisions which belong to the decision to make an incremental investment in the LNG project. This means one would not take the bonuses and rentals into account in the economic analysis.

### 4.1.1 UPSTREAM

#### *4.1.1.1 BONUSES*

Alaska employs a system of competitive bonus bidding for the allocation of acreage.

#### *4.1.1.2 RENTALS*

Surface rentals in the Prudhoe Bay area are $ 1 per acre.

#### *4.1.1.3 ROYALTIES*

Royalties for Prudhoe are 12.5% of the value at the lease boundary. A processing allowance of $ 0.18 per Mcf is permitted for gas as a deduction from this value. This allowance escalates with inflation.

#### *4.1.1.4 SEVERANCE TAX*

The severance tax rate for oil is 12.25% for the first 5 years and 15% thereafter and for gas it is 10%. The severance tax is calculated on the value at the lease boundary less royalties. For gas there is a processing allowance of $ 0.20 per Mcf (assumed pending draft regulations). Also there is minimum severance tax of $ 0.064 per Mcf regardless of the price.

The severance tax for oil and gas is reduced by the Economic Limit Factor (ELF). This factor varies between 0 and 1 and depends on the daily well production in the case of oil and gas and also total daily field production in the case of oil.

#### *4.1.1.5 CORPORATE INCOME TAX*

The federal corporate income tax rate is 35%. Losses can be carried forward and interest is a deductible expense. Depreciation for federal purposes varies from asset class to asset class and is based on the MACRS system. Typically, the conditioning plant would be depreciated over 8 years.

The Alaska corporate income tax rate is 9.4% applied on a unitary world-wide basis of income. The experience of Alaska is that Alaska only receives about half this amount as a result of the apportionment procedures. The Alaska corporate income tax is deductible for federal corporate income tax purposes, creating a total tax rate of 41.1%.

The Alaska corporate income tax also permits the carry forward of losses and the deduction of interest. Depreciation rates are based on the Asset Depreciation Range (ADR), which varies by asset class. Typically, the conditioning plant would be depreciated over 12 years.

#### *4.1.1.6 PROPERTY TAX*

A 20 mill ( 2 percent) property tax applies based on the replacement cost of the asset value and determined on the basis of the remaining life of the asset. The property tax is applied during the construction period of the asset.

### 4.1.2 DOWNSTREAM

#### *4.1.2.1 CORPORATE INCOME TAX*

The same federal and state corporate income tax applies to the downstream. The federal depreciation period for LNG carriers is over 11 years and for the gas pipeline and the liquefaction plant over 16 years. The State depreciation period for the LNG carriers is over 15 years and for the pipeline and liquefaction plants over 18 years.

#### *4.1.2.2 PROPERTY TAX*

The same property tax applies to downstream operations. LNG carriers are not subject to property tax. Also, the State does not levy a property tax on liquefaction. The municipalities do levy such a tax.

## *4.2 RATE OF RETURN AND GOVERNMENT TAKE EFFECTIVENESS*

The fiscal features applied in Alaska can be characterized as follows:

– royalties and severance taxes - Since the royalties and severance taxes are determined on a net-back basis and most of the incremental costs are downstream of the value determination point, the royalties and severance taxes actually function as a profit share which is slightly progressive on a total project basis, despite the fact that the royalties are based on the gross value of the production. Royalties by their very nature are usually front-end loaded when considering the upstream only.

– corporate income tax. Corporate income tax is a neutral feature (neither progressive nor regressive) because the tax is profit based. The corporate income tax is strongly front-end loaded because of the very slow depreciation rates.

– property taxes. Property taxes are strongly regressive and strongly front-end loaded.

On average, the total Alaska fiscal system (Federal, State and local) is:

– slightly regressive or slightly progressive on a total project basis depending on the economic conditions and the tax position of the investor, and

– front-end loaded.

This means that the Alaska fiscal system is not optimal for an LNG project.

The rate of return to the investors is less than it needs to be. The rate of return is particularly negatively affected under marginal economic conditions. However, under high price scenarios, the total government take is less than it could be.

The current Alaska fiscal system could therefore be improved in order to make the LNG project more attractive by making the project more profitable and less risky. The system could also be improved by making it a more effective economic rent collector.

# 5. COMPARATIVE ECONOMICS

## *5.1 FINANCIAL EVALUATION CRITERIA*

### 5.1.1 HURDLE RATE

Probably the most important yardstick for assessing the profitability of the Alaska project is the "hurdle rate".

The hurdle rate is the minimum cashflow rate of return that the project has to have in order to be considered economically attractive by the investors. Many companies determine the hurdle rate after all taxes and before financing. The hurdle rate can be determined on a current or constant dollar basis. The hurdle rate depends on many factors, such as the rate of return of other opportunities, the average cost of capital, the project risks and financing opportunities.

Hurdle rates are different from company to company because the factors that determine the hurdle rate are different for each company. This means that some companies may consider a project profitable while others may not. For large projects, companies may have different hurdle rates per project depending on the project risk.

### *5.1.1.1 OTHER OPPORTUNITIES*

The petroleum industry is a global industry. All large oil companies are constantly assessing and re-assessing investment opportunities on an international basis with respect to their profitability and risk. Companies usually select the projects that offer the best combination of profitability and risk for development. The number of selected projects depends on the availability of capital.

The hurdle rate will be relatively high when a company has ample highly profitable investment opportunities and limited capital resources. The hurdle rate will be relatively low when a company has few projects available and ample capital resources.

One can obtain an idea of the hurdle rate that companies use based on other opportunities, by analyzing known projects under development and calculating the rate of return for such projects.

This year Mobil launched the Ras Laffan LNG project in Qatar in the Gulf area. Detailed information is available for this project. The rate of return for this project is approximately 13.5% under a $ 3.50 per MMBtu CIF price scenario in Korea and 15.3% for a $ 3.90 scenario. This rate of return is determined on a total project basis, including shipping and on a stand alone and a "before financing" current dollar basis ("Project ROR").

The rate of return on a Qatar LNG project is very important for Alaska, because Qatar has 250 trillion cubic feet of gas available and could therefore launch more LNG projects or expansions of the current projects if investors are interested and the markets are available.

Along with Ras Laffan, there are a number of other projects that are ahead in the time line compared to the Alaska North Slope project. The information on other LNG projects is less detailed than for Ras Laffan. However, based on reasonable assumptions about construction costs and other factors the rate of return of these projects can be estimated as follows:

| PROJECT ROR OF ONGOING PROJECTS | | |
|---|---|---|
| Price Scenario ($/MMBtu) | $ 3.50 | $ 3.90 |
| Ras Laffan | 13.5% | 15.3% |
| Qatargas | 14.7% | 16.8% |
| Oman-Shell | 14.1% | 15.8% |
| Australia - NW Shelf | 13.3% | 14.8% |

This indicates that the competitive rate of return for LNG projects that are being launched at this moment is in the range of 13 - 17% for the price range of $ 3.50 to $ 3.90 per MMBtu CIF Korea or Japan on a total project basis.

### *5.1.1.2 COST OF CAPITAL*

The hurdle rate has to be equal to or higher than the weighted average cost of capital after adjustment for risk. The weighted average cost of capital of a company is the after tax cost of all its capital sources in the form of debt and equity. For large oil corporations with a relatively modest debt, the current cost of capital can estimated in the range of 9% to 11%. It is not economic for a corporation to invest in a project if the project does not make at least a rate of return that is equal to the weighted average cost of capital after adjustment for risk.

Successful companies have projects with rates of return that are above the weighted average cost of capital.

### *5.1.1.3 ALASKA PROJECT RISK*

The relative risks of the projects is also an important factor in deciding about the attractiveness of a project and in deciding about the hurdle rate for the project. It should be noted that relatively speaking the Alaska project cannot be considered a low risk project under current conditions. There is a great variety of project risks. The following table is a comparison between the Alaska project and the Ras Laffan project of the project risks involved:

| RELATIVE PROJECT RISK ALASKA - RAS LAFFAN | | |
|---|---|---|
| | Alaska | Ras Laffan |
| RISKS: | | |
| Regional conflict risk | Very Low | Very High |
| General country risk | Low | Average |
| Gas reserve risk | Low | Very Low |
| Gas price risk | Aver - High | High |
| Regulatory/legal risk | High | Low |
| Risk of cost overruns | High | Low |
| Market access risk | High | Average |
| Fiscal stability risk | High | Low |

The relative risks find their expression in the financing terms that the market would be willing to provide. Indications are that the market would provide debt financing to an Alaska project under more favorable terms than for the Ras Laffan project, largely as a result of the low country risk. Yet, the project investor's risks may be evaluated higher or lower than Ras Laffan by the investors.

The netback value for gas would be substantially positive if the costs for the Alaska project could be reduced substantially to the $ 12 billion level. This would create an average price risk. The price risk can be substantially reduced by the State through a the revisions in the fiscal system suggested in this report. These revisions would lower the cost of service of the downstream and thereby increase the netback value and lowering the price risk, because even with lower international prices there would still be a positive netback value.

However, in case of substantial cost overruns, the netback value becomes lower and may even become negative, creating a very high price risk.

The market access risk in the case of Alaska is high because of the large size of the project. A typical example is Ras Laffan whereby Mobil has decided to go ahead with the first 2.4 million tons per year capacity without waiting for contracts to be finalized for the second 2.4 million tons. The large size of the Alaska project makes it unlikely that all gas can be marketed prior to project start-up.

Because of the need to built a large distance pipeline, the Alaska project would not be economic unless all steps of the 14.5 million ton project would be completed. This creates a significant market access risk.

The overall degree of risk would result in a risk adjustment of the hurdle rate. The rate could be adjusted upward or downward depending on the perception of risk.

In very high risk circumstances such as for the Sakhalin project, it might well be that the hurdle rate would be two or three percentage points higher.

For Alaska there is an opportunity to create a relatively low risk environment. Companies could reduce the cost overrun risk through more detailed initial analysis. The government of Alaska could assist in reducing the regulatory/legal risk and the fiscal stability risk. Furthermore, the government could reduce the cost overrun risk and price risk by creating a higher netback value for the gas through the fiscal system. A significant reduction of the risk could result in a lowering of the hurdle rate by one percentage point or more.

### *5.1.1.4 FINANCING*

With respect to the Alaska LNG project it is important to emphasize that the analysis of the project on a no-financing basis does not do the Alaska project justice. In the United States, interest is a tax deductible expense. Furthermore, the financial markets perceive North America as a low risk area in which a high leverage of the downstream operations is possible.

Finally, the incremental investments in the Alaska LNG project are primarily in downstream operations which are highly financeable.

The high degree of financeability of the downstream operations makes the incremental cost of capital less than the weighted average cost of capital of the corporation.

Given these considerations it is important to consider the comparative economics either on an after financing basis or provide some decrease in the hurdle rate in order to recognize these factors. The rate of return after financing would be the rate of return on equity ("Project ROE"). This means the rate of return on total capital less the debt.

### *5.1.1.5 TOTAL PROJECT VERSUS ITS COMPONENTS*

The risk on the total project and its components are not necessarily the same. The downstream components could be constructed under relatively low risk contractual arrangements with the producers. The producers would run the risk of cost overruns, price declines and other risks.

Therefore, for the determination of the netback value and for royalty purposes one would use a rate of return that is lower than the total project rate of return and would represent the lower risk. Also the costs of capital for the downstream components is typically lower than for the upstream component. The rate of return would be a Cost of Service rate of return.

In order to assume all the project risks, the liquid penalty and earn a reasonable return on the project development investments, the producers will have to have a reasonable minimum netback value for the gas. It can be estimated that this value is about $ 0.98 per Mcf. If downstream operators would assume more risk, this value could be lower but in this case the cost of service of the downstream operations increases because of the need for a higher rate of return in order to assume this risk.

### *5.1.1.6 RISK ADJUSTED HURDLE RATE*

Under the current economic conditions a typical hurdle rate under a price scenario of $ 3.50 per MMBtu would be about 13% for Middle East type risks. However, Alaska should be able to reduce risks considerably. Therefore, assuming that Alaska would take such measures, companies may adopt a 12% hurdle rate for the Alaska LNG project.

Under a price scenario of $ 3.90 per MMBtu all LNG projects in the world become more profitable and the alternative opportunities therefore become more profitable. Therefore an alternative target at $ 3.90 per MMBtu would be 14%, again on the assumption than Alaska would reduce risks substantially.

It should be noted that different companies may adjust differently for risk because the risk perceptions as well as the abilities to absorb risk are different among companies. Also the method of adjusting the hurdle rate by adjusting the percentage is somewhat subjective.

## *5.2 ANS LNG PROJECT PROFITABILITY ANALYSIS*

An economic sensitivity analysis of the project was done using investment costs ranging from $ 15 to $ 12 billion. The analysis was based on the currently applicable fiscal terms and conditions. For the CIF price range of $ 3.50 to $ 3.90 per MMBtu, the Project ROR ranges from 8.9% to 11.6% as indicated in the table below:

| TOTAL PROJECT ROR OF ANS LNG PROJECT | | |
|---|---|---|
| Price Scenario ($/MMBtu) | $ 3.50 | $ 3.90 |
| Alaska - $ 15 billion | 8.9% | 9.7% |
| Alaska - $ 13.5 billion | 9.8% | 10.6% |
| Alaska - $ 12 billion | 10.8% | 11.6% |
| *HURDLE RATE:* | *12.0%* | *14.0%* |

The above rate of return is determined on a consolidated basis, this means that it is assumed that companies can take their deductions for corporate income tax as the project proceeds. The analysis was also done on a current dollar basis.

The rate of return is dependent on the ramp-up speed of the project. A unique feature of the Alaska project is that a long distance high cost gas pipeline is required. The quicker this line can be filled with production, the higher the rate of return will be. If the ramp-up would be 3 years, the ROR would be approximately 0.7% higher. Such a fast ramp up, however, is improbable due to market restrictions. Currently, the total Pacific LNG market is increasing by about 2.5 million tons per year and many projects compete in this market.

It therefore appears that the Alaska North Slope LNG project is not economic under current conditions, even if the costs could be dropped to $ 12 billion and the ramp-up speed could be increased.

However, improvements in the fiscal system together with a reduction of project risk could make the project attractive.

## *5.3 ALASKA PROJECT ON THE BASIS OF OTHER FISCAL SYSTEMS*

### 5.3.1 OVERALL FISCAL BURDEN

The overall fiscal burden imposed by Alaska on a possible LNG project is tough in comparison with other LNG exporting countries.

The relative burden can be most accurately measured by applying the fiscal terms of other jurisdictions to Alaska North Slope economics.

In such a comparison the economics of Alaska, Canada and Australia are measured on a consolidated basis and the economics of the other LNG exporting countries is measured on a stand alone basis. The following table provides the comparative analysis of the ROR for two scenarios, $ 15 billion costs with a price of $ 3.50 and $ 13.5 billion costs with a price of $ 3.90:

| TOTAL PROJECT ROR OF DIFFERENT FISCAL SYSTEMS BASED ON ALASKA ECONOMICS | | | |
|---|---|---|---|
| | Costs/price: | 15B- $ 3.50 | 13.5B- $ 3.90 |
| | Project: | | |
| ALASKA | North Slope | 8.9% | 10.6% |
| INNER CIRCLE-LOW COST: | | | |
| Brunei | Lumut | 8.7% | 10.2% |
| Indonesia | Arun | 9.1% | 10.6% |
| Malaysia | Bintulu I ,II | 5.6% | 7.1% |
| Malaysia | Bintulu III | 5.5% | 7.0% |
| Vietnam | Offshore | 9.1% | 10.0% |
| OUTER CIRCLE-HIGH COST: | | | |
| Abu Dhabi | Das Island | 9.1% | 10.8% |
| Australia | All projects | 9.8% | 11.5% |
| Canada | PACRIM | 9.9% | 11.4% |
| Indonesia | Irian Jaya | 10.0% | 11.9% |
| Indonesia | Natuna | 10.2% | 12.2% |
| Oman | Shell | 10.3% | 12.4% |
| PNG | Hides | 10.0% | 11.8% |
| Qatar | Qatargas | 9.7% | 12.2% |
| Qatar | Ras Laffan | 9.4% | 11.4% |
| Russia | Sakhalin II | 9.9% | 11.2% |
| Yemen | Hunt | 9.7% | 11.1% |

The "inner circle-low cost" jurisdictions are areas which have both a short shipping distance to Korea and Japan and have low gas development costs. Fiscal terms in these areas can be expected to be relatively tough because these gas resources are being produced under favorable economic conditions. It can be seen how the terms of these jurisdictions are indeed equal to or tougher than those of Alaska for investors.

The "outer circle-high cost" jurisdictions are areas which have either a high shipping cost to Korea and Japan because of large transport distances or have high gas resource development costs or both. These jurisdictions have to offer - on average - better terms in order to be competitive. Alaska belongs in this group.

It can be noted that all jurisdictions in this group offer better terms and conditions than Alaska resulting in a higher rate of return to investors, when the fiscal terms are applied to Alaska economic conditions.

This is a very strong indication that the Alaska fiscal terms are not competitive with the "outer circle-high cost" jurisdictions.

### 5.3.2 STRUCTURE OF THE GOVERNMENT TAKE

An important issue in international fiscal systems is the structure of the fiscal system. The structure of the fiscal system can be analyzed by reviewing the level of government take under various scenarios.

The government take is defined as the percentage that the government obtains of the economic rent. The government take is usually expressed as a percentage of the undiscounted rent, although economic rent is usually determined on a discounted basis.

The following table provides the undiscounted government take in percent for the two scenarios:

| GOVERNMENT TAKE OF DIFFERENT FISCAL SYSTEMS BASED ON ALASKA ECONOMICS | | | |
|---|---|---|---|
| | Costs/price: | 15B- $ 3.50 | 13.5B- $ 3.90 |
| | Project: | | |
| ALASKA | North Slope | 40.4% | 41.7% |
| INNER CIRCLE-LOW COST: | | | |
| Brunei | Lumut | 46.6% | 49.8% |
| Indonesia | Arun | 57.5% | 59.9% |
| Malaysia | Bintulu I ,II | 61.2% | 66.4% |
| Malaysia | Bintulu III | 61.2% | 66.4% |
| Vietnam | Offshore | 38.2% | 47.9% |
| OUTER CIRCLE-HIGH COST: | | | |
| Abu Dhabi | Das Island | 44.4% | 45.6% |
| Australia | All projects | 33.7% | 36.1% |
| Canada | PACRIM | 35.2% | 39.9% |
| Indonesia | Irian Jaya | 48.7% | 50.7% |
| Indonesia | Natuna | 25.6% | 25.9% |
| Oman | Shell | 21.6% | 19.4% |
| PNG | Hides | 27.3% | 28.1% |
| Qatar | Qatargas | 33.1% | 30.8% |
| Qatar | R.s Laffan | 34.4% | 33.7% |
| Russia | Sakhalin II | 37.5% | 38.2% |
| Yemen | Hunt | 35.3% | 49.5% |

The government take can be defined on a "No Participation" basis or a "Participation" basis. A "No Participation" basis means that the cashflow as a result of direct government equity participation is not being taken into account. A "Participation" basis means that this cashflow is included. The above table is on a "No Participation" basis.

In terms of the overall level of government take it can be noted how the government take in the "inner circle-low cost" jurisdictions is typically higher than for the "outer circle-high cost" jurisdictions.

This means that most governments of the "outer circle-high cost" group compete by offering a lower government take. This compensates for the higher gas development costs and longer transport distances.

The progressivity of the fiscal systems can be analyzed by comparing the $ 15 billion-$3.50 case with the $ 13.5 billion-$3.90 case. The results are as follows:

– Vietnam and Yemen have strongly progressive systems,
– Brunei, Malaysia, Indonesia (Arun and Irian Jaya), Australia and Canada have progressive systems,
– Alaska, Abu Dhabi, Indonesia (Natuna), PNG and Russia have very slight progressive systems or neutral systems, and
– Oman and Qatar have regressive systems because the government take goes down under more favorable conditions.

What is also interesting to note is that some governments are able to generate a relatively high rate of return on the basis of a higher government take than Alaska. For instance, Yemen under the $ 13.5 billion case has a government take of 49.5% compared to Alaska's 41.7%. Yet, the rate of return under the Yemen contract would be 0.5% higher. The reason is that the Yemen contract is strongly back-end loaded while the Alaska contract is strongly front-end loaded. Another interesting example is Abu Dhabi which uses accelerated depreciation for tax purposes in order to make the system back-end loaded. Canada generates also a higher rate of return through accelerated depreciation.

A special case is Indonesia, which actually "subsidizes" the project through the direct investment in liquefaction. Indonesia compensates for this arrangement through a higher government take (except for Natuna).

This means that the "outer circle-high cost" countries compete by introducing one or more of the following fiscal concepts in their fiscal system:

- a lower government take
- a progressive government take, making the $ 3.50 case more attractive,
- a back-end loaded government take, or
- investment "subsidies".

Alaska employs none of these features and it is therefore that the Alaskan terms are the least attractive for investors among the "outer circle-high cost" jurisdictions.

In addition to the basic government take, many jurisdictions employ direct government equity participation in the project. This is in particular the case for Qatar, Abu Dhabi, Oman, Yemen, Brunei and PNG. This increases the government take on a "Participation" basis substantially. However, these governments share in this case the commercial risks with the investors.

## *5.4 COMPETITIVE POSITION RELATIVE TO OTHER PROJECTS*

### 5.4.1 ALASKA ON THE TIME LINE

The projects in Qatar (Ras Laffan and Qatargas), Oman and the NW Shelf expansion project all are ahead on the time line relative to Alaska. The Qatargas project has already started. Oman and Ras Laffan have already specific sales contracts.

The total production capacity of the four projects together is 23.4 million tons of LNG per year. As indicated, the projects also have a Project ROR which are more attractive than the current Alaska project. It is unlikely that the Alaska North Slope project could be launched ahead of these projects.

The Alaska project would therefore primarily compete with a second tier of projects.

### 5.4.2 COMPETITION WITH RESPECT TO SECOND TIER PROJECTS

The economic information on most of these projects is still rather limited. Project ROR figures for these projects are therefore only indicative. Only very generalized economic analysis can be done with a wide range of error.

Based on generalized economic calculations the indicative Project ROR of these projects could be compared with the applicable hurdle rates as follows for the $ 3.50 scenario:

| INDICATIVE COMPARATIVE ANALYSIS AND RATING OF FUTURE PROJECTS | | | | |
|---|---|---|---|---|
| | Hurdle | ROR | Diff | Rating |
| | % | % | % | % |
| Alaska - $12 billion | 12.0% | 10.8% | -1.2% | 5 |
| Canada-PACRIM | 12.0% | 12.0% | 0% | 2 |
| Australia-Gorgon | 12.0% | 11.1% | -0.9% | 4 |
| Russia-Sakhalin II | 14.0% | 11.0% | -3.0% | 8 |
| Mal-Bintulu III | 12.0% | 11.4% | -0.6% | 3 |
| Indon- Irian Jaya | 13.0% | 14.1% | +1.1% | 1 |
| Indonesia-Natuna | 13.0% | 10.8% | -2.2% | 7 |
| PNG-Hides | 13.0% | 11.3% | -1.7% | 6 |
| Yemen - Hunt | 13.0% | 9.9% | -3.1% | 9 |

It can be seen how Alaska seems to rate in the middle of the group of future projects.

Both the Canadian PAC-RIM and the Irian Jaya project are in the hurdle rate range. Malaysia III is close to the hurdle rate. The other projects seem unattractive at this time.

The total output of the projects would be 37.8 million tons per year. Only a few of these projects might be launched prior to 2010. Therefore, for Alaska to be able to enter the market in the 2005 - 2010 period, Alaska would have to compete with the best of these projects.

This indicates that the rate of return of the Alaska project would have to be improved considerably in order to make the project more profitable in comparison with the indicative rate of return of competing projects.

## 5.5 EFFECT OF TIME ON THE PROJECT

The effects of time on the Alaska LNG project are important.

As indicated earlier, the ramp-up speed could add about 0.7% to the Project ROR if the ramp up time could be reduced from 6 to 3 years. It is likely that the ramp up time could be reduced somewhat over time.

By the year 2010 the Pacific markets may increase at a rate of 3 million or more per year instead of 2.5 million tons per year. This might result in a situation where the ramp up time could be reduced to 5 years or 4.5 years. This would increase the rate of return and make the market access risk less.

At the same time the liquid loss which is estimated at 384 million barrels if the project starts in 2005 might be reduced to less than half this amount by the year 2010. This would add about 0.2% to the Project ROR.

A general benefit to Alaskan's might be that over time the CIF prices for gas in East Asia may increase in real terms, creating a considerably higher economic rent which in turn would result in much higher government revenues.

The main drawback of delays in the Alaska project is that the project may be "nibbled to death" by small projects coming in ahead of the Alaska project. Petroleum exploration in Asia used to be primarily for oil. Gas was considered a by-product. However, the strongly emerging gas markets in Asia have now created a situation where petroleum companies are now exploraing for gas.

Exploration in Thailand, Pakistan and China is in many cases aimed at discovering gas. Vietnam may shortly initiate a program aimed at making gas exploration more attractive. Therefore, it can be expected that many gas discoveries will be made during the next decade.

At the same time the economics of small LNG liquefaction facilities is improving.

All such conditions could lead to a situation where Alaska may be delayed.

## 5.6 EXPANSION ECONOMICS

An important justification for possible fiscal improvements is the fact that the Alaska project as described here is really only a Phase I of a possible broader undertaking. Phase I involves the sale of 17 trillion cubic feet of gas and the corresponding production of about 19.5 trillion cubic feet (about 2.5 trillion cubic feet is necessary as energy source for conditioning, pipeline transport, liquefaction and storage and for boiloff during marine shipping).

The Alaska North Slope contains at least 35 trillion cubic feet and may prove to contain much larger reserves after companies start to explore specifically for gas.

There is scope for a profitable Phase II of the project. The level of profitability depends, however, very much on the development costs of the additional gas reserves.

It should be noted that apart from 26 Tcf in Prudhoe Bay and 3 Tcf in Point Thomson, the remainder of the current reserves is in relatively small fields which would high development costs per Mcf. Furthermore, Prudhoe Bay gas are also needed as fuel for the oil operations.

## 5.7 MAIN ADVANTAGES AND DISADVANTAGES OF THE ALASKA PROJECT

The main advantages of the Alaska project are:

- the potential ability to invest under consolidated tax conditions,
- the ability to raise financing under relatively favorable terms, and
- the availability of a large proved gas reserves which do not require substantial initial incremental investments for production.

The main disadvantages of the Alaska project are:

- the need for a high cost long distance gas pipeline in order to connect the gas to the coast,
- the required large size of the project, which results in a ramp up speed which is slow on a total project basis compared to other projects and results in increased market risk, and
- the lack of additional condensate production along with the gas production, and the existence of a liquid penalty because early gas production will result in a lower recovery of liquids

# 6. INCREASING PROFITABILITY

In order for the Alaska LNG project to take place the competitiveness and profitability of the project have to be increased. This can only be achieved on the basis of:

a) an active program on the part of the corporations in order to evaluate whether costs can be reduced, and

b) a cooperative approach between the State Government, the Federal Government and the local governments with respect to improving fiscal terms and reducing project risk.

Unless all four parties are willing to make a contribution to increasing the competitiveness and reducing the risk of the project, it would be difficult to reach the minimum objectives.

The increase in competitiveness should be primarily achieved by reducing the government take on the downstream portion of the project. By reducing the government take on the downstream, the netback value will be increased which in turn will lower the cost overrun risk and the price risk. This risk can be further reduced by reducing the upstream government take under conditions of low netback prices.

## *6.1 STATE AND FEDERAL INCENTIVES*

The State and the Federal government could seek to improve the competitiveness of the project considerably by solving two important issues:

- the slow rate of depreciation, and
- the high combined tax rate.

### 6.1.1 ACCELERATION OF DEPRECIATION

The depreciation should preferably be brought in line with worldwide conditions for LNG plants. This means that an accelerated depreciation of 20% straight line per year should be the target. The change in depreciation should be proposed in such a way that it does not result in impacts on other tax payers.

This can be achieved by:

– targeting the liquefaction plants and the LNG carriers for accelerated depreciation, or/and

– targeting a specific class of "frontier projects" or "LNG projects" for an accelerated rate.

The IRS has already some discretion to specify accelerated depreciation for certain classes of assets and therefore such a change may not require new Federal legislation.

### 6.1.2 TAX CREDITS

The negative impact of the high overall tax burden could reduced by introducing a tax credit. A total State and Federal tax credit of 10% could be proposed. A tax credit would be a highly effective way to stimulate the project since it is an excellent mechanism to lower the net after tax investment cost of the project.

### 6.1.3 FEDERAL JUSTIFICATION

There is ample justification for the above measures from a Federal perspective. As a result of the tax improvements, the Alaska North Slope project will come one step closer to reality. The project would establish for the Federal Government a very significant new source of taxable income. The project would generate on an undiscounted basis billions of dollars in corporate income tax for the Federal Government. Based on a $ 12 billion and $ 3.50 per Mcf scenario, the project would generate $ 26.7 billion in tax income for the Federal Government over a 30 year period.

## *6.2 STATE AND LOCAL INCENTIVES*

### 6.2.1 PROPERTY TAX

The State of Alaska and the municipalities could improve the project economics substantially by reducing the property tax.

The State may wish to make the entire project tax exempt for property tax purposes. The local governments could at least eliminate property tax during the construction period as well as the ramp up period.

Additionally one should consider a property tax holiday of 10 years from the end of the ramp-up period. However, one might consider a compensation package for the municipalities for this benefit.

For instance, the compensation could be in the form of "free" natural gas delivered to the municipalities at the pipeline in exchange for the property tax holiday and in lieu of the payment of property tax. Also agreement would need to be reached on the detailed calculation methods of the property tax.

There would be ample justification for the proposed measures from the point of view of the local governments. The project would bring considerable employment and business opportunities and would provide low cost clean energy and a considerable future source of property tax income.

## *6.3 STATE INCENTIVES*

### 6.3.1 RELIEF ON MINIMUM SEVERANCE TAX

The State could remove the minimum severance tax in order to enhance the ability for the sellers of the gas to negotiate the lowest possible minimum sales price in case of oil price declines. Asian buyers are very concerned about minimum sales prices.

### 6.3.2 ROYALTY AND SEVERANCE TAX RELIEF

The current 12.5% royalty and the 10% severance tax are front-end loaded The project risk could be reduced and the profitability under low netback conditions could be enhanced with a lower fiscal burden under these conditions. This relief is part of a more general restructuring of the royalty and severance tax to be described in the next chapter.

### 6.3.3 DETERMINATION OF NET BACK VALUE FOR ROYALTY AND SEVERANCE TAX PURPOSES

It can also be recommended to establish a more detailed and specific system on how the netback price for royalty and severance tax purposes would be calculated. The netback price should be based on the principle that each of the downstream components of the project should be a viable business by itself. A cost of service type rate of return should be included in the calculation of the cost of marine shipping, liquefaction, pipeline transport and conditioning for royalty net back value purposes.

The cost of service should be based on the assumption that the downstream operations are relatively low risk and that producers assume most of the project risks.

Such a calculation could result in a "deemed tariff" for these services for the purpose of royalty calculations.

The "deemed tariff" should apply regardless of whether the project has an integrated project structure or not. Therefore, the deemed tariff could be equal to or different from the actual tariffs or rates that would be charged from time to time.

### *6.4 TIME LIMITS AND WORK COMMITMENTS*

A significant fiscal restructuring would be required in order to achieve the objectives of the State of Alaska. Most of these changes can be suggested as permanent changes to the fiscal system.

However, one may wish to establish some time limits on certain specific fiscal benefits which are being provided as a specific incentive for the LNG project.

Also it is important that the State of Alaska insist on a work plan on the part of the future investors in exchange for the fiscal benefits. The main objective of the fiscal improvements is to push the project forward. It is important that the producers demonstrate their willingness to make modest investments in feasibility work and studies.

## 7. INCREASING FAIRNESS AND REDUCING RISK

As indicated earlier Alaska should aim for obtaining the highest possible share of the economic rent commensurate with other economic objectives. A back-end loaded and progressive system could help in achieving these objectives. At the same time such systems reduce project risks for the investors.

### *7.1 CREATION OF BACK END LOADING*

One could recommend to replace the current royalty and severance tax with a single back-end loaded and progressive royalty. This would provide a simplification of the fiscal system.

The single new royalty could be made more progressive back-end loaded by:

- removing the severance tax for gas,
- introducing a higher royalty in combination with a higher royalty allowance, and
- by making this royalty time related.

## *7.2 CREATION OF PROGRESSIVITY AND BACK-END LOADING*

Very important variables in the creation of economic rent are the CIF price of gas and the downstream costs. A high price and low downstream costs create automatically a large economic rent. It is in the interest of Alaska to capture a large share of the economic rent that might be generated.

The royalty could be made more sensitive to the netback value by increasing the current allowance of $ 0.18 per Mcf to, for instance, $ 0.60 per Mcf. The average project royalty could be increased at the same time to, for instance, 30%.

This average royalty could then be re-distributed over a time frame related to the project. The royalty could start at 5% during the construction and ramp-up phase and could go up to rather high levels of say 40 - 60% depending on the detailed provisions of the formula that is applied. Such a formula needs careful consideration.

The creation of a progressive and back-end loaded royalty system make the determination of the net-back value for royalty purposes an essential component of the overall fiscal system, as already discussed in section 6.3.3

Also it should be recognized that the royalty would apply under the umbrella of a specific agreement on the Phase I royalties only. The royalties applicable to a possible Phase II should be judged on the basis of the economic conditions existing at the time that the decision about Phase II is being made and should take into consideration the need for possible considerable incremental investments to put new gas fields on stream.

Finally, it should be noted that the specific royalty formula needs to be designed in the context of the total fiscal package and should therefore be based on the final form of agreements reached between the levels of government.

# 8. NON FISCAL ISSUES

## *8.1 STATE PARTICIPATION*

The State has currently a 12.5% royalty interest and therefore owns currently 12.5% of the gas. The State could consider co-investing in certain phases of the project on a 12.5% basis.

The most obvious targets for co-investment would be the pipeline and the liquefaction plant. The pipeline is the highest risk component of the project with respect to cost overrun risk. A participation of the State in the pipeline and the liquefaction plant would reduce project risk.

Alaska does not have a State company. The only possible equity source for possible co-investment would be the Permanent Fund. The current rules under the Permanent Fund would not permit such a co-investment. Alaskans may wish these rules to be maintained.

The Permanent Fund is not taxable. The Fund would not benefit from any possible accelerated depreciation or tax credits. Nor would the Fund benefit from deductions for tax purposes. Therefore the Fund would co-invest on a stand alone basis. This has a negative impact on the ROE. At the same time, however, the Fund would not pay tax, which has a positive impact.

The co-investment by the Fund could be an attractive proposition for the Fund, relative to the economics of the private investors participating in the same project.

The participation could help in sharing risk and could be an element in a fiscal stability arrangement.

The participation by the State of Alaska in the project would also enhance the confidence of the Asian buyers in the Alaska project, since it would be perceived as evidence of Alaska support for the project.

## *8.2 STATE FINANCING*

An important provision that is available to Alaska is the fact that the State can arrange for financing packages whereby interest is not taxable on the part of the lenders. This creates the opportunity for borrowing at a lower rate. The ability to borrow under such conditions is limited however to specific purposes, such as ports and infrastructure. Some aspects of the project may be financed in this manner.

Also the distribution of risks and benefits of the State of Alaska is very different from the private investors. The State of Alaska will benefit from Phase II. The specific initial project investors might or might not.

Therefore, the State of Alaska could assume project risk by partially financing the project with long term loans.

The atractiveness of the project could increase if the State could use such tax supported financing and can assume project risk by lending under favorable conditions.

## *8.3 INFRASTRUCTURE DEVELOPMENT*

Some governments in the world have promoted the LNG exports through very considerable direct infrastructure or project support. Qatar constructed an new S 1 billion port. Indonesia assumes the construction and financing costs of the liquefaction plants and charges private investors for liquefaction on a cost basis.

The State of Alaska may be able to provide similar support to the project. This may be the case for improvements in the port in Valdez or similar infrastructural works.

## *8.4 FISCAL STABILITY*

The ANS LNG project will not occur without a significant enhancement of the stability of the fiscal terms. The profitability of the project depends entirely on a comprehensive set of fiscal and financial measures. Without these measures the project is uneconomic. As a result, there has to be an acceptable degree of fiscal stability before investors can risk the investment in such a large project.

This fiscal stability does not exist at this time. The State of Alaska has the unilateral right to change taxes. This applies to severance taxes, property taxes and corporate income tax. All these taxes are major components of the fiscal structure.

Even if the current government would agree to a new fiscal package, the next government could change it. The State of Alaska could therefore take a number of measures that would help in establishing an environment of fiscal stability. Several measures are possible.

### 8.4.1 GENERAL BUDGET

Fiscal stability risk increases dramatically if the investors perceive that the government strongly needs additional revenue sources. A very important step in creating an environment of fiscal stability is therefore to develop the government's finances in such a manner that investors perceive that the State's income and State's financial resources will reasonably cover the State's outlays during the first 20 years of production of the project.

### 8.4.2 CONSTITUTIONAL BUDGET RESERVE FUND

The current Constitutional Budget Reserve Fund of $ 3 billion is a stabilizing factor. It would reduce perceived risk if this fund could be maintained on the basis of prudent budget management.

### 8.4.3 FISCAL STRUCTURE

The overall nature of the fiscal structure helps in maintaining fiscal stability. A progressive and back-end loaded system is more stable than a regressive and front-end loaded system. The pressure for more government income over time is satisfied with a back-end loaded system, which automatically adjusts over time to higher levels of payments to government.

The fiscal stability is also enhanced with the development of a progressive system that provides for a fair sharing of the economic rent under a wide range of conditions. The perception of fairness of the system on the part of the public is one of the best fiscal stability factors.

### 8.4.4 A SPECIFIC STABILITY AGREEMENT

One of the great advantages of the production sharing and joint venture agreements in Asia and the Middle East is that it are agreements with a state company. The state company can agree to provide fiscal stability to the investor regardless of the actions to be taken by the national government.

Alaska could introduce a similar type of agreement. However, in this case the agreement would have to be directly with the State. It is an open question as to whether the Constitution permits such a contractual arrangement. The Constitution imposes some limits on the ability of the State to commit itself irrevocably to certain levels and kinds of taxation. Any agreement binding future legislators would most likely be considered un-constitutional or politically unacceptable by some legislators.

It seems that a reasonable middle ground could be the following:

-- the State Legislature could pass a law permitting the government to enter into fiscal agreements for specific projects for a specific time period, for instance, no longer than 25 years ( 5 years for development and 20 years production),

– any such agreements would have to be specifically approved by the State Legislature,

– if the fiscal system changes in the future, such changes would not be applicable to the project for which the agreement exists and such agreements would be "grandfathered" under any such new law changing the fiscal system,

– it could be understood that the agreement could only be canceled or amended on the basis of a specific new law by the State Legislature.

This process does not provide for absolute fiscal stability, but it would come as close as one could reasonably hope for in the North American context. A formal agreement with the investors signed by the State and approved by the State Legislature would have a tremendous moral weight and it would be very damaging for the image of the State if the agreement would be unilaterally canceled or amended.

### 8.4.5 FINANCING PACKAGE

The long term State supported financing package may help to solidify the fiscal stability. The package may include certain conditions that would link the package to the fiscal stability. Since the State of Alaska would have guaranteed the financing package to the lenders, this would create considerable additional comfort on the part of the investors that the fiscal stability will "hold".

### 8.4.6 PARTICIPATION

The equity participation provisions could be part of the overall fiscal stability agreement.

# 9. CONCLUSIONS

In order to make the Alaska North Slope LNG project economic, three objectives have to be achieved:

1. The costs of the project have to be reduced substantially. The cost reduction should be preferably from $ 15 billion to $ 12 billion (in constant $ 1997)

2. The profitability of the project has to be improved through a fiscal package in which the Federal, State and local governments cooperate.

3. The risks of the project have to be considerably reduced.

## *9.1 COST REDUCTION*

The analysis indicates that the rate of return of the project could be increased from about 9% to 11% through a cost reduction from $ 15 billion to $ 12 billion. The producers of the North Slope gas could therefore make a significant contribution to the project by evaluating whether the project could be launched at a much lower cost. This will require more detailed feasibility work. Cost reduction from the current estimate of $ 15 billion is essential if the project is to proceed.

## *9.2 IMPROVEMENT IN FISCAL TERMS*

The application of all the improvements in fiscal terms discussed in this report will result in an increase in the Project ROR with more than one percentage point. The following table illustrates how the ROR could be improved relative to the current situation:

| IMPROVEMENT IN ROR | | |
|---|---|---|
| Price Scenario ($/MMBtu) | $ 3.50 | $ 3.90 |
| Alaska - $ 12 billion Current Terms | 10.8% | 11.6% |
| Alaska - $ 12 billion Improved Terms | 12.1% | 12.9% |
| *Hurdle Rates* | *12.0%* | *14.0%* |

It can be noted how a $ 12 billion project at a price of $ 3.50 per MMBtu would be slightly over the risk adjusted hurdle rate of 12%.

For the $ 3.90 scenario the desirable target rate would still not be reached, which means that the Alaska LNG project still would not compare very well with other LNG projects around the world under this price scenario or higher price scenarios.

On the other hand, the project rates relatively better under lower price scenarios and would rate very high on a ROE basis. Also the minimum netback price of about $ 0.90 per Mcf would be far exceeded at the $ 3.90 CIF price level.

## *9.3 REDUCTION OF RISK*

The proposed fiscal structure reduces cost overrun risk and price risk.

The State of Alaska could reduce project risk further through a detailed contractual arrangement with the producers, involving fiscal stability and a detailed definition of terms, including detailed calculation procedures for all fiscal components.

Based on such a package that involves considerable risk reduction companies may be prepared to consider a risk adjusted hurdle rate of 12%, based on CIF prices of $ 3.50 per MMBtu.

The combination of improved fiscal terms and risk reduction may result in an overall situation where the project would be considered profitable and attractive by the producers. From that point onwards it would be the actual development of LNG market conditions that would determine when the project could be launched in the 2005 - 2010 time period.

## *9.4 OTHER FACTORS*

Apart from the three factors indicated above, further factors could help in bringing the project about.

A shorter ramp-up time of 4.5 or 5 years could add another 0.5% to the Project ROR. Based on the new fiscal package and the risk reduction agreement with the State of Alaska, it might be possible to convince buyers that a faster ramp up would be attractive.

Attractive financing arrangements could further help the project by improving the profitability on a Project ROE basis. The rating of the Alaska project could be improved considerably on an ROE basis, due to the favorable US tax treatment of financing and the fact that more favorable financing conditions can be assumed. The State could help with providing financing for some project components.

It should be noted that CIF gas price increases would not necessarily help in bringing the project closer. Other LNG projects in the world would benefit equally from price increases and because of the smaller size and faster ramp up of these projects the positive impact of price increases is stronger for such projects. This means that it would not be a good strategy for Alaska to simply wait for higher gas prices.