MEMORANDUM

TO: Council, AP, and SSC Members

FROM: Clarence G. Pautzke
Executive Director

DATE: June 16, 1989

SUBJECT: Gulf of Alaska and Bering Sea/Aleutian Islands Groundfish Fishery Management Plans

ACTION REQUIRED

Final approval of Amendments 18 and 13 and implementing regulations for Secretarial review.

BACKGROUND

In April the Council approved Amendments 18 and 13 and the associated draft Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis (EA/RIR/IRFA) for public review. The amendment document contains eight issues and their management alternatives:

(1) Allocate sablefish total allowable catch in the Bering Sea/Aleutian Islands.

(2) Establish a fishing season framework for all groundfish fisheries in the Gulf of Alaska and Bering Sea/Aleutian Islands.

(3) Establish a Shelikof District in the Central Regulatory Area of the Gulf of Alaska.

(4) Establish a groundfish fishing closed zone near the Walrus Islands and Cape Peirce in the Bering Sea/Aleutian Islands.

(5) Replace the king crab protection time/area closures around Kodiak Island and modify the halibut bycatch management regime for the Gulf of Alaska.

(6) Expand the Pacific cod trawl exemption zone in the Bering Sea/Aleutian Islands.

(7) Implement a system of observer coverage and other data gathering and data reporting requirements for the groundfish fisheries of the Gulf of Alaska and the Bering Sea/Aleutian Islands.

(8) Clarify the Secretary's authority to split or combine species groups within the target species management category by a framework procedure for the Gulf of Alaska and the Bering Sea/Aleutian Islands.

The amendment proposals and alternatives are summarized in item D-1(a)(1). The domestic observer program section of the proposed comprehensive data gathering amendment is presented under its own memo [item D-1(b)]. Public comments received during the comment period (May 5 to June 2, 1989) were sent to you June 9 and along with several comments received late are summarized in item D-1(a)(2). Comments received after the
writing of this memo are identified under D-1 Supplemental and provided either in the notebook or in your supplemental folders. An amendment worksheet is also provided for your use as item D-1(a)(3).

After the Amendment 18/13 document was distributed for public review, the Plan Teams prepared an addendum to the EA/RIR/IRFA which presented additional data and analysis relevant to Chapters 2.0, 6.0, 7.0, and 8.0. The Plan Teams believed that the additional information would help clarify or expand understanding of these four amendment proposals. This addendum was mailed to you on June 13.

Final action on Amendment 18/13 should be taken in three steps:

1. On Wednesday the Council will identify their preferred alternative for each amendment topic.

2. The Plan Teams and NOAA General Counsel will then revise the amendment text if necessary and prepare the FMP changes and the implementing regulations. It may also be necessary to prepare additional materials for inclusion in the addendum to the EA/RIR/IRFA.

3. On Friday the Council will consider the materials prepared by the teams and General Counsel and give final approval to send Amendments 18/13 to Secretarial review.

These documents (the EA/RIR/IRFA, the addendum, and draft regulations) will constitute most of the formal amendment 18/13 package submitted to the Secretary. The remaining transmittal documents, preamble, etc., will be prepared as soon as possible. The amendments should be implemented by November 1989.
SUMMARY

GULF OF ALASKA AND BERING SEA/ALEUTIAN ISLANDS
GROUNDFISH FMP AMENDMENTS 18 AND 13

2.0 ALLOCATE SABLEFISH TOTAL ALLOWABLE CATCH IN THE BERING SEA/ALEUTIAN ISLANDS

Alternative 1: Do nothing - status quo.

Alternative 2: Determine expected "true" bycatch, and allocate the remaining sablefish TAC in the Bering Sea/Aleutian Islands to the directed fishery.

Alternative 3: Allocate the Bering Sea/Aleutian Islands sablefish TAC between the fixed and trawl gear groups.

3.0 ESTABLISH A FISHING SEASON FRAMEWORK FOR ALL GROUNDFISH FISHERIES IN THE GULF OF ALASKA AND BERING SEA/ALEUTIAN ISLANDS

Alternative 1: Do nothing - status quo.

Alternative 2: Establish a framework procedure for the annual setting of fishing seasons (date specific) for any of the managed groundfish species using a rule related notice procedure for implementation.

Alternative 3: Establish a procedure for the annual setting of fishing seasons (date specific) for any of the managed groundfish species using a regulatory amendment procedure for implementation.

4.0 ESTABLISH A SHELIKOF DISTRICT IN THE CENTRAL REGULATORY AREA OF THE GULF OF ALASKA

Alternative 1: Do nothing - status quo.

Alternative 2: Establish a Shelikof District management area.

5.0 ESTABLISH A GROUNDFISH FISHING CLOSED ZONE NEAR THE WALRUS ISLANDS AND CAPE PEIRCE IN THE BERING SEA/ALEUTIAN ISLANDS

Alternative 1a: Do nothing - status quo.

Alternative 1b: No action, but develop a cooperative program, involving all concerned parties, with voluntary guidelines to minimize disturbance to walrus.

Alternative 2: Establish seasonal groundfish fishing closure zones of 12-mile radius around Round Island/The Twins and Cape Peirce.

Alternative 3: Establish seasonal groundfish fishing closure zone north of a line from Cape Constantine to the southernmost tangent of a 12-mile radius around Cape Peirce.
6.0 REPLACE THE KING CRAB PROTECTION TIME/AREA CLOSURES AROUND KODIAK ISLAND AND MODIFY THE HALIBUT BYCATCH MANAGEMENT REGIME FOR THE GULF OF ALASKA

6.1 Implement a Revised Time/Area Trawl Closure Plan to Protect King Crab Around Kodiak Island

Alternative 1: Do nothing - status quo.

Alternative 2: Extend existing time/area closure measures (Type I and II areas) for another three years.

Alternative 3: Implement a modified time/area closure scheme for bottom trawling (Type I, II, and III areas) for three years.

6.2 Amend the Halibut PSC Framework for the Gulf of Alaska

Alternative 1: Do nothing - status quo.

Alternative 2: More fully implement the existing halibut PSC framework and/or permit limited retention of halibut bycatch.

(a) Prohibit pot gear which does not minimize halibut bycatch.

(b) Set halibut PSC limits by gear group. This measure would have two options: (1) annually set limits using a framework procedure, or (2) establish fixed 750 mt longline, 2,000 mt trawl limits.

(c) Apportion the PSC limit of each gear group among specific target fisheries.

(d) Set a halibut PSC reserve to be used by vessels with observers and low bycatch rates. This measure would have four options: (1) allow vessels to fish until PSC or TAC is taken or weekly bycatch rate exceeds published rate, whichever occurs first; (2) assign equal portions of reserve to qualifying vessels once 80% is taken and allow vessel to fish its allotment until weekly bycatch rate exceeds published rate or allotment is taken, whichever occurs first; (3) allow each qualifying vessel to fish until 50% of reserve is taken, then eliminate vessels with bycatch rates above the average; or (4) close fishery when published bycatch rate x reported catch = PSC limit, but allow vessels demonstrating lower rates to fish until exhausting their bycatch savings demonstrated during the open fishery.

(e) Allow limited retention of halibut bycatch in the longline fisheries. This measure has two options: (1) set rate at 1%? .5%? 4.5%?; or (2) set rate by target species? by area?

7.0 EXPAND THE PACIFIC COD TRAWL EXEMPTION ZONE IN THE BERING SEA/ALEUTIAN ISLANDS

Alternative 1: Do nothing - status quo.

Alternative 2: Extend the northern boundary of the exemption zone as defined under Amendment 10 to a line approximating the 30-fathom isobath.

Alternative 3: Extend the northern boundary of the exemption zone as defined under Amendment 12a to a line approximating the 30-fathom isobath.

Alternative 4a: Extend the northern boundary of the exemption zone as defined under Amendment 10 to a line approximating the 30-fathom isobath, but close the zone to trawling during the period March 15 - June 30.

Alternative 4b: The northern boundary of the exemption zone would remain at approximately the 25-fathom isobath and the zone would be closed to trawling during the period March 15 - June 30.
8.0 IMPLEMENT A SYSTEM OF OBSERVER COVERAGE AND RECORDKEEPING AND DATA REPORTING REQUIREMENTS FOR THE GROUNDFISH FISHERIES OF THE GULF OF ALASKA AND THE BERING SEA/ALEUTIAN ISLANDS AREAS

8.1 Recordkeeping and Reporting Requirements

Alternative 1: Do nothing - status quo.

Alternative 2: Modify existing recordkeeping and reporting requirements.

8.2 Observer Program

Alternative 1: Do nothing - status quo.

Alternative 2: Implement Fixed Percentage Mandatory Observer (specify percentage up to 100%).

Alternative 3: Implement Mandatory Observer Program That Is Frameworked To Allow Less Than 100% Coverage (specify percentage or cost).

9.0 CLARIFY SECRETARY'S AUTHORITY TO SPLIT OR COMBINE SPECIES GROUPS WITHIN THE TARGET SPECIES MANAGEMENT CATEGORY BY A FRAMEWORK PROCEDURE FOR THE GULF OF ALASKA AND THE BERING SEA/ALEUTIAN ISLANDS

Alternative 1: Do nothing - status quo.

Alternative 2: Clarify the Secretary's authority to split or combine species groups within the target species category by a more timely framework procedure.
Summary of Public Comments Received on Amendments 18 and 13
to the Groundfish Fishery Management Plans for the
Gulf of Alaska and the Bering Sea/Aleutian Islands

Introduction

Comments from 10 individuals or organizations on the amendment document were received through the close of the official comment period on June 2. The Alaska Factory Trawler Association presented draft comments at the joint plan team meeting in Seattle on June 5-7. Subsequently, two additional late comments were received at the Council offices.

The numbered sections below correspond to the chapters of the amendment package as mailed to the Council in early May.

2. Allocate sablefish total allowable catch in the Bering Sea/Aleutian Islands.

Alternative 1: Maintain the status quo.

Under this option, all gear groups would compete for the available sablefish TAC.

COMMENT: Alaska Factory Trawler Association - advocates maintaining the status quo in the Bering Sea.

Alternative 2: Determine expected "true" bycatch, and allocate the remaining sablefish TAC in the Bering Sea/Aleutian Islands to the directed fishery.

This alternative gives bycatch demands preference over the directed fishery in order to both reduce the discards of sablefish taken as bycatch and to ensure full utilization of other, larger groundfish fisheries that take sablefish incidentally to their target species.

COMMENT: Eric Olsen, Fishing Vessel Owners' Association - favors this alternative for the Bering Sea subarea only.
David Larson, Polmar Fisheries - supports the FVOA position.

Alternative 3: Allocate the Bering Sea/Aleutian Islands sablefish between fixed and trawl gear groups.

A set percentage of the annual TAC would be given to each gear group (trawl and fixed gear) under this alternative. The RD would be expected to, as necessary, set aside a portion of each gear group's share to meet its expected bycatch demands.

COMMENTS: Eric Olsen, Fishing Vessel Owners' Association - favors a harvest allocation of 87% for fixed gear and 13% for trawl operations in the Aleutian Islands subarea.

David Larson, Polmar Fisheries - supports the FVOA position.

John M. Bruce, Deep Sea Fishermen's Union of the Pacific - favors gear allocations of 70% for fixed gear and 30% for trawl operations in the Bering Sea, and 90% fixed gear - 10% trawl in the Aleutian Islands.

Arni Thomson, Alaska Crab Coalition - favors gear allocations of 70% fixed gear - 30% trawl operations in the Bering Sea and 90% fixed gear - 10% trawl operations in the Aleutian Islands.
Alaska Factory Trawler Association - favors a modified Alternative 3 in the Aleutian Islands with primary TAC allocations to meet bycatch demands of all fisheries and secondary TAC allocations for directed fishing in the ratio of 70% trawl and 30% fixed gear.

GENERAL COMMENT: Steven Pennoyer, NOAA-Fisheries - offered several comments on this amendment chapter, but did not advocate a particular alternative.

3. Establish a fishing season framework for all groundfish fisheries in the Gulf of Alaska and Bering Sea/Aleutian Islands.

Alternative 1: Maintain the status quo.

Both the GOA and BSAI plans presently specify the groundfish fishing season as beginning on January 1 and ending on December 31 unless closed due to a PSC bycatch cap being reached or following the attainment of TAC for all groundfish fisheries except sablefish.

COMMENT: Alaska Factory Trawler Association - favors the status quo.

Alternative 2: Establish a framework procedure for the annual setting of fishing seasons (date specific) for any of the managed groundfish species using a rule related notice procedure for implementation.

The proposed framework procedure would allow the Council to make recommendations on adjustments to existing fishing seasons on an annual basis following a review of public proposals.

NO COMMENT

Alternative 3: Establish a procedure for the annual setting of fishing seasons (date specific) for any of the managed groundfish species using a regulatory amendment procedure for implementation.

Under this alternative, fishing seasons would be set by the Secretary after Council recommendations.

COMMENTS: Donald A. McCaughran, International Pacific Halibut Commission - feels either Alternative 2 or 3 is preferable to the status quo.

Steven Pennoyer, NOAA-Fisheries - prefers Alternative 3.

4. Establish a Shelikof district in the central regulatory area of the Gulf of Alaska.

Alternative 1: Maintain the status quo.

This alternative would retain current management areas.

NO COMMENT

Alternative 2: Establish a Shelikof Strait management area.

This alternative provides for regulating the harvest of fish in Shelikof Strait as a separate management area.

COMMENTS: Steven Pennoyer, NOAA-Fisheries - supports Alternative 2.

Alaska Factory Trawler Association - supports Alternative 2.
5. Establish a groundfish fishing closed zone near the Walrus Islands and Cape Peirce in the Bering Sea/Aleutian Islands.

Alternative 1a: Maintain the status quo.

Alternative 1b: No action, but develop a cooperative program, involving all concerned parties, to minimize disturbance to walrus.

Under these alternatives, no mandatory area closures would be imposed in waters adjacent to Round Island, The Twins, and Cape Peirce.

COMMENT: Alaska Factory Trawler Association - supports Alternative 1a.

Alternative 2: Establish a 12-mile radius groundfish fishing closure zones around walrus haulout sites with seasonal closures.

This alternative would close federal waters out to twelve miles surround Round Island, The Twins, and Cape Peirce. The closure zone would extend nine miles seaward from the State's three-mile limit. The closure would be in effect from April 1 through September 30, the time period corresponding to peak walrus utilization. Fishing would be permitted in the zone from October 1 through March 31. The closure under this alternative would sunset December 31, 1995.

COMMENT: Steven Pennoyer, NOAA-Fisheries - supports Alternative 2, but notes insufficient information is presented to determine whether it is superior to Alternative 3.

Alternative 3: Seasonal groundfish fishing closure north of a line from Cape Constantine to the southernmost tangent of a 12-mile radius around Cape Peirce.

This alternative would close a larger area to fishing from April 1 through September 30, the period corresponding to peak walrus utilization. As with Alternative 2, fishing would be permitted in the closed zone from October 1 through March 31. The closure would sunset December 31, 1995.


Roger E. McManus, Center for Marine Conservation - supports Alternative 3.


6. Replace the King Crab protection time/area closures around Kodiak Island and modify the halibut bycatch management regime for the Gulf of Alaska.

A. Implement a revised time/area trawl closure plan to protect King Crab around Kodiak Island.

Alternative 1: Maintain the status quo.

Under this alternative, the current time area closure scheme to protect king crab would expire December 31, 1989. Retention of king and Tanner crab would remain prohibited in all domestic, joint venture and foreign groundfish fisheries.

NO COMMENT
Alternative 2: Extend existing time/area closure measures for another three years.

This alternative would extend the Type I and II time/area closures implemented by Amendment 15 until December 31, 1992.


Alternative 3: Implement a modified time/area closure scheme for bottom trawling for three years.

This alternative extends the current time/area closures until December 31, 1992 and provides for a limited expansion of designated closed areas when a significant recruitment event occurs.

COMMENT: Steven Pennoyer, NOAA-Fisheries - supports Alternative 3.

B. Amend the halibut PSC framework for the Gulf of Alaska.

Alternative 1: Maintain the status quo.

Under this alternative, the existing halibut PSC framework will be retained.

NO COMMENT

Alternative 2: More fully implement the existing halibut PSC framework and/or permit limited retention of halibut bycatch.

This alternative would enable a number of measures, similar to those defined by the Council Bycatch Committee, to be implemented. These measures include: (1) use of pot gear which minimizes halibut bycatch, (2) set separate halibut PSC limits by gear group, (3) apportion PSC limits of each gear type by target fishery, (4) establish, for each PSC limit, a reserve available to vessels with at-sea observers and adequately low bycatch rates for use once the initial portion of PSC limit is attained, and (5) permit limited retention of halibut bycatch in longline fisheries.

COMMENT: Donald A. McCaughran, International Pacific Halibut Commission - (1) favors measures to encourage groundfish fishing with pots minimizing halibut bycatch, (2) supports allocating halibut PSC among gear groups and apportioning PSC among gears through a framework procedure, (3) supports apportioning PSC limits among target fisheries within gear groups, (4) supports a PSC reserve for vessels fishing with observers, and (5) opposes permitting retention of halibut bycatch in longline fisheries, and (6) favors retention of PSC limits for bycatch management in the absence of observers.

Expand the Pacific Cod trawl exemption zone in the Bering Sea/Aleutian Islands.

Alternative 1: Maintain the status quo.

Under this alternative, the northern boundary of the trawl exemption zone between 160° W. and 162° W. would remain a line approximating the 25-fathom isobath. The exemption zone would extend from 162° W. to 163° W. during the period March 15 - June 15.

NO COMMENT

Alternative 2: Extend the northern boundary of the exemption zone as defined under Amendment 10 to a line approximating the 30-fathom isobath.
This alternative would extend the trawl exemption zone north to a line approximating the 30-fathom isobath. For the portion of the exemption zone extending from 162° W. to 163° W., the northern boundary of the exemption zone would remain at a line approximating the 25-fathom isobath.


Alternative 3: Extend the northern boundary of the exemption zone defined under Amendment 12a to a line approximating the 30-fathom isobath.

This alternative would place the northern boundary of the exemption zone at a line approximating the 30-fathom isobath. The seasonal (March 15 - June 15) extension to 163° W. would also extend to the 30-fathom isobath.

NO COMMENT

Alternative 4a: Extend the northern boundary of the exemption zone as defined under Amendment 10 to a line approximating the 30-fathom isobath, but close the zone to trawling during the period March 15 - June 30.

This alternative extends the northern boundary of the trawl exemption zone, but eliminates the seasonal extension to 163° W. and would impose a seasonal trawl closure from March 15 - June 30.

Alternative 4b: Maintain the northern boundary of the exemption zone at a line approximating the 25-fathom isobath, but close the zone to trawling during the period March 15 - June 30.

This alternative is identical to 4a, but it does not extend the northern boundary to a line approximating the 30-fathom isobath.


Harold Sparck, Yukon-Kuskokwim Fisheries Task Force - supports Alternative 4 as originally distributed in the amendment document. Alternative 4 was modified into two options, 4a (the same as the original Alternative 4) and 4b, the plan team.

GENERAL COMMENT: Steven Pennoyer, NOAA-Fisheries - reserves comment until the period of Secretarial review.

8. Implement a system of observer coverage and recordkeeping and data reporting requirements for the groundfish fisheries of the Gulf of Alaska and the Bering Sea/Aleutian Islands area.

A. Recordkeeping and Reporting

Alternative 1: Maintain the status quo.

This alternative would maintain the existing recordkeeping and reporting requirements.

NO COMMENT

Alternative 2. Modify existing recordkeeping and reporting requirements to provide better fishery management information.

Changes to existing recordkeeping and reporting requirements under consideration are: (1) processors must maintain a daily cumulative production log (DCPL), (2) harvesting vessels larger than 5 net tons must maintain a daily fishing log (DFL), (3) shoreside processors must maintain a transfer log (TL), (4) processors must submit to NOAA-Fisheries a weekly summary of transfer log entries, (5) at-sea
processors must submit a weekly production report in product weight, (6) shoreside processors must submit a weekly production report (WPR), (7) processors and catcher vessels required to maintain a DCPL and/or DFL must submit copies of their DCPL and/or DFL to NOAA-Fisheries on a quarterly basis, and (8) each processor or its parent company must submit annually a monthly product value report (MPVR).

COMMENTS: Steven Pennoyer, NOAA-Fisheries - strongly supports an enhanced logbook and reporting program.

Harold Sparck, Yukon-Kuskokwim Fisheries Task Force - supports the proposed modifications.

Arni Thomson, Alaska Crab Coalition - supports more detailed recordkeeping and reporting requirements, except that they may be overly burdensome to small operators.

Alaska Factory Trawler Association - supports enhanced data collection efforts.

B. **Observer Program**

**Alternative 1.** Maintain the status quo.

Observer coverage under this alternative will continue to be voluntary.

NO COMMENT

**Alternative 2.** Implement fixed percentage mandatory observer coverage (of up to 100%).

This alternative will require up to 100% observer coverage of all vessels capable of taking an observer. Vessels too small to accommodate an observer will be sampled during shoresidedelivers.

COMMENTS: Alaska Factory Trawler Association - supports 20% coverage of all groundfish sorting stations, so long as it is fair and equitable. Funding should be by the government.

Harold Sparck, Yukon-Kuskokwim Fisheries Task Force - supports a fixed percentage observer program. Funding should be from operations fees on industry.

**Alternative 3.** Implement a mandatory observer program that is frameworked to allow less than 100% coverage.

A frameworked approach would allow the Council to modify the level of overall fleet coverage from year to year as its goals and needs for fishery information change. A sampling approach will be required to promote accurate representation of the fleet and reliability of the data.

COMMENT: Arni Thomson, Alaska Crab Coalition - supports mandatory observer coverage of up to 100% in sensitive areas.

GENERAL COMMENT: Steven Pennoyer, NOAA-Fisheries - strongly supports a program to increase observer coverage.

Thais Gasca - supports a mandatory observer program.

9. **Clarify Secretary's authority to split or combine species groups within the target species management category by a framework procedure for the Gulf of Alaska and the Bering Sea/Aleutian Islands.**

**Alternative 1.** Maintain the status quo.
This alternative might cause future confusion as to the appropriate procedure for splitting or combining species groups within the target species category.

NO COMMENT

Alternative 2. Clarify the Secretary's authority to split or combine species groups within the target species category by a more timely framework procedure.

This alternative would clarify the Secretary's authority. A TAC for a new target species could be established using the same framework procedures used for specifying TACs as provided currently by the FMPs and implementing regulations.

COMMENT: Steven Pennoyer, NOAA-Fisheries - supports the clarification of the Secretary's authority.
PROBLEM STATEMENT: In 1987 and 1988 the number of walrus hauled out on Round Island (Walrus Islands State Game Sanctuary) and at Cape Peirce (Togiak National Wildlife Refuge) declined by more than 50%, coincident with the initiation of fishing for yellowfin sole in northern Bristol Bay. Personnel on Round Island reported frequent, loud noise on the island for the first time in 1987; the sounds heard were emanating from yellowfin sole vessels. The frequency of other human related activities which are potentially disruptive to walrus (e.g. tour vessels or from other fisheries such as salmon, herring, etc.) have been relatively constant in northern Bristol Bay over the past few years. Conclusive data establishing a direct cause and effect relationship between the sounds generated by the yellowfin sole fishery and the decline in walrus numbers are not available. In fact, no quantitative information exists describing frequency of disturbance to walrus from any source or the level and frequency of natural or anthropogenic sounds (both airborne and submerged) in areas adjacent to walrus haulout sites in northern Bristol Bay.

Despite the lack of acoustic and behavioral data, Federal and State management agencies, Native groups, and conservation organizations were concerned that these sounds were likely disturbing walrus to the point of adversely affecting their use of the area for hauling out. These groups believed the circumstantial evidence (declining counts and anecdotal reports of increased "noise") was compelling enough to warrant proposing corrective measures. As a result, the North Pacific Fisheries Management Council has proposed several alternatives for amending the North Pacific Groundfish Management Plan to restrict fishing for yellowfin sole near walrus haulout sites in northern Bristol Bay. The purpose of this preliminary study is to assess the potential for collecting acoustic data from Round Island and Cape Peirce. If possible, relative levels of sound (both submerged and airborne) for ambient and human generated sources will be assessed at both locations. This information may form the basis for conducting more detailed comparative studies in future years if the fishery is restricted from using the area.

OBJECTIVES:

1. Determine effectiveness of the proposed acoustic monitoring program.

2. Implement monitoring program designed to assess relative sound intensity for various sources: ambient, generated by fishing, tour, and other vessels, aircraft, and others as presented.
3. Determine if a relationship exists between relative sound levels (in decibels) and the number of vessels observed from the island.

4. Determine effectiveness of proposed sampling equipment and program for assessing frequency and intensity of sounds from various sources.

5. As opportunity presents, collect sound level data specific to identified sources (e.g. a known vessel at a known distance).

6. Assess the potential for determining cause and effect relationships between known sound sources and responses of individual or groups of walrus.

METHODS

Two approaches will be taken:

1) A representative sample of sound levels (both airborne and submerged) will be taken to determine the overall makeup of the acoustic environment at each location during the sampling periods of June and July, 1989.

2) Opportunistic measurements of anthropogenic sounds will be made as vessels and aircraft approach the sampling area.

Measurements will be taken at Round Island and Cape Peirce during June and July, 1989, the period when walrus haulout in large numbers at these locations and vessel activity is high. A Biological Technician with acoustics experience will serve as primary data recorder and will analyze collected data. An acoustics specialist, Mr. Don Ljundblad, Naval Oceans Systems Center, and the Marine Mammals Management Walrus Biologist will accompany the Technician into the field initially.

Representative sampling of submerged sounds primarily will be collected by the use of anchored floating sonobuoys (AN/SSQ-57 A’s) provided by the Navy. Sounds picked up by the sonobuoy will be transmitted via radio signals to a receiver and recorded on a Nagra two channel analog tape recorder (on loan from the Navy) on land. Recorded sounds will be stored on 90 minute tapes. Land based recording will allow for simultaneous observation of walrus hauled out on beaches as well as ship activity in the area. Sonobuoys will be deployed either by boat or airplane depending on weather and availability of craft. Recordings will be made during 15 minute sessions once each hour (the sonobuoys are operational (approximately 8 hour duration). New sonobuoys will be deployed as weather and other logistics allow; in general we will attempt to deploy at least one sonobuoy per day. A sampling period will consist of a 7 to 10 day visit to each site per month. Thorough representative sampling at Cape Peirce may not be possible because vessel deployment of sonobuoys is likely to be limited or impossible.

Opportunistic measurements of underwater sounds will be collected either by sonobuoys or by ship deployed hydrophone connected by a 20 foot cable to the pre-amplifier and recorder. The hydrophone will be deployed over the side of a boat at uniform depth with the engine silent. Hydrophone calibration will be accomplished by presenting a tone of known frequency and amplitude at one meter from the hydrophone to provide a known reference with respect to
measured ambient levels. Recordings will be made as vessels approach the drifting vessel. This equipment may be used to supplement (or replace if necessary) the representative sampling regime set up for sonobuoys.

At both sites, instantaneous in-air sound level readings will be taken using a hand held sound meter at intervals similar to those previously described. Sound levels will be read visually from the meter and, along with time and other physical data, transcribed to data sheets for later analysis.

Concurrent notes on sea state, wind speed and direction, water temperature and distance and activity of vessels in the area will be made during all recordings. Vessel distance will be determined by visual estimation or by contacting vessels by marine radio and requesting Loran readings.

Acoustic data collected will be analyzed during one week periods in both June and July in the Marine Mammal Field Office, Region 7, Anchorage, or during a two week period at the Naval Oceans Systems Center in San Diego, CA, depending on the availability of equipment. A preliminary report will be drafted by the Technician by August 30 and finalized by the Program Biologist by September 30.

DURATION OF STUDY: May 29, 1989 – August 31, 1989
ESTIMATED ANNUAL BUDGET:

Salaries:

Wildlife Biologist GS-11/4 One payperiod $1525
Biological Technician GS-5/1 Five payperiods 3783
Acoustic Specialist Contributed 0

$ 5308

Operational Costs

Supplies (tapes, batteries) 300
Equipment (repair of sound level meter, microphone) 600
Contracts (Round Island Charter for vessel support) 875
Carr's Grocery 500

$ 2275

Travel and Per Diem:

Two trips to Round Island for Biological Tech. $ 834
Two trips to Cape Peirce for Biological Tech. 0 *
Field camp per diem (30 days camp rate) 90

$ 924

TOTAL FISH AND WILDLIFE SERVICE COSTS $ 8507

Costs Contributed by the North Pacific Fisheries Management Council

Travel of Don Ljundblad from San Diego to Anchorage and return $ 568
Ljundblad travel: Anchorage to Round Island and return 700
Per Diem (6 days Anch., 10 days field) 750
Charter of plane from Bellingham - Cape Peirce and return 975
Biological Tech. to San Diego and return (airfare) 568
Per Diem in San Diego 570
Supplies 600

$ 4731

* Trips to Cape Peirce funded by NPFMC air charter or via regularly scheduled supply aircraft from Togiak National Wildlife Refuge

Prepared by: Dana J. Seagars, Wildlife Biologist

Reviewed by: Scott Schliebe, Acting Supervisor Marine Mammals Management
Norman Stadem  
Vice President, Alaska  
AIFMA Coop  
1826 E. 26th Ave.  
Anchorage, AK 99508

June 15, 1989

Mr. John Peterson  
Chairman  
North Pacific Fisheries Management Council  
P. O. Box 103136  
Anchorage, AK 99510

Dear Mr. Peterson:

AIFMA is the largest association of independent fishing captains participating in one of the richest inshore fisheries in the state of Alaska -- the Bristol Bay salmon fishery. AIFMA Coop is a strong supporter of efforts to improve the effectiveness of the observer and the recordkeeping-reporting programs in the groundfish fisheries in the Gulf of Alaska and Bering Sea/Aleutians.

Just about everything has been said about the merits of more reliable information for management of the fisheries. Our comment is simply to encourage the acceptance of sections 8.1.1.2., and 8.2.2.2., Alternatives 2 of recordkeeping-reporting and observer coverage of the action plan, respectively. Please refer, in particular, to Chapter 8 of Amendments 18 and 13, to the Gulf of Alaska and Bering Sea/Aleutians Groundfish Management Plans, respectively, June 20-23, 1989.

It is certain that the development of an effective management program is fundamentally dependent on an independent monitoring of primary fishing activities. An unmonitored fishery encourages abuses. We have seen this time and again in our inshore fisheries.

You are well aware that two extremely contentious issues are by-catch and high seas interception. We believe these two issues are related and we are in alliance with other organizations which are addressing these serious problems.
Yours truly,

Norman Stadem, Vice President
AIFMA Coop
Table D-1(a)(3) – Gulf of Alaska and Bering Sea/Aleutian Islands Groundfish FMP Amendments 18 and 13: Alternatives Worksheet.

<table>
<thead>
<tr>
<th>Proposals/Alternatives</th>
<th>AP Recommendation</th>
<th>SSC Recommendation</th>
<th>Council Preference</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0 Allocate Sablefish TAC in the BSAI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alt. 1: Status quo.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alt. 2: Establish bycatch, then allocate remaining TAC to directed fishery.</td>
<td></td>
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<tr>
<td>Alt. 3: Allocate TAC to fixed and trawl gear, BS and/or Al.</td>
<td></td>
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</tr>
<tr>
<td>3.0 Establish Procedure to set Fishing Seasons in the GOA and BSAI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alt. 1: Status quo.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Alt. 2: Framework procedure.</td>
<td></td>
<td></td>
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<tr>
<td>Alt. 3: Implement by regulatory amendment.</td>
<td></td>
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<tr>
<td>4.0 Establish Shelikof District in the GOA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alt. 1: Status quo.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alt. 2: Establish Shelikof district.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>5.0 Establish Groundfish Fishing Closures to Protect Walrus in the BSAI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alt. 1a: Status quo.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Alt. 1b: Voluntary measures to minimize disturbance.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alt. 2: Closures around Round Island/the Twins and Cape Peirce.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Alt. 3: Closure north of line from Cape Constantine to tangent of 12-mile radius from</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cape Peirce.</td>
<td></td>
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</tbody>
</table>

Note: (*** ) designates those amendment alternatives that can be implemented by a regulatory amendment.
6.0 Implement Bycatch Management Measures in the GOA

6.1 Implement Revised Time/Area Closure to Protect Crab Around Kodiak Island
   Alt. 1: Status quo.
   Alt. 2: Extend Type I and II closures for three years.
   Alt. 3: Extend Type I, II, and III closures for three years.

6.2 Amend Halibut PSC Framework
   Alt. 1: Status quo.
   Alt. 2: More fully implement the existing halibut PSC framework or permit retention:
      2a: Prohibit pot gear which does not minimize halibut bycatch. (***)
      2b: Set halibut PSC limits by gear group:
         2b1: Annually set using a framework procedure. (***)
         2b2: Establish 750 mt longline, 2,000 mt trawl limits.
      2c: Apportion PSC limit of each gear group among target fisheries. (***)
      2d: Set a halibut PSC reserve to be used by vessels with observers and low bycatch rates:
         2d1: Allow vessels to fish until PSC or TAC is taken or weekly bycatch rate exceeds published rate, whichever occurs first.
         2d2: Assign equal portions of reserve to qualifying vessels once 80% is taken and allow vessel to fish its allotment until weekly bycatch rate exceeds published rate or allotment is taken, whichever occurs first.
         2d3: Allow each qualifying vessel to fish until 50% of reserve is taken, then eliminate vessels with bycatch rates above the average.
         2d4: Close fishery when published bycatch rate x reported catch = PSC limit, but allow vessels demonstrating lower rates to fish until exhausting their bycatch savings demonstrated during the open fishery.
      2e: Allow limited retention of halibut in longline fisheries:
         2e1: Set rate at 1%? 1.5%? 4.5%?
         2e2: Set rate by target species? by area?

7.0 Expand Pacific Cod Trawl Exemption Zone in the BSAI
   Alt. 1: Status quo.
   Alt. 2: Extend Amendment 10 northern boundary to 30 fathoms.
   Alt. 3: Extend Amendment 12a northern boundary to 30 fathoms.
   Alt. 4a: Extend Amendment 10 northern boundary to 30 fathoms, but close zone during March 15 - June 30.
   Alt. 4b: Retain Amendment 10 northern boundary at 25 fathoms, but close zone during March 15 - June 30.

Note: (***) designates those amendment alternatives that can be implemented by a regulatory amendment.
<table>
<thead>
<tr>
<th>Proposals/Alternatives</th>
<th>AP Recommendation</th>
<th>SSC Recommendation</th>
<th>Council Preference</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.0 Implement an Observer Program and a Revised Recordkeeping and Data Reporting System in the GOA and BSAI</td>
<td></td>
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<tr>
<td>8.1 Implement a Revised Recordkeeping System</td>
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<tr>
<td>Alt. 1: Status quo.</td>
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<td></td>
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<tr>
<td>Alt. 2: Implement revised system.</td>
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<tr>
<td>8.2 Implement an Observer Program</td>
<td></td>
<td></td>
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<tr>
<td>Alt. 1: Status quo.</td>
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<tr>
<td>Alt. 2: Implement a fixed percentage mandatory observer coverage program (specify percentage up to 100%).</td>
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<tr>
<td>Alt. 3: Implement a frameworked mandatory observer coverage program to allow for less than 100% coverage (specify percentage or cost).</td>
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<tr>
<td>9.0 Clarify Secretary's Authority to Split or Combine Species Groups Within the Target Species Category in the GOA and BSAI</td>
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<td></td>
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<tr>
<td>Alt. 1: Status quo.</td>
<td></td>
<td></td>
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<tr>
<td>Alt. 2: Clarify the Secretary's authority by a framework procedure.</td>
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</tbody>
</table>

Note: (***)) designates those amendment alternatives that can be implemented by a regulatory amendment.
17.0 Changes to the Gulf of Alaska Groundfish FMP and Commercial Fishing Regulations

17.1 Summary

Amendment 18 will make the following changes to the FMP:

(a) Establish a procedure to set fishing seasons on an annual basis by regulatory amendment.
(b) Establish a Shelikof District in the Central Regulatory Area.
(c) Implement revised bottom trawl closures around Kodiak Island to protect crab.
(d) Establish halibut PSC limits for fixed gear and trawl gear.
(e) Establish a new data reporting system.
(f) Establish a new observer program.
(g) Clarify the Secretary's authority to split or combine species groups within the target species management category by a framework procedure.

Note that one measure to control halibut bycatch in the Gulf is included in Amendment 18. This measure is already part of the FMP and, therefore, only requires implementing regulations be in force. This measure is:

Prohibit the use of pot gear that does not minimize halibut bycatch. Pot gear is allowed (except for sablefish) in the FMP in Section 4.3.1.3 (p. 4-13).

17.2 Changes to Relevant Sections of the FMP

A. In Section 2.2, "Operational Definitions of Terms," page 2-3, replace the term Resource Assessment Document (RAD) with Stock Assessment and Fishery Evaluation Report (SAFE) using the same definition.

B. In Section 3.0, second paragraph on page 3-1, insert after the first sentence, "For purposes of managing pollock, the . . . of the pollock resource."

To provide for regulating the harvest of pollock in Shelikof Strait, an important spawning area and the location of a concentrated fishing effort during late winter and early spring, a Shelikof District is specified within the Central Regulatory Area."

At the end of the third paragraph on page 3-2, after the sentence, "West of Kodiak Island and . . . and rough again."

"Figure 3.2 illustrates the Shelikof District of the Central Regulatory Area."

After page 3-1 (Figure 3.1), insert a new Figure 3.2 Shelikof District of the Central Regulatory Area in the Gulf of Alaska. The new Figure 3.2 is attached to this summary of FMP changes.

C. Add the following sentence after the first sentence in Section 3.1 Species Managed by this Plan on page 3.4, as follows:

"Species may be split or combined within the Target Species category according to procedures set forth in Section 4.2.1.1, without amendments to
this FMP, notwithstanding the designations listed below under Target Species.

D. In Section 4.2.1.1 on page 4-2, replace text with the following:

"The Secretary, after receiving recommendations from the Council, will determine TACs and apportionments thereof among DAP, JVP, TALFF, and reserves for each target species and the 'other species' category by January 1 of the new fishing year, or as soon as practicable thereafter, by means of regulations implementing the FMP. Notwithstanding designated target species and species groups listed in Section 3.1, the Council may recommend splitting or combining species in the target species category for purposes of establishing new TACs if such action is desirable based on commercial importance of a species or species group and whether sufficient biological information is available to manage a species or species group on its own biological merits.

"Prior to making recommendations to the Secretary, the Council will make available to the public for comment as soon as practicable after its September meeting, a preliminary Stock Assessment and Fishery Evaluation (SAFE) and preliminary specifications of ABC and TAC for each target species and the 'other species' category, and apportionments thereof among DAP, JVP, TALFF, and reserves. At a minimum, the SAFE will contain information listed in Section 4.2.1.4.

"At its December meeting, the Council will review the final SAFE and comments received. The Council will then make final recommendations to the Secretary."

E. Retitle Section 4.2.1.4, "The Resource Assessment Document," page 4-6, with the title Stock Assessment and Fishery Evaluation. Where the acronym (RAD) has been used in the plan, replace with the acronym (SAFE).

F. Under Section 4.2.3, "Prohibited species catch limits and adjustments to control Pacific halibut bycatch," page 4-8, delete the text and insert the following substitute text:

"The Council believes that discarding incidental catches of fish is wasteful and should be minimized. However, recognizing that in the groundfish fisheries halibut incidentally caught are managed outside this FMP, the treatment of halibut as a prohibited species is appropriate in the short term.

"Under this FMP, retention of prohibited species captured while harvesting groundfish is prohibited to prevent covert targeting on these species. The prohibition removes the incentive that groundfish fishermen might otherwise have to target on the relatively high valued prohibited species, and thereby results in a lower incidental catch. It also eliminates the market competition that might otherwise exist between domestic halibut fishermen and groundfish fishermen who might land halibut in the absence of prohibition.

"Halibut that are taken as bycatch in the trawl and fixed gear fisheries results in fishing mortality even though the FMP requires that these species be discarded. Bycatch survival rate of these species is typically less than 100% and may approach zero for some fisheries and gear. To control halibut bycatch in these fisheries, a 2,000 mt prohibited species catch (PSC) limit is
established for all trawl gear and a 750 mt halibut PSC is established for all fixed gear.

"When the PSC limit established for trawl gear is reached, further fishing with bottom trawl gear will be prohibited in the Gulf of Alaska management area for the remainder of the fishing year. When the 750 mt halibut PSC limit established for fixed gear is reached, further fishing with hook-and-line or pot gear is prohibited in the Gulf of Alaska for the remainder of the fishing year.

"When the DAP or JVP vessels to which a PSC limit applies have caught an amount of prohibited species equal to that PSC, the Secretary may, by notice, permit some or all of those vessels to continue to engage in fishing for groundfish in the applicable regulatory area, under specified conditions. These conditions may include the avoidance of certain areas of prohibited species concentrations or specific gear specifications and will be determined on a case-by-case basis."

G. In section 4.3.1.3 (pages 4-13 and 4-14), heading Central Area, subheading Time/area closures and gear restrictions to control king crab bycatch, replace the last paragraph of this subsection ("Two area designations . . . expire on December 31, 1989.") with the following:

"Three area designations have been established for purposes of protecting king crab stocks and are described in Figure 4.1 and Table 4.3. This management measure and accompanying regulations will expire on December 31, 1992."

Replace Figure 4.1 on page 4-15 with a new Figure 4.1 (attached). Replace Table 4.3 on page 4-16 with a new Table 4.3 (attached). Add Tables 4.3.1, 4.3.2, and 4.3.3 (attached).

H. Delete Section 4.3.1.2.1 Sablefish fishing seasons on page 4-13. On page 4-23, renumber Section 4.3.3 Generic as Section 4.3.4 and insert a new section 4.3.3 Fishing Seasons, as provided below:

"Fishing seasons are defined as periods when harvesting groundfish is permitted. Fishing seasons will normally be within a calendar year, if possible, for statistical purposes, but could span two calendar years if necessary. Changes to fishing seasons can be recommended by the Council at any time. In consultation with the Council, the Secretary will establish all fishing seasons by regulations that implement the FMP to accomplish the goals and objectives of the FMP, the Magnuson Act, and other applicable law. Season openings will remain in effect unless amended by regulations implementing the FMP.

"The Council will consider the following criteria when recommending regulatory amendments:

- Biological: spawning periods, migration, and other biological factors;
- Bycatch: biological and allocative effects of season changes;
- Exvessel and wholesale prices: effects of season changes on prices;
- Product quality: producing the highest quality product to the consumer;"
- Safety: potential adverse effects on people, vessels, fishing time, and equipment;
- Cost: effects on operating costs incurred by the industry as a result of season changes;
- Other fisheries: possible demands on the same harvesting, processing, and transportation systems needed in the groundfish fishery;
- Coordinated season timing: the need to spread out fishing effort over the year, minimize gear conflicts, and allow participation by all elements of the groundfish fleet;
- Enforcement and management costs: potential benefits of seasons changes relative to agency resources available to enforce and manage new seasons; and
- Allocation: potential allocation effects among users and indirect effects on coastal communities.

I. Delete the text in Section 4.3.1.4 Recordkeeping and Reporting Requirements and add new text provided below:

"The Council and NOAA Fisheries must have the best available biological and socioeconomic information with which to carry out their responsibilities for conserving and managing groundfish resources, as well as other fish resources, such as crab, halibut, and salmon, that are incidentally caught in the groundfish fishery. This information is used for making inseason and inter-season management decisions that affect these resources as well as the fishing industry that utilize them. This information is also used to judge the effectiveness of regulations guiding these decisions. The Council will recommend changes to regulations when necessary on the basis of such information.

"The need for the Council and NOAA Fisheries to consider the best available information is explicit in the goals and objectives as established by the Council and contained in the FMP. They are also explicit in the Magnuson Act, Executive Order 12291, the Regulatory Flexibility Act, the National Environmental Policy Act, and other applicable law. The Secretary, therefore, will require segments of the fishing industry to keep and report certain records as necessary to provide the Council and NOAA Fisheries with the needed information to accomplish these goals and objectives. The Secretary may implement and amend regulations at times to carry out these requirements after receiving Council recommendations to do so, or at other times as necessary to accomplish these goals and objectives. Regulations will be proposed and implemented in accordance with the Administrative Procedure Act, the Magnuson Act, and other applicable law.

"Information on catch and production, effort, and price. In consultation with the Council, the Secretary may require recordkeeping that is necessary and appropriate to determine catch, production, effort, price, and other information necessary for conservation and management of the fisheries. Such requirements may include the use of catch and/or product logs, product transfer logs, effort logs, or other records. The Secretary may require the industry to submit periodic reports or surveys of catch and fishery performance information derived from the logs or other recordkeeping requirements. Recordkeeping and reporting would be required of operators of catcher vessels, catcher/processor vessels, mothership processor vessels, and by
responsible officers of shoreside processor plants. Such requirements will be contained in regulations implementing this FMP.

"Information on processing expectations. In consultation with the Council, the Secretary may require U.S. processors and persons delivering U.S.-caught fish to foreign processing vessels to submit information to the Regional Director that is necessary and appropriate to reassess the adequacy of DAP and JVP specifications. Such information may be collected by means of written or telephone surveys. Such requirements will be contained in regulations implementing this FMP.

"Information on catching and/or processing activity. The Secretary may require catcher/processor vessels and mothership processor vessels to submit check-in and check-out reports for any Federal statistical area and the Territorial Sea adjacent to the Federal statistical area. Such requirements will be contained in regulations implementing this FMP."

J. In Section 4.3.3.1, "Observers," page 4-23, delete all text and replace it with the following:

"As in the need for reporting requirements, the Council and NOAA Fisheries must have the best available biological and socioeconomic information with which to carry out their responsibilities for conserving and managing groundfish resources. To augment this information, the Secretary, in consultation with the Council, will require each U.S. fishing vessel that catches groundfish from, or receives groundfish from the EEZ, and each shoreside processor that receives fish caught in the EEZ, to accommodate a observer certified by NOAA Fisheries. Such accommodation may be exempt from this requirement under an Observer Plan prepared by the Council according to regulations implementing this FMP. The purpose of the at-sea observer requirement is to verify catches, including those discarded at sea, and collect biological information of types required in the Observer Plan, which will include information on marine mammals and birds.

"Observers associated with the Marine Mammal Protection Act Observer Program will be considered to be observers for purposes of the Observer Plan if they meet requirements of observers for this Program."

17.3 Changes to Commercial Fishing Regulations

A. Fishing Seasons

§611.92 Groundfish of the Gulf of Alaska

Fishing for groundfish in the statistical areas defined at §611.92 is authorized from January 1 through December 31, subject to the other provisions of this part.

§672.72 Seasons.

(a) Fishing for groundfish in the statistical areas defined at §672.2 is authorized from January 1 through December 31, subject to the other provisions of this part, except as provided in paragraph (b) of this section.
(b) Fishing for sablefish is authorized with hook-and-line gear from 12:00 noon Alaska local time on April 1 through December 31, subject to other provisions of this part.

B. Shelikof District

§672.2 The Shelikof Strait district means all waters of the EEZ enclosed by a line connecting the following points in the order listed:

<table>
<thead>
<tr>
<th>Reference point</th>
<th>N. Lat.</th>
<th>W. long.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>58°51'N.</td>
<td>153°15'W.</td>
<td>Cape Douglas then south to the intersection of 152°00'W. with Afognak Island, then counter clockwise around the western shorelines of Afognak, Kodiak, and Raspberry Islands to Alitak Bay then south to</td>
</tr>
<tr>
<td>B</td>
<td>58°51'N.</td>
<td>152°00'W.</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>57°00'N.</td>
<td>154°00'W</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>56°30'N.</td>
<td>154°00'W</td>
<td>then west through Trinity Islands to</td>
</tr>
<tr>
<td>E</td>
<td>56°30'N.</td>
<td>155°00'W.</td>
<td>then south to</td>
</tr>
<tr>
<td>F</td>
<td>56°00'N.</td>
<td>155°00'W.</td>
<td>then west to</td>
</tr>
<tr>
<td>G</td>
<td>56°00'N.</td>
<td>157°00'W.</td>
<td>then north to Intersection of 157°00'W. with the Alaska Peninsula.</td>
</tr>
<tr>
<td>H</td>
<td>56°00'N.</td>
<td>157°00'W.</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>56°00'N.</td>
<td>157°00'W.</td>
<td></td>
</tr>
</tbody>
</table>

C. Kodiak Trawl Closures

§672.24 Gear limitations.

(c) Trawls other than pelagic trawls.  (1) No person may trawl in any of the following areas in the vicinity of Kodiak Island (see Type I Area) from a vessel having any trawl other than a pelagic trawl either attached or on board:

(i) Alitak Flats and Towers Areas: All water of Alitak Flats and the Towers Areas enclosed by a line connecting the following seven points in the order listed: (see figure 4.1)

(ii) Marmot Flats Area: All waters enclosed by a line connecting the following five points in the clockwise order listed: (see figure 4.1)

(2) From February 15 to June 15, no person may trawl in any of the following areas in the vicinity of Kodiak Island (see Type II area) from a vessel having any trawl other than a pelagic trawl either attached or on board:

(i) Chirikof Island Area: All waters surrounding Chirikof Island enclose by a line connecting the following four points in the counter clockwise order listed: (see figure 4.1)
(ii) Barnabas Area: All waters enclosed by a line connecting the following five points in the counter clockwise order listed: (see figure 4.1)

D. Halibut PSC Limits

§672.20 GENERAL LIMITATIONS

(c) NOTICES

(1) Notices of harvest limits and PSC limits. (i) General

(ii) Pacific halibut PSC limits. PSC limits of 2,000 mt for trawl gear and 750 mt for hook-and-line and pot gear are established. Each share is allocated to DAP and to JVP in proportion to the the specified DAP and JVP amount of groundfish apportionment.

§672.20(f) Halibut.

(1) Trawl gear. If during the year, the Regional Director determines that the catch of halibut by vessels using trawl gear and are delivering their catch to foreign vessels (JVP) vessels or vessels using trawl gear and are delivering their catch to U.S. fish processors (DAP vessels) will reach the proportional share of 2,000 mt of halibut provided for under paragraph (c)(1)(ii) of this section, the Regional Director will publish a notice in the Federal Register prohibiting fishing with trawl gear other than pelagic trawl gear for the rest of the year by DAP or JVP vessels in the Gulf of Alaska, to which the PSC limit applies, subject to paragraph (f)(3).

(2) Hook-and-line and pot trawl gear. If during the year, the Regional Director determines that the catch of halibut by vessels using hook-and-line and pot gear and are delivering their catch to foreign vessels (JVP) vessels or vessels using hook-and-line and pot gear and are delivering their catch to U.S. fish processors (DAP vessels) will reach the proportional share of 750 mt of halibut provided for under paragraph (c)(1)(ii) of this section, the Regional Director will publish a notice in the Federal Register prohibiting fishing with hook-and-line and pot gear for the rest of the year by DAP or JVP vessels in the Gulf of Alaska to which the PSC limit applies, subject to paragraph (f)(3).

(3) When the JVP or DAP vessels to which a halibut PSC limit applies have caught an amount of halibut equal to that PSC, the Regional Director may, by notice in the Federal Register, allow some or all of those vessels to continue to fish for groundfish using bottom-trawl gear or hook-and-line and pot gear under specified conditions, subject to other provisions of this part. In authorizing such continued fishing with these gear types, the Regional Director will take into account the following considerations, and issue relevant findings:

   (i) The risk of biological harm to halibut stocks and of socioeconomic harm to authorized user posed by continued fishing by these vessels; * * *

E. Data Reporting

50 CFR PART 620 -- GENERAL PROVISIONS FOR DOMESTIC FISHERIES

1. The authority citation for Part 620 reads as follows:

   Authority: 16 U.S.C. 1801 et seq.

   2. Section 620.3 is amended by revising paragraph (d) as follows:

   § 620.3 Relation to other laws.
   * * * *
(d) **Marine mammals.** Regulations governing exemption permits and the recordkeeping and reporting of the incidental take of marine mammals are set forth at Parts 216 and 229 of this title.

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**50 CFR PART 672 — GROUNDFISH OF THE GULF OF ALASKA**

1. The authority citation for Part 672 reads as follows:

   Authority: 16 U.S.C. 1801 et seq.

2. Section 672.3 is amended by revising paragraph (b) as follows:

   (b) For regulations governing foreign fishing for groundfish in the Gulf of Alaska, see 50 CFR 611.92; for those governing foreign fishing for groundfish in the Bering Sea and Aleutian Islands, see 50 CFR 611.93. For regulations governing fishing for groundfish in the Bering Sea and Aleutian Islands by vessels of the United States, see 50 CFR Part 675; for those governing exemption permits and the recordkeeping and reporting of the incidental take of marine mammals, see 50 CFR 216.24 and 50 CFR 229. For regulations governing fishing for Pacific halibut by vessels of the United States, see the regulations of the International Pacific Halibut Commission at 50 CFR 301.

3. Section 672.5 is revised as follows:

   §672.5 Recordkeeping and reporting.

   (a) **Logbooks.** The operator of any catcher vessel larger than 5 net tons or of any catcher/processor vessel, mothership processor vessel, or shoreside processing plant that harvests or processes groundfish from any of the Gulf of Alaska statistical areas described in Section 672.2, or from the territorial sea adjacent to any statistical area, must meet the following recordkeeping requirements:

   (1) General. The operator of each catcher vessel, catcher/processor vessel, mothership processor vessel, and shoreside processing plant must maintain timely and accurate records required by this section.

   (i) The operator of each catcher vessel, catcher/processor vessel, mothership processor vessel, and shoreside processing plant must maintain all required records in English, based on Alaska Local Time (ALT) unless otherwise specified in the regulations, and make the original copy of the records immediately available for inspection upon the request of an authorized officer or observer.

   (ii) For any fishing year, the operator of each catcher vessel, catcher/processor vessel, mothership vessel, and shoreside processing plant must retain the original copy of all required records on board the vessel, or for shoreside plants, within the processing facility, until the end of the fishing year or for as long after the fishing year that species products recorded in logbooks are retained onboard a vessel or at a processing facility. The owner of a catcher vessel, catcher/processor vessel, mothership vessel and/or shoreside processing plant must retain the original copy of all required records at the owner's federal permit address of record or State processor code address of record, whichever is applicable, for three years after the end of a fishing year. These records must be made available for inspection upon the request of an authorized officer at any time during the three years after the end of a fishing year, whether or not such records are on board the vessel or at the processing plant.
(iii) The operator of each catcher vessel, catcher/processor vessel, mothership vessel, and shoreside processing plant must use the logbook prescribed and provided by the Regional Director. The logs shall be maintained in accordance with these regulations and the instructions attached to the issued logs.

(iv) Recordkeeping required under paragraphs (a)(2)(ii), (a)(3)(ii), and (a)(4)(i) of this section must be in indelible ink with correction to be accomplished by lining out and rewriting rather than erasure or obliteration. Original pages in issued logs shall not be removed from the log.

2) Daily fishing logbook. (i) The operator of each catcher/processor and catcher vessel harvesting groundfish from any of the Gulf of Alaska statistical areas, or the territorial sea adjacent to any statistical area, must maintain onboard a daily fishing log of the effort and catch information of the vessel as described in paragraph (a)(2)(ii) of this section. Daily effort entries are required for each day the vessel conducts fishing operations. Daily entries are not required whenever the fishing vessel is in port. Each page of the log may contain entries pertaining to only one day’s fishing activity within each statistical area described in Section 672.2. Catcher/processor vessels will be provided with daily fishing logbooks that also record the daily production information required under paragraph a(3) of this section.

(ii) Contents. (A) The daily fishing log must record the following effort information on a daily basis:

(1) A consecutive page number beginning with the first day of the fishing year that the vessel started fishing operations and continuing throughout the log for the remainder of the fishing year;
(2) The date;
(3) The catcher vessel’s name;
(4) The federal statistical area in which the catcher vessel is conducting fishing activity or, if fishing in territorial waters, the adjacent federal statistical area.
(5) The gear type;
(6) For hook and line and pot gear, the average number of hooks or pots per skate, size of hooks used, and average length of skates;
(7) For trawl gear, the size of net opening, codend mesh size, and average speed of tow;
(8) The vessel operator’s signature;
(9) Crew size;
(10) Daily discard amounts of each groundfish species or species group to at least the nearest tenth of a metric ton (0.1 mt) round weight, and daily discard amounts of each prohibited species by number, except for discard amounts of herring, which should be reported by round weight (0.1 mt).

(B) The following information must be recorded for each haul or set, as appropriate to the gear type employed:

(1) The consecutive trawl or set number, beginning with the first trawl or set of the fishing year;
(2) The time the gear was set (ALT);
(3) The position of the set in geographical coordinates;
(4) The sea depth;
(5) The trawl depth;
(6) The hauling time;
(7) The position of the haul in geographical coordinates;
(8) The duration of the set;
(9) The number of pots or skates;
(10) The estimated total weight of the catch for the trawl or set, to at least the nearest metric ton round weight.
(11) Marine mammal interaction information required under CFR Part 229

(iii) Maintenance of the daily fishing log. Entries in the daily fishing log as to trawl or set number, time, position, and estimated catch weight shall be updated within two hours of the hauling time. All other entries in
the daily fishing log shall be updated within 12 hours of the end of the day (ALT) on which the trawl or set occurred.

(iv) Upon each delivery or landing, species discard amounts must be provided to the processor receiving the vessel’s catch so that such amounts may be reported under the requirements set forth at paragraphs (b)(3)(ix) and (b)(3)(x) of this section.

(v) Submission of daily fishing logs. Each vessel operator must submit a copy of the daily fishing on a quarterly basis to the Northwest and Alaska Fishery Center, National Marine Fisheries Service, Sand Point Way NE Bldg. 4, Seattle, Washington 98115. Copies of the DFL must be submitted by May 1, August 1, November 1, and February 1 for the previous quarter’s fishing activity.

(3) Daily cumulative production log (DCPL). (i) The operator of each catcher/processor vessel, mothership processor vessel, and shore-side processor that processes groundfish from any of the Gulf of Alaska statistical areas or the territorial sea adjacent to any statistical area, must maintain on the processing vessel or within the processing facility a daily cumulative production log of catch receipt (if applicable), species discard, and retained groundfish product information as described in paragraph (a)(3)(ii) of this Section. Daily log entries are required for each day the vessel or facility receives or processes groundfish. Each page of the log may contain entries pertaining to only one day’s catch receipt from each statistical area described in Section 672.2. For the purpose of logbook entries, a week is defined as the period from Sunday through Saturday.

(ii) Contents. (A) The DCPL must record the following information on a daily basis:

1. A consecutive page number beginning with the first day of the fishing year the vessel started operations and continuing throughout the log for the remainder of the fishing year;
2. The date;
3. The vessel or plant name;
4. The federal statistical area from which the groundfish catch receipt was harvested, or, if harvested from territorial waters, the adjacent federal statistical area
5. The gear used to harvest the groundfish catch receipt;
6. The vessel or plant operator’s signature;
7. Crew size or employment information;
8. Daily discard amounts of each groundfish species or species group to at least the nearest tenth of a metric ton (0.1 mt) round weight, and, if applicable, daily discard amounts of each prohibited species by number, except for discard amounts of herring, which should be reported by round weight (0.1 mt).
9. For each species or species group for which a total allowable catch (TAC) has been specified by the Secretary under Section 672.20 of this part, and product produced during the day:
   i. The product by species code and product type;
   ii. The balance forward of species product amounts produced during a week to the nearest tenth of a metric ton (0.1 mt). (At the beginning of each week, the balance forward for species product amounts for that week will be zero).
   iii. The daily total product produced by species and product type to the nearest tenth of a metric ton (0.1 mt);
   iv. The cumulative weekly total product aboard by species and product type to the nearest tenth of a metric ton (0.1 mt).

(B) The following information must be recorded for each catch receipt:
1. For each set or codend received by mothership processor vessels:
   i. A consecutive catch receipt or codend number for the day;
   ii. The catch receipt time;
   iii. The catch receipt position
   iv. The name of the delivering vessel;
   v. The delivery vessel’s Federal groundfish permit number or ADF&G vessel number;
   vi. Estimated catch receipt weight to at least the nearest metric ton round weight.
   vii. Marine mammal interaction information required under CFR part 229

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(2) For each groundfish landing received by shoreside processors from catcher vessels:
   (i) State of Alaska fish ticket number;
   (ii) The name of the delivering vessel;
   (iii) The delivery vessel’s ADF&G vessel number or federal groundfish permit number;
   (iv) The catch receipt time (ALT);
   (v) Estimated catch receipt weight to at least the nearest metric ton round weight.

(iii) Daily maintenance of the DCPL. Entries in the DCPL as to codend or fish ticket number, receipt time, position, and delivering vessel’s name shall be updated within two hours of the receipt time. All other entries in the DCPL shall be updated within 12 hours of the end of the day (ALT) on which the trawl, set, receipt, or production occurred. Product shall be logged on the day processed regardless of the day of catch or receipt. Entries for product weights must be based on the number of production units (pans, cartons, blocks, trays, cans, bags, or individually frozen fish) and the average weight of the production unit, with reasonable allowance for water added. Allowance for water added cannot exceed five percent of the gross unit weight. Product unit weights must be based on the total actual net weight of the product as determined by representative samples.

(iv) Submission of DCPL’s. Each processing vessel or plant operator must submit a copy of the DCPL on a quarterly basis to the Northwest and Alaska Fishery Center, National Marine Fisheries Service, Sand Point Way NE Bldg. 4, Seattle, Washington 98115. Copies of the DFL must be submitted by May 1, August 1, November 1, and February 1 for the previous quarter’s processing activity.

(4) Product transfer logbooks. The operator of each catcher/processor vessel, mothership processor vessel, and shoreside processor plant must record, in a separate transfer log, each transfer, offloading, shipment or receipt of any processed fishery product, including quantities transferred or off-loaded outside the EEZ, within any states territorial waters, or within the internal waters of any state or at any shoreside facility.

(i) Contents. The transfer log must record the following information:
   (A) A consecutive page number beginning with the first transfer or shipment of groundfish product in a fishing year and continuing throughout the log for the remainder of the fishing year;
   (B) Whether the product transfer reflects a product receipt or shipment/offloading;
   (C) Company representative’s name, telephone number, and Fax or telex number;
   (D) Vessel or plant name, Federal permit number or Alaska State processor code number, and radio call sign of vessel if applicable;
   (E) The name of the other vessel (including Federal permit number and call sign) shipping agent, or commercial facility (including location) involved in the transfer or shipment;
   (F) The time and date (ALT) and, if applicable, vessel location (in geographic coordinates, or if within a port, the name of the port) the transfer or shipment began and was completed;
   (G) The intended designation of the carrier or vessel receiving product;
   (H) For each product type by species or species group, the total net product weight transferred or shipped to the nearest one-tenth of a metric ton (0.1 mt), an estimated net weight in kilograms or pounds of product per carton, and the total number of cartons of product transferred or shipped.

(ii) Submission of transfer logs. Copies of transfer logs for each weekly period, Sunday through Saturday, ALT, must be submitted to the Regional Director within four days following the week ending date through such means as the Regional Director will prescribe. Submission of product transfer logs is only required if product transfer activity occurred during that weekly period.

(b) Other recordkeeping and reporting requirements.

(1) Catcher vessels. The operator of any fishing vessel (including any catcher/processor vessel) to which a permit has been issued under section 672.4 of this Part, that catches groundfish in any of the Gulf of Alaska
regulatory areas, the territorial sea adjacent to any regulatory area, or internal waters of the State of Alaska, will be responsible for the submission to ADF&G of an accurately completed State of Alaska fish ticket or an equivalent document containing all of the information required on an Alaska fish ticket. Fish tickets are not required for groundfish sold or delivered to a foreign processing vessel which has a permit under section 611.3 of this title.

(i) When to submit fish tickets.

(A) Sales or deliveries to shore. Expect as provided by paragraph (b)(1)(ii) of this section, the operator of any fishing vessel who sells or delivers his catch of groundfish to shore must submit the fish ticket required under paragraph (b)(1) of this section within one week after such fish are sold or delivered.

(B) Sales or deliveries to vessels. Except as provided by paragraph (b)(1)(ii) of this section, the operator of any fishing vessel who sells or delivers his catch of groundfish to another vessel must submit the fish ticket required under paragraph (b)(1) of this section within one week after he returns to port.

(ii) At the election of the fishing vessel operator who catches groundfish, fish tickets may be prepared, and submitted under paragraph (b)(1)(i)(A) of this section to ADF&G by the shore-based purchaser within one week after such fish are received by the purchaser, or, if submitted under paragraph (b)(1)(i)(B) of this section, to ADF&G by the vessel-based purchaser within one week after such purchaser returns to shore. For purposes of this paragraph, a "purchaser" is any person who receives from a fishing vessel regulated under this Part, groundfish caught in either subarea of the Bering Sea and Aleutian Islands management area, the territorial sea, or internal waters of the State of Alaska.

(iii) Address. Mail or deliver State of Alaska fish tickets to the ADF&G office nearest area of groundfish landing, or send these documents to the Director, Commercial Fish Division, Alaska Department of Fish and Game Headquarters, P.O. Box 3-2000, Juneau, Alaska 99802.

(2) Catcher/processor vessels, mothership processor vessels, and shoreside processor plants. (i) Alaska groundfish check-in report. The operator of any catcher/processor and/or mothership processor vessel must notify the Regional Director before starting and upon stopping fishing for or receiving groundfish from any of the Gulf of Alaska statistical areas, or the territorial sea adjacent to any statistical area. Notification will be through such means as the Regional Director will prescribe, and will consist of the vessel's name, permit number (if applicable), radio call sign, date and hour (ALT) of when fishing for or receiving groundfish will begin or cease, and the latitude and longitude of such activity.

(ii) Weekly product report. After a receipt of groundfish by a shoreside plant operator or after notification of starting fishing by a vessel under paragraph (b)(2)(i) of this section, and continuing until that vessel's entire catch or cargo of fish has been off-loaded, the operator of that vessel or plant must submit a weekly product report, including reports of zero tons caught or received, for each weekly period, Sunday through Saturday, ALT, or for each portion of such period. The weekly product report must be received by the Regional Director within four days of the end of the reporting period through such means as the Regional Director will prescribe. This report must contain the following information:

(A) Submitter's name, telephone number, and Fax or
(B) Name of vessel or plant and radio call sign of vessel;

(C) Federal permit number or Alaska State processor code, which ever is applicable;

(D) The ending date (Saturday) of the reporting period;

(E) Gear type used to harvest groundfish catch or catch receipt;

(F) Number of days fished or during which fish were received;

(G) The product type and total product weight produced during the weekly reporting period for each species or species group for which a total allowable catch (TAC) has been specified by the Secretary under Section 672.20 of this part;

(H) The statistical area(s) from which each retained species or species group product was caught during the reporting period;

(I) The amount of each groundfish species or species group discarded, including the amount discarded by catcher vessels, by species or species group, during the weekly reporting period. Discard amounts should be reported in round weight to the nearest metric ton.

(J) The amount of each prohibited species discarded by a vessel or plant, including the amount discarded by catcher vessels delivering to processor vessels or shoreside plants, during the reporting period. Discard amount of each prohibited species must be reported by number, except for herring, which should be reported by round weight (0.1 mt).

(iii) Alaska groundfish processor monthly product value report. Each groundfish processor or its parent company must complete a monthly product value report for any month during which groundfish harvested from the EEZ off Alaska or territorial waters adjacent to the EEZ were sold. Monthly product value reports must be submitted annually to the Northwest and Alaska Fishery Center, National Marine Fisheries Service, Sand Point Way NE Bldg. 4, Seattle, Washington 98115. The monthly product value reports must be received by NMFS no later than March 1 for the previous fishing year. These reports must include the following information:

(A) Name of the representative for the vessel, plant or company, telephone number, and Fax or telex number;

(B) Name of vessel(s) or plant(s);

(C) Federal permit number or Alaska State processor code, which ever is applicable;

(D) Month and year;

(E) For each species or species group for which product was sold during the month, the product type(s); Product size(s) or grade(s); product weight(s) to the nearest tenth of a metric ton (0.1 mt); and product value(s).

(c) Groundfish utilization surveys. (1) Domestic processors and purchasers. -- Any U.S. fish processor or purchaser (i.e., any person who receives fish for a commercial purpose from a fishing vessel subject to this part), except for any fisherman purchasing fish for his own use as bait or any foreign fishing vessel permitted to receive U.S. harvested fish at sea, shall accurately complete each written survey authorized by this section.
(i) Surveys shall be conducted at those times considered necessary by the Regional Director, but at least twice, and no more than four times, during the fishing year.

(ii) Each survey shall be designed to gather the following information:

(A) Changes in processing plant capacity;

(B) Changes in the availability of groundfish by species;

(C) Changes in market demand;

(D) Changes in expected utilization of processing capacity or expected purchases of groundfish species for the subsequent 12-month period or for the remainder of the fishing year;

(E) Changes in other factors which the purchaser or processor believes relevant to the accurate determination of the amounts of domestic annual processing (DAP).

(iii) Completed surveys shall be returned to the Regional Director at the address and by the date specified on the survey.

(2) U.S. vessels delivering to foreign processing vessels. --The owner or operator of any fishing vessel regulated by this section who has delivered, or intends to deliver, groundfish caught in any Gulf of Alaska regulatory area to a foreign fishing vessel at sea shall accurately complete each written survey authorized by this section and received by the owner or operator from the Regional Director.

(i) Surveys shall be conducted at those times considered necessary by the Regional Director, but at least twice, and no more than four times during the fishing year.

(ii) Each survey shall be designed to gather the following information:

(A) Changes in the number and capacity of U.S. vessels which harvest groundfish to be delivered to foreign fishing vessels at sea;

(B) Changes in regulatory areas of operation;

(C) Changes in capacity or operations of the foreign fishing vessel to which deliveries are being, or will be, made;

(D) Changes in quantities and species of groundfish expected to be delivered in the subsequent 12-month period or the remainder of the fishing year;

(E) Changes in alternative fishery opportunities available to the U.S. vessels; and

(F) Changes in other factors the owner or operator believes relevant to the accurate determination of the amount of joint venture processing (JVP).

(iii) Completed surveys shall be returned to the Regional Director at the address and by the date specified on the survey.

F. Observer Program

§672.7 Prohibitions.
(d) Fish for groundfish except under terms of an observer plan as provided by §672.27 of this part.

§672.27 Observers.

All fishing vessels subject to this part must comply with terms contained in an observer plan that has been prepared by the Secretary in consultation with the Council for purposes of providing data useful in management of the groundfish fishery, unless specifically exempt from such compliance by the observer plan.

G. Secretary's Authority to Split or Combine

§672.20 General limitations. - Gulf of Alaska

(a)  *  *  *

(2) TAC. The Secretary, after consultation with the North Pacific Fishery Management Council (Council), will specify the annual TAC for each calendar year for each target species and the "other species" category, and will apportion the TACs among DAP, JVP, TALFF, and reserves. TACs in the target species category may be split or combined for purposes of establishing new TACs with apportionments thereof under paragraph (c)(1) of this section. The sum of the TACs so specified must be within the OY range of 116,000 - 800,000 mt for target species and the "other species" category.
The Shelikof Strait district means all waters of the EEZ enclosed by a line connecting the following points in the order listed:

<table>
<thead>
<tr>
<th>Reference point</th>
<th>N. Lat.</th>
<th>W. Long.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>58°51'N.</td>
<td>153°15'W.</td>
<td>Cape Douglas then south to the intersection of 152°00'W. with Afognak Island,</td>
</tr>
<tr>
<td>B</td>
<td>58°51'N.</td>
<td>152°00'W.</td>
<td>then counter clockwise around the western shorelines of Afognak, Kodiak, and</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
<td>Raspberry Islands to Alitak Bay then south to</td>
</tr>
<tr>
<td>D</td>
<td>57°00'N.</td>
<td>154°00'W.</td>
<td>then west through Trinity Islands to</td>
</tr>
<tr>
<td>E</td>
<td>56°30'N.</td>
<td>154°00'W.</td>
<td>then south to</td>
</tr>
<tr>
<td>F</td>
<td>56°30'N.</td>
<td>155°00'W.</td>
<td>then west to</td>
</tr>
<tr>
<td>G</td>
<td>56°00'N.</td>
<td>155°00'W.</td>
<td>then north to</td>
</tr>
<tr>
<td>H</td>
<td>56°00'N.</td>
<td>157°00'W.</td>
<td>Intersection of 157°00'W. with the Alaska Peninsula.</td>
</tr>
<tr>
<td>I</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 4.1 Areas around Kodiak Island closed to trawling except with pelagic trawls. TYPE I areas are closed year round. TYPE II areas are closed February 15 to June 15. TYPE III areas close when a significant recruitment event occurs.
Table 4.3 Definitions of king crab bycatch areas.

<table>
<thead>
<tr>
<th>Area Type</th>
<th>Name and Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Type I areas are those king crab stock rebuilding areas where a high level of protection will be provided to the king crab by closing the area year-round to bottom trawling. Fishing with other gear would be allowed.</td>
</tr>
<tr>
<td>II</td>
<td>Type II areas are those areas sensitive for king crab populations and in which bottom trawling will be prohibited during the soft-shell season (February 15 - June 15). Fishing with other gear would be allowed and fishing with bottom trawl gear would be allowed from January 1 - February 14 and June 16 - December 31.</td>
</tr>
<tr>
<td>III</td>
<td>Type III areas are those geographic areas adjacent to a Type I or Type II area that have been identified as important juvenile king crab rearing or migratory areas. These areas only become operational following a determination that the &quot;recruitment event criteria&quot; has occurred. The NMFS Regional Director will classify the expanded area as either Type I or II depending on the information available. Areas designated as Type I, II, or III are shown in Figure 4.1.</td>
</tr>
</tbody>
</table>

For purposes of implementing a Type III area, a "recruitment event" is defined as the appearance of female king crab in substantially increased numbers. A substantially increased number is defined as occurring when the total number of females estimated for a given district equals the number of females established as a threshold criteria for opening that district to commercial crab fishing. In any given year a recruitment event may occur in one or more of the Kodiak management districts as indicated by the standardized Kodiak crab survey conducted by the Alaska Department of Fish and Game. A recruitment event closure will continue until either (1) a commercial crab fishery opens for that district, (2) the number of crab drops below the threshold level established for that district, or (3) the end of 1992 when the closures established by this measure would expire. Implementation of the Type III area closures would be accomplished by regulatory amendment.

See Tables 4.3.1, 4.3.2., and 4.3.3 for geographic coordinates defining Type I,II, and III areas.
Table 4.3.1. TYPE I AREAS

(i) *Alitak Flats and Towers Areas*: All water of Alitak Flats and the Towers Areas enclosed by a line connecting the following seven points in the order listed:

<table>
<thead>
<tr>
<th>Reference point</th>
<th>N. lat.</th>
<th>W. long.</th>
<th>Land description</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>56 59 4</td>
<td>154 31 1</td>
<td>Low Cape.</td>
</tr>
<tr>
<td>b</td>
<td>57 00 0</td>
<td>155 00 0</td>
<td></td>
</tr>
<tr>
<td>c</td>
<td>56 17 0</td>
<td>155 00 0</td>
<td></td>
</tr>
<tr>
<td>d</td>
<td>56 17 0</td>
<td>153 52 0</td>
<td></td>
</tr>
<tr>
<td>e</td>
<td>56 33 5</td>
<td>153 52 0</td>
<td>Cape Sitkinak</td>
</tr>
<tr>
<td>f</td>
<td>56 54 5</td>
<td>153 32 5</td>
<td>East point of</td>
</tr>
<tr>
<td>g</td>
<td>56 56 0</td>
<td>153 35 5</td>
<td>Twoheaded Island</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Kodiak Island,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>thence, along the</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>coastline of Kodiak</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Island until</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>intersection of</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>56 59 4</td>
<td>154 31 1</td>
<td>Low Cape.</td>
</tr>
</tbody>
</table>

(ii) *Marmot Flats Area*: All water enclosed by a line connecting the following five points in the clockwise order listed:

<table>
<thead>
<tr>
<th>Reference point</th>
<th>N. lat.</th>
<th>W. long.</th>
<th>Land description</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>58 00 0</td>
<td>152 30 0</td>
<td></td>
</tr>
<tr>
<td>b</td>
<td>58 00 0</td>
<td>151 47 0</td>
<td></td>
</tr>
<tr>
<td>c</td>
<td>57 37 0</td>
<td>151 47 0</td>
<td></td>
</tr>
<tr>
<td>d</td>
<td>57 37 0</td>
<td>152 10 1</td>
<td>Cape Chiniak,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>thence, along the</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>coastline of Kodiak</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Island to</td>
</tr>
<tr>
<td>e</td>
<td>57 54 5</td>
<td>152 30 0</td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>58 00 0</td>
<td>152 30 0</td>
<td>North Cape.</td>
</tr>
</tbody>
</table>
Table 4.3.2. TYPE II AREAS

(i) **Chirikof Island Area**: All waters surrounding Chirikof Island enclosed by a line connecting the following four points in the counter clockwise order listed:

<table>
<thead>
<tr>
<th>Reference point</th>
<th>N. lat.</th>
<th>W. long.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>56 07 0</td>
<td>155 13 0</td>
</tr>
<tr>
<td>b</td>
<td>56 07 0</td>
<td>156 00 0</td>
</tr>
<tr>
<td>c</td>
<td>55 41 0</td>
<td>156 00 0</td>
</tr>
<tr>
<td>d</td>
<td>55 41 0</td>
<td>155 13 0</td>
</tr>
<tr>
<td>a</td>
<td>56 07 0</td>
<td>155 13 0</td>
</tr>
</tbody>
</table>

(ii) **Barnabas Area**: All waters enclosed by a line connecting the following five points in the counter clockwise order listed:

<table>
<thead>
<tr>
<th>Reference point</th>
<th>N. lat.</th>
<th>W. long.</th>
<th>Land description</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>57 00 0</td>
<td>153 18 0</td>
<td>Black Point.</td>
</tr>
<tr>
<td>b</td>
<td>56 56 0</td>
<td>153 09 0</td>
<td>South Tip of Ugak Island.</td>
</tr>
<tr>
<td>c</td>
<td>57 22 0</td>
<td>152 18 5</td>
<td>North Tip of Ugak Island.</td>
</tr>
<tr>
<td>d</td>
<td>57 23 5</td>
<td>152 17 5</td>
<td>Narrow Cape, thence, along the coastline of Kodiak Island to</td>
</tr>
<tr>
<td>e</td>
<td>57 25 3</td>
<td>152 20 0</td>
<td>Cape Kasick to inshore waters.</td>
</tr>
<tr>
<td>f</td>
<td>57 04 2</td>
<td>153 30 0</td>
<td>Black Point, incl.</td>
</tr>
<tr>
<td>a</td>
<td>57 00 0</td>
<td>153 18 0</td>
<td>inshore waters.</td>
</tr>
</tbody>
</table>
Table 4.3.3.

TYPE III AREAS

Outer Marmot Bay

All waters bounded by lines connecting the following coordinates in the order listed: 1) 58 00 00 N lat., 151 55 40 W long. 2) 58 02 30 N Lat., 151 55 40 W Long. 3) 58 02 30 N lat., 151 47 00 W long. 4) 58 04 53 N lat., 151 47 00 W long. 5) 58 04 53 N lat., 151 35 25 W long. 6) 57 57 40 N lat., 151 35 25 W long. 7) 57 57 40 N lat., 151 47 00 W long. 8) 58 00 00 N lat., 151 47 00 W long. 9) 58 00 00 N lat., 151 55 40 W long.

Barnabas

All waters bounded by lines connecting the following coordinates in the order listed: 1) 57 14 30 N lat., 152 37 50 W long. 2) 57 10 00 N lat., 152 25 30 W long. 3) 57 02 32 N lat., 152 35 02 W long. 4) 57 04 25 N lat., 152 54 15 W long. 5) Then following the three mile limit line to 57 13 00 N lat., 152 49 25 W long. 6) Then following the three mile limit line to: 57 14 30 N lat., 152 37 50 W long.

Horse’s Head

All waters bounded by lines connecting the following coordinates in the order listed: 1) 56 49 55 N lat., 153 36 30 W long. 2) 56 34 35 N lat., 153 05 37 W long. 3) 56 28 35 N lat., 153 05 37 W long. 4) 56 28 35 N lat., 153 52 05 W long. 5) Then following the three mile limit line to: 56 49 55 N lat., 153 36 30 W long.

Chirikof

All waters bounded by lines connecting the following coordinates in the order listed: 1) 56 16 45 N lat., 155 39 00 W long. 2) 56 16 45 N lat., 155 11 45 W long. 3) 55 41 00 N lat., 155 13 00 W long. 4) 56 07 10 N lat., 155 13 00 W long. 5) 56 07 10 N lat., 155 39 00 W long. 6) 56 16 45 N lat., 155 39 00 W long.
18.0 Changes to the Bering Sea/Aleutian Islands Groundfish FMP

18.1 Summary

Amendment 13 will make the following changes to the FMP:

(a) Allocate sablefish in the Bering Sea and the Aleutian Islands Management Subareas.

(b) Establish a procedure to set fishing seasons on an annual basis by regulatory amendment.

(c) Establish groundfish fishing closed zones near the Walrus Islands and Cape Peirce.

(d) Establish a new data reporting system.

(e) Establish a new observer program.

(f) Clarify the Secretary's authority to split or combine species groups within the target species management category by a framework procedure.

18.2 Changes to the Relevant Sections of the Bering Sea/Aleutian Islands FMP

A. In Section 11.3, delete the first three paragraphs renumber Sections 11.3.1 and 11.3.2 on page 11-4 as 11.3.2 and 11.3.3, add new text in Section 11.3, and add a new Section 11.3.1 The Stock Assessment and Fishery Evaluation (SAFE), as follows:

Add the following text:

The Secretary, after receiving recommendations from the Council, will determine TACs and apportionments thereof among DAP, JVP, TALFF, and reserves for each target species and the "other species" category by January 1 of the new fishing year, or as soon as practicable thereafter, by means of regulations implementing the FMP. Notwithstanding designated target species and species groups listed in Section 14.2.B.2 on page 14-1, the Council may consider whether splitting or combining species in the target species category for purposes of establishing new TACs is desirable based on commercial importance of a species or species group and whether sufficient biological information is available to manage a species or species group on its own biological merits.

Prior to making recommendations to the Secretary, the Council will make available to the public for comment as soon as practicable after its September meeting, a preliminary Stock Assessment and Fishery Evaluation (SAFE) and preliminary specifications of ABC and TAC for each target species and the "other species" category, and apportionments thereof among DAP, JVP, TALFF, and reserves. At a minimum, the SAFE will contain information listed in Section 11.3.1

At its December meeting, the Council will review the final SAFE and comments received. The Council will then make final recommendations to the Secretary.

11.3.1 The Stock Assessment and Fishery Evaluation

For purposes of supplying scientific information to the Council for use in utilizing the above procedure, a The Stock Assessment and Fishery Evaluation (SAFE) is prepared annually. The SAFE will, at a minimum, contain or refer to the following:

(1) Current status of Bering Sea and Aleutian Islands area groundfish resources, by major species or species group.
(2) Estimates of maximum sustainable yield (MSY) and acceptable biological catch (ABC).
(3) Estimates of groundfish species mortality from nongroundfish fisheries, subsistence fisheries, and recreational fisheries, and difference between groundfish mortality and catch, if possible.

(4) Fishery statistics (landings and value) for the current year.

(5) The projected responses of stocks and fisheries to alternative levels of fishing mortality.

(6) Any relevant information relating to changes in groundfish markets.

(7) Information to be used by the Council in establishing prohibited species catch limits (PSCs) for prohibited species and fully utilized species with supporting justification and rationale.

(8) Any other biological, social, or economic information which may be useful to the Council.

B. Replace text in Section 14.3 on page 14-4 with the following:

Fishing seasons are defined as periods when harvesting groundfish is permitted. Fishing seasons will normally be within a calendar year, if possible, for statistical purposes, but could span two calendar years if necessary. In consultation with the Council, the Secretary will establish all fishing seasons by regulations that implement the FMP to accomplish the goals and objectives of the FMP, the Magnuson Act, and other applicable law. Season openings will remain in effect unless amended by regulations implementing the FMP.

The Council will consider the following criteria when recommending regulatory amendments:

- Biological: spawning periods, migration, and other biological factors;
- Bycatch: biological and allocative effects of season changes;
- Exvessel and wholesale prices: effects of season changes on prices;
- Product quality: producing the highest quality product to the consumer;
- Safety: potential adverse effects on people, vessels, fishing time, and equipment;
- Cost: effects on operating costs incurred by the industry as a result of season changes;
- Other fisheries: possible demands on the same harvesting, processing, and transportation systems needed in the groundfish fishery;
- Coordinated season timing: the need to spread out fishing effort over the year, minimize gear conflicts, and allow participation by all elements of the groundfish fleet;
- Enforcement and management costs: potential benefits of seasons changes relative to agency resources available to enforce and manage new seasons; and
- Allocation: potential allocation effects among users and indirect effects on coastal communities.

C. Within subsection 14.4.3.1, page 14-6, General, strike "None" and insert:

"Waters seaward of the State of Alaska three-mile limit, out to twelve miles surrounding 1) Round Island and the Twins, and 2) Cape Peirce, are closed to fishing for groundfish from April 1 through September 30 (Figure 27b depicts the closed waters). This measure is effective through December 31, 1992."

D. In Section 14.4.5 "Reporting Requirements", page 14-10, replace all text under Subsection A "Domestic" with the following:

The Council and NOAA Fisheries must have the best available biological and socioeconomic information with which to carry out their responsibilities for conserving and managing groundfish resources, as well as other fish resources, such as crab, halibut, and salmon, that are incidentally caught in the groundfish fishery. This information is used for making inseason and inter-season management decisions that affect these resources as well as the fishing industry that utilize them. This information is also used to judge the effectiveness of regulations guiding these decisions. The Council will recommend changes to regulations when necessary on the basis of such information.
The need for the Council and NOAA Fisheries to consider the best available information is explicit in the goals and objectives as established by the Council and contained in the FMP. They are also explicit in the Magnuson Act, Executive Order 12291, the Regulatory Flexibility Act, the National Environmental Policy Act, and other applicable law. The Secretary, therefore, will require segments of the fishing industry to keep and report certain records as necessary to provide the Council and NOAA Fisheries with the needed information to accomplish these goals and objectives. The Secretary may implement and amend regulations at times to carry out these requirements after receiving Council recommendations to do so, or at other times as necessary to accomplish these goals and objectives. Regulations will be proposed and implemented in accordance with the Administrative Procedure Act, the Magnuson Act, and other applicable law.

Information on catch and production, effort, and price. In consultation with the Council, the Secretary may require recordkeeping that is necessary and appropriate to determine catch, production, effort, price, and other information necessary for conservation and management of the fisheries. Such requirements may include the use of catch and/or product logs, product transfer logs, effort logs, or other records. The Secretary may require the industry to submit periodic reports or surveys of catch and fishery performance information derived from the logs or other recordkeeping requirements. Recordkeeping and reporting would be required of operators of catcher vessels, catcher/processor vessels, mothership processor vessels, and by responsible officers of shore-side processor plants. Such requirements will be contained in regulations implementing this FMP.

Information on processing expectations. In consultation with the Council, the Secretary may require U.S. processors and persons delivering U.S.-caught fish to foreign processing vessels to submit information to the Regional Director that is necessary and appropriate to reassess the adequacy of DAP and JVP specifications. Such information may be collected by means of written or telephone surveys. Such requirements will be contained in regulations implementing this FMP.

Information on catching and/or processing activity. The Secretary may require catcher/processor vessels and mothership processor vessels to submit check-in and check-out reports for any Federal statistical area and the Territorial Sea adjacent to the Federal Statistical area. Such requirements will be contained in regulations implementing this FMP.

E. In Section 14.4.6 "Domestic Observer Program", page 14-12, replace all text with the following:

As in the need for reporting requirements, the Council and NOAA Fisheries must have the best available biological and socioeconomic information with which to carry out their responsibilities for conserving and managing groundfish resources. To augment this information, the Secretary, in consultation with the Council, will require each U.S. fishing vessel that catches groundfish from, or receives groundfish from the EEZ, and each shore-side processor that receives fish caught in the EEZ, to accommodate a observer certified by NOAA Fisheries. Such accommodation may be exempt from this requirement under an Observer Plan prepared by the Council according to regulations implementing this FMP. The purpose of the at-sea observer requirement is to verify catches, including those discarded at sea, and collect biological information of types required in the Observer Plan, which will include information on marine mammals and birds and.

Observers associated with the Marine Mammal Protection Act Observer Program will be considered to be observers for purposes of the Observer Plan if they meet requirements of observers for this Program.

F. Add a new section 14.4.9, as follows:

14.4.9 Gear allocations

The following gear allocations are specified by this plan:
Bering Sea Subarea

Starting in 1990, vessels using fixed gear, including hook-and-line and pot gear, shall be permitted to harvest no more than 50 percent of the TAC specified for sablefish. Vessels using trawl gear shall be permitted to harvest no more than 50 percent of the TAC specified for sablefish.

Aleutian Islands Subarea

Starting in 1990, vessels using fixed gear, including hook-and-line and pot gear, shall be permitted to harvest no more than 90 percent of the TAC specified for sablefish. Vessels using trawl gear shall be permitted to harvest no more than 10 percent of the TAC specified for sablefish.

G.

Annex I, page AI-1, replace the term Resource Assessment Document with Stock Assessment and Fishery Evaluation Report using the same definition. Where the acronym (RAD) has been used in the plan, replace with the acronym (SAFE).

18.3 Changes to Commercial Fishing Regulations

A. Allocate Sablefish

§675.24 Gear Allocations.

Vessels using gear types other than those specified by paragraphs (a) and (b) of this section, must treat sablefish as a prohibited species.

(a) In the Bering Sea Subarea, defined at §675.2 of this part, hook-and-line and pot gear may be used to take no more than 50 percent of the TAC for sablefish; trawl gear may be used to take no more than 50 percent of the TAC for sablefish.

(b) In the Aleutian Islands Subarea, defined at §675.2 of this part, hook-and-line and pot gear may be used to take no more than 90 percent of the TAC for sablefish; trawl gear may be used to take no more than 10 percent of the TAC for sablefish.

B. Fishing Seasons

§675.7 Seasons.

(a) Fishing for groundfish in the statistical areas defined at §675.2 is authorized from January 1 through December 31, subject to the other provisions of this part.

C. Walrus Islands Closed Zones

§675.22 Time and area closures.

No fishing is allowed in that part of the Bering Sea Subarea within 12 nautical miles from islands named Round Island and The Twins as shown on National Oceanic Survey Chart INT 500, and around Cape Pierce (160°10' W. longitude, 58°40' N. latitude) during April 1 through September 30 of years 1990, 1991, 1992.

D. Data Reporting

50 CFR PART 675 -- GROUNDFISH OF THE BERING SEA AND ALEUTIAN ISLANDS AREA

1. The authority citation for Part 675 reads as follows:

Authority: 16 U.S.C. 1801 et seq.
2. Section 675.3 is amended by revising paragraph (b) as follows:

   * * * * *

   (b) For regulations concerning the conservation of halibut, see the regulations of the International Pacific Halibut Commission at Part 301 of this chapter. For regulations governing fishing for groundfish in the Gulf of Alaska, see Part 672 of this chapter; and for those governing exemption permits and the recordkeeping and reporting of the incidental take of marine mammals, see 50 CFR 216.24 and 50 CFR 229.

   * * * * *

3. Section 675.5 is revised as follows:

§675.5 Recordkeeping and reporting.

(a) Logbooks. The operator of any catcher vessel larger than 5 net tons or of any catcher/processor vessel, mothership processor vessel, or shoreside processing plant that harvests or processes groundfish from any of the Gulf of Alaska statistical areas described in Section 672.2, or from the territorial sea adjacent to any statistical area, must meet the following recordkeeping requirements:

   (1) General. The operator of each catcher vessel, catcher/processor vessel, mothership processor vessel, and shoreside processing plant must maintain timely and accurate records required by this section.

   (i) The operator of each catcher vessel, catcher/processor vessel, mothership processor vessel, and shoreside processing plant must maintain all required records in English, based on Alaska Local Time (ALT) unless otherwise specified in the regulations, and make the original copy of the records immediately available for inspection upon the request of an authorized officer or observer.

   (ii) For any fishing year, the operator of each catcher vessel, catcher/processor vessel, mothership vessel, and shoreside processing plant must retain the original copy of all required records on board the vessel, or for shoreside plants, within the processing facility, until the end of the fishing year or for as long after the fishing year that species products recorded in logbooks are retained onboard a vessel or at a processing facility. The owner of a catcher vessel, catcher/processor vessel, mothership vessel and/or shoreside processing plant must retain the original copy of all required records at the owner's federal permit address of record or State processor code address of record, whichever is applicable, for three years after the end of a fishing year. These records must be made available for inspection upon the request of an authorized officer at any time during the three years after the end of a fishing year, whether or not such records are on board the vessel or at the processing plant.

   (iii) The operator of each catcher vessel, catcher/processor vessel, mothership vessel, and shoreside processing plant must use the logbook proscribed and provided by the Regional Director. The logs shall be maintained in accordance with these regulations and the instructions attached to the issued logs.

   (iv) Recordkeeping required under paragraphs (a)(2)(ii), (a)(3)(ii), and (a)(4)(i) of this section must be in indelible ink with correction to be accomplished by lining out and rewriting rather than erasure or obliteration. Original pages in issued logs shall not be removed from the log.

2) Daily fishing logbook. (i) The operator of each catcher/processor and catcher vessel harvesting groundfish from any of the Gulf of Alaska statistical areas, or the territorial sea adjacent to any statistical area, must maintain onboard a daily fishing log of the effort and catch information of the vessel as described in paragraph (a)(2)(ii) of this section. Daily effort entries are required for each day the vessel conducts fishing operations. Daily entries are not required whenever the fishing vessel is in port. Each page of the log may contain entries pertaining to only one day's fishing activity within each statistical area described in Section 672.2. Catcher/processor vessels will be provided with daily fishing logbooks that also record the daily production information required under paragraph a(3) of this section.

   (ii) Contents. (A) The daily fishing log must record the following effort information on a daily basis:
(1) A consecutive page number beginning with the first day of the fishing year that the vessel started fishing operations and continuing throughout the log for the remainder of the fishing year;

(2) The date;

(3) The catcher vessel's name;

(4) The federal statistical area in which the catcher vessel is conducting fishing activity or, if fishing in territorial waters, the adjacent federal statistical area.

(5) The gear type;

(6) For hook and line and pot gear, the average number of hooks or pots per skate, size of hooks used, and average length of skates;

(7) For trawl gear, the size of net opening, codend mesh size, and average speed of tow;

(8) The vessel operator's signature;

(9) Crew size;

(10) Daily discard amounts of each groundfish species or species group to at least the nearest tenth of a metric ton (0.1 mt) round weight, and daily discard amounts of each prohibited species by number, except for discard amounts of herring, which should be reported by round weight (0.1 mt).

(B) The following information must be recorded for each haul or set, as appropriate to the gear type employed:

(1) The consecutive trawl or set number, beginning with the first trawl or set of the fishing year;

(2) The time the gear was set (ALT);

(3) The position of the set in geographical coordinates;

(4) The sea depth;

(5) The trawl depth;

(6) The hauling time;

(7) The position of the haul in geographical coordinates;

(8) The duration of the set;

(9) The number of pots or skates;

(10) The estimated total weight of the catch for the trawl or set, to at least the nearest metric ton round weight.

(11) Marine mammal interaction information required under CFR Part 229

(iii) Maintenance of the daily fishing log. Entries in the daily fishing log as to haul or set number, time, position, and estimated catch weight shall be updated within two hours of the hauling time. All other entries in the daily fishing log shall be updated within 12 hours of the end of the day (ALT) on which the trawl or set occurred.

(iv) Upon each delivery or landing, species discard amounts must be provided to the processor receiving the vessel's catch so that such amounts may be reported under the requirements set forth at paragraphs (b)(3)(ix) and (b)(3)(x) of this section.

(v) Submission of daily fishing logs. Each vessel operator must submit a copy of the daily fishing on a quarterly basis to the Northwest and Alaska Fishery Center, National Marine Fisheries Service, Sand Point Way NE Bldg. 4, Seattle, Washington 98115. Copies of the DFL must be submitted by May 1, August 1, November 1, and February 1 for the previous quarter's fishing activity.

(3) Daily cumulative production log (DCPL). (i) The operator of each catcher/processor vessel, mothership processor vessel, and shoreside processor that processes groundfish from any of the Gulf of Alaska statistical areas or the territorial sea adjacent to any statistical area, must maintain on the processing vessel or within the processing facility a daily cumulative production log of catch receipt (if applicable), species discard, and retained groundfish product information as described in paragraph (a)(3)(ii) of this Section. Daily log entries are required for each day the vessel or facility receives or processes groundfish. Each page of the log may contain entries pertaining to only one day's catch receipt from each statistical area described in Section 672.2. For the purpose of logbook entries, a week is defined as the period from Sunday through Saturday.

(ii) Contents. (A) The DCPL must record the following information on a daily basis:

(1) A consecutive page number beginning with the first day of the fishing year the vessel started operations and continuing throughout the log for the remainder of the fishing year;
The date;
The vessel or plant name;
The federal statistical area from which the groundfish catch receipt was harvested, or, if harvested from territorial waters, the adjacent federal statistical area
The gear type used to harvest the groundfish catch receipt;
The vessel or plant operator's signature;
Crew size or employment information;
Daily discard amounts of each groundfish species or species group to at least the nearest tenth of a metric ton (0.1 mt) round weight, and, if applicable, daily discard amounts of each prohibited species by number, except for discard amounts of herring, which should be reported by round weight (0.1 mt).
For each species or species group for which a total allowable catch (TAC) has been specified by the Secretary under Section 672.20 of this part, and product produced during the day:
(i) The product by species code and product type;
(ii) The balance forward of species product amounts produced during a week to the nearest tenth of a metric ton (0.1 mt). (At the beginning of each week, the balance forward for species product amounts for that week will be zero).
(iii) The daily total product produced by species and product type to the nearest tenth of a metric ton (0.1 mt);
(iv) The cumulative weekly total product aboard by species and product type to the nearest tenth of a metric ton (0.1 mt).

The following information must be recorded for each catch receipt:
(1) For each set or codend received by mothership processor vessels:
   (i) A consecutive catch receipt or codend number for the day;
   (ii) The catch receipt time;
   (iii) The catch receipt position
   (iv) The name of the delivering vessel;
   (v) The delivery vessel's Federal groundfish permit number or ADF&G vessel number;
   (vi) Estimated catch receipt weight to at least the nearest metric ton round weight.
   (vii) Marine mammal interaction information required under CFR part 229

(2) For each groundfish landing received by shoreside processors from catcher vessels:
   (i) State of Alaska fish ticket number;
   (ii) The name of the delivering vessel;
   (iii) The delivery vessel's ADF&G vessel number or federal groundfish permit number;
   (iv) The catch receipt time (ALT);
   (v) Estimated catch receipt weight to at least the nearest metric ton round weight.

Daily maintenance of the DCPL. Entries in the DCPL as to codend or fish ticket number, receipt time, position, and delivering vessel's name shall be updated within two hours of the receipt time. All other entries in the DCPL shall be updated within 12 hours of the end of the day (ALT) on which the trawl, set, receipt, or production occurred. Product shall be logged on the day processed regardless of the day of catch or receipt. Entries for product weights must be based on the number of production units (pans, cartons, blocks, trays, cans, bags, or individually frozen fish) and the average weight of the production unit, with reasonable allowance for water added. Allowance for water added cannot exceed five percent of the gross unit weight. Product unit weights must be based on the total actual net weight of the product as determined by representative samples.

Submission of DCPL's. Each processing vessel or plant operator must submit a copy of the DCPL on a quarterly basis to the Northwest and Alaska Fishery Center, National Marine Fisheries Service, Sand Point Way NE Bldg. 4, Seattle, Washington 98115. Copies of the DFL must be submitted by May 1, August 1, November 1, and February 1 for the previous quarter's processing activity.

Product transfer logbooks. The operator of each catcher/processor vessel, mothership processor vessel, and shoreside processor plant must record, in a separate transfer log, each transfer, offloading, shipment or receipt of any processed fishery product, including quantities transferred or off-loaded outside the EEZ, within any state territorial waters, or within the internal waters of any state or at any shoreside facility.

Contents. The transfer log must record the following information:
(A) A consecutive page number beginning with the first transfer or shipment of groundfish product in
a fishing year and continuing throughout the log for the remainder of the fishing year;

(B) Whether the product transfer reflects a product receipt or shipment/offloading;
(C) Company representative’s name, telephone number, and Fax or telex number;
(D) Vessel or plant name, Federal permit number or Alaska State processor code number, and radio call sign of vessel if applicable;
(E) The name of the other vessel (including Federal permit number and call sign) shipping agent, or commercial facility (including location) involved in the transfer or shipment;
(F) The time and date (ALT) and, if applicable, vessel location (in geographic coordinates, or if within a port, the name of the port) the transfer or shipment began and was completed;
(G) The intended designation of the carrier or vessel receiving product;

(H) For each product type by species or species group, the total net product weight transferred or shipped to the nearest one-tenth of a metric ton (0.1 mt), an estimated net weight in kilograms or pounds of product per carton, and the total number of cartons of product transferred or shipped.

(ii) Submission of transfer logs. Copies of transfer logs for each weekly period, Sunday through Saturday, ALT, must be submitted to the Regional Director within four days following the week ending date through such means as the Regional Director will prescribe. Submission of product transfer logs is only required if product transfer activity occurred during that weekly period.

(b) Other recordkeeping and reporting requirements.

(1) Catcher vessels. The operator of any fishing vessel (including any catcher/processor vessel) to which a permit has been issued under section 675.4 of this Part, that catches groundfish in the Bering Sea and Aleutian Islands Management Area or either subarea, the territorial sea adjacent to either subarea, or internal waters of the State of Alaska, will be responsible for the submission to ADF&G of an accurately completed State of Alaska fish ticket or an equivalent document containing all of the information required on an Alaska fish ticket. Fish tickets are not required for groundfish sold or delivered to a foreign processing vessel which has a permit under section 611.3 of this title.

(i) When to submit fish tickets.

(A) Sales or deliveries to shore. Expect as provided by paragraph (b)(1)(ii) of this section, the operator of any fishing vessel who sells or delivers his catch of groundfish to shore must submit the fish ticket required under paragraph (b)(1) of this section within one week after such fish are sold or delivered.

(B) Sales or deliveries to vessels. Except as provided by paragraph (b)(1)(ii) of this section, the operator of any fishing vessel who sells or delivers his catch of groundfish to another vessel must submit the fish ticket required under paragraph (b)(1) of this section within one week after he returns to port.

(ii) At the election of the fishing vessel operator who catches groundfish, fish tickets may be prepared, and submitted under paragraph (b)(1)(i)(A) of this section to ADF&G by the shore-based purchaser within one week after such fish are received by the purchaser, or, if submitted under paragraph (b)(1)(i)(B) of this section, to ADF&G by the vessel-based purchaser within one week after such purchaser returns to shore. For purposes of this paragraph, a "purchaser" is any person who receives from a fishing vessel regulated under this Part, groundfish caught in either subarea of the Bering Sea and Aleutian Islands management area, the territorial sea, or internal waters of the State of Alaska.

(iii) Address. Mail or deliver State of Alaska fish tickets to the ADF&G office nearest area of groundfish landing, or send these documents to the Director, Commercial Fish Division, Alaska Department of Fish and Game Headquarters, P.O. Box 3-2000, Juneau, Alaska 99802.

(2) Catcher/processor vessels, mothership processor vessels, and shoreside processor plants. (i) Alaska groundfish check-in report. The operator of any catcher/processor and/or mothership processor vessel must notify the Regional Director before starting and upon stopping fishing for or receiving groundfish from any of the Gulf of Alaska statistical areas, or the territorial sea adjacent to any statistical area. Notification will be

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through such means as the Regional Director will prescribe, and will consist of the vessel's name, permit number (if applicable), radio call sign, date and hour (ALT) of when fishing for or receiving groundfish will begin or cease, and the latitude and longitude of such activity.

(ii) Weekly product report. After a receipt of groundfish by a shoreside plant operator or after notification of starting fishing by a vessel under paragraph (b)(2)(i) of this section, and continuing until that vessel's entire catch or cargo of fish has been off-loaded, the operator of that vessel or plant must submit a weekly product report, including reports of zero tons caught or received, for each weekly period, Sunday through Saturday, ALT, or for each portion of such period. The weekly product report must be received by the Regional Director within four days of the end of the reporting period through such means as the Regional Director will prescribe. This report must contain the following information:

(A) Submitter's name, telephone number, and Fax or telex number;

(B) Name of vessel or plant and radio call sign of vessel;

(C) Federal permit number or Alaska State processor code, which ever is applicable;

(D) The ending date (Saturday) of the reporting period;

(E) Gear type used to harvest groundfish catch or catch receipt;

(F) Number of days fished or during which fish were received;

(G) The product type and total product weight produced during the weekly reporting period for each species or species group for which a total allowable catch (TAC) has been specified by the Secretary under Section 672.20 of this part;

(H) The statistical area(s) from which each retained species or species group product was caught during the reporting period;

(I) The amount of each groundfish species or species group discarded, including the amount discarded by catcher vessels, by species or species group, during the weekly reporting period. Discard amounts should be reported in round weight to the nearest metric ton.

(J) The amount of each prohibited species discarded by a vessel or plant, including the amount discarded by catcher vessels delivering to processor vessels or shoreside plants, during the reporting period. Discard amount of each prohibited species must be reported by number, except for herring, which should be reported by round weight (0.1 mt)

(iii) Alaska groundfish processor monthly product value report. Each groundfish processor or its parent company must complete a monthly product value report for any month during which groundfish harvested from the EEZ off Alaska or territorial waters adjacent to the EEZ were sold. Monthly product value reports must be submitted annually to the Northwest and Alaska Fishery Center, National Marine Fisheries Service, Sand Point Way NE Bldg. 4, Seattle, Washington 98115. The monthly product value reports must be received by NMFS no later than March 1 for the previous fishing year. These reports must include the following information:

(A) Name of the representative for the vessel, plant or company, telephone number, and Fax or telex number;

(B) Name of vessel(s) or plant(s);

(C) Federal permit number or Alaska State processor code, which ever is applicable;

(D) Month and year;

(E) For each species or species group for which product was sold during the month, the product type(s); Product size(s) or grade(s); product weight(s) to the nearest tenth of a metric ton (0.1 mt); and product value(s).
(c) Groundfish utilization surveys. (1) Domestic processors and purchasers. -- Any U.S. fish processor or purchaser (i.e., any person who receives fish for a commercial purpose from a fishing vessel subject to this part), except for any fisherman purchasing fish for his own use as bait or any foreign fishing vessel permitted to receive U.S. harvested fish at sea, shall accurately complete each written survey authorized by this section.

(i) Surveys shall be conducted at those times considered necessary by the Regional Director, but at least twice, and no more than four times, during the fishing year.

(ii) Each survey shall be designed to gather the following information:

(A) Changes in processing plant capacity;

(B) Changes in the availability of groundfish by species;

(C) Changes in market demand;

(D) Changes in expected utilization of processing capacity or expected purchases of groundfish species for the subsequent 12-month period or for the remainder of the fishing year;

(E) Changes in other factors which the purchaser or processor believes relevant to the accurate determination of the amounts of domestic annual processing (DAP).

(iii) Completed surveys shall be returned to the Regional Director at the address and by the date specified on the survey.

(2) U.S. vessels delivering to foreign processing vessels. --The owner or operator of any fishing vessel regulated by this section who has delivered, or intends to deliver, groundfish caught in any Gulf of Alaska regulatory area to a foreign fishing vessel at sea shall accurately complete each written survey authorized by this section and received by the owner or operator from the Regional Director.

(i) Surveys shall be conducted at those times considered necessary by the Regional Director, but at least twice, and no more than four times during the fishing year.

(ii) Each survey shall be designed to gather the following information:

(A) Changes in the number and capacity of U.S. vessels which harvest groundfish to be delivered to foreign fishing vessels at sea;

(B) Changes in regulatory areas of operation;

(C) Changes in capacity or operations of the foreign fishing vessel to which deliveries are being, or will be, made;

(D) Changes in quantities and species of groundfish expected to be delivered in the subsequent 12-month period or the remainder of the fishing year;

(E) Changes in alternative fishery opportunities available to the U.S. vessels; and

(F) Changes in other factors the owner or operator believes relevant to the accurate determination of the amount of joint venture processing (JVP).

(iii) Completed surveys shall be returned to the Regional Director at the address and by the date specified on the survey.

E. Observer Program
§675.7 Prohibitions.

(d) Fish for groundfish except under terms of an observer plan as provided by §672.25 of this part.

§675.24 Observers.

All fishing vessels subject to this part must comply with terms contained in an observer plan that has been prepared by the Secretary in consultation with the Council for purposes of providing data useful in management of the groundfish fishery, unless specifically exempt from such compliance by the observer plan.

F. Secretary's Authority to Split or Combine

§675.20 General limitations. - Bering Sea/Aleutians

(a) * * *

(2) TAC. The Secretary, after consultation with the North Pacific Fishery Management Council (Council), will specify the annual TAC for each calendar year for each target species and the "other species" category, and will apportion the TACs among DAP, JVP, TALFF, and reserves. TACs in the target species category may be split or combined for purposes of establishing new TACs with apportionments thereof under paragraph (c)(1) of this section. The sum of the TACs so specified must be within the OY range of 1.4 - 2.0 million mt for target species and the "other species" category.
Figure 27b. Twelve-mile groundfish fishing closure around Round Island, The Twins and Cape Peirce; closure extends nine miles seaward from the State's three mile limit.
TESTIMONY OF
CINDY LOWRY
BEFORE THE

87th PLENARY SESSION
NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

June 21, 1989
My name is Cindy Lowry and I am the Alaska Regional Director for Greenpeace, an international environmental organization with 1.25 million supporters in the United States. I appreciate this opportunity to comment on Amendment 13 to the Bering Sea/Aleutian Islands Groundfish Fishery Management Plan, specifically, the proposed groundfish fishery closure near the Walrus Islands and Cape Peirce.

As an organization dedicated to protecting the integrity of marine ecosystems and ensuring the future viability of all species found within, we are greatly concerned about the continuing decline in numbers of walrus found at traditional haulout sites.

Greenpeace urges the Council to adopt Alternative 3 under the plan amendment which would encourage more walrus to return to the Walrus Island State Game Sanctuary and ensure protection from acoustical disturbance by the yellowfin sole fishery in northern Bristol Bay.

This alternative would provide a closure in waters north of a line drawn from Cape Constantine to the southern most tangent of a 12-mile radius centered at Cape Peirce. The closure would be in effect from April 1 through September 30 when walrus are present in the area.

Since 1987 a joint-venture fishery targeting on yellowfin sole has moved into this area producing considerable noise and activity near the Round Island walrus haulouts. The numbers of walrus using the haulouts has declined 60-70% from a maximum number in 1986 of 12,500 to 4500 using the beaches in 1988. Sanctuary staff have also reported that noise associated with the fishing vessels was so loud that it interrupted sleep.

While evidence is not conclusive that this fishing operation is the sole source of the declining numbers of walrus returning to haulout areas, it cannot be discounted either. It is also our understanding that this fishing fleet may be able to take its quota outside this closure area thereby preventing undue hardship. Legal counsel advises that if future evidence shows a direct correlation between noise and disturbance, there is the potential for a "take" under the Marine Mammal Protection Act.
With the recent ban on elephant ivory into this country, the pressure may be on for an increase in walrus ivory. Therefore, sanctuaries will become even more important for the walrus as truly safe harbors.

Other alternatives to decrease disturbance to haul out areas have been implemented. In 1984 the Alaska Board of Game increased the restricted zone around Round Island from 1/2 mile to 2 miles, and most recently to 3 miles. In recent years, the Alaska Department of Fish and Game has also restricted the numbers of visitors to the island and discouraged the use of aircraft.

Adoption of Alternative 3 appears to be the only valid recourse to be taken at this time to help remedy the acoustical disturbance produced by the fishing fleet, and promote the return of walrus to their traditional haulout sites.

In the meantime, Fish and Wildlife Service can continue their acoustical studies around haulout sites and hopefully in the future more conclusive studies will be funded to document any correlation between sounds and walrus disturbance behavior.

Greenpeace believes that in management practices, it's best to err on the conservative side rather than risking the future viability of a species. We hope that the Council agrees and adopts Alternative 3.

Thank you for considering our views.
DATE: June 7, 1989

MEMORANDUM FOR: Richard J. Marasco, Chairman, Scientific & Statistical Committee
Loh-Lee Low, Chairman, BSAI Plan Team
James W. Balsiger, Chairman, GOA Plan Team

FROM: F/AKR1 - Dale R. Evans

SUBJECT: Publication of Notice of Initial Preliminary Specifications

Two serious problems exist with the current practices being followed in the publication of specifications for groundfish harvest in the Bering Sea/Aleutian Islands and Gulf of Alaska management areas. First, the draft specifications published in the FEDERAL REGISTER following the September Council meetings do not always represent what the Council is proposing for the following year; in several cases the Council has not had the benefit of the full status-of-stocks analysis as presented in the RAD. Publication of the current year TACs for the following year does not meet the intent of the procedures provided in the regulations implementing the groundfish FMPs.

Second, publication of initial preliminary specifications in the FEDERAL REGISTER must occur before fishing can start in the new fishing year. This does not occur because of the press of end-of-the-year business, holidays, etc., in the time following the December meeting.

To correct this situation, the Council could, at its September 1989 meeting, prepare preliminary estimates of 1990 TACs based on the best available information, and publish this information in the FEDERAL REGISTER for public review and comment prior to the December Council meeting. Depending on what action the Council takes with regard to management of PSC bycatch, PSC amounts for 1990 should also be published at this time.

The Council could also adopt interim final specifications for the first quarter of the fishing year at its September meeting, and publish these in the FEDERAL REGISTER for public review and comment. These would be published as a final rule on a separate schedule so that the fisheries could open on January 1.

The final notice of preliminary specifications would be published in January 1990, following Council action at its December meeting. This notice would supersede the interim notice of specifications for the first quarter published earlier.

cc: GCAK, NPFMC
June 9, 1989

Chairman John Peterson
North Pacific Management Council
P.O. Box 103136 DT
Anchorage, Alaska 99510

Dear Chairman Peterson:

My firm owns and manages two longline catcher/processors, F/V BLUE ICE and F/V SILVER ICE. We employ, in the course of a season, over 100 people who will be directly impacted by regulations set by the North Pacific Management Council. The future of my business will be threatened should the council not focus clearly on their primary objective "To promote (not end) fair resource allocation without allowing excessive privileges."

I believe that the present status quo management of Black Cod stocks in the Bering Sea, with regards to by-catch quotas, would seriously compromise your objective for two reasons:

1) Without first establishing a method of verification of by-catch will result in a disproportionate harvest of Black Cod in the Bering Sea between fixed gear and the Trawl fishery.

2) It will set a precendent of management style that could drastically effect resource allocation in the Aleutians and Gulf of Alaska in the coming seasons.

However, having now stated my concerns and in the interest of contributing to the strength of our industry; I would like to go on record as supporting the stand of the Fishing Vessel Owners Association with regard to resource allocation in the Bering Sea Aleutians and Gulf waters. I would further support their position on by-catch levels only in as much as it would not allow for a Trawl fishery to blatantly target on Black Cod for the sole purpose of catching the by-catch quota.

I have personally longlined on two different vessels both catcher/processors recently during our 1988 season. While targeting on Pacific Cod, my vessel catch in Black Cod amounted to less than 1 % of our total catch.
The following catch data supports this statement.

<table>
<thead>
<tr>
<th>Column</th>
<th>TOTAL</th>
<th>P.Cod</th>
<th>Sabelfish</th>
<th>Turbot</th>
<th>Other*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug.</td>
<td>2,354</td>
<td>2,320</td>
<td>17</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>Sept.</td>
<td>5,055</td>
<td>4,729</td>
<td>55</td>
<td>270</td>
<td>1</td>
</tr>
<tr>
<td>Sept.</td>
<td>3,916</td>
<td>3,588</td>
<td>70</td>
<td>231</td>
<td>27</td>
</tr>
<tr>
<td>Oct.</td>
<td>5,356</td>
<td>4,991</td>
<td>5</td>
<td>360</td>
<td>0</td>
</tr>
<tr>
<td>Nov.</td>
<td>3,141</td>
<td>3,083</td>
<td>4</td>
<td>54</td>
<td>0</td>
</tr>
<tr>
<td>Sum</td>
<td>19,822</td>
<td>18,711</td>
<td>151</td>
<td>917</td>
<td>43</td>
</tr>
</tbody>
</table>

*Other includes: Red Rockfish, Black Rockfish, Pollock, Herring, and Octopus.

My experience tells me that a verifiable 1% by-catch for both fixed gear and Trawl fishery would create a manageable surplus. A surplus whence directed to the longline fishery will go to promote an industry which has shown over 100 years of efficient and quality conscious production.

Sincerely,

David Larson
Master

cc: Eric Olsen, F.V.O.A.
    David Little, Clipper Seafoods Ltd.
    Clarence Pautzke, North Pacific Fishery
ALASKA FACTORY TRAWLER ASSOCIATION
4039 21ST AVE., WEST, SUITE 400
SEATTLE, WASHINGTON 98109
(206) 285-5139
TELEFAX 206-285-1841
TELEX 5106012568, ALASKA TRAWL SEA

North Pacific Fishery Management Council
605 West Fourth Avenue
Third Floor
Anchorage, Alaska

Enclosed please find the Alaska Factory Trawler Association (AFTA) comments on the individual sections of proposed FMP amendments 18 and 13.

SUMMARY

1. ALLOCATE SABLEFISH TAC IN THE BERING SEA/ALEUTIANS

AFTA supports Alternative #1 status quo in the Bering Sea. We are opposed to sablefish management efforts in the Bering Sea which would create a directed fishery in the Aleutians. AFTA favors the adoption of a modified Alternative 3 which would allocate the TAC first to accommodate the bycatch needs of all fisheries, with remaining portions of the TAC then allocated for directed fishing in the following portions: 70% trawl, 30% fixed gear.

2. A FISHING SEASON FRAMEWORK FOR GROUNDFISH IN THE GOA AND BS/AL

AFTA is for the Status quo. The broad impact on the fishery which is contemplated under the frameworking proposal is impermissible under the NOAA frameworking guidelines. Council actions having potential for broad allocative impacts must go through the plan amendment process and may not be short cut.

3. ESTABLISH A SHELIKOF DISTRICT IN THE CENTRAL REGULATORY AREA OF THE GULF OF ALASKA

AFTA favors Alternative #2. Given the abundance of spawning pollock located by fishermen this spring in the western Gulf, and elsewhere outside of Shelikof, it is appropriate to modify current Gulf of Alaska pollock stock assessment techniques. The current stock assessment protocol in 1989 has resulted in an
artificially low ABC for pollock in the Gulf. This has contributed to unnecessary allocation controversies. However, creation of a separate Shelikof management area must not lead to the defacto development of a special preserve earmarked for some Alaska residents, to the exclusion of other fishermen.

4. ESTABLISH A GROUNDFISH CLOSED ZONE NEAR WALRUS ISLAND AND CAPE PIERCE IN THE BERING SEA/ALEUTIAN ISLANDS.

AFTA supports Alternative 1a: No action - status quo. There is no legitimate support for the proposition that noise from fishermen more than three miles out to sea has any effect on the land-based habits of walrus - or that closing larger areas to trawl fishing will benefit walrus populations. The proposal will result in inefficiency in the fishery. The best scientific evidence suggests changes in walrus habits are caused by other factors including the burgeoning walrus population itself. Scientists advise at its current high levels the walrus population is wiping out the clam stocks faster than the mollusks can reproduce. Yellow fin sole compete with walrus for those same clam stocks, and additional removals of yellow fin will most likely benefit the walrus. Of equal importance the analysis completely dismisses other human activity which does impact walrus - hunting pressure and increasing land based activity on Round Island.

5. REPLACE THE KING CRAB PROTECTION TIME/AREA CLOSURES AROUND KODIAK ISLAND AND MODIFY THE HALIBUT BYCATCH MANAGEMENT REGIME FOR THE GULF OF ALASKA.

AFTA supports Alternative 2: Extend existing time/area closures for another three years.

6. EXPAND THE PACIFIC COD TRAWL EXEMPTION ZONE IN THE BERING SEA/ALEUTIAN ISLANDS

AFTA supports Alternative 2: Extend the northern boundary of the exemption zone as defined under Amendment 10 to a line approximating the 30 fathom isobath. Extension of this fishery not only will promote efficient use of the resource by increasing the CPUE harvest rates, it will reduce bycatch of PSC species.
Comments on the Final Draft of The Environmental Assessment/Regulatory Impact Review for Amendment 18 to the Gulf of Alaska Groundfish Fishery Management Plan and Amendment 13 to the Bering Sea/Aleutian Islands Groundfish Fishery Management Plan

The draft Environmental Assessment (EA) notes (p. 56, par. 1) that the number of walrus hauled out on Round Island (Walrus Islands State Game Sanctuary) and at Cape Peirce (Togiak National Wildlife Refuge) declined by more than 50 percent, coincident with the development of a yellowfin sole fishery in northern Bristol Bay. It concludes that noise from the fishery, both in air and under-water, may have caused walrus to avoid or abandon traditional haul-out sites in the area and thus be responsible for the observed decline. It describes a no-action alternative and three possible options for reducing disturbance possibly caused by the groundfish trawl fishery.

The Environmental Assessment indicates (p. 59, par. 1) that the possible effects of the trawl fishery on other components of the walrus ecosystem, especially the possible effects of bottom-trawling on walrus feeding grounds, were considered but were not assessed because of the absence of quantitative data on possible effects. The EA does not describe the types of data that would be required to assess the possible effects of the fishery on walrus food supplies or the types of studies that would be required to obtain the data. Likewise, it does not describe the criteria or procedures that necessarily would be used to determine whether the selected alternative has the desired effect. In addition, it does not provide an assessment of how the spread of the yellowfin sole trawl fishery into northern Bristol Bay may affect the yellowfin sole population in the area. In this regard, it appears from information provided in the EA, that northern Bristol Bay could be an important yellowfin sole spawning ground and, if so, that trawl fishing in the area should perhaps be prohibited or regulated more strictly to protect the breeding stock.

If the decline in the number of walrus hauling out at traditional sites in northern Bristol Bay is due to noise, reduced food supplies, or other factors associated with the yellowfin sole trawl fishery, Alternative 3 (seasonal closure of the entire area between Cape Peirce and Cape Constantine) appears to be the alternative most likely to eliminate or mitigate the cause of the decline. Alternative 2 might exacerbate and/or mask the problem. That is, it might cause fishermen to focus their effort along the margin of the 12-mile buffer zones and form a barrier of boats and
noise (a noise curtain), which would continue to cause walrus to avoid or abandon these traditional haul-out sites. Therefore, the failure of the measure to reverse the decline in the numbers of walrus hauling out at these sites could be interpreted, incorrectly, to mean that the observed decline was not caused by noise, disturbance, or other factors associated with the fishery.

For the reasons noted, Alternative 3 appears to be the preferred alternative. If Alternative 3 is selected and the number of walrus hauling-out on Round Island, etc. return to pre-1987 levels, it will be reasonable to conclude that the decline was in fact caused by the spread of the fishery into northern Bristol Bay. It then will be possible to consider and test possible less-restrictive measures that will avoid impacting walrus while opening parts of the closed area to fishing.
Mr. Clarence G. Pautzke  
Executive Director  
North Pacific Fishery Management Council  
P.O. Box 103136  
Anchorage, AK 99510

Dear Clarence:

The U.S. Fish and Wildlife Service (Service) encourages the North Pacific Fishery Management Council (Council) to give final approval to an amendment to the Bering Sea/Aleutian Islands Groundfishery Management Plan to establish a groundfish fishing closure zone in a region including the Walrus Islands and Cape Peirce. In approving this amendment, we urge the Council to adopt Alternative 3 as the preferred alternative.

The intent of this Plan Amendment is to provide protection to walruses from acoustic disturbance due to sounds generated by groundfish fishing in northern Bristol Bay. A Joint-Venture fishery for yellowfin sole moved into this area in 1987 and continued at high levels in 1988. During this period, observers on Round Island reported loud noise associated with groundfish vessels for the first time and reported the number of walrus on northern Bristol Bay haulout sites to decline by more than 50% from prior levels (data available in Service files). Low frequency sounds such as those likely to be generated by groundfish fishing activities can travel considerable distances underwater, particularly through relatively shallow water areas such as northern Bristol Bay.

Selection of Alternative 3 will establish a broad area that will be free from ensonification by groundfish fishing vessels. We are supporting the selection of this alternative because we believe a conservative approach to the issue will best serve the interests of the walrus population utilizing haulout sites in Bristol Bay. If results of the ongoing acoustics study do not support this premise, a reopening of the area to ground fishing activities could more easily be accomplished than the reoccupation of haulout areas by potentially displaced walruses.

I would like to make two points for discussion purposes relative to the economic costs associated with the proposal as stated in the Plan Amendment Analysis. The first is a suggestion that economic benefits derived from tourists viewing walruses would be reduced by an unknown amount through declines in the number of walruses hauling out. A more detailed examination of the economic derivatives resulting from the non-consumptive uses may be appropriate. Secondly, a more detailed examination of fishing revenues foregone due to the area closure is recommended. The Joint-Venture fishery, during the current season, was able to take its quota of yellowfin sole some
distance to the south of the proposed closure area delineated under Alternative 3. It is possible that exclusion of this relatively small portion of the Bering Sea may not be overly burdensome on the fleet in the future provided availability of yellowfin sole in other areas allows for the quota to be taken without imposing additional costs to fishermen.

In closing, I call your attention to the substantial amount of interest generated by this proposed plan amendment. The National Marine Fisheries Service, the State of Alaska, the Eskimo Walrus Commission, and numerous public interest groups have joined the Fish and Wildlife Service in developing and supporting measures to protect walrus haulout areas from disturbance. Thank you for your consideration.

Sincerely,

Walter E. Strohmetz
Regional Director

cc: Pennoyer, NMFS

Collinsworth, ADF&G

Iya, EWC
Kommodores Criteria
For Prioritizing Observer Deployment

The following list is based on the potential for damage to the resource and on the value of the bycatch:

1. Factory Trawlers - 100% Observer Coverage
   - Self Funded (after all, they don't pay raw fish back to tax, comply with DEC, etc.)
   - Because of the magnitude of tonnage involved

   Priority A. Rock sole with ROE - KWF JV data indicated high discard rate

   Priority B. GOA Rockfish - Local Trawlers' experience indicates rockfish associated with high concentration of halibut.

   Priority C. Any fishery which delivers a high incidence of black cod - local knowledge indicates black cod are caught along with rock sole, Dover sole, and jinkle.

   Priority D. Pacific cod

   Priority E. Midwater trawl ROE fisheries

2. Shorebased Trawl Fleet - Not because of high bycatch, but because of industry perceptions.
2. SHOREBASED TRAWL (CONT.) - UP TO 100% AS FELT NECESSARY BY
   A. ANY FISHERY IN KNOWN OR PERCEIVED
      AREAS OF HIGH HALIBUT AND/OR CRAB BYCATCH
   B. ANY FISHERY SHOWING HIGH INCIDENCE OF
      BLACK COD IN THE TRAWL DELIVERIES
   C. ANY OTHER ON BOTTOM TRAWL FISHERIES
   D. MIDWATER TRAWL ROE FISHERIES

3/ A - POT BOATS - BECAUSE OF KNOWN BYCATCH
   OF HALIBUT AND PACIFIC COD CUT UP AND
   USED FOR BAIT
   - ALL POT FISHERIES EQUALLY IMPORTANT
   AND EQUALLY IMPORTANT TO SHOREBASED
   TRAWL.

3. LONGLINE FLEET - GOA
   UP TO 100% AS FELT NECESSARY BY NOAA
   OR PDFGC
   A. PACIFIC COD - HIGHER VALUE BYCATCH SPECIES
   B. BLACK COD
   C. HALIBUT - TO ESTABLISH BYCATCH PERCENTAGES

4.
MEMORANDUM

TO: Distribution
FROM: P. Craig
Groundfish Coordinator
ADF&G, Kodiak

STATE OF ALASKA

June 15, 1989
File: 17m102

DESCRIPTION OF ADF&G'S OBSERVER DATABASE FOR GROUNDFISH

The purposes of ADF&G's ongoing groundfish observer program in the Westward Region of Alaska are to (1) determine bycatch rates of prohibited species in domestic groundfish fisheries, (2) determine species composition of the directed fisheries, and (3) gather biological information about target and bycatch species. To date, the program has focused primarily on shore-based vessels in the Kodiak area.

ADF&G's database contains the following number of observed vessel trips for the multiple year period, January 1987 - May 1989:

<table>
<thead>
<tr>
<th>GEAR GROUP</th>
<th>Kodiak</th>
<th>Dutch Harbor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bottom trawl</td>
<td>91</td>
<td>7</td>
</tr>
<tr>
<td>Midwater trawl</td>
<td>38</td>
<td>8</td>
</tr>
<tr>
<td>Longline</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>Pots</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Totals (to date)</strong></td>
<td><strong>162</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

1 includes 12 observer trips conducted by NPFMC/SeaGrant
2 approximate duration of vessel trips: bottom trawl (3-4 days), midwater trawl (2-4 days), longline (5-10 days), pot (2-4 days)

New observer trips are continuously being added to the database. The database can be queried by gear type, date, target species, and area fished. Table 1 shows an example summary.

ADF&G's methodology is compatible with that of NMFS because ADF&G observers use NMFS data forms. It should be noted, however, that ADF&G and NMFS report their bycatch rates in different units: ADF&G (bycatch/ton of landed catch as reported on the fish ticket); NMFS (bycatch/ton of total catch brought aboard ship). ADF&G's method is used to account for incomplete reporting of fish that are discarded at sea or at processing plants.
Table 1. Bycatch rate of prohibited species and species composition in domestic commercial fisheries as observed by the Alaska Department of Fish and Game.

<table>
<thead>
<tr>
<th>Catch Details</th>
<th>Species</th>
<th>1 Catch (%)</th>
<th>2 Bycatch No./mt</th>
<th>Kg/mt</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prohibited</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area: Cent. Gulf Alaska</td>
<td>Halibut</td>
<td>2.4</td>
<td>8.9</td>
<td>27.5</td>
</tr>
<tr>
<td>Gear: Bottom Trawl</td>
<td>Tanner crab</td>
<td>0.1</td>
<td>4.3</td>
<td>1.7</td>
</tr>
<tr>
<td>Target Species: P. cod</td>
<td>R. king crab</td>
<td>T</td>
<td>T</td>
<td>T</td>
</tr>
<tr>
<td>Salmon</td>
<td>0.1</td>
<td>0.4</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Herring</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
</tr>
</tbody>
</table>

Inclusive Dates: 10 Jan 87 - 05 Apr 89

Vessels Observed: 25
Trips Observed: 42
Hauls/Sets Observed: 293
Total Landing: 1522.7 mt
Stat. Areas Observed:
505730 505800 515700
515730 515802 515908
515935 525630 525702
525730 535602 535632
535733 535734 535802

1. Catch (%) refers to total catch brought on deck and is based on the observed weight of fish caught or, for line and pot gear, the number of fish caught. Species proportions in individual trawl tows (or sets of line/pot gear) were determined by observer's samples and expanded to the total tow weight which was visually estimated by the skipper or observer.

2. Bycatch = kg or no. per metric ton of landed fish (whole fish, all species, including landed discard) as listed on the fish ticket. Longline and pot gear kg/mt was generated from the average weight of those fish which were weighed.

T = trace, less than 0.05
0.0 = no catch.
Sum of visually estimated catch = 1716.77 mt.
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BEFORE THE
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605 West Fourth Avenue
Third Floor
Anchorage, Alaska

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reconsider current Gulf of Alaska pollock stock assessment techniques. However, creation of a separate Shelikof management area must not lead to the defacto development of a special preserve earmarked for some Alaska residents, to the exclusion of other fishermen.

4. ESTABLISH A GROUNDFISH CLOSED ZONE NEAR WALRUS ISLAND AND CAPE PIERCE IN THE BERING SEA/ALEUTIAN ISLANDS.

AFTA supports Alternative 1a: Maintaing the current zone of protection surrounding Round Island in the status quo. There is no objective evidence supporting the proposition that noise from trawl fishermen more than three miles out to sea has any effect on the land-based habits of walrus - or that closing larger areas to trawl fishing will benefit walrus populations. The proposal will result in inefficiency in the fishery. The best scientific evidence suggests changes in walrus habits are caused by other factors including the burgeoning walrus population itself. The proposal is discriminatory in nature as it fails to exclude the vast majority of vessels which generate noise in this area and which contribute to human pressure on Walrus Island. The proposal completely dismisses from its regulatory scope other human activity which does impact walrus - hunting pressure and increasing land based activity on Round Island.

5. REPLACE THE KING CRAB PROTECTION TIME AREA CLOSURES AROUND KODIAK ISLAND AND MODIFY THE HALIBUT BYCATCH MANAGEMENT REGIME FOR THE GULF OF ALASKA.

AFTA supports Alternative 2: Extend existing time/area closures for another three years.

6. EXPAND THE PACIFIC COD TRAWL EXEMPTION ZONE IN THE BERING SEA/ALEUTIAN ISLANDS

AFTA supports Alternative 2: Extend the northern boundary of the exemption zone as defined under Amendment 10 to a line approximating the 30 fathom isobath. Extension of this fishery not only will promote efficient use of the resource by increasing the CPUE harvest rates, it will reduce bycatch of PSC species.
7. IMPLEMENT A SYSTEM OF OBSERVER COVERAGE AND RECORDKEEPING AND DATA REPORTING REQUIREMENTS

AFTA supports the enhanced data collection and observer systems proposed in the Amendments 13/18. Specifically, we support Alternative 2 providing for a new log and reporting system except for reporting requirements requesting product value. We request a clarification of the penalty schedule for inadvertent errors. AFTA supports the establishment of a permanent observer program, Alternative 2, to provide 20 percent coverage of all groundfish sorting stations, so long as it is fair and equitable. Funding should be by the government. However, AFTA commits to working with government and industry to find a way to put a fair and equitable observer system in place for 1989.
1. ALLOCATE SABLEFISH TAC IN THE BERING SEA/ALEUTIANS.
APPORTIONMENT OF SABLEFISH RESOURCE BETWEEN BYCATCH AND DIRECTED FISHERIES AND BETWEEN FIXED AND MOBILE GEAR IN THE BERING SEA/ALEUTIAN ISLANDS

With regard to sablefish in the Bering Sea/Aleutian Islands ("BSA") management areas, two issues are presented. The first deals with whether or not sablefish should be managed as a directed or bycatch species. The second deals with apportionment of any TAC which may be available for a directed fishery between fixed gear (pot and longline) and trawl.

For the reasons set forth below, AFTA favors a management approach which would treat sablefish as primarily a bycatch species in the trawl, longline and pot fisheries for other groundfish species in the BSA. If surpluses are available after ensuring that adequate amounts are available for bycatch, small directed fisheries could be conducted, with the surplus apportioned 70% to trawl and 30% to fixed gear. Such an approach would, we believe, be most consistent with the goals and objectives of the MFCMA, the fishery management plan, and with the National Standards against which management measures must be judged.

1. GOALS AND OBJECTIVES OF THE FISHERY MANAGEMENT PLAN AND NATIONAL STANDARDS 4 AND 5.

According to the Bering Sea FMP, the objectives of the plan include:

- Providing for rational and optimal use, in a biological and socio-economic sense, of the region's fishery resources as a whole; and
- Providing for the opportunity and orderly development of domestic groundfish fisheries.

In addition, National Standards 4 and 5 of the Magnuson Act provide as follows:

**National Standard No. 4.** If it becomes necessary to allocate or assign fishing privileges among various U.S. fishermen, such allocation shall be (a) fair and equitable to all such fishermen; (b) reasonably calculated to promote conservation; and (c) carried out in such a manner that no particular individual, corporation or other entity acquires an excessive share of such privilege.

**National Standard No. 5.** Conservation and management measures shall, where practicable,
promote efficiency in the utilization of fishery resources; except that no such measure shall have economic allocation as its sole purpose.

2. USE OF SABLEFISH AS BYCATCH FURTHERS THE GOALS AND OBJECTIVES OF THE FMP.

Use of sablefish primarily as bycatch in the directed (pot, longline and trawl) fisheries for other groundfish species in the Bering Sea/Aleutian Islands areas furthers the FMP's objectives of promoting the "rational and optimal use" of the region's groundfish resources as a whole, and the "orderly development of the domestic groundfish fisheries" in the area. This is true for a number of reasons.

A. The Sablefish Component of the Bering Sea/Aleutian Island Groundfish Complex. The Bering Sea/Aleutian Island groundfish Fishery Management Plan ("FMP") recognizes that "The history of fishery development, target species and species composition of the commercial catch ... are all much different in the Bering Sea/Aleutian Islands region than in the Gulf of Alaska." FMP, § 4.1. This is especially true in the case of sablefish, which represents a mere .3% of the BSA groundfish complex. This contrasts with the Gulf of Alaska, where the sablefish component represents 13% of the groundfish resource. Under the circumstances, it is much more difficult and makes much less management sense to maintain a directed fishery for sablefish in the BSA than it is in the Gulf of Alaska.

B. Use of Sablefish Primarily as Bycatch Helps to Avoid Overharvest of Sablefish and/or Underharvest of Other Groundfish Species. Given the difficulty of managing a directed fishery on a relatively small TAC species, there is a substantial risk that any directed fishery for sablefish would overharvest its quota, thereby cutting into the amount available to fund the bycatch needs of the target fisheries on other groundfish species. This would result in the Regional Director having to: (1) declare sablefish a prohibited species, thereby requiring the discard of subsequent bycatch; or (2) prematurely close the target fisheries for other, much larger and more valuable groundfish species in order to prevent further mortality on sablefish. Either of those results would be contrary to the goals and purposes of the MFCMA and the FMP. In view of the relatively small amount of fish which would be available to any directed sablefish fishery under the best of circumstances, the benefits of a directed fishery do not justify the risks of overfishing sablefish and/or underutilization of other groundfish species. This is especially true in the Bering Sea subarea where the TAC is smaller (2,800 m.t.) and bycatch demands are greater.
C. Use of Sablefish as Bycatch Would Avoid "Higgrading" of the Complex and Would Promote the Development of Underutilized Resources. Use of Bering Sea sablefish for bycatch would further the FMP's goals of promoting "the orderly development of the domestic groundfish fisheries" and "optimal use of the groundfish resource as a whole" by fostering development of the underutilized species in the BSA complex. Sablefish is by far the most valuable of the groundfish species on a pound for pound basis (see Table 2.4 of the EA/RIR). Making sablefish a bycatch only species would encourage fisheries on underutilized species by helping to subsidize those operations which might otherwise be only marginally profitable. On the other hand, managing sablefish as a directed fishery would encourage "high grading" of the groundfish complex--the skimming off of the most valuable fish, which represent only a small percentage of the complex, leaving vast quantities of lower valued species unharvested. For these reasons, a bycatch only regime would help to promote development of underutilized species and optimize total return from the groundfish fishery, thereby increasing overall benefit to the nation.

D. Use of Sablefish as Bycatch Would not Displace a Traditional Fishery. It should be recognized that the relatively small directed sablefish fisheries which were conducted by domestic pot, trawl and longline fishermen in the BSA during the 1985-88 period were really "transitional" fisheries. They did not represent historical or traditional fisheries, but rather fisheries which took advantage of the hiatus created by the phasing out of the foreign longline and trawl groundfish fisheries (which primarily relied on sablefish as bycatch in the BSA), and the lag in the development of DAP fisheries for other groundfish species. As domestic pot, longline and trawl fisheries for those other species expand to fill the void left by the foreign fleets, the bycatch demands on sablefish have inevitably eroded the limited directed fishery. This process has been accelerated by a decline in the sablefish resource, which saw the Bering Sea TAC fall from 3,700 mt. in 1987 to 2,800 mt. in 1989. Efforts to preserve such a small transitional fishery in the face of increasing bycatch needs only serve to inhibit full utilization of the remaining species in the groundfish complex.

E. Use of Sablefish as Bycatch Would Not Result in a "De Facto" Allocation to One User Group over Another. It should also be noted that a "bycatch only" fishery would not result in a "de facto" allocation of sablefish to trawlers or an "unfair" allocation of fishery resources to one particular user group as has been suggested. Indeed, the contrary is true. In the six month period following the Regional Director's closure of the directed sablefish fishery in the Bering Sea in 1988, longline vessels took 40% of the subsequent sablefish harvest under the bycatch-only regime. They had only taken 25% of the
harvest taken during the directed fishery which occurred during the first part of the year. As more factory longliners come on line and begin targeting on the abundant and largely underutilized BSA cod and turbot resources, their bycatch needs for sablefish are likely to expand even further. Maintenance of a directed fishery for sablefish at the expense of bycatch will thwart the development of the longline fisheries as well as trawl for other species which need sablefish as bycatch.

3. IF THERE IS SUFFICIENT SABLEFISH LEFT OVER FOR A DIRECTED FISHERY AFTER BYCATCH NEEDS ARE SATISFIED, IT SHOULD BE APPORTIONED 70% TO TRAWLERS, 30% TO FIXED GEAR.

There are a number of reasons why any directed fishery for sablefish in the BSA region should be apportioned 70% to trawl, 30% to fixed gear. These include:

A. Amendment 14 to the Gulf of Alaska Fishery Management Plan. Several years ago, after much deliberation and controversy, the Council adopted Amendment 14 to the Gulf of Alaska FMP. Amendment 14 apportioned the majority of the GOA sablefish resource to longline fishermen (95% in Southeast; and 80% in the remaining areas). As a consequence, longline fishermen were allocated 28,298 mt. out of the 34,300 mt. Gulfwide sablefish TAC in 1988. The GOA allocation scheme was premised on a desire to protect a traditional small boat fishery and the communities in Southeast Alaska which were economically dependent on the longline fleet. In approving allocation of the lion's share of GOA sablefish to the longline fleet, the Secretary of Commerce noted that there were unique circumstances justifying the action in the GOA, and that such an apportionment was not to be considered a precedent in other areas "where circumstances may differ" (50 FR 43196). The Secretary also noted that alternative sablefish fishing grounds were available in the BSA so that the vessels and effort being displaced from the GOA could make up at least some of their losses there.

As opposed to the GOA, there is no traditional small boat fleet which has demonstrated a historical dependence on the BSA sablefish resource. Nor are there any local economies which are reliant on the sablefish longline fleet for their existence. The longline fleet does not, therefore, have any preferential

<table>
<thead>
<tr>
<th>1988 Bering Sea Sablefish</th>
<th>Longline</th>
<th>Trawl</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catch Prior to Closure</td>
<td>370</td>
<td>1305</td>
<td>1675</td>
</tr>
<tr>
<td>Catch Following Closure</td>
<td>589</td>
<td>859</td>
<td>1448</td>
</tr>
<tr>
<td>Total for Year</td>
<td>959</td>
<td>2164</td>
<td>3123</td>
</tr>
</tbody>
</table>
claim to BSA sablefish based on a traditional reliance on that resource. Indeed, if any group has a claim to a preferential share of the BSA sablefish stocks, it should be those fishermen who were displaced from the GOA by Amendment 14.

B. Killer Whale Predation on the Longline Fishery for Sablefish. Perhaps the most compelling reason for not allocating significant portions of the BSA sablefish resource to longline fisheries is the problem of killer whale predation on longline gear in the BSA areas. Shortly after the domestic longline fishery began targeting on sablefish in the BSA, longline fishermen began experiencing problems with killer whales. The whales were attracted to longline fishing operations and would strip sablefish from the longline hooks as they were hauled to the surface. Similar problems had arisen a year or two earlier in Prince William Sound. The killer whale predation problem has been well documented and widely reported.\(^2\)

A deepwater fish, sablefish generally occupy depths below those frequented by killer whales. Sablefish are not, therefore, a normal component in the killer whale's diet. (Matkin, 1987) On longline hooks, however, sablefish make easy pickings; and killer whales began plaguing domestic longline vessels in the BSA just as they had foreign longliners years earlier when Japanese fishermen tried to conduct a longline

fishery for sablefish in the region. Although the fishermen have tried many different techniques in an effort to avoid the whales, scare them away, or otherwise trick them from interfering with longline fishing operations, the problem "has increased progressively since 1984," with most fishermen agreeing that "the problem has become much worse this year [1987]." (Steiner, 1987) Estimates of sablefish lost to the whales run from 25-35% of the catch in Prince William Sound (Matkin, 1988), to "every single marketable fish" on some trips in the Bering Sea/Aleutian Islands, with the whales seeming to target on the larger sized fish (Steiner, p. 5).

In a report based on dockside interviews he conducted in Dutch Harbor during June of 1987, Mr. Rick Steiner, of the University of Alaska's Marine Advisory Program, noted as follows:

On the issue of the total amount of hooked black cod taken by whales compared to the amount landed and logged against the quota, skippers generally agreed that it was very high. This is, of course, a sensitive issue because any consideration by management of this additional removal from the stock can only reduce the future allocations to the fishermen. Some estimated that whales had taken about half what fishermen had landed, some estimated whale take and landed catch about equal, and one estimated that whales had already consumed about twice what had been landed by the vessels.

(Emphasis added.) Steiner, 1987, p. 5.

Mr. Steiner concluded his report on pp. 8-9 as follows:

1. Killer whales are costing the longline fleet a significant amount of money in lost product, lost fishing time, run time, etc. A very conservative estimate, I think, would be over $1 million each year.

2. Harassment [of the whales] by some fishermen is having a detrimental effect on whales. It is impossible to reliably estimate at this time the severity of this impact.

3. Whales are removing a significant amount of black cod from the resource that is not counting against harvest quotas.

A report prepared by Ms. Marilyn Dahlheim, of the Northwest and Alaska Fishery Center's Marine Mammal Laboratory, in July of 1988, estimated that killer whale predation was
costing longline fishermen an estimated $2,300 per day/per vessel in the BSA. (See NWAFSC Processed Report 88-14, p. 21.)

Neither pot nor trawl vessels have problems with killer whales. Nor do longline vessels when they are targeting on other species, such as cod.

Due to the killer whale predation problem, harvest of the sablefish resource as a direct longline fishery would serve to minimize the poundage and monetary yield from the sablefish resource and increase the chance of overharvesting sablefish. It would also perpetuate sensitive encounters between fishing vessels and marine mammals. This does not make good management sense. Nor does it provide for the "rational and optimal" use of the resource as required by the FMP or "promote conservation" as required by National Standard No. 4.

C. There is no Price Differential between Longline Caught Sablefish and Trawl Caught Sablefish. During the early 1980s, there were reports of a price differential between longline-caught and trawl-caught sablefish. That differential was used in Amendment 14 as a primary justification for allocating the bulk of the sablefish in the Gulf of Alaska to the longline fleet as a way of maximizing revenues from the sablefish resource. As noted in the EA/RIR, however, that price differential has been disappearing rapidly, with reports now indicating that at-sea frozen sablefish taken by factory trawlers is commanding the same price in the Japanese market as longline product (see attached letter from Eiko Clarkson, International Business Manager of Arctic Alaska Fisheries). In view of the losses incurred through killer whale predation on longline fish, the value of the BSA sablefish resource could be as much as 20% to 66% higher if taken by trawl vessels rather than longline gear.

Conclusion

For all of the foregoing reasons, use of sablefish primarily as a bycatch in the directed fisheries for other groundfish species in the Bering Sea and Aleutian Islands areas would be the management measure most consistent with the FCMA's goal of full utilization of the groundfish resources, the FMP's objectives of promoting "optimal use of the groundfish resource as a whole" and "the orderly development of the domestic groundfish fisheries." To the extent any surplus is available for a directed harvest, that part of the TAC should be apportioned 70% to trawl and 30% to fixed gear. Such an apportionment would promote conservation and efficiency in the utilization of fishery resources as required National Standards 4 and 5.
To: Whom It May Concern: 

June 5, 1989

Re: Black Cod prices

It was brought to my attention that some people are trying to argue that the longline caught black cod and the trawl caught black cod have large price differences in the Japanese market. That is simply not the case, and I would like to offer some explanation and attempt to prove this claim to be absurd.

In order to compare prices accurately, one must compare apples to apples, i.e., the sizes of fish, freezing styles, and actual volume moved and sold. Following is the comparison of published auction prices of four vessels’ products; namely, Aleutian Speedwell (AS), Clipper Endeavor (CE), Aleutian Enterprise (AE) and Clipper Surprise (CS). As you know, AS and AE are factory trawlers, CE and CS are longliners. The reason I used these four is because the auctions were held at about the same time (May 10th and 12th) and at the same location (Shiogama).

<table>
<thead>
<tr>
<th>Size</th>
<th>&lt;CE&gt; L.L.</th>
<th>&lt;CE&gt; Trawl</th>
<th>&lt;AE&gt; Trawl</th>
<th>&lt;AS&gt;</th>
<th>&lt;CS&gt; L.L.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/6</td>
<td>852</td>
<td>812</td>
<td>805</td>
<td></td>
<td>855</td>
</tr>
<tr>
<td>7/8</td>
<td>810</td>
<td>750</td>
<td>750</td>
<td></td>
<td>870</td>
</tr>
<tr>
<td>9/10</td>
<td>752</td>
<td>723</td>
<td>720</td>
<td></td>
<td>750</td>
</tr>
<tr>
<td>11/15</td>
<td>702</td>
<td>663</td>
<td>–</td>
<td></td>
<td>705</td>
</tr>
</tbody>
</table>

By looking at above prices, one might think longliners are getting higher prices, but this is just not a true comparison of the products. A 4/6 size simply means four to six fish are frozen in a pan into a block, and when pan sizes differ, there would be different sizes of fish in a so-called 4/6 category. Clipper Surprise, Clipper Endeavor have 18 kg blocks, Aleutian Enterprise has 13.6 kg, Aleutian Speedwell has 14 kg blocks. Some boats have 3% glaze and some 5% which affect the product weights. Some boats pack differently weight-wise even using the same size pan.
According to the actual fish sizes, above chart will look like this:

<table>
<thead>
<tr>
<th>Clipper Endeavor</th>
<th>Aleutian Enterprise</th>
<th>Aleutian Speedwell</th>
<th>Clipper Surprise</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0 kg up</td>
<td>852</td>
<td></td>
<td>855</td>
</tr>
<tr>
<td>2.0 kg up</td>
<td>810</td>
<td>812</td>
<td>870 (810 actual)</td>
</tr>
<tr>
<td>1.7 kg up</td>
<td>752</td>
<td>750</td>
<td>750</td>
</tr>
<tr>
<td>1.2 kg up</td>
<td>702</td>
<td>723</td>
<td>720</td>
</tr>
<tr>
<td>1.2 kg up</td>
<td>-</td>
<td>663</td>
<td>652</td>
</tr>
</tbody>
</table>

Bill Atkinson's issue 298 -------> "Boat B" "Freezer longliner"

Since <AS> and <CS> prices were published in Bill Atkinson's newsletter (issue 298, pg 4 & 5), I have added the names used in the newsletter at the bottom of the chart above for reference.

As you can see, when compared actual fish sizes on which buyers bid their prices, there is no difference in the market prices. You might notice an unusually high price of Y870 in 7/8 category of Clipper Surprise. This simply is a mis-print, and those who deal with fish daily would know by simply checking their market source. The actual price of 7/8 is Y810 and not 870. Also cartons weigh approx. 18 kg for the products and not 10-12.5 kg as stated in Bill Atkinson's. Thus only when we truly compare actual sizes of fish, one can see the real picture.

I might also add that unless one knows the meaning of these published auction prices, a mere display of prices can be very misleading if his intention is to fairly assess the market. For an example, in this case of Clipper Surprise's auction, out of 448 cs of a so-called 7/8 size black cod auctioned, only 50cs were sold at Y810 and the rest did not sell at the auction since no other bid could beat the minimum price of 800 yen set by the seller. Thus the actual market could be even lower. Obviously even 1 cs out of 5000 cs is sold, the price appears in the paper, and one must look at the whole picture - quantity of the sale, products weights, prices sold outside auction, etc. to grasp the reality. I should think anybody whose business is to make profits in selling fish keeps a close watch on what actually happens in these auctions.

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1 Misprint confirmed in telephone conversation with Bill Atkinson. Price shown for transaction on 7/8 should have been Y 810/kg—not Y 870 as reported.
The bottom line is that there is no price difference between longliners and factory trawlers in the Black Cod market, and if anybody tries to argue otherwise, he/she is simply ignorant in the business. And I sincerely hope that the industry does not listen to such a false claim.

Eikō T. Clarkson
International Business Manager
Arctic Alaska Fisheries Corporation
trade balance for fisheries products, where exports to Japan during 1988 increased by 49% over the previous year. The main items on the list this time were related to electronics and high-technology.

Squid Drift-Net Permits

The Japan Fishery Agency recently issued permits to 460 vessels for this year's high-sea squid drift-net fishery, three less than last year. Of the total, 264 are over 100 g/tons and 194 vessels are under 100 tons. Fourteen of the boats can only operate for four months, while permits for the remaining vessels are valid for seven months of operation.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>South Korea</td>
<td>2,086</td>
<td>2,987</td>
<td>2,127</td>
<td>3,639</td>
</tr>
<tr>
<td>North Korea</td>
<td>-</td>
<td>-</td>
<td>1,560</td>
<td>2,258</td>
</tr>
<tr>
<td>Soviet Union</td>
<td>2,869</td>
<td>5,859</td>
<td>2,869</td>
<td>5,959</td>
</tr>
<tr>
<td>United States</td>
<td>6,646</td>
<td>16,019</td>
<td>18,774</td>
<td>34,009</td>
</tr>
<tr>
<td>Total</td>
<td>11,601</td>
<td>24,964</td>
<td>25,329</td>
<td>45,764</td>
</tr>
</tbody>
</table>

Unit: Metric tons.

**SHIOMAGAMA MARKET SALES**

**FREEZER LONGLINE FISH**

**MAY 10, 1989**

<table>
<thead>
<tr>
<th>SPECIES</th>
<th>SIZE</th>
<th>CASES</th>
<th>¥/KILO</th>
<th>$/LB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Cod</td>
<td>4-6</td>
<td>401</td>
<td>¥ 855</td>
<td>$ 2.97</td>
</tr>
<tr>
<td></td>
<td>7-8</td>
<td>448</td>
<td>¥ 876</td>
<td>$ 3.02</td>
</tr>
<tr>
<td></td>
<td>9-10</td>
<td>480</td>
<td>¥ 750</td>
<td>$ 2.60</td>
</tr>
<tr>
<td></td>
<td>11-14</td>
<td>540</td>
<td>¥ 705</td>
<td>$ 2.43</td>
</tr>
<tr>
<td></td>
<td>15-20</td>
<td>165</td>
<td>¥ 652</td>
<td>$ 2.26</td>
</tr>
<tr>
<td>Thornyhead</td>
<td>3L (13)</td>
<td>17</td>
<td>¥ 1,250</td>
<td>$ 4.34</td>
</tr>
<tr>
<td></td>
<td>2L (20)</td>
<td>8</td>
<td>¥ 1,170</td>
<td>$ 4.06</td>
</tr>
<tr>
<td></td>
<td>L (30)</td>
<td>12</td>
<td>¥ 1,030</td>
<td>$ 3.57</td>
</tr>
<tr>
<td></td>
<td>M (50)</td>
<td>25</td>
<td>¥ 953</td>
<td>$ 3.31</td>
</tr>
<tr>
<td></td>
<td>S (70)</td>
<td>13</td>
<td>¥ O/M</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>2S (96)</td>
<td>14</td>
<td>¥ 1,065</td>
<td>$ 3.70</td>
</tr>
<tr>
<td>Shortraker Rockfish</td>
<td>4-6</td>
<td>7</td>
<td>¥ 1,320</td>
<td>$ 4.58</td>
</tr>
<tr>
<td></td>
<td>7-10</td>
<td>10</td>
<td>¥ 1,350</td>
<td>$ 4.68</td>
</tr>
<tr>
<td></td>
<td>11-15</td>
<td>11</td>
<td>¥ 1,350</td>
<td>$ 4.68</td>
</tr>
</tbody>
</table>

Note: Number of fish per 10-12.5 kilo carton. The numbers in parentheses indicate the number of fish for thornyhead. "O/M" indicates that the product was not sold at the time, and was purchased through direct negotiation.
<table>
<thead>
<tr>
<th>SPECIES</th>
<th>SIZE</th>
<th>CASES</th>
<th>¥/KILO</th>
<th>CASES</th>
<th>¥/KILO</th>
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<tbody>
<tr>
<td>Shortraker</td>
<td>2-3</td>
<td>5</td>
<td>¥ 1,080</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4-6</td>
<td>160</td>
<td>¥ 1,320</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7-10</td>
<td>56</td>
<td>¥ 1,320</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11-15</td>
<td>31</td>
<td>¥ 1,020</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>16-20</td>
<td>28</td>
<td>¥</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blue Rockfish</td>
<td>11-15</td>
<td>3</td>
<td>¥ 460</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>16-20</td>
<td>103</td>
<td>¥ 445</td>
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2. ESTABLISH A FISHING SEASON FRAMEWORK FOR GROUNDFISH IN THE GOA AND BS/AI.
AFTA Comments on Establishment of Fishing Season Framework

AFTA is for Alternative 1, the status quo for fishing season framworking for the following reasons. The fishing season framework is proposed in order to streamline the process for setting fishing seasons in the groundfish fisheries of the North Pacific. The concept of easing the burden of the fisheries managers in establishing regulations is a legitimate goal. However, the Magnuson Act also established rights for those who are regulated by the Act - including the rights to the procedures which the plan amendment process provides.

The basis for the North Pacific Fisheries Management Council's management of the groundfish fisheries has been quota's. Within those quota's a series of management measures have been utilized but all have been implemented by the plan amendment process. This proposal is to take the setting of seasons, all seasons, out of the plan amendment process. This deeply concerns us for few management measures have so great of allocative impact as the setting of seasons. For this reason, AFTA believes that the plan amendment process is the only way to alter seasons that is fair and equitable to the affected persons and businesses. While the setting of seasons may appear to be a fairly perfunctory act of the government, a quick analysis reveals that the consequences of the establishment of seasons can have far reaching economic, social and biological impact.

It is apparent that the drafters of the EA/RIR encountered difficulty in setting out the possible impacts of actions under this framework to the public for non are stated. The document merely sets out a procedure/time line for an unlimited range of actions. The attempts to "window" certain seasons leave a very open window with no impact analysis at all. The limited analysis in the EA/RIR must be compared with the requirements stated in the NMFS Operational Guidelines.

In fact a framework (or multi-year) FMP is likely to take longer to prepare, since it must anticipate and describe situations expected to occur; establish criteria, procedures, and limits for action; allow for public comment on the range of potential actions and degree of delegated discretion; and provide all the necessary documentation to support the framework measures under other applicable law. The effort is the price that has to be paid for subsequent freedom of action.

The two short paragraphs in the EA's "Redistribution of Costs And Benefits" section fails to acknowledge the major concern that our
industry has with the proposal. Any setting of seasons will have a major allocative impact. What benefits one segment of the fishery, disadvantages another. That is the history of the management of the North Pacific groundfish fishery. It is unfair and unrealistic for the EA to suggest that overall regulatory efficiency of a very political body is going to uniformly benefit the industry as a whole. The factory trawler segment of the industry, which is the major user of the groundfish fishery resource has no representative on the Council and is fearful of efficient regulatory action by our competitors in positions of power on the Council.

We prefer the more deliberate and considered action of the FMP amendment process and therefore request that the Council opt for Alternative 1, the status quo.
3. ESTABLISH A SHELIKOF DISTRICT IN THE CENTRAL REGULATORY AREA OF THE GULF OF ALASKA.
ESTABLISH A SHELIKOF DISTRICT IN THE CENTRAL REGULATOR AREA OF
THE GULF OF ALASKA

AFTA favors Alternative 2 to establish a Shelikof Strait
Management Area. WE are mindful of the MFCMA standards 4 which
prohibits discrimination between residents of different states
in the implementation of conservaton and management measures of
this nature. Standard 3, call for management of an individual
stock of fish as a unit throughout its range, and interrelated
stocks of fish shall be managed as a unit or in close
coordination. AFTA comments that no management actions stemming
from this proposal should result in quotas for pollock in the
Gulf of Alaska, inside or outside the new management area, if
they are used to exclude at sea or shore based processors from
fair and open access to that quota.

No distributional impacts between shorebased and at-sea
processors must become the object of this management unit. Its
purpose must remain exclusively the enhancement of pollock
stocks within the GOA which both at-sea and shorebased
processors rely upon.

The EA/RIR echos an established bias in favor of the Shelikof
district as the basis upon which GOA pollock biomass is
predicted. This should be seriously reexamined in light of
substantial evidence defining alternative spawning pollock in
large numbers outside of Shelikof. A time limit should be
imposed for this management district, with a sunset provision
triggered after three years or upon conclusion of the scientists
that pollock biomass in the Gulf can be reasonably measured and
managed through techniques employed outside the Shelikof
district.
4. Establish a groundfish closed zone near Walrus Island and Cape Pierce in the Bering Sea/Aleutian Islands.
Round Island/Cape Pierce Groundfish Closed Zones - Walrus

SUMMARY

The Alaska Factory Trawler Association (AFTA) supports conservation measures legitimately established as necessary for the protection of our marine mammal resources. Implementation of any proposed conservation measure which closes fishing areas, must not discriminate among fishermen or exempt some gear groups contributing to the perceived problem. With regard to the proposed closure zones intended for Round Island and Cape Pierce, AFTA supports alternative 1a which maintains the current two mile area of at sea protection. However, any fishing closure in this area intended to protect walrus should apply to all vessel traffic. The cumulative impact of the hundreds of salmon and herring vessels repeatedly entering this area has a disturbance potential far greater than a few groundfish trawlers. Hunting pressure and land based human intrusion onto this sanctuary are also factors which must be reduced in conjunction with any limitation on fishing. AFTA will support alternative 1b if it leads to development of comprehensive voluntary guidelines which also limit hunting pressure, shore based human intrusions on Round Island, and the other fishermen working this area.

Expansion of the current protection zone has not been demonstrated to be necessary. Expanding it to only exclude trawl activity is clearly without merit. The best scientific evidence available does not establish any negative link between groundfishing activity and walrus haul out patterns. "There is uncertainty whether a cause and effect relationship (vessel noise & walrus haul out activity) even exists. (EA/RIR Section 5.4) The best scientific evidence does show the large walrus populations in these areas place excessive demand on the clam food supply, leading to natural change in walrus population and activity. It is probable that trawling for yellow fin sole in this area actually benefits the walrus by removing a serious competitor for the clam food supply. Clams constitute over 90% of a walrus diet. Yellow fin are voracious consumers of juvenile clams and therefore compete with the walrus. Removing more yellow fin should increase the clam stocks. With an increasing food supply the walrus would likely thrive and remain in the Round Island area.

Increasing hunting pressure which supports the ivory trade, increasing land based human intrusion onto the Round Island sanctuary itself, and the natural walrus pressure on the food supply are all likely to effect haul out activity. While some humans may not like the sounds of fishing activity, there is no evidence to conclude walrus are similarly disturbed. Current separation of the groundfish fleet from the walrus is more than adequate to accommodate the known sensibilities of walrus to fishing activity. The proposed amendment's bias against vessels
which tend to be larger will only result in unfair economic allocation of the resource. This proposal imposes inefficiency and unnecessary costs on the yellow fin sole fishery by foreclosing very productive fishing grounds without a realistically demonstrated basis of support. Ultimately the bias in this proposal results in an unreasonable measure without true conservation effect.

1. **Walrus Population Levels**

The scientific evidence does indicate walrus populations are currently at high levels. (see Exhibit A - National Wildlife, June, 1989) Walrus are not endangered having rebounded from the low levels observed in the 1950s. Previous low population levels were induced by intense 1930s and 1940s hunting pressure in both the Soviet and U.S. zones and other non-fishing related causes. Reports indicate the walrus population now greatly exceeds the maximum density its environment can support - and the problem is being demonstrated at Round Island. Overgrazing by the walrus in combination with the effects of increasing hunting pressure (to support the ivory trade), plus the effect of increasing land based human occupation on Round Island itself, are all major factors directly impacting walrus populations. Although these facts of walrus life impose far greater consequences on walrus than the occasional yellow fin sole trawler, they are not accounted for in the alternatives. These factors which tend to alter walrus behavior will not be impacted by any of the proposed alternative Council actions. On the limited information before it the Council cannot reasonably predict closing larger areas to trawling will benefit the walrus.

2. **Groundfishing Noise**

As the EA/RIR repeatedly infers, no demonstrated scientific evidence links groundfishing activity to changes in walrus haul out patterns. "There is some uncertainty as to whether a cause-and-effect relationship even exist". (EA/RIR Section 5.4) Indeed, walrus experts report anecdotes in which the walrus are frequently attracted to man made noise. The walrus' behavior cannot really be linked scientifically to any noise source or form. To merely assume some relationship between at-sea fishing noise and land based walrus activity exists is an unsatisfactory basis for excluding fishermen from this area.

Consideration of the true impacts this proposal will have on walrus and fishermen cannot realistically be assessed as the current analysis neglects to account for all vessels working within the area. This oversight highlights the inherent bias of
the proposal which seeks to exclude only trawl vessels. "There are several hundred vessel associated with each of several herring and salmon fisheries (many which use "screaming gimmes" - engines heard miles away). The disturbance to walrus from these fisheries has not been included in this analysis". (EA/RIR Appendix 5A)". It is not sufficient to merely discount other vessel traffic because of a size difference - all fishing gear and operations make some amount of noise. The cumulative impact of numerous small vessels will likely greatly exceed the noise generated by the few larger trawl vessels which occasionally come into the area.

3. Future DAP Yellow Fin Trawling

While no noise problem can be demonstrated at Round Island, it is doubtful that the prior levels of trawl noise during 1987 and 1988 will ever be repeated. The JV fleet operations require far greater numbers of trawl vessels to support their mother ships than domestic factory trawler operations. Factory trawlers operate low rpm engines which are well muffled and much quieter than older JV trawl vessels. As the trawl fleet has now largely become a modern DAP factory trawler operation, the net result will be fewer and quieter vessels conducting fishing operations near Round Island.

4. Cape Pierce Reveals Noise Is Not the Issue

It is noteworthy, that the proposal alleges changes in the walrus haul out activity at both Round Island, and Cape Pierce. No yellow fin sole trawl fishery is conducted with the 12 miles surrounding Cape Pierce, yet the same reduction in haul out patterns has been observed. This suggests that causes other than fishing noise are at the root of changes in Walrus haul out patterns. Such causes are most likely nutritional deficiency, hunting pressure, and human intrusion onto Round Island by non-fishermen.

5. Walrus Population Impacts Its Own Food Supply.

Changes in the walrus population and consequent modification in haul out patterns are known to have occurred throughout history, long before trawler, salmon and herring fishermen worked in the Bering Sea. Since 1960 when the Soviets imposed strict harvest limits, the Pacific walrus has staged a remarkable comeback. In 1950 approximately 3,000 male walrus hauled out on Round Island. Recently more than 12,000 showed up and a U.S. - Soviet census in 1985 estimated more than 250,000 Pacific walrus inhabit the Bering and Chukchi Seas.
According to Francis "Bud" Fay a walrus expert biologist at the University of Alaska, "Walruses have been reappearing in traditional uglit (haul out areas) with greater frequency in recent years, and have reoccupied virtually all their former range." The National Wildlife report continues, "Now, the creature's numbers greatly exceed the maximum density its environment can support. Simply put, there is not enough food to go around, and malnutrition has begun to take its toll. Walruses are not distributed uniformly throughout the Bering and Chukchi seas, probably because of varying food availability. They prefer shallow shelf waters where beds of mussels and clams, which in normal years average 96% of their diet, are only a short dive away.

Unfortunately, at its current high levels the walrus population is wiping out the clam stocks faster than the mollusks can reproduce. "The greatest impact appears to be on the summering areas," says Fay. "I believe it is there that food may exert its greatest influence as a limiting factor on population growth." Burns suggests that at current population levels the creature's eating habits "could cause long-term, although not irreversible damage to the Bering-Chukchi marine ecosystem" It is likely that the walrus main food supply will take a long time to recover from current rates of foraging, for clams are very slow to mature, and fishes, crabs, sea stars, seals and other organisms also feed on the mollusk. "When viewed together," says Alaska Department of Fish and Game biologist Don Calkins, "the changes in food habits, reduced body size and poorer physical condition indicate severe nutritional stress."

National Wildlife, June 1989, pgs 39-42 (See Exhibit A)

The overgrazing of Walrus on their food supply is an apparent component of natural changes in the current walrus physiology and population dynamics. Excluding fishing effort will not encourage the walrus to remain where the food supply is inadequate to support its needs. In fact, removing the trawlers therapeutic effects of harvesting yellow fin sole (which compete with the walrus for clams), may only add to the problem.

6. Hunting Pressure

According to reports from walrus biologists, the current level of walrus harvest is excessive and could result in reductions in walrus populations. This direct impact of human activity is unrelated to the trawl fishery, and is much more likely to effect haul out patterns:
"The combined annual Soviet-U.S. harvest gradually has increased to between 8,000 - 10,000, not including the number of killed or wounded walruses that cannot be retrieved. The mortality figure, says Fay, has exceeded the number of juvenile walruses joining the adult population for at least the past six years. Even under the best of conditions, when the walrus was well fed and more productive, annual harvests in excess of 10,000 have always sent the species' numbers tumbling."

As Eskimo villages increasingly have turned toward hunting walrus for ivory rather than for food, "the yearly harvest of walrus has long since surpassed the number required to support meat needs," says Dan Strickland, formerly of the Alaska Department of Fish and Game, "and headhunting for ivory is common." Now, Eskimos take more than 4,000 walruses a year, with additional unretrieved losses of dead and mortally wounded as high as 63 percent."

National Wildlife, June, 1989, page 42. (Exhibit A)

The impact of this hunting pressure is far more direct and serious than the speculative noise theories which underlie the proposed plan amendment.

"Typically, the young Eskimos cruise the Bering Sea in small skiffs with semiautomatic rifles, ambushing the lethargic 1,2000 pound beasts as they lounge on ice floes. The hunters then sever the head with chain saws; left on the melting ice floes, the remains sink and wash ashore months later. Authorities flying over the Alaskan coast often see hundreds of headless carcasses. And so many mutilated walrus bodies have washed up on the Siberian coast in the past that the Soviets have urged U.S. officials to halt the killing."

Newsweek, "Off With Their Heads, Killing Walrus For Ivory", Beck & Anderson. (See Exhibit B)

Clearly, the impact of high powered rifles and chainsaws have more direct and serious consequences on the vitality of the walrus population than vessels dragging nets through the water three to twelve miles out to sea. It does not make fisheries management sense to focus on the fishing activity or to impose limits on the efficient harvest of the national groundfish resource, when more direct activities obviously impacting the walrus are being completely ignored.
7. Land based Human Intrusion on Round Island

In conjunction with the increasing hunting pressure on walrus, the single most constant and direct and disturbing impact likely comes from the increasing human land-based intrusions onto Round Island itself. The proponents of the amendment have bootstrapped an unsupported theory that vessel noise generated mile at sea during limited periods of the summer disturbs walrus. This is a self serving conclusion as these same proponents wish to completely ignore their own year round intrusion onto the walrus sanctuary. Annual visitor intrusions onto the island have geometrically increased in the last several years. This brings increased human activity, human odors, human contact and human noise directly to the island. Air traffic over the haul out area and increased vessel transport traffic in this vicinity has been required to support the apparent growth of tourists. All this activity on the island has been on going during the same time period considered within the analysis. Land based human activity, even if well intended is a far more likely to effect walrus on Round Island, than the vessel activity out at sea. Indeed, it seems the proponents are more concerned with the sensitivity of the land based visitors to the island than in making fisheries management decisions leading to full and efficient use of the national resource. "The continued presence of fishing activity and noise reaching Round Island would decrease the feeling of remoteness for visitors to the Island"...(Section 5.3.1, page 65) This type of subjective criteria used to cut off ever increasing areas of the ocean to fishermen, has no place in responsible fisheries management decisions.

The walrus managers should direct their efforts at the documented and verifiable causes of walrus herd diminution rather than seeking to impose this costly and speculative discriminatory proposal.
EXHIBIT A

National Wildlife Walrus Article
O

A BALMY summer afternoon at Round Island, the fog recedes to expose sheer cliffs stained white by kittiwakes, murrels and puffs. Piercing the warm air is a delicate, chime-like tone—the incongruous song of a warty, bleated Pacific walrus hauling its wine-sack body onto the beach.

Though there are plenty of room elsewhere on the island, the 2,500-pound creature wallows slowly through a thick carpet of dozing bull walruses, stirring a cacophony of snorts and jabbing thrusts as he jockeys for a spot in their midst. Finding a place at last in this sea of blubber, he settles down to snooze in the sun. All is well, it seems. But appearances can be deceiving.

Round Island, one of seven islands which form the Walrus Islands State Game Sanctuary off southwestern Alaska, is the most prominent of the two areas on the American side of the Bering Strait where walruses come ashore on a predictable annual basis. From spring through fall, while the females and juveniles head north to summer feeding grounds, the males congregate on these beaches for a gregarious, malodorous bachelor party.

Despite the size of the party, however, the guest list may be shrinking. Scientists believe that the Pacific walrus population may be heading for a crash. Within the past decade, the species’ general state of health, reproductive capacity, and infant survival rate have taken a dramatic nose dive. Now, with the recent liberalization of Soviet harvest regulations and a rising demand for ivory in American waters, the walrus could find itself in trouble again.

It would not be the first time. In 1935, only eight of the animals hauled out on Round Island. Seventy years of commercial hunting by Yankee whalers had whittled the total Pacific walrus population according to some estimates, by 75 percent. All but the Round Island ugl— the Eskimo term for a site where walrus come ashore—and one other Alaskan haul-out spot had been abandoned. The species seemed headed for extinction.

However, since about 1960, when the Soviets imposed strict harvest limits, the Pacific walrus, cousin to the less numerous Atlantic walrus, has staged a remarkable comeback. In 1959, approximately 3,000 male walruses pulled their ollike bodies onto Round Island’s shores; almost 50 years later, more than 12,500 of them showed up. A U.S.-Soviet aerial census in 1983 estimated that more than 250,000 Pacific walruses inhabited the seas.

“Walruses have been reappearing at traditional ugl— with greater frequency in recent years, and have reoccupied virtually all their former range,” says walrus expert Francis “Bud” Fay, who is a biologist with the University of Alaska’s Institute of Marine Science in Fairbanks.

Brandishing pairs of lancelike tusks, two Pacific walruses clash off Round Island (above). The “tooth-walking sea horse” (right) uses its two distinctive canines to pull itself onto the ice. In the breeding season, rival males compete by showing off their ivory hardware.

Over the years, the two countries have responded to rises and falls in the walrus numbers by either slaughtering them by the thousands or allowing their population to balloon. Now, the creature’s numbers greatly exceed the maximum density its environment can support. Simply put, there is not enough food to go around, and malnutrition has begun to take its toll.

Now, U.S. scientists are scrambling to learn all they can about the animal. “A clearer understanding of the ways of the walrus is vital to the planning of a sound management program aimed at maintaining the population at an optimum, more stable level,” says John J. Burns, a marine mammals biologist formerly with the Alaska Department of Fish and Game.

Progress has been slow. Because the ice-loving mammal—largest of the Arctic and subarctic fin-footed animals— inhabits faraway frozen seas, much about its behavior remains murky. Marine biologists have never seen walruses mate in the wild, for example, and scientists are only now gaining insights into their eating habits.

Until only a few years ago, it was assumed that the “tooth-walking sea horse”—a name given the walrus by Swedish botanist Carolus Linnaeus in 1758 for its habit of pulling itself onto ice floes with its long tusks—used those teeth to dig mussels from the sea bottom. More recently, scientists have concluded from the kind of wear on the animals’ whiskers and tusks that walruses root like pigs searching for truffles. Even censuses are gross approximations, for the species migrates across a million square miles of the Chukchi and Bering seas—a remote, often inaccessible habitat.

In April the females, calves and young males begin their annual northward migration, passing through the Bering Strait for brief summer pasturage in the Chukchi Sea, a journey of up to 1,000 miles. There, in Arctic waters north of Alaska and Siberia, they remain close to the southern edge of the ice pack, floating on ice floes above shellfish grounds.

Meanwhile, groups of sub-adult and mature bulls remain in the Bering Sea, where they come ashore at Round Island and the islands to the east of Siberia. Come fall, the females and juveniles head south, and by December or January they are back in the Bering Sea. There, the males join them to feed and mate in the middle of the winter pack ice.

Walruses are not distributed uniformly throughout the Bering and Chukchi seas, probably because of varying food availability. They prefer shallow shelf waters where beds of mussels and clams, which in normal years average 96 percent of their diet, are only a short dive away.

Unfortunately, at its current high levels the walrus population is wiping out the clam stocks faster than the mollusks can reproduce. “The greatest impact appears to be on the summering areas,” says Fay.

“I believe it is there that food may exert its greatest influence as a limiting factor on population growth.”
The walrus has a prodigious and wasteful appetite. Individual animals may gobble up as much as 197 pounds of food in a day, or 5 to 7 percent of their body weight, eating only the choicest parts of the clam. Burns suggests that at current population levels the creatures’ eating habits “could cause long-term, although perhaps not irreversible, damage to the Bering-Chukchi marine ecosystem.”

It is likely that the walrus’ main food supply will take a long time to recover from current excessive rates of foraging, for clams are very slow to mature, and fishes, crabs, sea stars, seals and other organisms also feed on the mollusks. The situation may be exacerbated by such emerging environmental threats as oil drilling and mineral exploration in the region, which could cause severe damage to walrus habitat.

With clam stocks reduced, Pacific walruses are now eating a greater proportion of less nutritious prey—anemones, fish, even jellyfish—which they ignore when mollusks are abundant. And studies by Fay and Alaska Department of Fish and Game biologist L.F. Lowry between 1952 and 1982 indicate that seal-eating, unusual among walruses, was 10 to 100 times more common during the late 1970s and early 1980s than in the previous 30 years.

As a result, walruses today generally are much thinner than they were as recently as ten years ago. Mean blubber thickness, which can be up to 6 inches in a healthy male, is now only 55 to 60 percent of what it was two decades ago. And today’s full-grown walruses are weighing in much lighter than those in the late 1970s, when adult males averaged 2,640 pounds.

“When viewed together,” says Alaska Department of Fish and Game biologist Don Calkins, “the changes in food habits, reduced body size and poorer physical condition indicate severe nutritional stress.”

The effects of lower nutrition already have begun to spread beyond individuals and are showing up on the whole population. Today, Pacific walrus females do not attain full physical maturity until they are 12 years old—two years later than those of the 1960s, says Fay—and that in turn has lowered the birth rate.

Calf production has generally fallen in recent years and was especially low in 1980, when calf survival also plummeted. During the 1960s and early 1970s, more than 30 percent of observed adult females were accompanied by calves aged two months or more. According to Fay, that figure fell to between 5 and 15 percent from 1981 through 1984. As Burns suggests, “These are natural adjustments of a high population that is pushing the limits of its environmental carrying capacity.”

The population, it appears, is becoming older. And with fewer young walruses coming along, present-day levels of harvest composition of the harvest, or for specifying the manner of killing unless the population becomes depleted.

As Eskimo villages increasingly have turned toward hunting walrus for ivory rather than for food, “the yearly harvest of walrus has long since surpassed the number required to support meat needs,” says Dan Strickland, formerly of the Alaska Department of Fish and Game, “and headhunting for ivory is common.”

The average number of walruses taken by Alaskan Eskimos rose from about 1,500 in the early 1970s to more than 3,500 by the end of the decade. Now, Eskimos take more than 4,000 walruses a year, with additional unretrieved losses of dead and mortally wounded as high as 63 percent.

Harvesting by Soviet sealers in the 1940s and 1950s had reduced the walrus population to an estimated all-time low of about 40,000 by 1956, prompting the Soviet Ministry of Fisheries to ban commercial hunting in its waters. In 1982, biologists there decided the population had become large enough to permit renewed harvesting. Today, the Soviets are allowed to kill up to 5,000 walruses a year—3,500 by native hunters and 1,500 by government hunters.

Thus, the combined annual Soviet-U.S. harvest gradually has increased to between 8,000 and 10,000, not including the number of killed or wounded walruses that cannot be retrieved. The mortality figure, says Fay, has exceeded the number of juvenile walruses joining the adult population for at least the past six years. Even under the best conditions, when the walrus was well-fed and more productive, annual harvests in excess of 10,000 have always sent the species’ numbers tumbling.

Clearly, there is an urgent need for a program that will allow stabilization of the walrus population, control harvesting and at the same time protect the delicate marine environment.

Until the United States and the Soviet Union can develop such a plan, the future of the Pacific walrus will remain uncertain. And the longer the delay, the longer the animal will be living on thin ice.

Two walrus bulls rub bearded snouts in Alaska’s Bristol Bay (above). Such nosy behavior probably represents a get-acquainted nuzzle—common during the males’ annual haul-out at Round Island (right). While they revel, females and young swim to distant Arctic fies.
EXHIBIT B

Newsweek Article - Walrus Hunting
Off With Their Heads
Killing walrus for ivory

Unscrupulous ivory traders have already devastated the elephant herds of Africa and Asia. But the lumbering pachyderms aren't the only source of the precious commodity. For years, decapitated walrus carcasses have been washing up on remote shores of the Bering Sea in Alaska, their heads illegally severed to obtain their valuable tusks. Now that grisly practice has taken an even more disturbing turn: federal agents say that increasingly, walrus heads are being traded for illicit drugs, feeding the addiction of young Alaskan natives. "It seems we can't work a marine-mammal case in Alaska without drugs being involved," laments special agent Gary Mowad of the U.S. Fish and Wildlife Service. And the rate of exchange is appallingly cheap. For a mere six marijuana joints, Mowad says, black-market dealers can obtain a walrus skull with tusks that can bring as much as $800 wholesale.

Typically, the young Eskimos cruise the Bering Sea in small skiffs with semiautomatic rifles, ambushing the lethargic 1,200-pound beasts as they lounge on ice floes. The hunters then sever the heads with chainsaws; left on the melting floes, the remains sink and wash ashore months later. Authorities flying over the Alaskan coast often see hundreds of headless carcasses. And so many mutilated walrus bodies have washed up on the Siberian coast in the past that the Soviets have urged U.S. officials to halt the killing.

Tip-offs: That is proving difficult. Only a handful of Fish and Wildlife agents police thousands of miles of Alaskan shoreline. "We have to rely on concerned citizens to be our eyes and ears," says senior agent Wally Soroka. Even when authorities are tipped off to illegal kills, the drugs-for-ivory traders can easily avert prosecution, agents say. Federal law permits Alaska natives to hunt walruses for food and, as a byproduct, use their tusks in native arts. Often, a non-native trader will move in with an Eskimo woman, who can claim she is using the ivory for legitimate crafts. "Even if we find $10,000 worth of ivory in the garage, he'll say it belongs to her and then the federal government is helpless," says Mowad.

Slowly, native villagers are beginning to cooperate with authorities. Many Eskimo elders are alarmed about the drug habits of young natives. Legitimate walrus hunters are also concerned, as are local ivory artisans, who find it increasingly difficult to obtain their own supplies. "The Eskimos know that their culture is in trouble," says Mowad. "The more dead, headless walruses that wash up onshore, the worse it looks for them." With an estimated 250,000 walruses remaining in the Pacific, the beasts are by no means endangered. Still, says Mowad, "The walruses up here are taking a beating in the name of the drug trade. It's disgusting."

Melinda Beck with Cary Anderson
in Anchorage
5. REPLACE THE KING CRAB PROTECTION TIME/AREA CLOSURES AROUND KODIAK ISLAND AND MODIFY THE HALIBUT BYCATCH MANAGEMENT REGIME FOR THE GULF OF ALASKA.
King Crab Closed Zones

AFTA favors Alternative 2 which would extend existing time/area closure measures for another three years. This will extend the protection to crab stocks which fisheries managers have deemed necessary for conservation and development of the resource around Kodiak.

In order to support Alternative 3, we would want to see incorporated into the amendment specific criteria for the key decisions which will be made within the frameworking procedure. Preliminary to any enactment of this alternative, the amendment should establish criteria, procedures, and limits for action; allow for informed public comment on the range of potential actions and degree of delegated discretion; and provide all the necessary documentation to support the framework measures. (NMFS Operational Guidelines for Frameworking, Page 33, 1983)

The present analysis for alternative three does not do that.

The "threshold criteria" in a given district for a "significant recruitment event" of substantially increased numbers of juvenile crab is not quantified. What percentage increase of juveniles under which environmental conditions will constitute this event? This threshold level should be more fully defined. If the threshold level is to be referenced to independent existing criteria (e.g. ADF&G Crab Management Plan Guidelines), specifying that criteria will permit meaningful examination and analysis of this alternative.

The amendment does not specify whether the "Type III" areas which may also be closed upon a future "significant recruitment event" are limited to those identified in figure 6.1. That limitation should be clearly stated.

Crab Fishery Bycatch & Mortality

The benefits analysis fails to consider the substantial bycatch of prereruct and nontarget crab which generally occur in directed crab fisheries. Non-selective crab gear leads to bycatch of crab and handling mortality. Prior to reopening crab fishing in any areas closed under this plan, legitimate crab bycatch data should be developed in the crab fisheries and considered. Effective analysis of the crab fishery bycatch problem calls for consistent presorted crab bycatch data, not information derived from a few crab processors. Without crab bycatch data obtained through sufficient observer coverage on the crab catcher boats, fisheries managers will have no real way to determine the benefit of these proposed closures.

Crab bycatch of undersized prereruct and non-target crab is highest within the directed crab fishery itself. The predictable crab mortality inflicted through handling crab
bycatch on the decks of the crab catcher boats, and recurrent
catch and release of crab in the non-selective crab pots, must
be fully accounted for. In view of the migratory habits of crab
in and out of proposed protected areas and the possibility of
bairdi fishing in adjacent areas, it will be impossible to
predict whether imposing these requested restrictions on the
non-benefited gear groups will be worthwhile. Direct
observation of the presorted crab catch on crab catcher boats
and an accounting of crab mortality resulting from the handling
techniques of the crab bycatch is a necessary component of the
assessment process.

Halibut
AFTA supports implementing separate halibut PSC limits for long
line and trawl gear. A separate 2,000 mt halibut quota should
be maintained for trawl gear in the Gulf. The longline cod
fishery should have its own separate quota from the trawl quota
established to support legitimate long line fishing needs in
light of prevailing bycatch management concerns.

Retention of halibut PSC leading to sales which will support
scientific observer requirements and improved NMFS fisheries
management of the resource should be considered for
incorporation into this revised halibut bycatch management
regime. Forced retention and sale of unavoidable halibut
bycatch, combined with requirements that it be properly
maintained, sold, with proceeds placed into an observer fund,
will not negatively impact the halibut stocks and should benefit
the overall fishery. Appropriate restrictions forcing fishermen
to retain and maintain halibut bycatch would provide both a
disincentive to catch halibut (so as to avoid reducing
productive fishing effort), while benefiting legitimate
fisheries management needs.
6. EXPAND THE PACIFIC COD TRAWL EXEMPTION ZONE IN THE BERING SEA/ALEUTIAN ISLANDS.
EXPAND THE PORT MOLLER PACIFIC COD TRAWL FISHERY

AFTA supports alternative 2 to extend the northern boundary of the exemption zone as defined under amendment 10 to a line approximating the 30 fathom isobath. This will provide domestic trawlers an improved opportunity to harvest Pacific cod (Gadus macrocephalus) at higher CPUE rates without impacting other species. This fishery has been conducted on an annual basis since 1986, with observers on the factory trawlers and catcher boats which fish for cod in this area. The 12,000 red king crab cap agreed to by crab and trawl fishermen has never been approached, halibut bycatch is low, and bycatch levels have generally remained modest throughout the history of this fishery. "...the fishery is currently well under the 12,000 red king crab limit..." (Table 4.6 -Summary of prohibited species and total catch statistics, Port Moller cod fishery, 1986 and 1988)

Efficiency Increases By Expanding Out To 30 Fathoms
Port Moller is an important cod fishery for trawl gear with catches presently averaging well above 60% cod. The vast majority of other species taken along with cod in this fishery are yellowfin sole, rock sole, with small fluctuating percentages of pollock and herring. Expansion of the area out to 30 fathoms will enhance efficient use of the cod resource without harming other species. Data gathered both from observers on vessels in the Port Moller fishery and the June 1989 NMFS trawl survey confirms: "Groundfish catch rates in both years tended to be greater in the deeper interval" and "halibut bycatch rates in both years were less in the deeper interval" (see Supplemental Data on Port Moller Cod Fishery, pg 8.)

Halibut and Crab
Crab stocks are not affected by trawl fishing in this area. The data demonstrates the crab cap limit agreed to by crab and trawl fishermen has not been approached or exceeded. Crab stocks are not affected by trawling in this limited area. The viability of crab caught but returned to the sea is excellent. 1988 - 70% to 65.5% of red king crab "were judged to be in excellent condition" and in 1987 more than 80% were in good condition upon return to sea. "Tanner crab showed 100% survival rate in Areas 512 and s511, and a 70% survival in area North 511". (NWFAC Processed Report 88-25, pg.9; Report On The Port Moller Pacific Cod Trawl Fishery, Summer 1987, pg. 11) Expansion of the boundary for Port Moller will have no impact on crab stocks as any incremental increase in crab catch will be minimal, and the total catch must remain under the crab cap which limits the entire fishery. In light of the excellent observed viability of crab returned to the sea and low bycatch numbers there is no demonstrated impact to crab in any event.

The limited halibut bycatch will be reduced by expanding the boundary out to 30 fathoms. "Halibut bycatch rates in both
years were less in the deeper interval". (Supplemental Data at page 8.) The fishermen will tend to fish in the deeper waters and higher CPUE areas, where the halibut bycatch is known to be lower. Less halibut and more cod will be caught. Expansion of the Port Moller fishery out to 30 fathoms will have a mutual benefit for halibut and trawl fishermen alike.

**Herring**

There is an absence of data suggesting that known herring bycatch constitutes any problem for herring stocks. Despite this fact, trawlers have been working to reduce herring bycatch further. While herring bycatch rates are already relatively low in this fishery, AFTA expects that trawlers will employ agreed upon herring avoidance techniques to further reduce trawl bycatch of herring. Herring schools are distinct on sonar. The trawlers working in this area have agreed to monitor their sonar equipment for signs of herring, to alert each other on the radio in order to avoid potential herring problems, and to move out of problem herring areas when herring are encountered in towing operations. This should have definite positive effects by further reducing herring bycatch.

It does appear past herring bycatch has been overestimated in the fishery. Trawler interaction with herring schools are predictably isolated events to an individual vessel. In 1988 fully 90% of all Port Moller reported herring bycatch came from just 5 isolated tows, and 54% from just one tow. Despite the strong evidence that most vessels during most of the time do not take significant herring bycatch (0.3% fleet wide during week 1 of 1988) the analysis incorrectly assumes the opposite, that every vessel during the same time period is having this same experience. That assumption is not well taken as both the nature of herring and the trawl fishery are not supportive of the necessary basic presumption. The presumption is certainly invalid for the future as herring avoidance techniques which are presently part of the trawl fishing strategy in the Port Moller area, will further reduce herring bycatch.

Port Moller and the observer data for this fishery, demonstrate herring bycatch is sometimes avoided by shifting to deeper water operations. [Supplemental Data Pg 9, (3)] This factor should be considered with the trawler herring avoidance techniques which will reduce isolated herring interactions.

**March 15 - June 30**

This is the period in which the pacific cod fishery in Port Moller is economically viable for trawling for cod. Alternative 4 does not present a realistic choice as there is no justifiable reason to close this area from mid March to the end of June - thereby reducing all benefits presented by this fishery. No bycatch problem is realistically demonstrated in the fishery. Expansion out to 30 fathoms will reduce most bycatch concerns, and the trawlers have adopted measures to further reduce the present low levels of herring bycatch.
7. IMPLEMENT A SYSTEM OF OBSERVER COVERAGE AND RECORDKEEPING AND DATA REPORTING REQUIREMENTS.
AFTA comments on Record Keeping and Reporting Requirements

Amendment 13/18 proposes an entirely new system for record keeping and reporting. AFTA generally supports the proposed system and commends the Council for proposing that the requirements apply uniformly across the groundfish fishing industry. Hopefully, a comprehensive system such as the one proposed will bring much more order to the groundfish fishing industry as it matures.

The new requirements will significantly increase that reporting and record keeping burden on the fishing businesses, and more importantly, increases exposure of the businesses to prosecution for errors in compliance with the requirements. Therefore while we are supportive of the requirements, we ask the Council further consider a schedule of penalties for noncompliance that the industry can comment upon. This is a very important element of our support of the package overall.

We have outlined the level of accounting entries that will be required by the new system. Attachment A shows that 20,000-25,000 entries annually will be required by a typical factory trawler in the logging requirements alone. The possibility for error will be great, particularly for logging requirements which are to be made accurately on a real time basis. Presumably if a boarding party were to find errors in the logs the vessel could be cited for a violation of regulations.

AFTA is surprised to read that the Environmental Assessment does not propose to abandon the fish ticket system with the implementation of the new comprehensive plan. It is our belief that the requirement to report duplicate information to another government that does not have management jurisdiction over the fisheries resource is unwise and unfair to fishing businesses. We also believe that to maintain the state fish ticket system is violative of the federal paperwork regulations. We are hopeful that as a quid pro quo for the industry's acceptance of the new comprehensive reporting plan that the fish ticket reporting requirement will be deleted.

Furthermore, because the industry is assuming new responsibilities to get information to the government, the government should commit to processing and publishing of the information in a timely fashion. We suggest the government publish the reported information in aggregated form every two months with a one month lag from the input of the data by the industry.
Attachment A

RECORD KEEPING

1. DAILY CUMULATIVE PRODUCTION LOG (DCPL) - PROCESSORS (SEA AND SHORE) - ESTIMATED ENTRIES 300 DAYS X 8 PRODUCTS X 3 INFO REQUIREMENTS = 7200 ENTRIES
   DAILY, WEEKLY AND YEAR TO DATE PRODUCTION INFORMATION - MUST BE ACCURATE TO 220 POUNDS

2. DAILY FISHING LOG (DFL) - CATCHER VESSELS - VESSEL AND GEAR - ENGINE POWER, CREW SIZE, GEAR SIZE, MESH SIZE NET OPENING - 300 DAYS X 4 INFO REQUIREMENTS = 1200 ENTRIES
   HAUL BY HAUL INFO - DATE, TIME LOCATION, SEA DEPTH TRAWL DEPTH, HAUL WEIGHT, DURATION OF HAUL - 300 DAYS X 6 INFO REQUIREMENTS = 1800 ENTRIES
   DAILY INFO ON DISCARDS OF HALIBUT CRAB AND SALMON REPORTED BY NUMBERS OF FISH AND ALL OTHER REPORTED BY WEIGHT - 300 DAYS X 6 INFO REQUIREMENTS = 1800 ENTRIES
   INFO ON DAILY VESSEL ACTIVITY - SEARCH TIME, FISHING TIME, TRANSIT TIME AND DOWN TIME - 300 DAYS X 4 ENTRY REQUIREMENTS = 1200 ENTRIES

3. TRANSFER LOG - PROCESSORS (SEA AND SHORE)
   MUST BE ACCURATE TO 220 LBS. - 20 TRANSFERS X 10 PRODUCT FORMS X 4 INFO REQUIREMENTS = 800 ENTRIES

TOTAL ANNUAL ENTRIES REQUIRED - 21,200

REPORTING

4. TRANSFER LOG - PROCESSORS (SEA AND SHORE)
   WEEKLY REPORTS OF TRANSFER LOG ACTIVITY
   PRODUCT TRANSFERS BY SPECIES AND PRODUCT TYPE, SHIPPING COMPANY, DATE OF SHIPMENT AND THE DESTINATION. MUST BE ACCURATE TO 220 LBS. - WORK REQUIREMENT: COPY FROM TRANSFER LOG

5. WEEKLY PRODUCTION REPORT - PROCESSORS (SHORE AND SEA)
   WEEKLY PRODUCTION BY SPECIES AND PRODUCT FORM DISCARDS OF PROHIBITED SPECIES AND OTHER SPECIES WORK REQUIREMENT: COPY FROM DCPL

6. DCPL AND DFL - PROCESSORS AND CATCHER VESSELS
   COPIES SUBMITTED QUARTERLY - WORK REQUIREMENT: SEND COPIES OF DCPL

7. MONTHLY PRODUCT VALUE REPORT - PROCESSORS (SEA AND SHORE)
   SALES BY QUANTITY, VALUE, SPECIES AND PRODUCT FORM - WORK REQUIREMENT: REVIEWS SALES AND REPORT
AFTA Observer Comments

I. Introduction

The groundfish resources of the North Pacific are a national treasure worthy of the increased data collection effort proposed by Amendments 13/18. AFTA intends to be a constructive participant in the implementation of a new data collection system, although it is a difficult issue because no domestic fishery has been subject to a permanent observer program. Such a program involves an allocation of financial resources that are not now available. Nor is the law clear on observer programs and funding thereof. At this point we can only speculate as to what may be effective as a mandatory regulation.

The Environment Assessment presents observer coverage options that are virtually limitless. In addition to the status quo, Option 2 has the Council choose from 0 - 100% observer coverage. Option 3 establishes a framework that would allow the Council to set observer coverage rates between 0 - 100% as needs are established from year to year. The EA suggests that either the industry or the government may fund the observer program, the costs of which range from zero to $15 million. Moreover it is proposed that vessel could sell bycatch as a way to fund the program.

The EA poses two "main reasons" for observer coverage:
1) to reduce the chance of bias in data
2) to relieve the industry from the burden of collecting data

While we agree with the first concern, we disagree with the second. We believe that the industry would accept the data collection burden suggested in 2), were it to be offered as an alternative to carrying observers. There are great burdens on a vessel in carrying observers and, all things being equal, the vessel would prefer not to have that responsibility.

AFTA would like to commend the Council's effort to establish the principle that observer coverage for all gear groups should be placed where it is needed, ashore or afloat. No matter which alternative is adopted, this principle should be maintained.

We expect that this Plan amendment is the first step in an effort to have a data collection system evolve for the domestic industry. We support the effort to place observers at strategic positions within the industry. We feel the need now is to have the program achieve maximum results relative to the investment required for data. We have a proposal which is livable for the factory trawler industry, as operators of observer platforms and as potential financial contributors.
II. AFTA's Proposed Alternative

AFTA prefers implementation of Alternative 2 with a 20% coverage. We propose that the program be limited to scientific data collection including verification of catch and discard data with no enforcement function being permitted. AFTA prefers funding of the program by the government but is willing to participate in a broad-based industry funding partnership with the government if the funding contributes to a rational and cost effective program. We support the alternative of funding the program with proceeds of marketable prohibited species catch, as a measure to raise much need funds and to avoid waste of valuable species which are incidentally brought aboard the vessels.

AFTA has recently testified to the U.S. Senate on our proposals about the operation of an observer program in the North Pacific Groundfish fisheries. They are that the program be:

1. Mandatory
2. Fair and equitable to those in the fishery
3. Comprehensive for all segments
4. Centrally managed by NMFS and well coordinated
5. Coverage to provide statistically reliable data
6. Financed in a broad-based manner including government sources

It is our belief that Alternative 2 if implemented as proposed by AFTA will meet these criteria. While this program applies only to the groundfish fisheries management by the North Pacific Council, we would hope that if it is acceptable it would be applied to all fisheries managed by the Council including crab and halibut. Because some crab and halibut fishermen are quick to focus on the operations of the groundfish fisheries with respect to the health of their fisheries, we believe that appropriate data collection in those fisheries will enable managers to better understand and communicate the nature of the resource to those fishermen.

III. Explanation of the AFTA Proposal

We would like to elaborate on our proposal in question and answer format in order to provide specific details.

1. Where should observers be utilized?
   Use of observers should be considered at any point at which fish are sorted and/or discarded or at any point in which there is impact on the resource. Vessels, receiving stations and processing plants which are participating in the groundfish fisheries of the North Pacific all have these points.

2. Should any such receiving points be exempt?
No, however for the initial program, vessels under 50 feet should be exempt due to the physical difficulty of hosting an observer. However if such vessels were suspected of contributing to a significant unobserved resource mortality, they too should carry observers or be observed in another manner.

3. How many observers should be employed?
There should be enough to have an average of 20% of the vessel days on the grounds (VDOG) and the plant days in operation (PDIO) over the course of the year.

4. What are the duties of the observers?
Observers will collect scientific data as necessary and verify catch and discard data. Observers would not have an enforcement function but would be able to provide information under subpoena.

5. Why observers in a direct enforcement role are unacceptable?
Direct enforcement activities conflict with the collection of un-biased scientific data.
Enforcement, unjustly assumes vessels to be guilty of gross misreporting.

6. How will this program interact with the MMPA program?
Observers for the MMPA (if funded) will be placed on some groundfish vessels.

7. What about increased liability of the vessels carrying observers?
The government should provide vessel indemnification comparable to that in the MMPA Amendments. Increased insurance costs of the vessels carrying observers should be paid from this fund.

8. What about confidentiality?
Standard business confidentiality rules should apply. Concerns about lack of sufficient participation to aggregate information for disclosure should be abated because of the scope of the program and the increased numbers of participants.

9. Is 20% coverage a statistically valid coverage rate?
Yes, when compared with accepted standards of data precision for other aspects of fisheries management. Biomass estimates in years 1986 - 1989 for pollack have ranged from 86% to 46% accuracy; Pacific cod had 84% accuracy; and Yellowfin sole ranged from 84% to 76% accuracy as reported in the Final Resource Assessment Document for the 1989 Bering Sea-Aleutian Islands Groundfish Fishery. It is expected that an observer coverage rate of 20% will yield a data accuracy of between 85% and 90% for Halibut by-catch.
This accuracy rate has been reported in the EA using data from the 86-88 Bering Sea JV fishery and from a separate ADFG analysis of 16 Kodiak Island bottom trawls.

Several statistical methods have been suggested as a means of determining the level of observer coverage. All of these methods involve trade-offs between sample size and estimate precision. Figures 1. and 1.A are examples of estimate accuracy in relation to percent observer coverage when using a multivariate ratio estimator as presented in the EA for Bairdii crab and Halibut by-catch from 1986-88 Bering Sea JV data. Even this estimate is just that, an estimate (at the 95% level of confidence) with its associated error factor. This figure shows that large increases in data accuracy are obtainable with small increases in observer coverage only at smaller sampling sizes. As sampling size increases, gains in data precision increase, but at a diminishing rate, and at a disproportionately higher cost.

Observer data should not be considered as the only available source of information concerning by-catch. Observer data can be combined with information from research survey cruises negating the need for a high reliance solely on observer data. Demanding exceptionally high data precision from only one part of a multi-component data collection/management system places undue burden and undue faith on the observer program and is unrealistic.

10. At the statistically reliable coverage rate of 20%, how do we know that the unobserved fleet will behave in the same manner as the observed fleet?

We don't know for certain. But there is no reason to believe that the behavior would be different. Comparison to the behavior of the foreign fleets is inappropriate. Our vessels have too much independence, too much competition, and too much lack of an incentive to conspire to attempt the collusion that has occurred in the foreign fleets. Collusion and risk sharing was one of the bases for requiring 100% coverage for the foreign fleets. Our vessels on the other hand have much to lose by carrying off such a conspiracy and little to gain. The history of regulatory compliance by the U.S. catcher processor fleet indicates that they have been law abiding and should not be penalized by projecting the mentality of the foreign fleets to US. fishermen.

Two methods have been proposed to deal with suspected bias of observer sampling. The first utilizes spot checks and unannounced placement of observers. This reduces the ability of the vessel to change behavior while an observer
is on-board and allows for relatively bias free data collection. The second method involves the use of the proposed Daily Fishing Log (DFL) and the Daily Cumulative Production Log (DCPL) which implementation is being considered. By comparing these logs with observer data, bias if present may be determined and sampling methodology adjusted accordingly.

11. Will observer coverage rates be economically optimal, balancing program costs with benefits accrued from observer data.

In economic terms the marginal cost of the last unit increase in observer coverage should equal the marginal benefit of the last unit increase in data precision. It is desirable that the costs of obtaining a certain amount of information be balanced with the value of the information obtained. The NMFS Observer policy (1988), states "The program will not place a significant inequitable or undue financial or social burden on industry, measured against the overall benefits accruing from the FMP." In this case the costs of implementing an observer program must be balanced with the benefits derived from observer data.

The total cost for achieving target precision levels is graphed in Figures 3 and 3A. Clearly as precision is increased the cost rises significantly - in fact, at an increasing rate vis a vis the increase in precision. The cost per unit of data accuracy relative to increasing observer coverage is shown in Figures 2. and 2A. The number above the bar indicates the percentage of coverage required to achieve accuracy levels indicated along the bottom axis, which is a designation of the achievable accuracy levels. The height of the bar depicts the marginal cost to obtain that accuracy. It can be seen that marginal costs of achieving accuracy rates in excess of 90% (which comes from 20% observer coverage) rises very rapidly. These accuracy levels appear to be cost effective to achieve, but it would appear that spending levels beyond this defy the cost/benefit test, particularly given the accuracy levels with which the overall biomasses are estimated. Toward the right side of the graph, accuracy continues to increase, but at a much slower rate than the left side. Costs also continue to increase, but at a rate greater than accuracy.

The graphs in all of the figures depict diminishing gains in data accuracy relative to increasing costs to obtain that precision. The optimal level of coverage, the point at maximum gain per dollar spent, is at the left side of both figures, where percentage of observer coverage which is far less than 100%.
FIGURE 1. Data precision relative to percentage observer coverage. Based on Bering Sea 86-88 JV data for Bairdi Crab. Percent accuracy is a factor corresponding to the precision of estimate error.
FIGURE 1.A Data precision relative to percentage observer coverage. Based on Bering Sea 86-88 JV data for Halibut by-catch. Percent accuracy is a factor corresponding to the precision of estimate error.
Marginal cost of an observer program per marginal unit of data accuracy. Numbers above each bar indicate level of observer coverage. Based on 86-88 Bering Sea data for Bairdi crab and observer costs of $250 per day.
FIGURE 2.A Marginal cost of an observer program per marginal unit of data accuracy. Numbers above each bar indicate level of observer coverage. Based on 86-88 Bering Sea data for Halibut by-catch and observer costs of $250 per day.
FIGUR 3. Total costs of an observer program relative to data accuracy. Numbers above each bar indicate level of observer coverage. Based on 86-88 Bering Sea JV data for Bairdi crab by-catch and observer costs of $250 per day.
FIGURE 3. A Total costs of an observer program relative to data accuracy. Numbers above each bar indicate level of observer coverage. Based on 86-88 Bering Sea JV data for Halibut by-catch and observer costs of $250 per day.
IV. Closing Comments

AFTA intends to cooperate in the Council's effort to collect data for fisheries management. The Council must bear in mind that there is a down side for any fishing vessel to carry observers. They include:

1. Cost of giving up the space of a crew member for an observer
2. Likelihood of personnel conflicts with observers (the observer is not always right). Quality and quantity of observer data will increase if the observer is viewed by vessel crews as posing no threat to their livelihood.
3. Possibility of inaccurate data from an unqualified observer. A professional cadre of observers, adequately compensated, would have the following benefits: lower turnover, reduced training requirements and training costs, reduced variance of individual observer data leading to a reduction in overall observer coverage required to maintain a specified level of sampling variance.
4. Possibility for liability for an accident involving an observer
5. Disparate observer coverage will cause disparate information flow about the segments of the fishery, resulting in inequitable treatment vis-a-vis unobserved segments.

We hope that the Council will consider the information in our comments carefully and in the true spirit of cooperation that is intended.