

M E M O R A N D U M

TO: Council, SSC, and AP members

FROM: Jim H. Branson  
Executive Director

DATE: March 11, 1986

SUBJECT: Gulf of Alaska Groundfish Fishery Management Plan

ACTION REQUIRED

1. Review status of regulatory amendments and emergency rule closures.
2. Initial review of draft goals/objectives and FMP. Provide further direction to workgroup and plan team.

BACKGROUND

Status report on regulatory amendments on single species closures and management of sablefish gear allocations.

At the January meeting the Council approved development and implementation of two regulatory amendments to address the management of fully U.S.-utilized groundfish species. The first amendment would authorize NMFS to declare a species as "prohibited" once its OY has been reached. This measure would allow fisheries targeting on other groundfish species to continue if their bycatch of prohibited species were expected to be low. It would also authorize NMFS to close or limit targeting on other species to prevent overfishing of the prohibited species.

A second regulatory amendment was approved to allow the Regional Director to declare sablefish a "non-target species" for a particular gear type before its total share was reached. Regulations for the Eastern Gulf define a species as targeted if it constitutes 20% or more of the catch. If sablefish were less than 20% of the catch, NMFS would consider it an incidental harvest. This approach should provide fishermen sufficient sablefish bycatch to support directed fishing on other species. The Regional Director will base bycatch needs on observed incidental catch rates and estimated harvests by a particular gear type.

NMFS has completed preparation of the regulatory amendments and their accompanying environmental assessment and regulatory impact analysis. The amendment packages are currently undergoing final review by the Regional Office prior to submission to the Secretary.

Status report on NMFS implementation of trawl closures around Kodiak.

Based on a joint ADF&G and NMFS study which identified sensitive king crab areas around Kodiak Island, the Council approved an emergency rule closing the Chirikof Island, Alitak Flats, Towers, Barnabus, and Marmot Flats areas to hard on-bottom trawling during the period February 15 through June 15, 1986. This closure encompasses 80%-90% of the known female king crab stocks and is intended to protect crab during their softshell, reproduction period. The emergency rule is now in effect and will expire on June 15, 1986.

Initial review of draft Gulf of Alaska groundfish goals/objectives and FMP.

The Gulf of Alaska plan team met in Seattle on February 27-28, 1986 to continue development of the OY framework and other measures of the plan. A working draft of the proposed operational sections of the plan is included here as item D-3(a). The draft presents new terminology, frameworked management measures to set annual harvest quotas, quota apportionments, PSCs and fishing seasons, several conventional measures, and incorporates the new goals and objectives developed by the Council's workgroup. The plan team will review the draft with the Council.

Following the review, the plan team wants to discuss the draft and several options they still need direction for.

The draft minutes of the Council Gulf of Alaska FMP Workgroup, along with their "Draft Goals Statement for Management of Gulf of Alaska Groundfish Fisheries," are included as item D-3(b).

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**AGENDA D-3(a)  
MARCH 1986**

D R A F T

**GULF OF ALASKA GROUND FISH FISHERY MANAGEMENT PLAN**

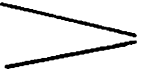
**Management Chapters I-IV**

**Prepared by the Gulf of Alaska  
Groundfish Plan Team**

**March 1986**

**For Discussion Purposes  
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**GULF OF ALASKA GROUND FISH FMP OUTLINE**

- I. INTRODUCTION**
  - II. GOALS AND OBJECTIVES**
    - A. Objectives**
    - B. Operational Definitions of Teams**
  - III. AREAS AND STOCKS INVOLVED**
  - IV. MANAGEMENT MEASURES OUTLINE**
    - A. General Information**
    - B. Framework Measures**
    - C. Conventional Measures**
    - D. Other Measures**
  - V. APPENDICES**
  - VI. REFERENCES**
- To Be Supplied Later
- 

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## I. INTRODUCTION

This Fishery Management Plan (FMP) has been developed by the North Pacific Fishery Management Council and is for the groundfish fishery (excluding halibut) of the Gulf of Alaska. In 1978, it replaced the Preliminary Fishery Management Plan for the management of groundfish in the Gulf of Alaska. Since then the FMP has been amended thirteen times and has proven to be both administratively cumbersome and difficult to update. Amendments are frequently required in response to stock fluctuations or changes in either the domestic or foreign fishery. In 1981 this FMP was revised through an amendment to eliminate these weaknesses. The result is basically a new FMP with new objectives and frameworked measures which will provide the needed flexibility and guidance to make timely management decisions.

In terms of both the fishery and the groundfish resource, the Gulf of Alaska groundfish fishery (excluding halibut) forms a distinct management unit. The history of fishery development, target species and species composition of the commercial catch, bathymetry, and oceanography are all much different in the Gulf than in the adjacent Bering Sea/Aleutian and British Columbia to California regions. Although many species occur over a broader range than the Gulf of Alaska, with only a few exceptions (e.g. halibut and perhaps sablefish) stocks of common species in the Gulf are believed different from those in adjacent regions.

Even though the International Pacific Halibut Commission is responsible for management of the North American halibut fishery, the potential adverse impact on halibut of a fishery for other groundfish species is so great that it must be taken into account in the management of the groundfish fishery. Therefore, certain pertinent aspects of the halibut resource and the directed fishery it supports are described in this FMP. Throughout this document, the terms "groundfish" and "bottomfish" exclude Pacific halibut unless otherwise noted. This FMP follows the Plan outline adopted by the North Pacific Council and forms the major component of an Environmental Impact Statement which assesses the effect that implementation of this Plan is expected to have on the environment of the region which encompasses the Gulf of Alaska.

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## II. GOALS AND OBJECTIVES

### A. Gulfwide Groundfish Management Goals and Objectives

The North Pacific Fishery Management Council is committed to develop long-range plans for managing the Gulf of Alaska groundfish fisheries that will promote a stable planning environment for the seafood industry and will maintain the health of the resource and environment. In developing allocation and harvesting systems, the Council will give overriding consideration to maximizing economic benefits to the United States. Such management will:

- (1) Conform to the National Standards and to NPFMC Comprehensive Fishery Management goals;
- (2) Be designed to assure that to the extent practicable:
  - (a) so that commercial, recreational, and subsistence benefits may be obtained on a continuing basis;
  - (b) minimize the chances of irreversible or long-term adverse effects on fishery resources and the marine environment;
  - (c) a multiplicity of options will be available with respect to future uses of these resources; and
  - (d) regulations will be long term and stable with changes kept to a minimum.

Principal Management Goal: Groundfish resources of the Gulf of Alaska will be managed to maximize positive economic benefits to the United States, consistent with resource stewardship responsibilities for the continuing welfare of the Gulf of Alaska living marine resources. Economic benefits include, but are not limited to profits, benefits to consumers, income and employment.

To implement this goal, the Council establishes the following objectives:

Objective 1: The Council will establish annual harvest guidelines, within biological constraints, for each groundfish fishery and mix of species taken in that fishery;

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Objective 2: In setting annual harvest guidelines, the Council will account for all fishery-related removals by gear types for each groundfish species, including bycatches, prohibited species, sport fishery, and subsistence catches as well as by directed fisheries.

Objective 3: The Council will manage the fisheries to minimize waste by:

- (a) Developing alternative approaches to treating bycatches as prohibited species. Any system adopted must address the problems of covert targeting and enforcement.
- (b) Developing management measures that encourage clean fisheries through gear and fishing technique modifications to minimize discards.

Objective 4: The Council will manage groundfish resources of the Gulf of Alaska to stimulate development of fully domestic groundfish fishery operations.

Objective 5: Only when requested to do so by the industry will the Council develop measures to limit the number of participants in a fishery, including systems to convert the common property resource to private property.

Objective 6: Rebuilding depleted stocks will be undertaken only if benefits to the United States can be predicted after evaluating the associated costs and benefits and the impacts on related fisheries.

Objective 7: Population thresholds will be established for major species or species complexes under Council management on the basis of the best scientific judgements of minimum population levels required to maintain strong reproduction potential over the long term. If population estimates drop below those thresholds, continued harvest will be constrained until stocks rebuild. Allowable biological catch (ABC) indicates surplus above threshold levels available for harvest.

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## B. Operational Definitions of Terms

The following terms are used extensively throughout this fishery management plan.

- Maximum sustainable yield (MSY) is an average over a reasonable length of time of the largest catch which can be taken continuously from a stock under current environmental conditions. It should normally be presented with a range of values around its point estimate.

Where sufficient scientific data as to the biological characteristics of the stock do not exist or the period of exploitation or investigation has not been long enough for adequate understanding of stock dynamics, the MSY will be estimated from the best information available.

- Annual surplus production (ASP). The annual or seasonal harvest which allows the stock to be maintained at approximately the same level of abundance (apart from the effects of environmental variation) in succeeding seasons or years.
- Biological reference point (BRP) is the species-specific catch calculated by multiplying current stock biomass and the exploitation rate associated with MSY. It forms the starting point for the plan team's deliberations in determining the PTRC.
- Plan Team Recommended Catch (PTRC) is the annual species-specific catch level which the plan team recommends to the Council. It may be based on biological and/or economic considerations, and may include separate recommendations for different components of the fishery (e.g. target catch and bycatch).
- Total fishing mortality (TFM) is an annually determined catch which is species specific and is based on consideration of maximum sustainable yield, the biological reference point, and the plan team's recommended catch. The TFM represents all fishery removals from the resource in a given year.



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The definition of TFM prescribes that the benefits of the fishery resources be allocated among all of its citizens affected by the fishery. These may include commercial fishermen, processors, sport fishermen, distributors, consumers, and service industries. Target quotas and acceptable bycatch levels may be specified. Surpluses to domestic needs may be allocated to foreign fishermen. These groups usually have different and other conflicting ideas about the best use of the resources. The determination of total fishing mortality then involves judgemental decisions that must be made by the Council based upon the best available information.

- Optimum yield (OY) is the yield from the groundfish fishery as a whole which provides the greatest overall benefit to the nation. Each year OY is determined by the summation of all TFMs less the sum of PSCs specified for each species and/or species group being managed under the plan. As a result, the OY is based upon the maximum sustainable yield for a given fishery, modified by relevant economic, social or biological factors.
- Target quota (TQ) is a portion of TFM and represents the harvest of a species taken by the directed fishery.
- Acceptable bycatch level (ABL) is a retainable portion of TFM that is allocated to nontarget fisheries for bycatch purposes.
- Prohibited species catch limit (PSC) is a non-retainable portion of TFM that is allocated to non-target fisheries for bycatch purposes.
- DAH (expected domestic annual harvest) is the estimated portion of the U.S. groundfish harvest which will be utilized by domestic processors (DAP) and the estimated portion, if any, delivered to foreign processors (JVP) which are permitted to receive U.S. harvested groundfish in the fishery conservation zone.

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- DAP is the estimated portion of DAH that is expected to be processed by U.S. processors. It also includes estimates of the quantities and species of groundfish that will enter non-processed fish markets such as those for bait in crab and longline fisheries. It includes catches by U.S. factory trawlers.
- JVP is the estimated portion of DAH that exceeds the capacity and intent of U.S. processors to utilize, or for which domestic markets are not available, that is expected to be delivered to foreign processors in the Fishery Conservation Zone.
- TALFF. (determination of the total allowable level of foreign fishing): TALFF is determined by deducting the DAH and RESERVE from the TQ.
- OPERATIONAL RESERVE is established for each species or species group to account for uncertainties arising from harvests delivered to U.S. processors, joint ventures, foreign fishing, and imprecise allocations of bycatch species in mixed species fisheries. Reserves are to be promptly apportioned to the DAP, JVP and TALFF in that order of priority, in accordance with the procedures and criteria specified in the regulations as necessary to achieve the FMP objectives. Apportioned reserves may be directed to either the target quota or to bycatch.
- Fishing year is defined as January 1 through December 31.
- Fishery assessment document (FAD) - an annually prepared document that presents both biological and economic fishery information.

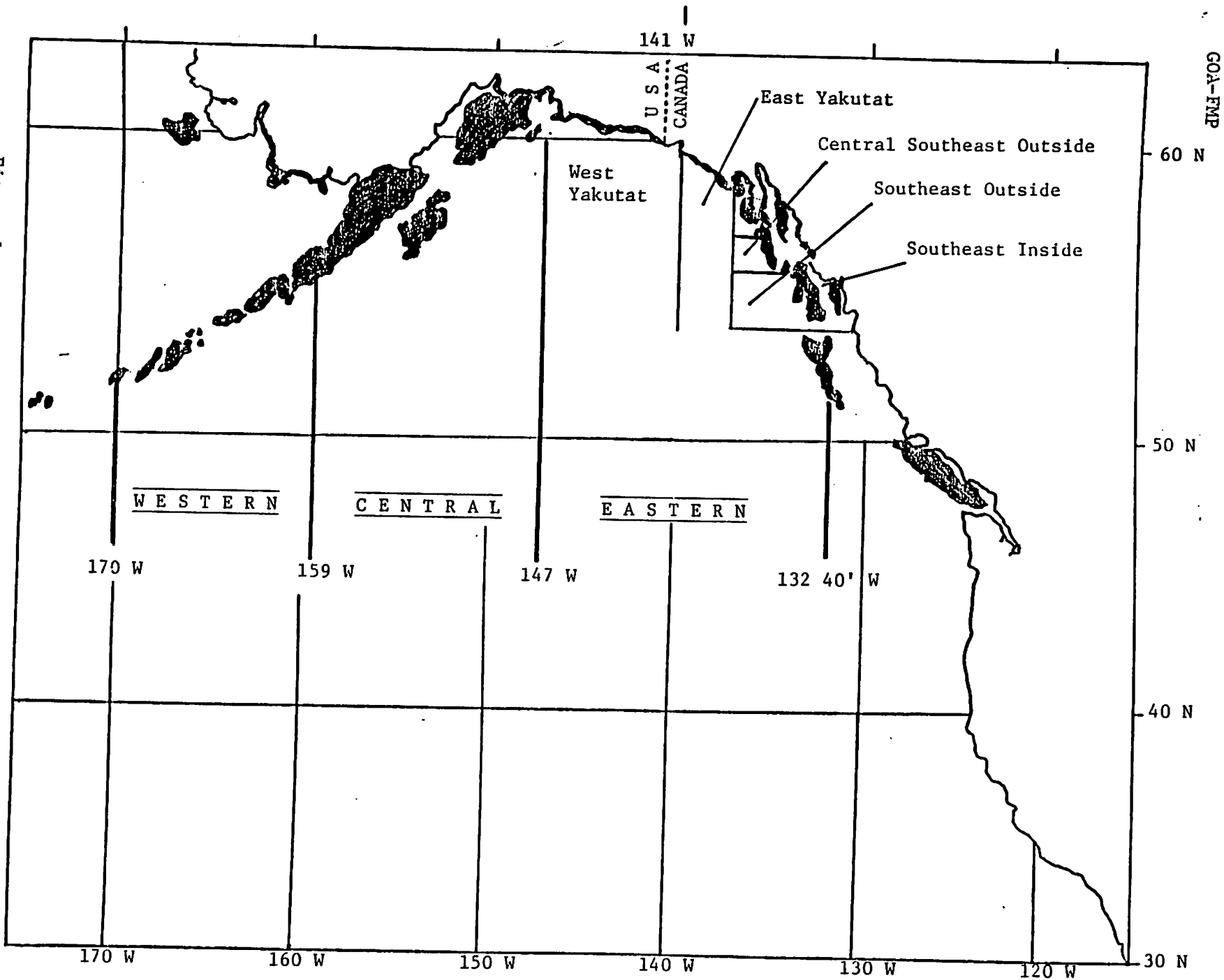
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## III. AREAS AND STOCKS INVOLVED

The Gulf of Alaska is defined to include that portion of the North Pacific Ocean exclusive of the Bering Sea, between the eastern Aleutian Islands at 170°W. longitude and Dixon Entrance at 132°40'W. longitude and includes the following regulatory areas: Western, Central, and Eastern (Figure 1). For purposes of managing pollock, the Western and Central areas are combined to allow improved management and better conservation of the pollock resource. For purposes of managing sablefish, the Eastern Regulatory Area is divided into four districts: West Yakutat (140°W. longitude to 147°W. longitude), East Yakutat (137°W. longitude to 140°W. longitude), Southeast Outside (all waters of the FCZ east of 137°W. longitude), and Southeast Inside (all waters of the territorial sea east of 137°W. longitude and north of 54°30'N. latitude). This division to protect localized sablefish stocks and is necessary to prevent overexploitation in the Eastern Regulatory Area. For purposes of managing Other Rockfish, the Eastern Area is divided into the four districts described for sablefish with the addition of a Central Southeast Outside District (all waters between 56°N and 57°30'N latitude and westward to 137°W longitude). This additional district is to protect localized rockfish stocks from overharvest and delineates the primary rockfish fishing grounds in this region.

Figure 1 indicates regulatory areas as defined by the FMP consisting of Western, Central, and Eastern. Total area of Continental Shelf in the Gulf of Alaska is about 160,000 square km, which is more than the shelf area in the Washington-California region but less than 25% of that in the eastern Bering Sea. Between Canada and Cape Spencer in the Gulf of Alaska the Continental Shelf is narrow and rough. North and west of Cape Spencer it is broader and more suitable for trawling. As it curves westerly from Cape Spencer towards Kodiak Island it extends some 50 miles seaward, making it the most extensive shelf area south of the Bering Sea. West of Kodiak Island and proceeding along the Alaska Peninsula toward the Aleutian Islands, the shelf gradually becomes narrow and rough again.

Figure 1. Regulatory Areas of the Gulf of Alaska (FMP)



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Diversity of commercial bottomfish species in the Gulf of Alaska is intermediate between the Bering Sea, where the fewest species occur, and the Washington-California region, where the most species are present. The most diverse species in the Gulf of Alaska is the rockfish group (genus Sebastes) where 27 species have been identified. While most rockfish species are found in the Eastern region of the Gulf, only six species are encountered in the Alaska Peninsula region. Only one species of rockfish, Pacific ocean perch (Sebastes alutus) has been the target of a major fishery in the Gulf of Alaska. However, several other species do support relatively small fisheries in the eastern area. For management purposes rockfish are considered to be a complex consisting of three distinct assemblages that are based on their ecological niche. These assemblages are:

## Slope Category

Pacific ocean perch (S. alutus)  
Northern rockfish (S. polyspinus)  
Rougheye rockfish (S. aleutianus)  
Shortraker rockfish (S. borealis)  
Sharpchin rockfish (S. zacentrus)  
Red banded rockfish (S. babcocki)  
Rosethorn rockfish (S. helvomaculatus)  
Darkblotch rockfish (S. crameri)  
Redstripe rockfish (S. proriger)  
Splitnose rockfish (S. diploprou)  
Harlequin rockfish (S. variegatus)  
Aurora rockfish (S. aurora)  
Yelloweye rockfish (S. ruberrimus)

## Shelf Demersal Category

Yelloweye rockfish (S. ruberrimus)  
Quillback rockfish (S. maliger)  
Canary rockfish (S. pinniger)  
China rockfish (S. nebulosus)  
Tiger rockfish (S. nigrochinctus)  
Rosethorn rockfish (S. helvomaculatus)  
Silvergray rockfish (S. brevispinus)  
Copper rockfish (S. cuorinus)

## Shelf Pelagic Category

Black rockfish (S. melanops)  
Dusky rockfish (S. ciliatus)  
Yellowtail rockfish (S. flavidus)  
Widow rockfish (S. entomelas)  
Boccacio (S. paucispinus)  
Blue rockfish (S. mystinus)

The relative abundance of fishes in the cod family (Gadidae) is also different in the Gulf of Alaska compared to the other regions. Pacific hake (Merluccius productus), the most abundant of the cod-like fishes off Washington-California, is present only in the southern portion of the Gulf and generally

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not in commercial quantities. Pollock (Theragra chalcogramma), the dominant "cod" and largest element in the bottomfish biomass of the Bering Sea, is much less abundant in the Gulf of Alaska and becomes progressively scarcer to the south until it is practically absent off Oregon. However, the abundance of pollock in the Gulf of Alaska has increased by perhaps an order of magnitude during the past decade coincident with a reduction in the abundance of Pacific ocean perch. The abundance of pollock now appears to be declining primarily as the result of poor recruitment from the 1980 and 1981 year classes. Pollock currently comprise the largest exploitable biomass within the gadoid community in the Gulf, approaching perhaps that of Pacific hake in the Washington-California region but far smaller than that of pollock in the Bering Sea. Pacific cod (Gadus macrocephalus) may reach its greatest level of abundance in the Gulf.

Other abundant groundfishes which have been the target of fisheries in the Gulf include sablefish (Anoplopoma fimbria) and Atka mackerel, a member of the greenling family (Hexagrammidae). Sablefish, which was depressed as a result of intensive fishing by foreign fleets in the 1960s and 1970s, has recovered to high levels of abundance. Atka mackerel once supported a targeted foreign fishery in the Central regulatory area over the past decade, but now has declined to negligible quantities. The 1984 survey indicates that the total biomass for Atka mackerel is 39,000 mt with 38,000 mt being available in the Western Area and 1,000 mt in the Central Area. Length frequency information suggests that the population consists mostly of large fish. Recruitment in the Central Area appears nonexistent. The absence of catches in the Eastern area indicates stocks are not sufficiently abundant to support a commercial fishery. The low abundance of Atka mackerel may be due to a westward shift in the distribution of stocks or to excessive fishing mortality. Sablefish are found from California waters northward into the Gulf of Alaska and Bering Sea, but this species reaches its greatest abundance in the Gulf of Alaska.

Many of the flounders present in the Gulf of Alaska also occur in the Bering Sea and Washington-California region; however, the relative abundance of different species varies greatly between areas. In the Bering Sea yellowfin sole (Limanda aspera) dominates the flounder community, but is comparatively

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scarce in the Gulf and absent off Washington-California. Petrale sole (Eopsetta jordani) and English sole (Parophrys vetulus) are important components of the flounder community off Washington-California but they are scarce in the Gulf and for all practical purposes absent in the Bering Sea. The arrowtooth flounder, or so-called turbot (Atheresthes stomias), is widely distributed along the Pacific and Bering Sea coasts of the United States and appears to comprise the largest part of the exploitable biomass of flounders in the Gulf of Alaska. Other abundant flounders in the Gulf include Pacific halibut (Hippoglossus stenolepis), which reaches its greatest abundance there and off British Columbia; rock sole (Lepidopsetta bilineata); starry flounder (Platichthys stellatus); flathead sole (Hippoglossoides); rex sole (Glyptocephalus zachirus); and, in deep water, the Dover sole (Microstomus pacificus).

Along the slope of the Continental Shelf, rattails (Macrouridae) and thornyhead rockfish (Sebastolobus) are important components of the groundfish community.

Elasmobranchs are represented in the Gulf by several species of sharks and skates. The spiny dogfish shark (Squalus acanthias), is much less abundant in the Gulf than in waters off British Columbia and the Pacific Northwest where it is an important element within the groundfish community. Skates (Rajidae) are widely distributed throughout the Gulf and are most abundant on the inner shelf. Ratfish (Hydrolagus collei) are present in the Gulf but are much less abundant there than in waters to the south. The abundance of all elasmobranchs appears to decrease progressing from east to west in the Gulf toward the Alaska Peninsula.

## Groundfish Species Managed by this Plan

Seven species/or species groups are managed under the Gulf of Alaska Groundfish FMP. Seven are identified as "target species" and support either a single species or mixed species target fishery.

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## Target Species

1. Pollock
2. Pacific cod
3. Flounders
4. Rockfish
  - slope assemblage
  - shelf demersal assemblage
  - shelf pelagic assemblage
5. Sablefish
6. Atka mackerel
7. Other Species

The following groundfish are managed under the Other Species category: Thornyhead rockfish, squid, sculpins, sharks, skates, eulachon, smelts, capelin and octopus.



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IV. MANAGEMENT MEASURES OUTLINE

A. General Information

B. Framework Measures

1. Setting Harvest Levels (incl. sliding scale for declining stocks)
2. Apportionment of Harvest Within DAH
3. Prohibited Species Catch Limits and Adjustments
4. Fishing Seasons for Groundfish
5. Authority to Make Inseason Time/Area Adjustments

C. Conventional Measures

1. Permits
2. Reporting Requirements
3. Gear Restrictions (i.e., legal gear, mesh restrictions, etc.)
4. Gear Allocations
5. Observers

D. Other Measures

1. Access Limitation
2. Size Limits

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## IV. MANAGEMENT MEASURES

### A. General Information

The tools that are available to the Council for controlling fisheries are called management measures. They include quotas, for target and bycatch species, seasons, gear restrictions, reporting requirements and permits. This section of the FMP describes the measures authorized for management of groundfish in the Gulf of Alaska. Measures described in this FMP fall into two categories: framework measures and conventional measures. Framework measures are those management tools that often require adjustment on an annual basis. These measures include the setting of optimum yield and the apportionment of the target quota to domestic and joint venture processors. These measures are administratively designed to provide the Council with the opportunity to rapidly respond to biological and socioeconomic changes within a fishery without formally amending the plan. Often a framework measure will produce a range of management options based on specified criteria.

Conventional measures are long-term management tools that are very specific in their application and can only be changed with a formal amendment to the FMP. Examples of conventional measures include permits, reporting requirements, gear restrictions, and specific allocations of target quotas among user groups. To change a conventional measure requires extensive analysis and public input and at least one year to implement.

Management measures are implemented through fishery regulations which may not put into effect the full range of management options of a measure. If a management decision outside of the implemented range of options is necessary, a regulatory amendment would be required.

### B. Framework Measures

#### 1. Setting Harvest Levels and Determining Optimum Yield

A framework procedure has been developed whereby the Council can set harvest levels and specify an optimum yield for groundfish fisheries on an annual

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basis. The framework procedure is best illustrated as a flow diagram presented in Figure 2. The procedure consists of three steps which require Council review and approval which ultimately leads to an OY point estimate within a specified range. Each step is described below:

## Step 1. Determination of Total Fishing Mortality and the Setting of Quotas.

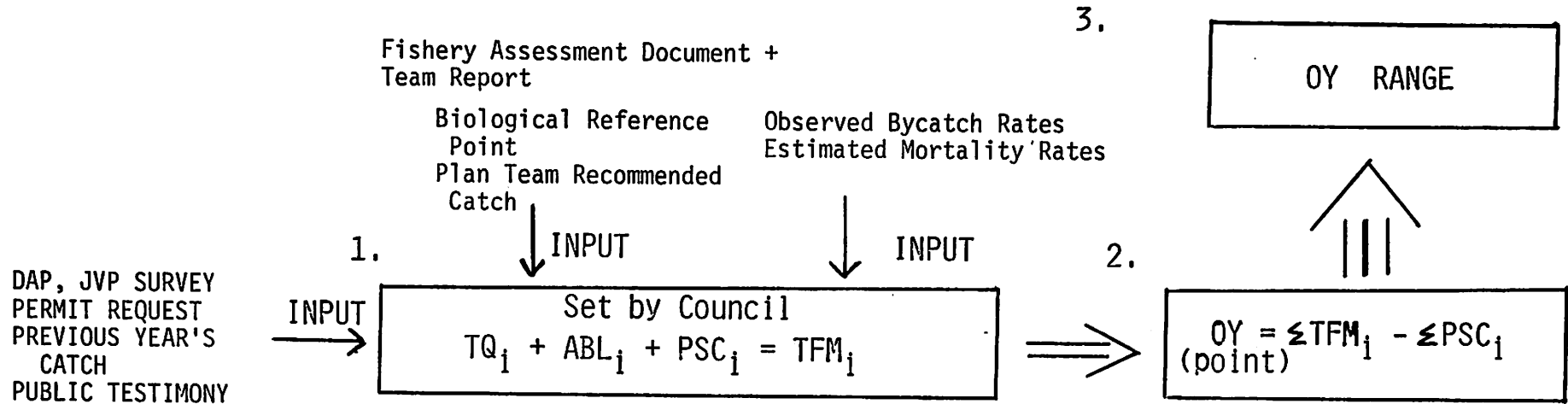
Total Fishing Mortality (TFM) is an estimate of all fishery removals of a resource in a given year. To determine the TFM for a given species or species group the following formula is used.

$$\text{TFM} = \text{Target Quota} + \text{Acceptable Bycatch Level} + \text{Prohibited Species Catch Limit}$$

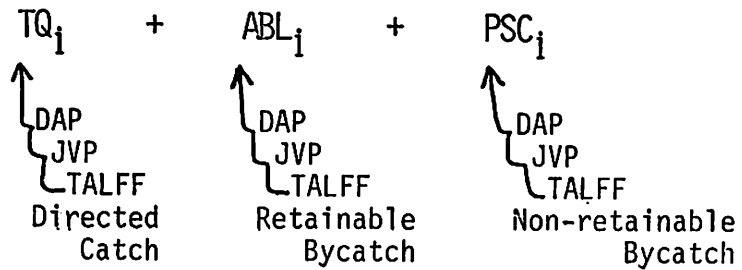
The TFM is calculated after the Council sets the Target Quota (TQ) for the directed fishery, the Acceptable Bycatch Level (ABL), which is the allocation of retainable bycatch amounts to nondirected fisheries, and the Prohibited Species Catch Limit (PSC), which is the allocation of nonretainable bycatch to nondirected fisheries. Summation of specific allocations and/or estimated harvests will produce a TFM value for each species or species group being managed under the plan.

Step 1 is initiated with the development and presentation of a Fisheries Assessment Document (FAD) and Team report that provides the Council with a biological reference point (the current biomass in relation to MSY) and the plan team's recommended catch (based on biological status of stocks). This information is important when evaluating possible TFM values against estimates of MSY. Other required information include estimates of domestic and foreign industry needs (i.e., results of industry survey, permit requests, etc.), previous year's harvest, and public testimony. All of this information will guide the Council to determining initial target quotas. A TQ is the amount of groundfish that can be harvested by a directed commercial fishery. Once initial TQs are specified, the Council will assess and allocate if necessary amounts of groundfish for bycatch purposes to domestic and foreign fisheries. Bycatch allocations can take two forms: retainable (ABL) or nonretainable (PSC). The framework authorizes the use of ABL and PSC limits which may be specified by fishery, gear, and area. Further fishing during the year is

OY FRAMEWORK



-1-



RESERVES (Species Specific)

- $Res_i = (TQ_i + ABL_i) \times RF$
- $Res_i = (TQ_i) \times RF$

No. 2 would be used if no  $ABL_i$  is specified.

TARGET QUOTA =  $TQ_i$   
 = Commercial Quota<sub>i</sub>

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prohibited in an area by those who have taken their bycatch allocation in that area. Separate ABLs and PSCs will (may) be established for the wholly domestic fishery, the joint venture fishery, and the foreign fishery. A bycatch limit may be specified in terms of incidental catch weight, numbers, or value, and in terms of catch or estimated mortality. To estimate bycatch requirements and to make bycatch allocations, information on observed bycatch rates and estimated mortality rates will be provided to the Council by the plan team and the fishing industry. Other information to be supplied include:

- (a) estimated change in the biomass and stock condition of each bycatch species or species group;
- (b) potential impact on bycatch species stocks;
- (c) potential impacts on directed fisheries for the bycatch species;
- (d) estimated incidental catch in years prior to that for which ABLs and/or PSCs are being set;
- (e) expected change in groundfish catch;
- (f) estimated change in groundfish biomass;
- (g) methods available to reduce incidental catch;
- (h) the cost of reducing incidental catch; and
- (i) other biological and socioeconomic factors that affect the appropriateness of specific bycatch measures in terms of FMP objectives.

This information will guide the Council toward estimates of bycatch needs in the fisheries. The Council may adjust the initial TQ as necessary to balance the formula.

Following the initial specification of TQs, ABLs, and PSCs for a particular species or species group, initial estimates of TFM and operational reserves can be calculated. Operational reserves is determined by the following formula:

1.  $\text{Reserves} = (\text{TQ} + \text{ABL}) \times \text{reserve factor}$

The reserve factor is a percentage that the Council applies to the retainable catch to establish an operational reserve. The reserve is used to account for

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uncertainties arising from harvests delivered to domestic processors, joint venture processors, foreign fisheries, and imprecise allocations of bycatch species in mixed species fisheries. Should the Council choose to not allocate specific bycatch amounts to nondirected fisheries or gear types, but instead only estimate bycatch harvests for purposes of determining TFM, reserves will be calculated using the following formula:

$$2. \quad \text{Reserves} = \text{TQ} \times \text{reserve factor}$$

Once initial TQs, ABLs, PSCs, TFMs, and Reserves are calculated, the Council publishes the values for a minimum 30-day public review period. At the conclusion of the public comment period, the Council reexamines the initial values in light of comments received and any new biological or socioeconomic information that is available prior to finalizing the TFMs, quotas, and bycatch amounts for the next fishing year.

With the exception of the "other species" management category, the framework procedure described above is used to determine TFM values for every specified groundfish species and species group managed by the plan. Groundfish that support their own fishery, and for which a sufficient database exists that allows each to be managed on the basis of its own biological, social, economic, and ecological merits, are called "target species". Groundfish species that are not specified as a "target species" are collectively grouped in the "other species" category. These species currently are of slight economic value and not generally targeted upon. This category, however, contains species with economic potential or are important ecosystem components, but sufficient data is lacking to manage each separately. Accordingly, a single TFM, equal to 5% of the combined TFMs for "target species", applies to this category as a whole. Records of catch of this category as a whole must be maintained.

## Step 2. Determination of Optimum Yield for the Fishing Year.

For purposes of managing groundfish resources in the Gulf of Alaska, optimum yield (OY) is that yield from the groundfish fishery as a whole which provides

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the greatest overall benefit to the nation. All retainable harvests must fall within the OY range. Each year the OY is determined by the following formula:

$$OY = \sum TFM - \sum PSC$$

where the summation of all PSCs calculated for every species or species group managed by the plan, is subtracted from the sum of all TFM values. The result is a point estimate of OY for groundfish for that year. An initial OY is subject to the same public review period as described in Step 1. A final OY is calculated following finalization of its component parts.

### Step 3. Evaluation of OY Estimate With OY Range.

An OY range for Gulf of Alaska groundfish resources has been determined based on historical fishery performance. A summation of all historical commercial groundfish species low and high harvests during the base period of 1965-1984 provides a range of 115,000 mt to 810,000 mt. The base period from 1965 to 1984 was selected since it encompasses twenty years and that large harvests of both Pacific ocean perch and pollock would be included within the range.

Following the determination of an OY for a given year, its placement with the OY range is of interest. This exercise is only intended as a monitoring scheme, providing a benchmark for management. It should be noted that an OY for a particular year is very dependent on the abundance of pollock in the Gulf of Alaska. The OYs will likely mirror fluctuations in the pollock resource. Given the uncertainties surrounding these fluctuations, it is recognized that in some years the calculated OY may fall outside the historic OY range but for most years it will fall within the specified range.

### Implementation of the OY Framework

Upon review, it might appear that the framework procedure is extremely complicated and that the Council must review and set numerous quotas, bycatch levels and allocations. Under the old OY format, the Council had fewer specific numbers to formally review and set, in part due to limited biological

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and socioeconomic information on the resource and that the fishery itself was undergoing its initial stage of development.

However, since 1980 more information has become available and is now routinely requested by the public and Council. Many of the decisions discarded in the framework are currently being made, but without an established procedure. With the framework, the Council will now proceed through its decision-making by reviewing all relevant information and following a defined procedure with specified steps. This is a major advantage of the framework. Council development of initial TFMs, TQs, bycatch levels, and OY can be simplified with the aid of electronic calculators and computers. Given these tools, the goal to maximize revenues from this resource and other plan objectives, the Council will be able to examine a starting set of harvest and bycatch values, make necessary revisions and adjustments, observe changed value effects on other fisheries, and approve initial or final values within the time frame of their meeting.

Following the determination of initial TFMs, TQs, bycatch levels, and OY the Regional Director will issue a notice of the initial values by October 1 of the preceding fishing year. After Council approval a final notice of TFMs, TQs, bycatch levels, and OY will be issued by December 31.

## 2. Apportionment of Harvest Within DAH

Expected domestic annual harvest (DAH) is the estimated portion of the U.S. groundfish harvest which will be utilized by domestic processors (DAP), which includes those amounts of groundfish "processed" for use as bait or for personal consumption, and the estimated portion, if any, delivered to foreign processors (JVP) which are permitted to receive U.S. harvested groundfish in the Fishery Conservation Zone and internal waters. The total allowable level of foreign fishing (TALFF) is the directed foreign groundfish harvest that is surplus to domestic requirements.

The estimate of DAP will be updated annually based upon the previous year's production and projected increases in U.S. processing. JVP is the U.S. harvested portion of the target quota (TQ) in excess of the estimated amount



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to be utilized by U.S. processors or for which actual domestic markets are not available, that will be delivered to foreign processors who are authorized to receive such U.S. harvested fish. Estimates of domestic utilization in this category are updated annually based upon the previous year's catch and projected increases in catch anticipated by the various joint venture companies. The projected increases in DAP and JVP will be based on surveys conducted by the National Marine Fisheries Service, recommendations from the Council, information provided by the domestic fishing industry, other agencies, and knowledgeable people. TALFF is the foreign portion of TQ in excess of the estimated amount required to satisfy U.S. needs. The Regional Director, upon recommendation of the Council, will publish a notice in the Federal Register of proposed apportionments of each TQ among DAP, JVP and TALFF as soon as practicable after October 1. Based on comments received he will publish a final notice of DAP, JVP and TALFF apportionments before January 1 of each new year.

Estimates of future production by processors are difficult, if not impossible, to make accurately. It is generally recognized by those processors making the estimates that their figures are optimal and based on assumptions that sometimes do not materialize. Machinery or installation delays, changes in markets, better than normal alternative fisheries for the fishing fleets (or processors) may all affect their actual production. Therefore, a DAH reassessment system and release mechanism is established through this FMP and by regulation to allow adjustments in DAH during the fishing year.

Production by U.S. fishermen and processors shall be reassessed periodically based on:

- (a) Catch and production to date during the year.
- (b) Current fishing and production activity.
- (c) Projections for additional catch and production during the remainder of the year based on demonstrated capacity.

The Regional Director may reassess the DAP and JVP at any time and apportion to them any amounts from the operational reserve that he finds will be taken by each category. As the fishing season progresses, should the initial DAP

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exceed timely expectations of actual harvest, the Regional Director shall reapportion the excess to JVP, if needed, or to TALFF.

If the initial JVP exceeds timely expectations of actual harvest, the Regional Director shall reapportion the excess to DAP, if needed, or to TALFF.

The Regional Director shall apportion to TALFF as soon as practicable after April 1, June 1, and August 1, and on such other dates as he determines appropriate any portion of JVP and/or DAP that he determines will not be harvested by U.S. fishing vessels during the remainder of the fishing year.

When the Regional Director determines that apportionment is required and that immediate action is necessary to increase DAP, JVP or TALFF, he may decide that such an adjustment is to be made without affording a prior opportunity for public comment. Public comments on the necessity for, and the extent of the apportionment shall then be submitted to the Regional Director for a number of days after the effective date that will be specified in a notice announcing such action.

### 3. Prohibited Species Catch Limits and Adjustments

The Council believes that discarding incidental catches of fish is wasteful and should be minimized. However, recognizing that in the groundfish fisheries some species incidentally caught are managed by other fishery management plans, the treatment of these species as a prohibited species is appropriate in the short term.

For purposes of controlling bycatch of other high valued species not managed by this plan when harvesting groundfish, the Council has identified four species groups which are categorized as "Prohibited Species". The four species groups are: Pacific halibut, Pacific salmon, king crab, and Tanner crab. 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, it therefore, results in a lower incidental catch. It also

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eliminates the market competition that might otherwise exist between domestic crab, halibut, and salmon fishermen and groundfish fishermen who might land crab, halibut, and salmon in the absence of the prohibition.

Halibut, salmon, king, and Tanner crab that are taken as bycatch in the groundfish fisheries results in fishing mortality even though the FMP requires that these species be discarded because the survival rate of these species is typically less than 100% and may approach zero in species catch limits (PSC) which may be specified by fishery, area, and gear. When necessary, a PSC limit may be established for each prohibited species group.

When a PSC is reached further fishing with specific types of gear or modes of operation during the year is prohibited in an area by those who take their prohibited species catch (PSC) limit in that area.

Separate PSC limits may be established for the wholly domestic fishery and the joint venture fishery for each area. Separate PSC limits may be established for specific gear.

PSC limits will be determined annually, if necessary, by the Regional Director of NMFS-AK in consultation with the Council. Prior to the Regional Director's determination, the Council will make recommendations to him for each fishery and area based on the best available information concerning the affected stocks and fisheries. The Regional Director will make these recommendations and supporting information available to the public for comment. If the Council does not make recommendations by December 15, the PSC measures already established shall automatically constitute the Council's recommendations to the Regional Director.

Prior to the beginning of the fishing year, the Regional Director will determine:

- (a) the areas for which PSC limits will be established;
- (b) the numbers of PSC limits per area and fishery;
- (c) the level of each PSC limit;
- (d) whether PSC limits will be allocated to individual operation;

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- (e) the methods of allocation to be used; and
- (f) the types of gear or modes of operation to be prohibited once a PSC limit is taken.

The Regional Director may change the PSC measures during the year for which they were set if, as new information becomes available, it is apparent to him that his initial determination has become inappropriate with respect to meeting FMP objectives. The Council may recommend such inseason changes based on new information.

The Council's recommendations on PSC measures will be based on the following types of information:

- (a) estimated bycatch in years prior to that for which PSC limits are being set;
- (b) expected change in groundfish catch;
- (c) estimated change in groundfish biomass;
- (d) methods available to reduce bycatch;
- (e) the cost of reducing bycatch; and
- (f) other biological and socioeconomic factors that affect the appropriateness of specific PSC limits in terms of FMP objectives.

In addition for halibut:

- (a) estimated change in halibut biomass and stock condition;
- (b) potential impact on halibut stocks; and
- (c) potential impacts on domestic halibut fishery.

In addition for king/Tanner crab:

- (a) estimated change in king/Tanner crab biomass and stock condition;
- (b) potential impact on king/Tanner crab stocks; and
- (c) potential impacts on domestic king/Tanner crab fishery.

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In addition for salmon:

- (a) estimated change in salmon biomass and stock condition;
- (b) potential impact on salmon stocks; and
- (c) potential impacts on domestic salmon fishery.

For the first fishing year for which this section is effective, the Regional Director will determine the PSC measures to implement using the best information available if the Council does not make recommendations prior to October of the year preceding the year for which they are established.

The Regional Director, after consulting with the Council, will implement the PSC measures by the most expeditious procedures that are available under federal law.

#### 4. Fishing Seasons for Groundfish

Fishing season(s) is defined as the period specified when harvesting a fishery resource is permitted. Fishing seasons will usually be within a fishing year for statistical purposes. However, it is recognized that there may be occasions where management of fisheries require seasons which extend into the next fishing year. The designation of a fishing season by the Council can be used to meet a variety of management objectives, thereby, providing the Council with one of its most useful management tools. To optimize its use, the fishing season management measure has been frameworked to allow the Council to adjust fishing seasons on an annual basis following a review of biological and socioeconomic factors. Implementation of the season dates will occur by either a regulatory amendment or a rule-related notice depending on time available.

The use of the management measure will begin with a public call for proposals. Proposals received by the Council will be evaluated based on their achievement of biological and socioeconomic criteria. Some of the criteria or factors the Council may consider in recommending fishing seasons are:

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- Biological risks: spawning periods, migration, and other information, thereby, minimizing the biological risk to the groundfish resource.
- Product quality: producing the highest quality product to the consumer.
- Weather: seasons scheduled to avoid severe weather conditions, and, therefore, minimize loss of fishing time, men, ships, and equipment.
- Cost: Costs of industry operations are affected by the timing of seasons.
- Other fisheries: that will be making demands on the same harvesting, processing, and transportation systems needed in the groundfish fishery.
- Coordinated season timing: the need to spread fishing effort, minimize gear conflicts, and allow participation by all elements of the groundfish fleet.
- Enforcement and management costs: the costs of enforcement and management as affected by the timing and area of different groundfish seasons and as affected by seasons for other resources.

Following a review of the fishing season proposals, the Council may approve or disapprove one or more proposals depending whether the proposed season change provides significant advantages over the designated fishing season it is intended to replace.

## Specification of Opening and Closing Dates of the Fishing Season by the Issuance of Notices.

The Council may find it necessary to adjust season opening and closing dates prior to a groundfish fishing season on the basis of biological and socioeconomic considerations discussed above. These considerations are

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designed to protect the groundfish resource while optimizing the economic efficiency of the industry. As some of these preseason adjustments may be necessary, and implementing a regulatory amendment in a timely manner may not be possible, the use of a notice procedure is authorized.

Following a Council review of proposed season dates and their accompanying rationale, the Council will consider such proposals based on biological and socioeconomic factors. Following this review, any approved changes to existing season will be submitted to the Regional Director, Alaska Region, National Marine Fisheries Service, for review and approval. Upon receipt of the new seasons, the Regional Director will publish in the Federal Register a notice to establish new groundfish seasons and invite public comment for 30 days on his initial determinations. After considering any comments received, the Regional Director shall publish in the Federal Register a notice of his final determination.

The socioeconomic factors that the Regional Director must consider in addition to biological factors in making his final determination are listed below. It is, however, recognized that the Council and Regional Director may have to consider other factors which are relevant to the conservation and management of groundfish and cannot be forecast at this time. The following factors are identical to those considered by the Council and their accompanying descriptions have been provided above.

- (a) Biological risks
- (b) Product quality
- (c) Weather
- (d) Cost
- (e) Other fisheries
- (f) Coordinated season timing
- (g) Enforcement and management costs

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## 5. Authority to Make Inseason Time/Area Adjustments

In the course of a fishing season, the harvest levels and season opening and closing dates specified under the other provisions of the FMP may be found to require modification in light of all relevant information. Under such circumstances, the Regional Director may take prompt action to modify those harvest levels and season opening dates in all or part of a management area in order to meet the biological or socioeconomic criteria of the FMP. The Regional Director is hereby authorized to take such action, using the most expeditious procedures that are permissible under Federal law, after considering all relevant information based on one or more of the following biological and socioeconomic factors:

### Biological factors:

- (a) The effect of overall fishing effort within the management area, or parts thereof;
- (b) Catch per unit of effort and rate of harvest;
- (c) Relative abundance of stocks within the management area or parts thereof;
- (d) The proportion of other groundfish, halibut, salmon, or crab being caught, the retention of which is prohibited;
- (e) General information on the condition of stocks within the area or parts thereof;
- (f) Information pertaining to the optimum yield for stocks within the management area; or
- (g) Any other factors necessary for the conservation and management of the groundfish, halibut, salmon, or crab resources.

### Socioeconomic factors:

- (a) Fishing time required by the available harvesting and processing capacity to utilize harvestable groundfish;



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- (b) Advantages of coordinating the harvesting and processing of certain groundfish species with fisheries for other groundfish, Pacific halibut, crab, and salmon that may compete for the same harvesting and processing facilities, eg. ice supplies and refrigeration;
- (c) Consideration of costs to segments of the industry that may be affected by timing of seasons;
- (d) The need to slow the rate or amount of harvest in a management area to serve other socioeconomic or biological factors;
- (e) Consideration of enforcement and management costs as a result of added fishing time;
- (f) Desirability of providing an opportunity to conduct an exploratory fishery on underutilized groundfish stocks;
- (g) The need to avoid loss of fishing time during unsafe weather conditions to promote safety among the fishing fleet.

The Regional Director of NMFS shall use field orders to regulate the taking of sablefish to provide for the full achievement of the optimum yields for sablefish and other species. The use of field order authority may include the designation of sablefish as a bycatch-only species in any legal fishery once a specified fraction of the OY for that fishery has been taken, and any other measures that may be necessary to prevent the achievement of the sablefish allocation for a particular gear from closing other fisheries with the same gear which depend on incidental amounts of sablefish.

## C. Conventional Measures

### 1. Permits

All U.S. fishing vessels operating in that part of the Gulf of Alaska groundfish fishery which is under Council jurisdiction must have a current permit issued annually by the Secretary of Commerce or, if considered acceptable by the Secretary of Commerce, a State of Alaska vessel license. The following information is required when applying for a federal fishing or processing permit:

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## Vessel Registration/Gear Licensing

U.S.C.G. document no.  
State agency boat plate no.  
State marine board no.  
Vessel length  
Gear type(s)

## 2. Reporting Requirements

Fishery statistics, including value of the catch, shall be reported within 7 days of the date of landing using fish tickets and compiled by months. The following information will be provided on the fish ticket:

### Landing/Fish Receipt

Port of landing  
Date of landing  
Area of catch  
State agency boat plate no.  
Species and pounds  
Gear type(s)  
Value of catch  
Ticket no.

In addition to elements identified above, fishing effort (e.g., days out of port, days on the grounds, or number of landings) should also be reported.

Area of catch should be compatible with the major statistical area described in this plan. Where possible, such reporting should be augmented with fishermen interviews and verification of data by logbook review.

With regard to the timeliness of reporting, all elements of the above format should be available to the Council, in summary form (e.g., catch by species, by vessel class and gear type, by major statistical area, and by month) no later than 3 months after the end of the month of record. Annual summary reports of final fishery statistics and computer tapes, cards, or disks containing the basic fishery data, in accordance with applicable State and Federal statutes regarding confidentiality of data, should be available to the Council by July of the following year.

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Processor Reports. All processors of groundfish, buyers of groundfish whose purchases enter nonprocessed fish markets, except fishermen buying for their own bait needs and persons delivering U.S. caught groundfish to foreign processor vessels shall report information required for periodic reassessment of DAP and JVP. The regulations implementing this plan specify the information to be reported and the time schedule for reporting.

Catcher/Processors Reports.

- (a) Reporting requirements. Vessels that catch and process groundfish at sea (catcher/processors) often do not land their catch for periods of several weeks. The Council considers such catcher/processors to be those vessels that have the capacity to freeze their catch at sea and are able, therefore, to remain at sea for periods of more than two weeks before returning to port.

Thus, while they are required to complete and submit a fish ticket upon landing their catch to the appropriate management agency within a period prescribed by regulation, catch information supplied by a fish ticket may not reach the management agencies in time to affect inseason management decisions concerning time/area adjustments or apportionments of surplus groundfish among the various users. Hence, those vessels that catch and process at sea and do not land their catch within two weeks from the date of catch are required to report the hail weights of their catch within a period prescribed by regulation. Such report must be in writing and must be submitted to the Director, Alaska Region, National Marine Fisheries Service. The Council intends that each vessel operator be responsible for submitting the written report by whatever means are available to him. The Council does not intend that a catcher/processor, which lands its catch within two weeks from the date of catch, provide a written catch report in addition to the required fish ticket.

- (b) Check-in and check-out report. Catcher/processors are required to check-in and check-out of any regulatory area or district for which an optimum yield is established within a time period prescribed by regulation. This report may be by radio through the U.S. Coast Guard to

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the Director, National Marine Fisheries Service. The Council intends that this requirement will enhance the National Marine Fisheries Service's ability to monitor the timeliness of the written catch reports described in (a) above and to assess the total harvest capacity in a regulatory area/district for purposes of projecting dates when an optimum yield will be reached.

### 3. Gear Restrictions (i.e., legal gear, mesh restrictions, etc.)

This plan authorizes the use of trawls, pot and longline, and hook and longline as legal gear for the commercial harvest of groundfish. Further area restrictions apply and are described below. All other gear is prohibited. However, possession of an experimental fishery permit authorizes the use of another form of gear on a limited basis. Application for use of experimental gear must be made to the Regional Director, Alaska Region, National Marine Fisheries Service, and contain the following elements:

Personal name  
Vessel name  
Valid federal fishing permit  
Description of gear type  
Description of experiment

Upon completion of the experiment, a written report is to be made available to NMFS for distribution.

#### Eastern Area.

Legal gear. Legal gears for the taking of sablefish are trawls and hook-longlines.

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## Central Area.

Legal gear. In 1986, legal gears for the taking of sablefish are trawls, hooks and longlines, and pot longlines. In 1987, and thereafter, legal gears shall be trawls and hooks and longlines.

## Western Area.

Legal gear. In 1986, 1987, and 1988, legal gears for the taking of sablefish are hooks and longlines, pot longlines, and trawls. In 1989 and thereafter, legal gears shall be trawls and hooks and longlines.

Gear Limitations. All sablefish pots must have a biodegradeable escape panel, with an opening in the webbing equal in perimeter to the tunnel eye opening. This opening must be laced on otherwise secured with untreated cotton twine or other natural thread no larger than 120 thread."

## 4. Gear Allocations

The following gear allocations are specified by this plan.

## Eastern Area.

Allocation of sablefish between gears. From 1986 forward, vessels using hook and longline gear shall be permitted to take up to 95% of the OY for sablefish. Vessels using trawl gear shall be permitted to harvest up to 5% of the Optimum Yield for sablefish.

## Central Area.

Allocation of sablefish between gears. In 1986, vessels using hook and longline gear shall be permitted to take up to 55% of the sablefish OY; vessels using pot-longline gear shall be permitted to take up to 25% of the OY; and trawl vessels shall be permitted to take up to 20% of the OY.

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In 1987 and thereafter, vessels using hook and longline gear shall be permitted to take up to 80% of the sablefish OY; and vessels using trawl gear shall be permitted to take up to 20% of the OY.

## Western Area.

Allocation of sablefish between gears. In 1986, 1987, and 1988, vessels using hook and longline gear shall be permitted to take up to 55% of the OY for sablefish; vessels using pot longline gear shall be permitted to take up to 25% of the OY; and vessels using trawls may take up to 20% of the OY. In 1989 and thereafter, vessels using hooks and longlines may take up to 80% of the OY; and vessels using trawls may take up to 20% of the OY.

## 5. Observers

All fishing vessels operating in this management unit may be required to accommodate and pay the costs for one (two on motherships) NMFS-certified onboard observer. Observers will be assigned to individual vessels and for periods at the discretion of the U.S. Government (for foreign vessels) or the National Marine Fisheries Service (for domestic vessels) to: measure catch rates; estimate species, size, and age composition of the catch; collect other biological data; determine location and duration of hauls or sets; and observe gear configuration and performance. The Council may reserve the right to close areas at certain times of the year to vessels that do not have NMFS-certified observers on board.

## D. Other Measures

### 1. Access Limitation

The Council may wish to limit access in the fisheries in the Gulf of Alaska in order to maintain an orderly fishery and prevent overcapitalization in the harvesting sector. An objective for fisheries management as stated in the MFCMA is to maximize the benefit to the nation derived from fisheries. This implies efficient use of our nation's resources including labor and capital.

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When an industry that harvests a common-property resource becomes overcapitalized, as is often the case in the commercial fisheries, society's resources are not used in their most efficient manner. This will make it difficult to maximize the fishery's benefit to the nation. It should be noted that other factors besides efficiency are considered by the Council and may make access limitation less attractive in certain situations; however, limiting access in a fishery is an important management tool and the option to use it should be made available to managers.

Access limitation may take the form of a limit on the number of licenses issued for a fishery, individual shares of the annual quota, taxes on catch, or high license or landing fees. Taxes and fees may be used in conjunction with license limitation or individual quotas.

## 2. Size Limits

A commercial size limit for a particular species group may be necessary to afford the opportunity for the species to reproduce or to direct fishing toward an optimal size given existing markets and processing capabilities. Should the Council desire a size limit, the plan will require an amendment specifying a specific length and the supporting rationale for the limit.

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## DRAFT MINUTES

Gulf of Alaska FMP Workgroup Meeting  
February 27-28, 1986

The Council workgroup met in Seattle February 27-28, 1986 to continue development of goals and objectives for the Gulf of Alaska groundfish fisheries. In attendance were:

<u>Council</u>	<u>Advisory Panel</u>	<u>SSC</u>	<u>Others</u>
Sara Hemphill (Chairman)	John Woodruff	Don Bevan	Jim Branson
John Harville	Al Burch	Rich Marasco	Fred Gaffney
John Peterson	Thorn Smith		Steve Dickinson
John Winther			John van Amerongen

The workgroup convened at 9:00 a.m. Thursday, February 27, at the Northwest & Alaska Fisheries Center at Sand Point, Seattle to continue work on (1) expansion and refinement of the goals and objectives for the groundfish fishery of the Gulf of Alaska; and (2) guidance to the Plan Team on revising the FMP. The Plan Team was meeting at the same time in an adjacent room and members from both groups interacted during the day-and-a-half the workgroup was in session.

The workgroup started with a discussion of Plan Team needs with Steve Davis, the Council staff member on the Gulf Groundfish Plan Team, and centered around the efficiency of using maximum economic yield as the primary criterion for management of the Gulf groundfish resource.

The workgroup met with the entire Plan Team from 9:45 a.m. to 11:30 a.m. and discussed the terms used for development of the plan and the goals and objectives and how the primary goal of maximum economic yield could best be applied to management.

After lunch the workgroup reviewed the tentative groundfish management plan objectives used by Steve Davis at the December Council meeting to arrive at first approximations of OYs and management measures for 1986. The workgroup concluded that those tentative objectives would be largely incorporated in the



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draft goals statements developed at the November workgroup meeting with some revision and expansion.

The workgroup spent the rest of the day redrafting the "Draft Goals Statement for Management of Gulf of Alaska Groundfish Fisheries" developed by the workgroup in November. They recessed at 5:00 p.m.

The group reconvened at 9:00 a.m. Friday, February 28, reviewed the draft document produced during the previous day's meeting, made some changes and additions, and produced the attached "Draft Goals Statement for Management of Gulf of Alaska Groundfish Fisheries" as their recommendation to the Council for inclusion in the Gulf of Alaska Groundfish Fishery Management Plan.

The workgroup adjourned at 12:30 p.m., immediately preceding a Council ad hoc conference call with Regional Director Bob McVey to discuss the Bering Sea emergency action taken by the Council at the January meeting.

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2/28/86

## Draft Goals Statement for Management of Gulf of Alaska Groundfish Fisheries

### Preamble

The North Pacific Council is committed to develop long-range plans for managing the Gulf of Alaska groundfish fisheries that will promote a stable planning environment for the seafood industry and will maintain the health of the resource and environment. In developing allocation and harvesting systems, the Council will give overriding consideration to maximizing economic benefits to the United States. Such management will:

- (1) Conform to the National Standards and to NPFMC Comprehensive Fishery Management goals;
- (2) Be designed to assure that to the extent practicable:
  - a. commercial, recreational, and subsistence benefits may be obtained on a continuing basis;
  - b. minimize the changes of irreversible or long-term adverse effects on fishery resources and the marine environment;
  - c. a multiplicity of options will be available with respect to future uses of these resources;
  - d. regulations will be long term and stable with changes kept to a minimum.

Principal Management Goal: Groundfish resources of the Gulf of Alaska will be managed to maximize positive economic benefits to the United States, consistent with resource stewardship responsibilities for the continuing welfare of the Gulf of Alaska living marine resources. Economic benefits

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include, but are not limited to profits, benefits to consumers, income and employment.

To implement this goal, the Council establishes the following objectives for the Gulf of Alaska.

Objective 1: The Council will establish annual harvest guidelines, within biological constraints, for each groundfish fishery and mix of species taken in that fishery;

Objective 2: In setting annual harvest guidelines, the Council will account for all fishery-related removals by all gear types for each groundfish species, including bycatches, prohibited species, sport fishery, and subsistence catches, as well as by directed fisheries.

Objective 3: The Council will manage the fisheries to minimize waste by:

(a) developing alternative approaches to treating bycatches as prohibited species. Any system adopted must address the problems of covert targeting and enforcement.

(b) developing management measures that encourage clean fisheries through gear and fishing technique modifications to minimize discards.

Objective 4: The Council will manage groundfish resources of the Gulf of Alaska to stimulate development of fully domestic groundfish fishery operations.

Objective 5: Only when requested to do so by the industry will the Council develop measures to limit the number of participants in a fishery, including systems to convert the common property resource to private property.

Objective 6: Rebuilding depleted stocks will be undertaken only if benefits to the United States can be predicted after evaluating the associated costs and benefits and the impacts on related fisheries.

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Objective 7: Population thresholds will be established for major species or species complexes under Council management on the basis of the best scientific judgements of minimum population levels required to maintain strong reproduction potential over the long term. If population estimates drop below those thresholds, continued harvest will be constrained until stocks rebuild. Allowable biological catch (ABC) indicates surplus above threshold levels available for harvest.

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# COMMERCIAL FISHING

Alaska Department of Fish & Game

*emergency order*

under authority  
of AS 16.05.060

EMERGENCY ORDER NO. 4-S-08-86

Issued at Kodiak, AK 99615  
March [ ], 1986

EFFECTIVE DATE: 12:00 Noon  
March [ ], 1986

Expiration Date:  
December 31, 1986

EXPLANATION:

This emergency order closes Akutan Bay, Unalaska Bay, Makushin Bay, Inanudak Bay, Akun Bay and Beaver Inlet to trawl gear year around, other than pelagic trawls.

REGULATION:

5 AAC 39.165. TRAWL GEAR UNLAWFUL. is amended to read:

5 AAC 39.165. TRAWL GEAR UNLAWFUL. (b) The following waters are closed to trawling other than pelagic trawls year around:

(6) Akutan Bay - all waters inside Akun Head at 54°18' N. lat., 165°38' W. long. to North Head at 54°14' N. lat., 165°56' W. long., and north of 54°08' N. lat. in Akun Strait.

(7) Unalaska Bay - all waters inside Cape Cheerful at 54°01' N. lat., 166°40' W. long. to Cape Kalekta at 54°00'30" N. lat., 166°22' W. long.

(8) Makushin Bay - all waters inside Cape Kovrizhka at 53°51' N. lat., 167°09'30" W. long. to Cape Idak at 53°31'20" N. lat., 167°47' W. long. thence to Konets Head at 53°19'30" N. lat., 167°50'45" W. long.

(9) Inanudak Bay - all waters inside Cape Aslik at 53°25' N. lat., 168°24'30" W. long. then to Cape Ilmalianuk at 53°16'15" N. lat., 168°35'30" W. long.

(10) Akun Bay - all waters inside Billings Head at 54°17'30" N. lat., 165°28'30" W. long. to a point on the opposite shore at 54°13' N. lat., 165°24'30" W. long.

(11) Beaver Inlet - all waters inside Brundage Head at 53°56' N. lat., 166°12'30" W. long. to Cape Sedanka at 53°50'30" N. lat., 166°05'20" W. long. and north of 53°42' N. lat.

For purposes of this emergency order, pelagic trawls are defined as follows:

DRAFT

Pelagic Trawl means a trawl in which neither the net nor the trawl doors (or other trawl-spreading device) operates in contact with the seabed, and which does not have attached to it any protective device (such as chafing gear, rollers, or bobbins) that would make it suitable for fishing in contact with the seabed.

Fishermen wishing to use pelagic trawls in these closed waters are required to have properly functioning recording net sounding devices on their pelagic trawls.

Don W. Collinsworth  
Commissioner

by delegation to: Martin F. Eaton  
Regional Shellfish Biologist  
Westward Region

JUSTIFICATION:

Red king crab resources in the Dutch Harbor (Area O) Management Area of the Gulf of Alaska are at historical low levels. Reproductive stocks have declined severely, primarily as a result of successive recruitment failures of juveniles. The directed king crab fishery has remained closed for the last three years to protect stocks. No short term recovery of stocks is likely as abundance of crabs one to four years from attaining legal size is extremely low.

King crab congregate during the winter and spring to molt and mate. The molting and mating period extends from late January through June and crabs may take two to three months to reach a hardshell condition after molting. Most molting and mating occurs from about mid February through early June in water depths less than 40 fathoms. King crab seasons are designed to avoid mating and softshell periods and must take place outside of the period February 15 to August 1 in the Dutch Harbor Management Area.

There are certain areas where mating and molting king crab have historically formed concentrations. Although there are fewer crabs in these areas because of present low stocks, the areas in which molting and mating have historically been concentrated remain similar. King crab are particularly susceptible to damage from handling and encounters with fishing gear during molting and the subsequent softshell period. Bottom trawls are known to capture a broader size range of crabs in various states of hardness than do pots. Additionally, trawls and dredges are generally acknowledged to inflict some damage and mortality on crabs encountered by the gear but not retained. The Department has broad experience with pots and trawls as research tools for assessing king and Tanner crabs at various times of the year. The catchability and condition of crabs captured in each gear type is always a consideration relative to the time of year each gear type is most effective.

# DRAFT

E.O. 4-S-08-86

-3-

March [ ], 1986

Historically, fisheries not targeting on crabs but known to be damaging to crab stocks have been restricted. Scallop fishing with dredges, for example, is prohibited all year in many bays of the Dutch Harbor Management Area to protect major king and Tanner crab stocks. In certain areas open to scallop fishing that contain substantial stocks in king and Tanner crabs, seasons are established to avoid most of the crab's softshelled period.

The dangerously low numbers of king crab indicated by survey data, suggest all effective conservation methods available should be employed to maintain the small remaining reproductive stocks, therefore, the above delineated closures are implemented to protect king crab. These closures will become regulations effective approximately June 15, 1986.

## DISTRIBUTION:

Lieutenant Governor; Attorney General; Commissioner of Fish and Game; Director of the Division of Commercial Fisheries; Regional Supervisor, Division of Fish and Wildlife Protection; Detachment Commander, Fish and Wildlife Protection, Kodiak; members of the Alaska Board of Fisheries; Commanding Officer, U.S. Coast Guard, Anchorage, Kodiak and Juneau; Alaska Regional Director of the National Marine Fisheries Service. This emergency order is distributed to all Westward Region commercial shellfish processors and advisory committees and fishermen associations; the Kodiak Mirror; and broadcast over appropriate frequencies at Kodiak. Copies may be obtained from the Department of Fish and Game office in Kodiak.

DRAFT

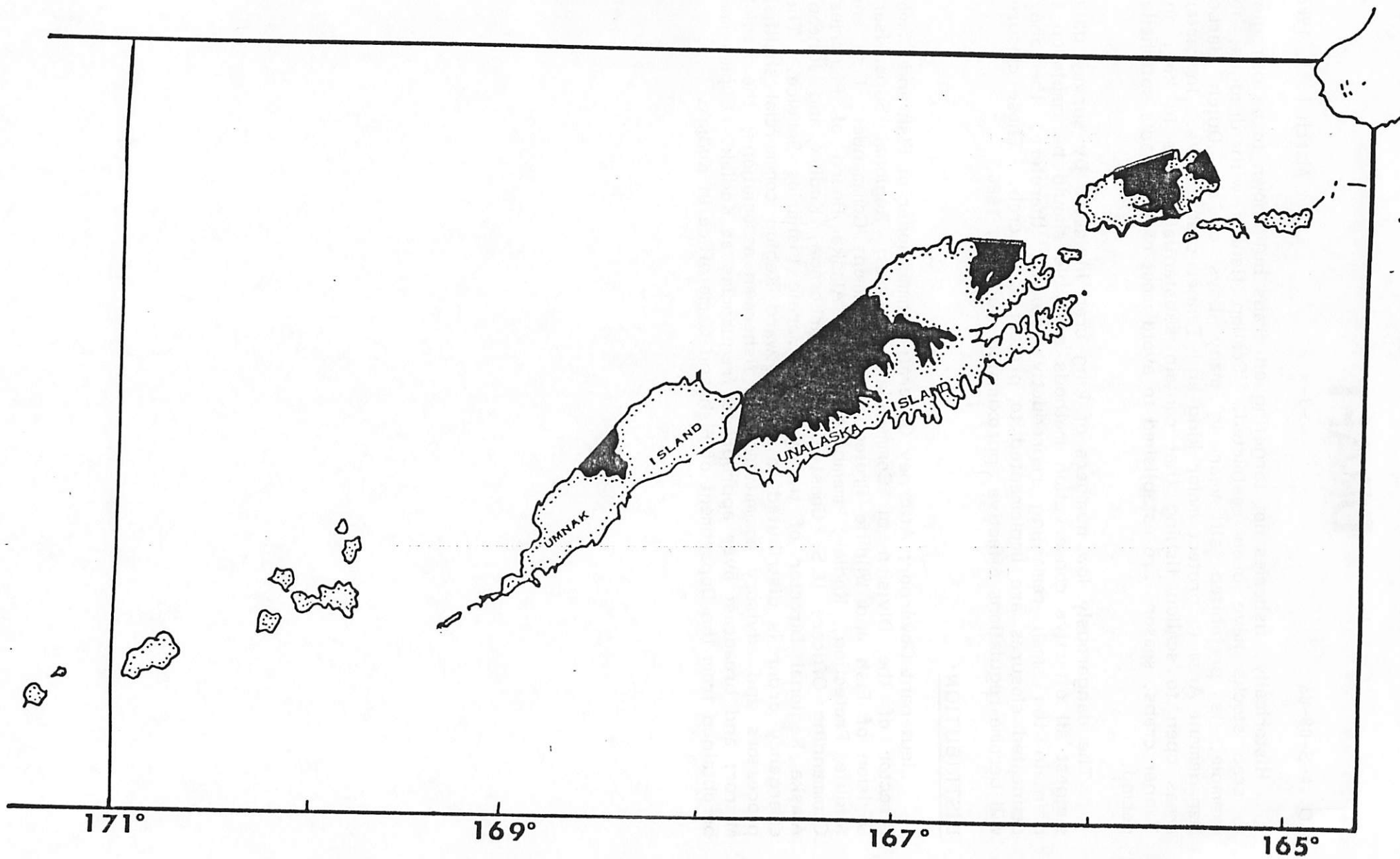


Figure 1. Shaded areas closed to bottom trawling, Dutch Harbor king crab registration area.

DRAFT



**DRAFT**

# COMMERCIAL Fishing

**Alaska Department of Fish & Game**

*emergency order*

under authority  
of AS 16.05.060

EMERGENCY ORDER NO. 4-S-09-86

Issued at Kodiak, AK 99615  
March [ ], 1986

EFFECTIVE DATE: 12:00 Noon  
March [ ], 1986

Expiration Date:  
December 31, 1986

EXPLANATION:

This emergency order closes all territorial waters (inside three miles) south of the Alaska Peninsula between Cape Kumlik and Scotch Cap Light year around to all trawling other than pelagic trawling.

REGULATION:

5 AAC 39.165. TRAWL GEAR UNLAWFUL. is amended to read:

5 AAC 39.165. TRAWL GEAR UNLAWFUL. (b) The following waters are closed to trawling other than pelagic trawls year around:

(12) Chignik Area - all waters extending three miles seaward and shoreward of a line (the base line) between the following points:

- 333 - southernmost tip Cape Kumlik;
- 334 - easternmost tip Unavikshak Island;
- 335 - southernmost tip Atkulik Island;
- 336 - easternmost tip Kak Island;
- 337 - easternmost tip Castle Cape (Tuliumnit Point);
- 338 - easternmost tip Chankliut Island;
- 339 - along seaward coast to southernmost tip Chankliut Island;
- 340 - southernmost tip Seal Cape;
- 341 - easternmost tip Mitrofanina Island;
- 342 - southernmost tip Spitz Island;
- 343 - southernmost tip Chiachi Island

(13) South Peninsula Area - all waters illustrated as Territorial Sea on NOAA Chart #16540 (10th Ed. Oct. 10/81) entitled, "Shumagin Island to Sanak Island," and all waters east of the longitude of Scotch Cap Light and south of Unimak Island and Alaska Peninsula which are illustrated as Territorial Sea on NOAA Chart #16520 (20th Ed. July 10/82) entitled, "Unimak and Akutan Passes and Approaches."

For purposes of this emergency order, pelagic fish trawls are defined:

Pelagic Trawl means a trawl in which neither the net nor the trawl doors (or other trawl-spreading device) operates in contact with the seabed, and which does not have attached to it any protective device (such as chafing gear, rollers, or bobbins) that would make it suitable for fishing in contact with the seabed.

Don W. Collinsworth  
Commissioner

**DRAFT**

by delegation to: Martin F. Eaton  
Regional Shellfish Biologist  
Westward Region

JUSTIFICATION:

Red king crab resources in the Alaska Peninsula Management Area of the Gulf of Alaska are at historical low levels. Reproductive stocks have declined severely, primarily as a result of successive recruitment failures of juveniles. The directed king crab fishery has remained closed for the last three years to protect stocks. No short term recovery of stocks is likely as abundance of crabs one to four years from attaining legal size is extremely low.

King crab congregate during the winter and spring to molt and mate. The molting and mating period extends from late January through June and crabs may take two to three months to reach a hardshell condition after molting. Most molting and mating occurs from about mid February through early June in water depths less than 40 fathoms. King crab seasons are designed to avoid mating and softshell periods and must take place outside of the period January 20 to August 1 in the Alaska Peninsula Management Area.

There are certain areas where mating and molting king crab have historically formed concentrations. Although there are fewer crabs in these areas because of present low stocks, the areas in which molting and mating have historically been concentrated remain similar. King crab are particularly susceptible to damage from handling and encounters with fishing gear during molting and the subsequent softshell period. Bottom trawls are known to capture a broader size range of crabs in various states of hardness than do pots. Additionally, trawls and dredges are generally acknowledged to inflict some damage and mortality on crabs encountered by the gear but not retained. The Department has broad experience with pots and trawls as research tools for assessing king and Tanner crabs at various times of the year. The catchability and condition of crabs captured in each gear type is always a consideration relative to the time of year each gear type is most effective.

Historically, fisheries not targeting on crabs but known to be damaging to crab stocks have been restricted. Scallop fishing with dredges, for example, is prohibited all year in large portions of the Kodiak Management

**DRAFT**

E.O. No. 4-S-09-86

-3-

March [ ], 1986

Area to protect major king and Tanner crab stocks. In certain areas open to scallop fishing that contain substantial stocks in king and Tanner crabs, seasons are established to avoid most of the crab's softshelled period.

The dangerously low numbers of king crab indicated by survey data, suggest all effective conservation methods available should be employed to maintain the small remaining reproductive stocks, therefore, the above delineated closures are implemented to protect king crab. These closures will become regulations effective approximately June 15, 1986.

DISTRIBUTION:

Lieutenant Governor; Attorney General; Commissioner of Fish and Game; Director of the Division of Commercial Fisheries; Regional Supervisor, Division of Fish and Wildlife Protection; Detachment Commander, Fish and Wildlife Protection, Kodiak; members of the Alaska Board of Fisheries; Commanding Officer, U.S. Coast Guard, Anchorage, Kodiak and Juneau; Alaska Regional Director of the National Marine Fisheries Service. This emergency order is distributed to all Westward Region commercial shellfish processors and advisory committees and fishermen associations; the Kodiak Mirror; and broadcast over appropriate frequencies at Kodiak. Copies may be obtained from the Department of Fish and Game office in Kodiak.

**DRAFT**

DRAFT



Figure 1. Shaded areas closed to bottom trawling, Alaska Peninsula king crab registration area.

DRAFT

# DRAFT COMMERCIAL Fishing

Alaska Department of Fish & Game

## *emergency order*

under authority  
of AS 16.05.060

EMERGENCY ORDER NO. 4-S-07-86

Issued at Kodiak, AK 99615  
March [ ], 1986

EFFECTIVE DATE: 12:00 Noon  
March [ ], 1986

Expiration Date:  
December 31, 1986

### EXPLANATION:

This emergency order closes specific areas around Kodiak Island to trawling other than with pelagic trawls. Some areas are closed year around, while others are closed between February 15 and June 15.

### REGULATION:

5 AAC 39.165. TRAWL GEAR UNLAWFUL. is amended to read:

5 AAC 39.165. TRAWL GEAR UNLAWFUL. (b) The following waters are closed to trawling other than pelagic trawls year around.

(1) Chirikof Island Area - all waters surrounding Chirikof Island enclosed by a line from 56°07' N. lat., 156° W. long. then to 56°07' N. lat., 155°13' W. long., then to 55°41' N. lat., 155°13' W. long., then to 55°41' N. lat., 156° W. long., then back to 56°07' N. lat., 156° W. long.

(2) Alitak Flats and Towers areas - all waters of Alitak Bay, Olga Bay, Alitak Flats and Sitkinak Island enclosed by a line from Low Cape (57° N. lat., 154°31' W. long.), to 57° N. lat., 155° W. long., then to 56°17' N. lat., 155° W. long., then to 56°17' N. lat., 153°52' W. long., then to Cape Sitkinak at 56°33'30" N. lat., 153°52' W. long., then to the easternmost point of Twoheaded Island at 56°54'30" N. lat., 153°32'30" W. long., then to the point of Kodiak Island located at 56°56' N. lat., 153°35'30" W. long.

(3) Barnabas Area - all waters east of 153°16' W. long. in Sitkalidak Passage and enclosed by a line from Black Point (56°59'30" N. lat., 153°18' W. long.) to 56°56' N. lat., 153°09' W. long. to the southernmost tip of Ugak Island (57°22' N. lat., 152°18'30" W. long.) and west of a line from the northernmost tip of Ugak Island (57°23'30" N. lat., 152°17' W. long.) to Narrow Cape (57°26' N. lat., 152°19' W. long.).

(4) Marmot Flats Area - all waters enclosed by a line across Ouzinkie Narrows at 152°30' W. long. and from East Cape (57°55' N. lat., 152°19'30" W. long.) to Pillar Cape (58°09' N. lat., 152°06' W. long.) to Marmot Cape (58°10' N. lat., 151°52' W. long.) and from Cape St. Hermogenes on Marmot Island (58°15' N. lat., 151°47' W. long.) and west of

151°47' W. long., to a point at 57°38' N. lat., 151°47' W. long., then to Cape Chiniak (57°38' N. lat., 152°09' W. long.).

(5) West Side - all waters east of a line from Cape Uyak (57°38'20" N. lat., 154°20'50" W. long.) to Cape Ugat (57°52'20" N. lat., 153°50'40" W. long.) to Raspberry Cape (58°03'35" N. lat., 153°25' W. long.) to Black Cape (58°24'30" N. lat., 152°53' W. long.) to Party Cape on Shuyak Island (58°37'10" N. lat., 152°34' W. long.) and west of 152°30' W. long. in Shuyak Straits and west of 152°50' W. long. in Whale Pass and Afognak Strait.

(c) The following waters are closed to trawling other than pelagic trawls from February 15 through June 15:

(1) Northeast Afognak - all state waters enclosed by a line from Point Banks (58°38' N. lat., 152°19' W. long.) to a point at 58°42' N. lat., 152°19' W. long., following the three mile contour southeasterly to a point at 58°08' N. lat., 151°47' W. long. and north to Cape St. Hermogenes on Marmot Island (58°15' N. lat., 151°47' W. long.) and north of a line from Pillar Cape (58°09' N. lat., 152°06' W. long.) to Marmot Cape (58°10' N. lat., 151°52' W. long.).

(2) Marmot Bay - all waters east of 152°50' W. long., in Whale Pass, Afognak Strait and west of a line across Ouzinkie Narrows at 152°30' W. long. and west of a line from East Cape (57°55' N. lat., 152°19'30" W. long.) to Pillar Cape (58°09' N. lat., 152°06' W. long.) including all of Izhut Bay, Kazakof Bay, Kizhuyak Bay and Marmot Bay.

(3) Cape Chiniak - all state waters enclosed by a line from Cape Chiniak (57°38' N. lat., 152°09' W. long.) to a point at 57°38' N. lat., 152°02' W. long., following the three mile contour southwesterly to 57°20' N. lat., 152°23' W. long., then to the southernmost tip of Ugak Island (57°22' N. lat., 152°18'30" W. long.) and east of a line from the northernmost tip of Ugak Island (57°23'30" N. lat., 152°17' W. long.) to Narrow Cape (57°26' N. lat., 152°19' W. long.).

(4) South Sitkalidak - all state waters enclosed by a line from Black Point (56°59'30" N. lat., 153°18' W. long.) to a point at 56°57'30" N. lat., 153°13' W. long., then southwesterly following the three mile contour to a point at 56°50' N. lat., 153°37' W. long., then to the easternmost point of Twoheaded Island at 56°54'30" N. lat., 153°32'30" W. long., then to a point on Kodiak Island at 56°56' N. lat., 153°35'30" W. long., and waters west of the longitude of 153°16' W. long., in Sitkalidak Passage.

(5) East Sitkinak - all state waters enclosed by a line from Cape Sitkinak at 56°33'30" N. lat., 153°52' W. long., to a point at 56°37' N. lat., 153°48'30" W. long., then southerly following the three mile contour to a point at 56°28'30" N. lat., 153°52' W. long., then north to Sitkinak Island at 56°33'30" N. lat., 153°52' W. long.

**DRAFT**

For purposes of this emergency order, pelagic fish trawls are defined: Pelagic Trawl means a trawl in which neither the net nor the trawl doors (or other trawl-spreading device) operates in contact with the seabed, and which does not have attached to it any protective device (such as chafing gear, rollers, or bobbins) that would make it suitable for fishing in contact with the seabed.

Fishermen wishing to use pelagic trawls in these closed waters are required to have properly functioning recording net sounding devices on their pelagic trawls. Note: Interpretation of the Territorial Sea boundary was taken from NOAA Chart of Kodiak Island #16580 (8th Ed. Oct. 31/81).

Commercial Fisheries Emergency Order 4-S-06-86 is rescinded.

**DRAFT**

Don W. Collinsworth  
Commissioner

by delegation to: Martin F. Eaton  
Regional Shellfish Biologist  
Westward Region

JUSTIFICATION:

Red king crab resources in the Kodiak Management Area of the Gulf of Alaska are at historical low levels. Reproductive stocks have declined severely, primarily as a result of successive recruitment failures of juveniles. The directed king crab fishery has remained closed for the last three years to protect stocks. No short term recovery of stocks is likely as abundance of crabs one to four years from attaining legal size is extremely low.

King crab congregate during the winter and spring to molt and mate. The molting and mating period extends from late January through June and crabs may take two to three months to reach a hardshell condition after molting. Most molting and mating occurs from about mid February through early June in water depths less than 40 fathoms. King crab seasons are designed to avoid mating and softshell periods and must take place outside of the period January 20 to August 1 in the Kodiak Management Area.

There are certain areas where mating and molting king crab have historically formed concentrations. Although there are fewer crabs in these areas because of present low stocks, the areas in which molting and mating have historically been concentrated remain similar. King crab are particularly susceptible to damage from handling and encounters with fishing gear during molting and the subsequent softshell period. Bottom trawls are known to capture a broader size range of crabs in various states of hardness than do pots. Additionally, trawls and dredges are generally acknowledged to inflict some damage and mortality on crabs encountered by the gear but not retained. The Department has broad experience with pots and trawls as research tools for assessing king and Tanner crabs at various

times of the year. The catchability and condition of crabs captured in each gear type is always a consideration relative to the time of year each gear type is most effective.

Historically, fisheries not targeting on crabs but known to be damaging to crab stocks have been restricted. Scallop fishing with dredges, for example, is prohibited all year in large portions of the Kodiak Management Area to protect major king and Tanner crab stocks. In certain areas open to scallop fishing that contain substantial stocks in king and Tanner crabs, seasons are established to avoid most of the crab's softshelled period.

Kodiak groundfish surveys indicate that the distribution of flounders such as rock sole and flathead sole heavily overlaps the known distribution of king and Tanner crabs. Newly developing groundfish trawl fisheries for flounders and cod have also occurred in Kodiak areas known to contain concentrations of king and Tanner crabs. Bycatches of king and Tanner crabs in groundfish trawl fisheries have been documented by agency observers since the beginning of these fisheries. Developing groundfish trawl fisheries for cod and flounders have in part been conducted during the softshell period for both king and Tanner crabs. Bycatches of king and Tanner crabs during the softshell period have been documented in the Kodiak area for both cod and flounder fisheries. Hard-on-bottom fisheries for bottomfish in areas where king and Tanner crab are concentrated will unavoidably capture softshell crabs. A high mortality of softshell crabs captured in trawl fisheries has historically been experienced, dating back to the early development years when trawls were legal gear for king crabs and subsequently prohibited. Additionally, mortality of softshell crabs that come in contact with trawl gear but are not retained is expected to be high.

The dangerously low numbers of king crab indicated by survey data, suggest all effective conservation methods available should be employed to maintain the small remaining reproductive stocks, therefore, the above delineated closures are implemented to protect king crab. These closures will become regulations effective approximately June 15, 1986.

#### DISTRIBUTION:

Lieutenant Governor; Attorney General; Commissioner of Fish and Game; Director of the Division of Commercial Fisheries; Regional Supervisor, Division of Fish and Wildlife Protection; Detachment Commander, Fish and Wildlife Protection, Kodiak; members of the Alaska Board of Fisheries; Commanding Officer, U.S. Coast Guard, Anchorage, Kodiak and Juneau; Alaska Regional Director of the National Marine Fisheries Service. This emergency order is distributed to all Westward Region commercial shellfish processors and advisory committees and fishermen associations; the Kodiak Mirror; and broadcast over appropriate frequencies at Kodiak. Copies may be obtained from the Department of Fish and Game office in Kodiak.



**DRAFT**

**Alaska  
Peninsula**

SHELIKOF STRAIT

Kodiak I.

Afognak I.

MAERMOT

CAPE  
CHINIYAK

Wormot Flats

UGAK I.

Barnabas

C. IKOLIK

OLD HARBOR

LOW CAPE

TWO  
HEADED I.

Alitak Flats →

C. SITKINAK

Towers

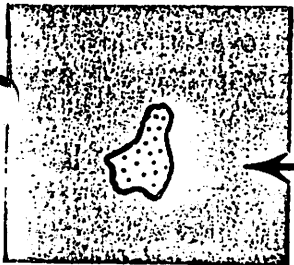
**DRAFT**



CLOSED YEAR AROUND

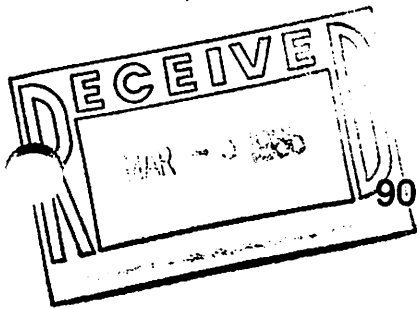


CLOSED FEBRUARY 15-JUNE 15



← Chirikof Island

Figure 1. Shaded areas closed to bottom trawling, Kodiak king crab registration area.



907-486-3910  
Box 991



Kodiak, Alaska  
99615

ACTION	ROUTE TO	INITIAL
March 3, 1986	Exec. Dir.	S
	Asst. Dir.	
	Adm. Serv.	
	Environ.	
	Gen. Inv.	
	Ident. Res.	
	Int. Affs.	
	Lab.	
	Legal Coun.	
	Off. of Cong. & Public Affs.	
	Rec. Mgmt.	
	Spec. Inv.	
	Training	
	Off. of the Dir.	

Ron Jolin  
North Pacific Fishery Management  
Council  
P.O. Box 103136  
Anchorage, Alaska 99510

Dear Ron:

We would like to respond to ~~the~~ proposed trawl closures around Kodiak Island. Since the proposed closures include both State and Federal waters, we feel that these proposals, as recommended by the Fish and Game Advisory Board, need to be addressed at the joint Board and Council level. We feel that before a developing fishery is virtually wiped out, it should be given the utmost consideration at all levels.

Sincerely,

*Alvin R. Burch*

Alvin R. Burch  
Executive Director

*Michael Serwold*

Michael Serwold  
President

cc: Jim Branson ✓  
Jim Campbell



KODIAK GROUND FISH LANDINGSDepartment of Fish and Game Fish Tickets  
(tons, year-to-date, 3/07/86)

Pollock	800	
Pacific Cod	320	
Sablefish	140	
Flounder	19	
Rockfish	07	
Other	07	
<u>Total</u>		<u>1,293</u>

Processors Survey (tons, year-to-date, 3/07/86)

Pollock	2,860	
Pacific Cod	368	
Sablefish	27	
Flounder	20	
Rockfish	3	
<u>Total</u>		<u>3,278</u>

Processors surveyed indicated that the above level of production employed some 295 full-time equivalent processing workers, 5-10 trawlers, and 7-8 longliners. A proposed sole operation will employ an additional 80 employees.

One processor reported outstanding orders for an additional 800,000 lbs. of pollock and Pacific cod and ongoing negotiations for an additional 2.0 million lbs. of product.

Each of the processors contacted indicated their concern over board proposals which would prohibit trawling in the near shore areas around Kodiak. One processors expressed his opinion that such a blanket closure would impact their plans to operate on sole concentrations located some 45 minutes from their plant.

While the information we were able to collect on this short notice is admittedly sketchy, we are encouraged by the unprecedented level

March 11, 1986

of interest on the part of shore-based Kodiak processors to invest the time and money to enter the groundfish processing business. We would reiterate our concern that your action on these various proposals take into account the need to provide the developing shore-based groundfish fishery in Kodiak a regulatory environment that encourages this continued investment.

Recognizing that the quality of information regarding groundfish stocks, particularly flatfish species, in the near shore areas around Kodiak is limited, perhaps the use of required on-board observers in certain areas could provide for continued on-bottom trawling while enhancing our data base and providing for time and area specific closures when by-catches of prohibited species exceed prudent conservation and management goals.

If we can be of assistance in your deliberations or if you would like us to attempt to collect more specific data please feel free to contact the department.

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