


MEMORANDUM

TO: Council, SSC and AP Members

FROM: Clarence G. Pautzke 
Executive Director

DATE: January 29, 1998

SUBJECT: Groundfish Amendments: Final Action

ESTIMATED TIME 4 HOURS (all D-1 items)
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ACTION REQUIRED

- (a) Final action on a regulatory amendment to revise the Western and Central GOA pollock trimester apportionments.
- (b) Final action on Plan Amendments 52/52 for vessel pre-registration and 24-hr stand-down provision.
- (c) Final action on BSAI Plan Amendment 53 to set gear allocations for shortraker/rougheye.

BACKGROUND

- (a) Revise the Western and Central GOA pollock trimester apportionments

The objective of revising the Western and Central GOA pollock trimester apportionments is to reapportion the pollock TACs so that increases in projected pollock removals during the second season would occur during a potentially less stressful foraging period for sea lions. The benefit to sea lions comes as both potential increase in available forage and shorter fishing duration in the third quarter.

The analysis of the proposed regulatory amendment (Item D-1(a)) contains the following alternatives:

Alternative 1: No Action.

Alternative 2: Reapportion 10 percent of the pollock TAC in the W/C Regulatory Areas from the third season (September 1) to the second season (June 1) resulting in a 25/35/40 split.

Alternative 3: Adopt an FMP Amendment that would framework a process whereby the percentage of pollock TAC apportioned to each season would be specified during the annual harvest specification process.

A reapportionment of 10 percent of the pollock TAC from the third to the second season for the 1998 fishing season could be accomplished through an interim regulatory amendment as described in Alternative 2. Alternative 3 is a framework FMP amendment that would allow the seasonal apportionments of pollock TAC to be specified by the Council during the annual TAC specification. Because the 1998 pollock TAC has already been approved by the Council, the plan amendment proposed under Alternative 3 would not take effect until the Council begins to consider TACs for 1999. Adoption of both Alternatives 2 and 3 would allow for a 10 percent

reapportionment in 1998 and would retain management flexibility to adjust the seasonal apportionments of pollock TAC in the combined W/C Regulatory Areas in subsequent years if changes in status of pollock stocks and new information about Steller sea lions in subsequent years suggest that another seasonal split is optimal. The economic effects of a 10 percent shift in pollock TAC in the W/C Regulatory Area from September to June are estimated to be a reduction in exvessel value of approximately \$525,000 using 1997 prices.

(b) Vessel registration and 24-hr stand-down provision

In recent years, several BSAI and GOA fisheries have been "at risk" of exceeding their TACs or PSC limits. These "at risk" fisheries are characterized as short in duration, usually less than 2 weeks, due to TACs that are small relative to fishing effort. Catch information in these fisheries, obtained through the current reporting procedures, are neither timely nor accurate enough to allow proper management. Currently, NMFS does not have advance knowledge of fishery-specific effort, nor the authority to obtain such information. These management problems have been particularly acute in the pollock and Pacific cod fisheries of the Western Regulatory Area of the GOA.

In September 1997, the Council received a report from its industry committee, formed to examine possible trip limits for western GOA pollock and Pacific cod fisheries. However, the industry committee failed to reach consensus on a trip limit proposal for western GOA fisheries. The Council delayed formal analysis of trip limit options and voted to proceed with formal analysis of only two short-term measures for Western GOA fisheries: (1) a stand down period for vessels switching between the BSAI and GOA and vice versa, and (2) a requirement that vessels register in western and central GOA fisheries before they are allowed to participate. In the longer term, the Council also scheduled a discussion of GOA management measures for pollock and Pacific cod in the western and central GOA for this meeting (see item D-2(a)). The Council will then develop a problem statement and identify the specific alternatives to be developed further, with the intent of implementing the measures by January 1, 1999.

During initial review of the analysis in December 1997, the Council requested that staff revise the analysis to address: (1) 48-hr, 72-hr, or 96-hr stand-down period for all fisheries for vessels in the pollock or Pacific cod fisheries that planned to switch between the BSAI and GOA and vice versa; and (2) a requirement that vessels register in Western or Central GOA fisheries before they are allowed to participate in the fishery.

The following alternatives are considered in this analysis of Plan Amendments 52/52 (Item D-1(b)). Alternatives 2 and 3 are not mutually exclusive and may complement each other. Either or both alternatives could be adopted. However, the Council may wish to framework these types of management actions in the plan amendment and implement those listed below in a regulatory amendment to allow the Council and NMFS greater flexibility. If approved, implementation is planned for the pollock B season in 1998.

Alternative 1: No Action.

Alternative 2: Establish a vessel registration program for "At risk" fisheries which meet certain criteria.

Alternative 3: Establish a stand down requirement for vessels transiting between the BSAI and GOA.

Vessel and gear options

- Option 1. Stand down requirement would apply to all groundfish vessels
- Option 2. Stand down requirement would apply to trawl vessels only
- Option 3. Stand down requirement would apply to trawl catcher vessels only

Fishery options

- Option 1. Stand down requirement would apply to all target fisheries.
- Option 2. Stand down requirement would apply to vessels engaged in directed fishing for pollock and Pacific cod only.

Options for length of stand down period

- Option 1. 48 hours
- Option 2. 72 hours
- Option 3. 96 hours

Options for beginning and ending of stand down period

- Option 1. Stand down period begins at the time gear retrieval is completed in one area and ends when gear is deployed in the new area.
- Option 2. Stand down period begins on the date of delivery and fishing may resume in the new area at 12 noon, Alaska local time, 2, 3, or 4 days after the date of delivery.

(c) Amendment 53 - Gear allocations for shortraker/rougheye

Shortraker/rougheye rockfish in the Aleutian Islands subarea typically are closed to directed fishing at the beginning of the fishing year because the full TAC amount is needed as bycatch in other fisheries. Unfortunately, bycatch rates were higher than anticipated in 1997, and fisheries that take these species as bycatch were closed to prevent reaching the overfishing level. The closure of these fisheries resulted in foregone opportunity to harvest available groundfish TACs and the threat of closure of the sablefish IFQ fishery. These series of events prompted development of an analysis to reduce maximum retainable bycatch (MRB) percentages and gear allocations for shortraker/rougheye rockfish. At its September 1997 meeting, the Council voted to establish a separate MRB percentage for shortraker/rougheye of 7 percent relative to deepwater species (rockfish species, sablefish, Greenland turbot, and flathead sole) and 2 percent relative to all other species except arrowtooth flounder, which cannot be used as a species against which shortraker/rougheye may be retained. In December, the Council approved the analysis for public review.

The EA/RIR was mailed to you on January 28, 1998. If approved, the actions would be implemented by July 1, 1998. Two separate management alternatives are considered:

Alternative 1: Status Quo. The shortraker/rougheye rockfish TAC would not be allocated between gear groups. MRB constraints would be the only management tool in place to reduce bycatch rates and bycatch amounts in the trawl fisheries would continue to threaten fixed gear fisheries with closures if overall bycatch amounts exceed TAC and result in overfishing concerns.

Alternative 2: The shortraker/rougheye rockfish TAC would be allocated between vessels using trawl and non trawl gear. Options for gear allocations as follows:

- 30 percent to non trawl gear/70 percent to trawl gear - Industry recommendation
- 20 percent to non trawl gear/80 percent to trawl gear - Historical catch distribution

DRAFT FOR PUBLIC REVIEW

ENVIRONMENTAL ASSESSMENT/REGULATORY IMPACT REVIEW

FOR

A PROPOSAL TO CHANGE THE PERCENTAGES OF POLLOCK TOTAL ALLOWABLE CATCH
APPORTIONED TO EACH FISHING SEASON IN THE WESTERN AND CENTRAL REGULATORY
AREAS OF THE GULF OF ALASKA

Prepared by

National Marine Fisheries Service
Alaska Regional Office

January 1998

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1.0 INTRODUCTION

The groundfish fisheries in the Exclusive Economic Zone (EEZ) (3 to 200 miles offshore) off Alaska are managed under the Fishery Management Plan for Groundfish of the Gulf of Alaska and the Fishery Management Plan for the Groundfish Fisheries of the Bering Sea and Aleutian Islands Area. Both fishery management plans (FMPs) were developed by the North Pacific Fishery Management Council (Council) under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). The Gulf of Alaska (GOA) FMP was approved by the Secretary of Commerce and became effective in 1978 and the Bering Sea and Aleutian Islands Area (BSAI) FMP was approved and became effective in 1982.

Actions taken to amend FMPs or implement other regulations governing the groundfish fisheries must meet the requirements of Federal laws and regulations. In addition to the Magnuson-Stevens Act, the most important of these are the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), the Marine Mammal Protection Act (MMPA), Executive Order (E.O.) 12866, and the Regulatory Flexibility Act (RFA).

NEPA, E.O. 12866 and the RFA require a description of the purpose and need for the proposed action as well as a description of alternative actions which may address the problem. This information is included in Section 1 of this document. Section 1 also examines implementation and enforcement issues related to the alternatives under consideration. Section 2 contains information on the biological and environmental impacts of the alternatives as required by NEPA. Impacts on endangered species and marine mammals are also addressed in this section. Section 3 contains a Regulatory Impact Review (RIR) which addresses the requirements of both E.O. 12866 and the RFA that economic impacts of the alternatives be considered including the impacts of the proposed action on small businesses.

This Environmental Assessment/Regulatory Impact Review addresses a regulatory amendment to change the seasonal apportionments of pollock total allowable catch (TAC) in the combined Western and Central (W/C) Regulatory Areas of the GOA, and/or an FMP Amendment to framework a process whereby the percentage of pollock TAC apportioned to each season would be specified during the annual harvest specification process.

1.1 Purpose of and Need for the Action

In its December 1997 meeting, the Council approved a 1998 pollock TAC of 119,150 mt for the combined W/C Regulatory Areas of the GOA. This TAC represents a 60 percent increase from the 1997 pollock TAC of 74,400 mt. The GOA Plan Team and the Council's Scientific and Statistical Committee (SSC) recommended the increased TAC based on survey and fishery data indicating the presence of a large 1994 year class.

Despite the projected increase in the pollock biomass available in the GOA, NMFS sea lion biologists believe that some conservative action should be considered to constrain the increase in pollock fishing activity during the fall months. Pollock is a significant prey resource for Steller sea lions and has been shown to be the most common component of the sea lion diet in the Gulf of Alaska in the years 1975-78 and 1985-86 in all areas and seasons sampled (Merrick and Calkins 1996). A 60 percent increase in the W/C GOA pollock TAC for 1998 could have an impact on Steller sea lions. With the current temporal apportionment of pollock TAC in the W/C GOA, significantly more fish would be removed during the fall months. Sea lion biologists believe that conservative action needs to be taken to reduce the pollock

allocation during that critical period, when sea lion pups are beginning their transition to solid food and adult females are both lactating and in early stages of pregnancy.

Summer aerial surveys indicate a continuing decline of Steller sea lions in the GOA. Between 1996 and 1997, numbers of non-pups (adults and juveniles) decreased in the central GOA by 14.4 percent (from 3,915 to 3,352) or 6.4 percent if the counts at Marmot Island are excluded. In the western GOA, the sea lion population appears to be relatively stable, decreasing only 2.9 percent (3,741 to 3,633). Pup surveys on Marmot Island indicated a 3.5 percent decrease from 1996 to 1997 (790 to 762).

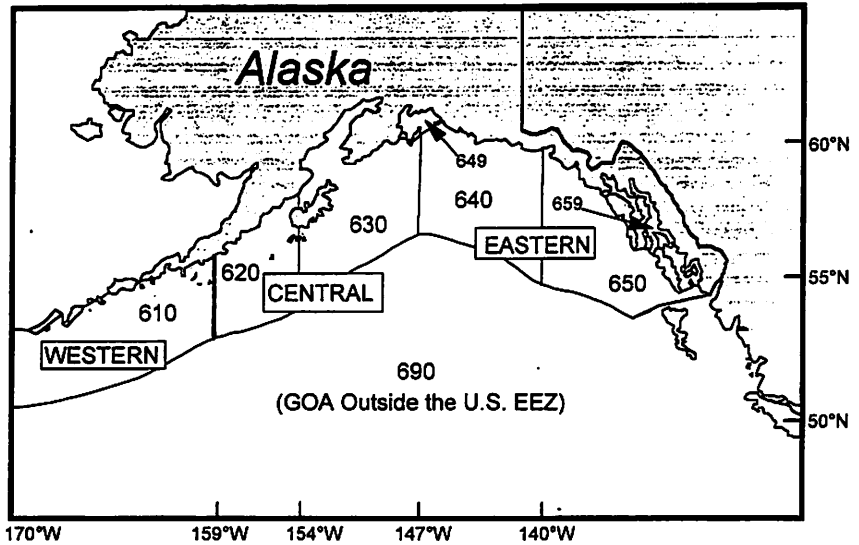


Figure 1. Regulatory and statistical areas in the Gulf of Alaska

Current groundfish regulations apportion the pollock TACs in the combined W/C Regulatory Area among three fishing seasons and three statistical areas; 610 (Shumagin), 620 (Chirikof), and 630 (Kodiak) (Figure 1). The pollock TAC apportioned to each statistical area is further divided into three seasonal allowances of 25 percent, 25 percent and 50 percent of the TAC, which become available on January 1¹, June 1, and September 1, respectively. These seasonal allowances were established by regulation and may be changed through regulatory amendment under provisions of Amendment 45 to the FMP.

The objective of this action is to reapportion the pollock TACs so that the projected increases in pollock catches during the third season in 1998 are reduced relative to what would occur under the current seasonal TAC split. Although the pollock stock assessment supports the higher harvest in 1998 in the W/C Regulatory Areas, a temporal modification of pollock harvest is warranted to limit the potential impacts of pollock fishing on sea lions. Increases in projected pollock removals in mid-summer (i.e., during the second season) would occur during a potentially less stressful foraging period for sea lions.

Pollock fishing has the potential to overlap strongly with Steller sea lion foraging activity. Historical harvest data indicate significant pollock removals have occurred since 1977 from areas designated under the ESA as Steller sea lion critical habitat. The percentage of total pollock catch in the GOA removed from within Steller sea lion critical habitat has increased significantly from less than 10 percent in the late 1970s to approximately 80 percent from 1983 to 1986 (Figure 2). Except for a high removal in 1988 (approximately 90 percent), the percentage of the pollock catch removed from critical habitat dropped to

¹Under existing regulations, the first seasonal allowance of pollock TAC becomes available on January 1 of each year. However, the GOA is not open to fishing with trawl gear until January 20 of each year. Because the pollock fishery is conducted with trawl gear exclusively, the first seasonal allowance does not realistically become available to the fleet until trawling opens on January 20 of each year.

approximately 60 percent or less of total catch in 1987-91. Although sea lion protective measures were put in place in the early 1990s, the percentage of total pollock removed from critical habitat has increased from the level seen in the late 1980s to to 60 percent to 80 percent in 1993-96 (Fritz and Ferrero, in press). This harvest has occurred principally within 20 nm of rookeries and major haulouts (Fritz and Ferrero, pers. comm.).

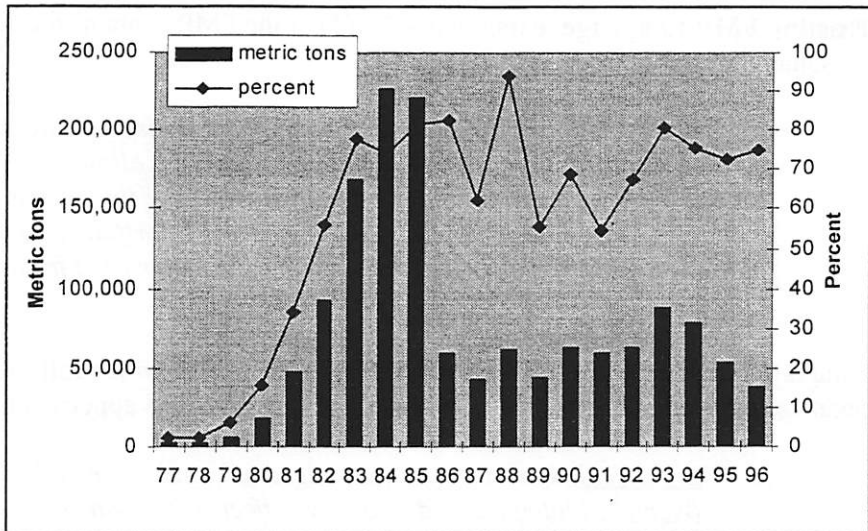


Figure 2. Pollock harvested within Steller sea lion critical habitat in the Gulf of Alaska expressed in metric tons and as a percentage of total pollock catch.

A regulatory amendment is necessary to reapportion the pollock TAC in the W/C Regulatory Areas for the 1998 fishing year. An FMP amendment is required for subsequent years to framework a process whereby the percentage of pollock TAC apportioned to each season would be specified during the annual harvest specification process to accommodate new or changing information on pollock stocks and Steller sea lion foraging needs.

1.2 Alternatives Considered

The following alternatives are considered in this analysis.

1.2.1 Alternative 1: No Action. The pollock TAC apportioned to each statistical area of the W/C Regulatory Areas of the GOA would continue to be divided into three seasonal allowances of 25 percent, 25 percent, and 50 percent of the TAC and become available on January 1, June 1, and September 1, respectively.

1.2.2 Alternative 2: Reapportion 10 percent of the pollock TAC in the W/C Regulatory Areas from the third season (September 1) to the second season (June 1) resulting in a 25/35/40 split. This alternative could be implemented on a permanent basis through a regulatory amendment, or on an interim basis for the 1998 fishing season with the procedures established under Alternative 3 determining the seasonal apportionment of pollock TAC for 1999 and beyond.

1.2.3 Alternative 3: Adopt an FMP Amendment that would framework a process whereby the percentage of pollock TAC apportioned to each season would be specified during the annual harvest specification process. Due to the statutory time schedule for review and approval of FMP amendments, this alternative could not be approved and implemented prior to June 1, 1998. Adoption of Alternative 3 without interim measures would delay the seasonal reapportionment of pollock TAC in the combined W/C Regulatory Area until 1999. However, this Alternative 3 could be combined with Alternative 2 such that a reapportionment of the pollock TAC in the combined W/C Regulatory Area is accomplished through an interim regulation for 1998 to be superseded in subsequent years by the framework process established by the FMP amendment.

Existing FMP Language Paragraph 4.2.1 (3) of the FMP contains the following language regarding seasonal allowances of pollock TAC:

The annual TAC established for pollock in the combined Western and Central Regulatory Areas shall be divided into seasonal allowances. Seasonal allowances of the pollock TAC will be established by regulation. The Council will consider the criteria described in Section 4.3.3 when recommending changes in seasonal allowances. Shortfalls or overages in one seasonal allowance shall be proportionately added to, or subtracted from, subsequent seasonal allowances.

Paragraph 4.3.3 of the FMP requires that the Council consider the following criteria when recommending regulatory amendments to change fishing seasons or seasonal apportionments of TAC

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

Proposed FMP Language. Under Alternative 3, paragraph 4.2.1 (3) of the FMP would be amended as follows to specify that seasonal apportionments of pollock TAC will be determined during the annual specification process as follows:

The annual TAC established for pollock in the GOA may be divided into seasonal allowances. The percentage of TAC apportioned to each fishing season will be specified on an annual basis. Shortfalls or overages in one seasonal allowance will be proportionately added to, or subtracted from, subsequent seasonal allowances in the same fishing year. The Council will consider the following criteria when recommending percentages of pollock TAC to be apportioned to each fishing season:

1. Marine mammals: effects on Steller sea lions and other marine mammals;
2. Biology: spawning periods, migration, and other biological factors;
3. Bycatch: effects on bycatch of salmon and other species;
4. Exvessel and wholesale prices: effects of seasonal allowances on prices;
5. Product quality: producing the highest quality product to the consumer;
6. Safety: potential adverse effects on people, vessels, fishing time, and equipment;
7. Cost: effects on operating costs incurred by the industry as a result of season changes;
8. Other fisheries: possible demands on the same harvesting, processing, and transportation systems needed in the groundfish fishery;

9. *Coordinated season timing: the need to spread out fishing effort over the year, minimize gear conflicts, and allow participation by all elements of the groundfish fleet;*
10. *Enforcement and management costs: potential benefits of season changes relative to agency resources available to enforce and manage new seasons; and*
11. *Allocation: potential allocation effects among users and indirect effects on coastal communities.*

Note that under this framework language, the percentage apportioned to each season would be determined during the annual specification process, but the season dates themselves (January 1, June 1, and September 1) would remain fixed in regulation. A regulatory amendment would still be required to effect any change in season dates.

1.3 Changes in TAC Amounts and Effects on Steller Sea Lions of a 25/35/40 Reapportionment of Pollock TAC in the Combined W/C Regulatory Area

In 1997, the status quo seasonal apportionments in the combined W/C Regulatory Area resulted in third seasonal allowances of 9,300, 15,624 and 12,276 mt for statistical areas 610, 620 and 630, respectively (Table 1).

Under Alternative 1 (status quo), the corresponding 1998 third seasonal allowances for each statistical area would be 14,895, 25,023 and 19,658 mt, for a total of 59,575 mt (Table 2). By area, the net increase under the status quo alternative would be 5,595, 9,399, and 7,382 mt, for each statistical area, respectively (Table 3).

Under Alternative 2, the 1998 TAC apportionments for the third season would be 11,916, 20,018, and 15,726 mt (Table 4.) Relative to the status quo alternative 11,915 mt of the 1998 pollock TAC is shifted back to the second season, with reductions of 2,979, 5,005 and 3,932 mt across areas 610, 620 and 630 (Table 5). When compared to 1997, the 1998 TAC apportionment under Alternative 2 limit third

Table 1. 1997 seasonal apportionments of pollock TAC in the combined W/C Regulatory Area.

Statistical Area	Split by Area	1997 TAC	Jan. 20 (25%)	June 1 (25%)	Sept. 1 (50%)
610 - Shumagin	0.25	18,600	4,650	4,650	9,300
620 - Chirikof	0.42	31,248	7,812	7,812	15,624
630 - Kodiak	0.33	24,552	6,138	6,138	12,276
Total	1.00	74,400	18,600	18,600	37,200

Table 2. 1998 seasonal apportionments of pollock TAC in the combined W/C Regulatory Area under Alternative 1 (25/25/50 split).

Statistical Area	Split by Area	1998 TAC	Jan. 20 (25%)	June 1 (25%)	Sept. 1 (50%)
610 - Shumagin	0.25	29,790	7,448	7,448	14,895
620 - Chirikof	0.42	50,045	12,511	12,511	25,023
630 - Kodiak	0.33	39,315	9,829	9,829	19,658
Total	1.00	119,150	29,788	29,788	59,575

Table 3. Difference between 1997 and 1998 TAC apportionments in the combined W/C Regulatory Area under Alternative 1 (25/25/50 split).

Statistical Area	Jan. 20 (25%)	June 1 (25%)	Sept. 1 (50%)
610 - Shumagin	2,798	2,798	5,595
620 - Chirikof	4,699	4,699	9,399
630 - Kodiak	3,691	3,691	7,382
Total	11,188	11,188	22,375

season increases in any one statistical area to less than 4,400 mt (Table 6). A 10 percent reapportionment of TAC under Alternative 2 decreases the third season apportionment such that the net increase between 1997 and 1998 are balanced between the first and third openings.

The benefit to sea lions comes as both potential increase in available forage and shorter fishing duration in the third quarter.

Table 4. 1998 apportionments of pollock TAC in the combined W/C Regulatory Area by statistical area and season under Alternative 2 (25/35/40 split).

<i>Statistical Area</i>	<i>Split by Area</i>	<i>1998 TAC</i>	<i>Jan. 20 (25%)</i>	<i>June 1 (35%)</i>	<i>Sept. 1 (40%)</i>
610 - Shumagin	0.25	29,790	7,448	10,427	11,916
620 - Chirikof	0.42	50,045	12,511	17,516	20,018
630 - Kodiak	0.33	39,395	9,829	13,760	15,726
Total	1.00	119,150	29,788	41,703	47,660

Table 5. Difference in 1998 TAC apportionments between Alternatives 1 and 2.

<i>Statistical Area</i>	<i>Jan. 1</i>	<i>Jun. 1</i>	<i>Sept. 1</i>
610 - Shumagin	0	2,979	-2,979
620 - Chirikof	0	5,005	-5,005
630 - Kodiak	0	3,932	-3,832
Total	0	11,915	-11,915

Table 6. Difference between 1997 and 1998 seasonal apportionments if split according to Alternative 2.

<i>Statistical Area</i>	<i>Jan. 1</i>	<i>June 1</i>	<i>Sept. 1</i>
610 - Shumagin	2,798	5,777	2,616
620 - Chirikof	4,699	9,704	4,394
630 - Kodiak	3,691	7,622	3,450
Total	11,188	23,103	10,460

1.4 Background on Management Actions Related to Steller Sea Lions

Regulatory Actions. As a result of precipitous declines in the U.S. population of Steller sea lions, the species was first listed as threatened under provisions of the ESA in 1990 (55 FR 12645, April 5, 1990). Coincident with the 1990 listing as threatened, NMFS implemented several sea lion protection measures. In 1991, 1992, and 1993, NMFS promulgated additional regulations under the Magnuson Fishery Conservation and Management Act to reduce the effects of fishing activity on Steller sea lions. These regulations included the establishment of buffer zones around Steller sea lion rookeries west of 150°W. long., and seasonal trawl exclusion zones. In 1993, NMFS designated critical habitat for the species (58 FR 45269, August 27, 1993), which includes all U.S. rookeries, major haulouts in Alaska, as well as three aquatic foraging areas in N. Pacific waters (Seguam Pass, southeastern Bering Sea Shelf, and the Shelikof Strait area of the GOA).

When the Steller sea lion population was listed as threatened under the ESA, the species was not delineated into separate stocks. Subsequently, analysis of mitochondrial DNA provided sufficient evidence to distinguish two population segments (Bickham et al., 1996). In addition, phylogeographic analysis (Dizon et al., 1992) using Steller sea lion population dynamics, data from tagging, branding and radio-telemetry studies, and phenotypic data supported the delineation of two discrete populations separated to the east and west of 144°W longitude. Further analyses on the decline in the western population led NMFS to publish a final rule in May 1997 (62 FR 24345, May 5, 1997; effective date June 4) distinguishing these populations and listing the western population, i.e. west of 144°W longitude, as endangered. The eastern population was determined as likely to maintain current abundance for the foreseeable future and remains listed as threatened. Results of population modeling indicated that the next 20 years will be crucial to the survival of the western population of Steller sea lions (NMFS, final rule 62 FR 24345). The GOA management area encompasses both the eastern and western populations of Steller sea lions. However, the fishery management action addressed here pertains to the pollock TAC in the W/C Regulatory Area, which is harvested solely within the range of the endangered western stock of Steller sea lions.

Concerns over the availability of prey resources for marine mammals, seabirds, and other groundfish prompted the Council to adopt Amendment 39 to the FMP which combined certain forage fish species into a unique forage fish species group, which would be managed to prevent commercial harvest on these prey species. A proposed rule to implement Amendment 39 was published on December 12, 1997 (62 FR 65402) with comments invited through January 26, 1998. If approved, the management measures implementing Amendment 39 would become effective in March 1998.

The process of groundfish stock assessment continues to include a marine mammal biologist to provide input on sea lion conservation. On an annual basis, the Council expands the range and detail of information in the Ecosystems Considerations chapter of the Stock Assessment and Fishery Evaluation (SAFE) report, which was first prepared in 1995. The intent of the Ecosystems Considerations chapter is to provide the Council with information about the effects of fishing from an ecosystems perspective, with Steller sea lion considerations forming an integral component to the chapter. Specific ecosystem concerns are identified that should be considered by fishery managers, particularly during the annual process of setting catch limits on groundfish.

Environmental Baseline. Since 1992 NMFS has conducted Alaska-wide aerial surveys of Steller sea lions on an alternate year schedule. A regularly scheduled survey was conducted in June 1996 that ranged from southeast Alaska westward through Attu Island in the western Aleutian Islands.

Summer aerial trend surveys show a continuing decline of Steller sea lions in the GOA. An overall decrease of 7.8 percent (1994-96) was observed in nonpup numbers at trend sites from southeast Alaska through the western Aleutian Islands. At trend sites in the Gulf of Alaska, surveys of adult and juvenile sea lions indicated an overall decrease of -17.6 percent from 1994 to 1996. The eastern Gulf of Alaska area, Prince William Sound, showed the greatest decrease (-36.8 percent), followed by the central (-13.4 percent) and the western (-6.1 percent) areas. Pup numbers at eight rookery sites in the whole Gulf of Alaska area decreased similarly after 1994, with the greatest declines observed at sites in the eastern Gulf of Alaska sites (-37.5 percent); productivity apparently increased (+13 percent) at the single site surveyed in the western Gulf of Alaska.

In 1997, the area from Kenai westward was surveyed to determine whether the patterns observed in 1996 were continuing. Counts of adult and juvenile animals at trend sites in the central and western Gulf of Alaska areas indicated a -14.4 percent decrease (central Gulf), or a -6.4 percent decrease excluding counts at Marmot Island, and a -2.9 percent decrease in the western area. Based on pup counts at Marmot Island, numbers in this area may not have decreased as much as shown in the aerial survey, with a change of -3.5 percent from 1996-97.

When the western Steller sea lion population was listed as endangered, NMFS determined that no new management measures would be immediately imposed. However, as recommended in the 1996 Biological Opinion, NMFS has undertaken an examination of current management measures.

In May 1997, NMFS convened an outside panel of scientific experts to design a study to evaluate the efficacy of the buffer zones placed around rookeries west of 150°W longitude. NMFS expects to begin this evaluation after the study plan is completed in late 1998. The results may lead to recommendations for modification of current management strategies. However, NMFS anticipates that any new management measures resulting from an evaluation of fishery effects will not be available for some time.

2.0 NEPA REQUIREMENTS: ENVIRONMENTAL IMPACTS OF THE ALTERNATIVES

An environmental assessment (EA) is required by the National Environmental Policy Act of 1969 (NEPA) to determine whether the action considered will result in significant impact on the human environment. If the action is determined not to be significant based on an analysis of relevant considerations, the EA and resulting finding of no significant impact (FONSI) would be the final environmental documents required by NEPA. An environmental impact statement (EIS) must be prepared for major Federal actions significantly affecting the human environment.

An EA must include a brief discussion of the need for the proposal, the alternatives considered, the environmental impacts of the proposed action and the alternatives, and a list of document preparers. The purpose and alternatives were discussed in Sections 1.1 and 1.2, and the list of preparers is in Section 6. This section contains the discussion of the environmental impacts of the alternatives including impacts on threatened and endangered species and marine mammals.

2.1 Environmental Impacts of the Alternatives

The environmental impacts generally associated with fishery management actions are effects resulting from (1) harvest of fish stocks which may result in changes in food availability to predators and scavengers, changes in the population structure of target fish stocks, and changes in the marine ecosystem community structure; (2) changes in the physical and biological structure of the marine environment as a result of fishing practices, e.g., effects of gear use and fish processing discards; and (3) entanglement/entrapment of non-target organisms in active or inactive fishing gear.

A summary of the effects of the annual groundfish TAC amounts on the biological environment and associated impacts on marine mammals, seabirds, and other threatened or endangered species are discussed in the final environmental assessment for the annual groundfish total allowable catch specifications (NMFS 1998).

2.2 Impacts on Endangered or Threatened Species

Background. The ESA provides for the conservation of endangered and threatened species of fish, wildlife, and plants. The program is administered jointly by NMFS for most marine species, and the US Fish and Wildlife Service (FWS) for terrestrial and freshwater species.

The ESA procedure for identifying or listing imperiled species involves a two-tiered process, classifying species as either threatened or endangered, based on the biological health of a species. Threatened species are those likely to become endangered in the foreseeable future [16 U.S.C. §1532(20)]. Endangered species are those in danger of becoming extinct throughout all or a significant portion of their range [16 U.S.C. §1532(20)]. The Secretary of Commerce, acting through NMFS, is authorized to list marine mammal and fish species. The Secretary of the Interior, acting through the FWS, is authorized to list all other organisms.

In addition to listing species under the ESA, the critical habitat of a newly listed species must be designated concurrent with its listing to the "maximum extent prudent and determinable" [16 U.S.C. §1533(b)(1)(A)]. The ESA defines critical habitat as those specific areas that are essential to the conservation of a listed species and that may be in need of special consideration. The primary benefit of critical habitat designation is that it informs Federal agencies that listed species are dependent upon these areas for their continued existence, and that consultation with NMFS on any Federal action that may

affect these areas is required. Some species, primarily the cetaceans, listed in 1969 under the Endangered Species Conservation Act and carried forward as endangered under the ESA, have not received critical habitat designations.

Listed Species. The following species are currently listed as endangered or threatened under the ESA and occur in the GOA and/or BSAI:

Endangered

Northern Right Whale	<i>Balaena glacialis</i>
Bowhead Whale ²	<i>Balaena mysticetus</i>
Sei Whale	<i>Balaenoptera borealis</i>
Blue Whale	<i>Balaenoptera musculus</i>
Fin Whale	<i>Balaenoptera physalus</i>
Humpback Whale	<i>Megaptera novaeangliae</i>
Sperm Whale	<i>Physeter macrocephalus</i>
Snake River Sockeye Salmon	<i>Oncorhynchus nerka</i>
Short-tailed Albatross	<i>Diomedea albatrus</i>
Steller Sea Lion ³	<i>Eumetopias jubatus</i>

Threatened

Snake River Fall Chinook Salmon	<i>Oncorhynchus tshawytscha</i>
Snake River Spring/Summer Chinook Salmon	<i>Oncorhynchus tshawytscha</i>
Steller Sea Lion ⁴	<i>Eumetopias jubatus</i>
Spectacled Eider	<i>Somateria fishcheri</i>

Section 7 Consultations. Because both groundfish fisheries are federally regulated activities, any negative affects of the fisheries on listed species or critical habitat and any takings⁵ that may occur are subject to ESA section 7 consultation. NMFS initiates the consultation and the resulting biological opinions are issued to NMFS. The Council may be invited to participate in the compilation, review, and analysis of data used in the consultations. The determination of whether the action "is likely to jeopardize the continued existence of" endangered or threatened species or to result in the destruction or modification of critical habitat, however, is the responsibility of the appropriate agency (NMFS or FWS). If the action is determined to result in jeopardy, the opinion includes reasonable and prudent measures that are necessary to alter the action so that jeopardy is avoided. If an incidental take of a listed species is expected to occur under normal promulgation of the action, an incidental take statement is appended to the biological opinion.

²species is present in Bering Sea area only.

³listed as endangered west of Cape Suckling.

⁴listed as threatened east of Cape Suckling.

⁵ the term "take" under the ESA means "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct" (16 U.S.C. §1538(a)(1)(B)).

Section 7 consultations have been done for all the above listed species, some individually and some as groups. Below are summaries of the consultations.

Endangered Cetaceans. NMFS concluded a formal section 7 consultation on the effects of the BSAI and GOA groundfish fisheries on endangered cetaceans within the BSAI and GOA on December 14, 1979, and April 19, 1991, respectively. These opinions concluded that the fisheries are unlikely to jeopardize the continued existence or recovery of endangered whales. Consideration of the bowhead whale as one of the listed species present within the area of the Bering Sea fishery was not recognized in the 1979 opinion, however, its range and status are not known to have changed. No new information exists that would cause NMFS to alter the conclusion of the 1979 or 1991 opinions. NMFS has no plan to reopen Section 7 consultations on the listed cetaceans for this action. Of note, however, are observations of Northern Right Whales during Bering Sea stock assessment cruises in the summer of 1997 (NMFS per. com). Prior to these sightings, and one observation of a group of two whales in 1996, confirmed sightings had not occurred.

Steller sea lion. The Steller sea lion range extends from California and associated waters to Alaska, including the Gulf of Alaska and Aleutian Islands, and into the Bering Sea and North Pacific and into Russian waters and territory. In 1997, based on biological information collected since the species was listed as threatened in 1990 (60 FR 51968), NMFS reclassified Steller sea lions as two distinct population segments under the ESA (62 FR 24345). The Steller sea lion population segment west of 144°W. longitude (a line near Cape Suckling, Alaska) is listed as endangered; the remainder of the U.S. Steller sea lion population remains listed as threatened.

NMFS designated critical habitat in 1993 (58 FR 45278) for the Steller sea lion based on the Recovery Team's determination of habitat sites essential to reproduction, rest, refuge, and feeding. Listed critical habitats in Alaska include all rookeries, major haul-outs, and specific aquatic foraging habitats of the BSAI and GOA. The designation does not place any additional restrictions on human activities within designated areas. No changes in critical habitat designation were made as result of the 1997 re-listing.

Beginning in 1990 when Steller sea lions were first listed under the ESA, NMFS determined that both groundfish fisheries may adversely affect Steller sea lions, and therefore conducted Section 7 consultation on the overall fisheries (NMFS 1991), and subsequent changes in the fisheries (NMFS 1992). The most recent biological opinion on the BSAI and GOA fisheries effects on Steller sea lions was issued by NMFS January 26, 1996. It concluded that these fisheries and harvest levels are unlikely to jeopardize the continued existence and recovery of the Steller sea lion or adversely modify critical habitat. NMFS conducted an informal Section 7 consultation on Steller sea lions for this action in 1997 and concluded that the GOA groundfish fishery and the 1997 TAC amounts were not likely to affect Steller sea lions in a way or to an extent not already considered in previous Section 7 consultations (NMFS, January 17, 1997). Reinitiation of formal consultation was not required at that time. NMFS has reopened formal consultation on the 1998 fishery to evaluate new information specific to the 60 percent increase of pollock TAC in the combined W/C Regulatory Area. A supplementary Biological Opinion, to the 1996 Biological Opinion, was produced that concluded that a reapportionment of 10 percent of the pollock TAC from the third season (September) to the second season (June) under Alternative 2 was not likely to jeopardize the continued existence and recovery of the western population of Steller sea lions.

For the 1998 fishery, a 60 percent increase in the pollock TAC has been specified for the combined W/C Regulatory Area. The second reinitiation criterion established in the 1996 BO states that formal consultation is required if "new information reveals effects of the action that may affect listed species or critical habitat (when designated) in a manner or to an extent not previously considered." For this

reason, NMFS reinitiated consultation to evaluate the effects of the action based on this recent new information on the increase in the pollock TAC for the combined W/C Regulatory Area. The portion of the 1996 BO that evaluates other aspects of the fishery remains current and is incorporated in this amendment by reference.

Pacific Salmon. No species of Pacific salmon originating from freshwater habitat in Alaska are listed under the ESA. These listed species originate in freshwater habitat in the headwaters of the Columbia (Snake) River. During ocean migration to the Pacific marine waters a small (undetermined) portion of the stock extend into the Gulf of Alaska as far east as the Aleutian Islands. In that habitat they are mixed with hundreds to thousands of other stocks originating from the Columbia River, British Columbia, Alaska, and Asia. The listed fish are not visually distinguishable from the other, unlisted, stocks. Mortal take of them in the chinook salmon bycatch portion of the fisheries is assumed based on sketchy information on abundance, timing, and migration patterns.

NMFS designated critical habitat in 1992 (57 FR 57051) for the for the Snake River sockeye, Snake River spring/summer chinook, and Snake River fall chinook salmon. The designations did not include any marine waters, therefore, does not include any of the habitat where the groundfish fisheries are promulgated.

NMFS has issued two biological opinions and no-jeopardy determinations for listed Pacific salmon in the Alaska groundfish fisheries (NMFS 1994, NMFS 1995). Conservation measures were recommended to reduce salmon bycatch and improve the level of information about the salmon bycatch. The no jeopardy determination was based on the assumption that if total salmon bycatch is controlled, the impacts to listed salmon are also controlled. The incidental take statement appended to the second biological opinion allowed for take of one Snake River fall chinook and zero take of either Snake River spring/summer chinook or Snake River sockeye, per year. As explained above, it is not technically possible to know if any have been taken. Compliance with the biological opinion is stated in terms of limiting salmon bycatch per year to under 55,000 and 40,000 for chinook salmon, and 200 and 100 sockeye salmon in the BSAI and GOA fisheries, respectively.

Short-tailed albatross. The entire world population in 1995 was estimated as 800 birds; 350 adults breed on two small islands near Japan (H. Hasegawa, per. com.). The population is growing but is still critically endangered because of its small size and restricted breeding range. Past observations indicate that older short-tailed albatrosses are present in Alaska primarily during the summer and fall months along the shelf break from the Alaska Peninsula to the GOA, although 1- and 2-year old juveniles may be present at other times of the year (FWS 1993). Consequently, these albatrosses generally would be exposed to fishery interactions most often during the summer and fall--during the latter part of the second and the whole of the third fishing quarters.

Short-tailed albatrosses reported caught in the longline fishery include two in 1995, one in October 1996, and none in 1997. Both 1995 birds were caught in the vicinity of Unimak Pass and were taken outside the observers' statistical samples.

Formal consultation on the effects of the groundfish fisheries on the short-tailed albatross under the jurisdiction of the FWS concluded that BSAI and GOA groundfish fisheries would adversely affect the short-tailed albatross and would result in the incidental take of up to two birds per year, but would not jeopardize the continued existence of that species (FWS 1989). Subsequent consultations for changes to the fishery that might affect the short-tailed albatross also concluded no jeopardy (FWS 1995, FWS 1997). The US Fish and Wildlife Service does not intend to renew consultation for this action.

Spectacled Eider. These sea ducks feed on benthic mollusks and crustaceans taken in shallow marine waters or on pelagic crustaceans. The marine range for spectacled eider is not known, although Dau and Kitchinski (1977) review evidence that they winter near the pack ice in the northern Bering Sea. Spectacled eider are rarely seen in U.S. waters except in August through September when they molt in northeast Norton Sound and in migration near St. Lawrence Island. The lack of observations in U.S. waters suggests that, if not confined to sea ice polynes, they likely winter near the Russian coast (FWS 1993). Although the species is noted as occurring in the GOA and BSAI management areas, no evidence exists that they interact with these groundfish fisheries.

Conditions for Re-initiation of Consultation. For all ESA listed species, consultation must be reinitiated if: the amount or extent of taking specified in the Incidental Take Statement is exceeded, new information reveals effects of the action that may affect listed species in a way not previously considered, the action is subsequently modified in a manner that causes an effect to listed species that was not considered in the biological opinion, or a new species is listed or critical habitat is designated that may be affected by the action.

2.3 Impacts on Marine Mammals Not Listed Under the ESA

Marine mammals not listed under the ESA that may be present in the GOA and BSAI include cetaceans, [minke whale (*Balaenoptera acutorostrata*), killer whale (*Orcinus orca*), Dall's porpoise (*Phocoenoides dalli*), harbor porpoise (*Phocoena phocoena*), Pacific white-sided dolphin (*Lagenorhynchus obliquidens*), and the beaked whales (e.g., *Berardius bairdii* and *Mesoplodon spp.*)] as well as pinnipeds [northern fur seals (*Callorhinus ursinus*), and Pacific harbor seals (*Phoca vitulina*)] and the sea otter (*Enhydra lutris*).

The proposed alternatives are designed to reduce impacts of the pollock fishery in the combined W/C Regulatory Area of the GOA on the western population of Steller sea lions. The affects of the alternatives on Steller sea lions are addressed in section 2.3 above. None of the alternatives will affect takes of other marine mammals not listed under the ESA. Therefore, none of the alternatives are expected to have a significant impact on marine mammals not listed under the ESA.

2.4 Coastal Zone Management Act

Implementation of each of the alternatives would be conducted in a manner consistent, to the maximum extent practicable, with the Alaska Coastal Management Program within the meaning of Section 30(c)(1) of the Coastal Zone Management Act of 1972 and its implementing regulations.

2.5 Conclusions or Finding of No Significant Impact

None of the alternatives are likely to significantly affect the quality of the human environment, and the preparation of an environmental impact statement for the proposed action is not required by Section 102(2)(C) of the National Environmental Policy Act or its implementing regulations.

Assistant Administrator for Fisheries, NOAA

Date

3.0 REGULATORY IMPACT REVIEW: ECONOMIC AND SOCIOECONOMIC IMPACTS OF THE ALTERNATIVES

This section provides information about the economic and socioeconomic impacts of the alternatives including identification of the individuals or groups that may be affected by the action, the nature of these impacts, quantification of the economic impacts if possible, and discussion of the trade offs between qualitative and quantitative benefits and costs.

The requirements for all regulatory actions specified in E.O. 12866 are summarized in the following statement from the order:

In deciding whether and how to regulate, agencies should assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating. Costs and benefits shall be understood to include both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify, but nevertheless essential to consider. Further, in choosing among alternative regulatory approaches, agencies should select those approaches that maximize net benefits (including potential economic, environment, public health and safety, and other advantages; distributive impacts; and equity), unless a statute requires another regulatory approach.

This section also addresses the requirements of both E.O. 12866 and the RFA to provide adequate information to determine whether an action is "significant" under E.O. 12866 or will result in "significant" impacts on small entities under the RFA.

E. O. 12866 requires that the Office of Management and Budget review proposed regulatory programs that are considered to be "significant". A "significant regulatory action" is one that is likely to:

1. Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;
2. Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
3. Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
4. Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order.

A regulatory program is "economically significant" if it is likely to result in the effects described above. The Regulatory Impact Review (RIR) is designed to provide information to determine whether the proposed regulation is likely to be "economically significant." None of the alternatives is expected to result in a "significant regulatory action" as defined in E.O. 12866.

3.1 Economic Effects of a 10 percent Reapportionment of Pollock TAC in the Combined W/C Regulatory Area under Alternative 2.

A 10 percent reapportionment of pollock TAC in the W/C Regulatory Area from the September 1 to June 1 season in 1998 would shift 11,915 mt of pollock TAC from the September to the June fishery (Table 5). Historically, exvessel prices for pollock in the W/C Regulatory Area have been higher during September because processors are able to realize a higher recovery rate on fish caught in September than fish caught in June (Table 7).

The economic effects of a 10 percent shift in pollock TAC in the W/C Regulatory Area from September to June are estimated to be a reduction in exvessel value of approximately \$ 525,000 (Table 8).

3.2 Economic Impacts of the Alternatives on Small Entities

The objective of the Regulatory Flexibility Act is to require consideration of the capacity of those affected by regulations to bear the direct and indirect costs of regulation. If an action will have a significant impact on a substantial number of small entities an Initial Regulatory Flexibility Analysis (IRFA) must be prepared to identify the need for the action, alternatives, potential costs and benefits of the action, the distribution of these impacts, and a determination of net benefits.

Table 8. Change in exvessel value under a 10 percent reapportionment of pollock TAC from September 1 to June 1 based on 1998 TAC amounts and 1997 average prices of \$0.08/lb in June and \$0.10/lb in September.

Statistical Area	10 % of 1998 TAC	Exvessel value		
		June 1	Sept 1	Difference
610 - Shumagin	2,979	\$525,257	\$656,572	\$-131,314
620 - Chirkof	5,005	\$882,482	\$1,103,102	\$-220,620
630 - Kodiak	3,932	\$693,290	\$866,613	\$-173,323
Total	11,915	\$2,100,853	\$2,626,066	\$-525,213

The Small Business Administration has defined all fish-harvesting or hatchery businesses that are independently owned and operated, not dominant in their field of operation, with annual receipts not in excess of \$3,000,000 as small businesses. In addition, seafood processors with 500 employees or fewer, wholesale industry members with 100 employees or fewer, not-for-profit enterprises, and government jurisdictions with a population of 50,000 or less are considered small entities. NMFS has determined that a "substantial number" of small entities would generally be 20 percent of the total universe of small entities affected by the regulation. A regulation would have a "significant impact" on these small entities if it changed annual gross revenues by more than 5 percent, total costs of production by more than 5 percent, or compliance costs for small entities by at least 10 percent compared with compliance costs as a percent of sales for large entities.

If an action is determined to affect a substantial number of small entities, the analysis must include:

1. a description and estimate of the number of small entities and total number of entities in a particular affected sector, and total number of small entities affected; and
2. analysis of economic impact on small entities, including direct and indirect compliance costs, burden of completing paperwork or recordkeeping requirements, effect on the competitive

position of small entities, effect on the small entity's cashflow and liquidity, and ability of small entities to remain in the market.

In 1996, the most recent year for which vessel participation data is available, 1,508 vessels participated in the groundfish fisheries of the GOA; 1,254 longline vessels, 148 pot vessels, and 202 trawl vessels. Of these, 96 vessels, all of them trawl catcher vessels, participated in the directed fishery for pollock in the GOA. These 96 vessels represent approximately 6 percent of the GOA groundfish fleet or less than 20 percent of total universe of small entities affected by the proposed regulation. The projected exvessel value of the 1998 pollock fishery in the combined W/C Regulatory Area is \$25,670,006 under Alternative 1, and \$25,144,792 under Alternative 2 which represents a 2 percent reduction in exvessel value from the status quo

(Table 9). Because a reapportionment of pollock TAC under Alternative 2 would affect less than 20 percent of the GOA groundfish fleet and result in a reduction of gross earnings of approximately 2 percent, this action will not have a significant impact on a substantial number of small entities; consequently, an IRFA was not prepared.

Table 9. Comparison of exvessel value of 1998 combined W/C Regulatory Area pollock fishery under Alternative 1 and Alternative 2 using 1997 average exvessel prices.

Statistical Area	Estimated exvessel value			
	Alt. 1 (25/25/50)	Alt. 2 (25/35/40)	Difference	Percent difference
610 - Shumagin	\$6,418,198	\$6,286,884	\$131,314	2
620 - Chirikof	\$10,781,750	\$10,561,129	\$220,620	2
630 - Kodiak	\$8,478,698	\$8,296,779	\$181,918	2
Total	\$25,670,006	\$25,144,792	\$525,213	2

4.0 SUMMARY AND CONCLUSIONS

The objective of this action is to reapportion the pollock TACs so that the projected increases in pollock catches during the third season in 1998 are reduced relative to what would occur under the current seasonal TAC split. Increases in projected pollock removals in mid-summer (i.e., during the second season) would occur during a potentially less stressful foraging period for sea lions. The benefit to sea lions comes as both potential increase in available forage and shorter fishing duration in the third quarter.

A reapportionment of 10 percent of the pollock TAC from the third to the second season for the 1998 fishing season could be accomplished through an interim regulatory amendment as described in Alternative 2. Alternative 3 is a framework FMP amendment that would allow the seasonal apportionments of pollock TAC to be specified by the Council during the annual TAC specification process based on Steller sea lion considerations and other factors. Because the 1998 pollock TAC has already been approved by the Council, the FMP amendment proposed under Alternative 3 would not take effect until the Council begins to consider TACs for 1999. Adoption of both Alternatives 2 and 3 would allow for a 10 percent reapportionment in 1998 and would retain for the Council the flexibility to adjust the seasonal apportionments of pollock TAC in the combined W/C Regulatory Areas in subsequent years if changes in status of pollock stocks and new information about Steller sea lions in subsequent years suggest that another seasonal split is optimal.

Historically, exvessel prices for pollock in the W/C Regulatory Area have been higher during September because processors are able to realize a higher recovery rate on fish caught in September than fish caught in June. Consequently, the economic effects of a 10 percent shift in pollock TAC in the W/C Regulatory Area from September to June are estimated to be a reduction in exvessel value of approximately \$ 525,000 using 1997 prices.

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6.0 LIST OF PREPARERS

Kent Lind
NMFS-Alaska Region

Lowell Fritz
NMFS-Alaska Fisheries Science Center

DRAFT FOR PUBLIC REVIEW

ENVIRONMENTAL ASSESSMENT/REGULATORY IMPACT REVIEW

FOR

AMENDMENT 52 TO THE FISHERY MANAGEMENT PLAN
FOR THE GROUND FISH FISHERY OF THE BERING SEA AND ALEUTIAN ISLANDS AREA
AND
AMENDMENT 52 TO THE FISHERY MANAGEMENT PLAN
FOR GROUND FISH OF THE GULF OF ALASKA

TO ESTABLISH

A VESSEL REGISTRATION PROGRAM FOR SHORT TERM FISHERIES AND/OR A STAND DOWN
REQUIREMENT FOR VESSELS TRANSITING BETWEEN THE BERING SEA AND ALEUTIAN
ISLANDS MANAGEMENT AREA AND THE GULF OF ALASKA

Prepared by

National Marine Fisheries Service
Alaska Regional Office

January 1998

EXECUTIVE SUMMARY

In recent years, several fisheries in the Bering Sea and Aleutian Islands Management Area (BSAI) and Gulf of Alaska (GOA) have been "at risk" of exceeding their specified total allowable catch (TAC) or prohibited species catch (PSC) limits. The fisheries that are "at risk" are characterized as short in duration, usually less than 2 weeks, due to TACs that are small relative to the fishing effort. Catch information in these fisheries, obtained through the current reporting procedures, are neither timely nor accurate enough to allow proper management. Under the existing management regime, NMFS does not have advance knowledge of fishery specific effort, nor the authority to obtain such information. These management problems have been particularly acute in the pollock and Pacific cod fisheries of the Western Regulatory Area of the GOA

The problems and risks associated with managing short term fisheries will continue to present themselves as long as NMFS does not have sufficient tools to project and manage fishing effort in these fisheries. Amendments 52/52 would authorize NMFS to establish a vessel registration program for "at risk" fisheries and/or would authorize NMFS to establish a stand down period for groundfish vessels transiting between the BSAI and GOA or vice versa. These alternatives are not mutually exclusive but are independent proposals. Either alternative or both could be adopted as Amendments 52/52.

Alternative 1: No Action. The groundfish fisheries of the BSAI and GOA would continue to be managed under the existing management regime. The weekly production reports and daily production reports submitted to NMFS by processors and daily observer reports are the current tools for managing "at risk" fisheries.

Alternative 2: Establish a vessel registration program for "At risk" fisheries which meet certain criteria. NMFS would establish criteria to determine which fisheries would require registration. Based on these criteria, NMFS would create a roster of "registration fisheries" that would be announced at the beginning of each year and supplemented as necessary on an inseason basis throughout the year. Criteria for establishing a registration requirement for a fishery could include: (1) the size of the TAC amount or PSC limit specified for the fishery relative to the degree of interest in that fishery, (2) a fishery for which the TAC or PSC limit was exceeded by a significant amount in the previous year and the current year's quota and expected effort are similar, (3) a fishery for which the above two criteria may not apply but an expanded interest has developed inseason, and (4) a "mop-up" fishery. Vessel operators would be required to register with NMFS a certain number of days before beginning directed fishing in a registration fishery and penalties would be established for non-compliance. The vessel registration program could begin with the pollock and Pacific cod fisheries of the western and central GOA, possibly as early as late-1998 depending upon staff resources. Additional fisheries could be assigned registration status in subsequent years once automated procedures for registering vessels are developed and tested.

Under a vessel registration program, the fleet as a whole will benefit if NMFS is able to manage "at risk" fisheries so that quotas are more fully harvested and the overhead costs associated with re-crewing and transiting to the fishing grounds for short term "mop-up" openings could be avoided. A registration requirement would reduce the flexibility of vessel operators to enter and leave fisheries at will. In some cases, this could pose costs for certain operations if they realize at mid-course that would prefer to be participating in a short term fishery for which they have not registered. Nevertheless, while a registration requirement for certain "at risk" fisheries will increase the constraints on the fleet, it will serve to increase the ability of NMFS to manage such fisheries to obtain optimum yield and provide the greatest net benefit to the nation.

Alternative 3: Establish a stand down requirement for vessels transiting between the BSAI and GOA. Under such a requirement, vessels transiting between the BSAI and GOA or vice versa would be required to stand down for a period of time before beginning fishing in the new area. The following options for a vessel stand down requirement are considered in the analysis.

Vessel and gear options.

- Option 1.** Stand down requirement would apply to all groundfish vessels
- Option 2.** Stand down requirement would apply to trawl vessels only
- Option 3.** Stand down requirement would apply to trawl catcher vessels only

Fishery options

- Option 1.** Stand down requirement would apply to all target fisheries.
- Option 2.** Stand down requirement would apply to vessels engaged in directed fishing for pollock and Pacific cod only.

Options for length of stand down period

- Option 1.** 48 hours
- Option 2.** 72 hours
- Option 3.** 96 hours

Options for beginning and ending of stand down period

- Option 1.** Stand down period begins at the time gear retrieval is completed in one area and ends when gear is deployed in the new area.
- Option 2.** Stand down period begins on the date of delivery and fishing may resume in the new area at 12:00 p.m. A.l.t 2, 3, or 4 days after the date of delivery.

The most precisely targeted stand down requirement would be a program applied to trawl catcher vessels only. Little reason exists to impose a stand down requirement on catcher processors or vessels using fixed gear, which have not posed management difficulties in the past due to rapid shifts of effort. The most effective and easily enforced stand down requirement would be one that applies to all fishing activity regardless of target fishery. NMFS catcher vessel logbooks currently require that fishermen log their time of gear deployment, time of gear retrieval, and date of delivery, but not the time of delivery. Therefore, the most easily implemented stand down requirement for 1998 would be one that starts either at the time of gear retrieval or on the date of delivery. A stand down requirement that begins at the date and time of delivery would require logbook and recordkeeping and reporting changes which would delay implementation until 1999.

A stand down requirement limited to certain target fisheries such as pollock and Pacific cod could be difficult or impossible to enforce, could increase regulatory discards of these species, and could be in conflict with the objectives of the improved retention/improved utilization program recently approved as Amendments 49/49. Care must be taken in the design and implementation of both a vessel registration program and a vessel stand down requirement to prevent inadvertent increases in regulatory discards.

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1.0 INTRODUCTION

The groundfish fisheries in the Exclusive Economic Zone (EEZ) (3 to 200 miles offshore) off Alaska are managed under the Fishery Management Plan for Groundfish of the Gulf of Alaska and the Fishery Management Plan for the Groundfish Fisheries of the Bering Sea and Aleutian Islands Area. Both fishery management plans (FMPs) were developed by the North Pacific Fishery Management Council (Council) under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). The Gulf of Alaska (GOA) FMP was approved by the Secretary of Commerce and became effective in 1978 and the Bering Sea and Aleutian Islands Area (BSAI) FMP was approved and became effective in 1982.

Actions taken to amend FMPs or implement other regulations governing the groundfish fisheries must meet the requirements of Federal laws and regulations. In addition to the Magnuson-Stevens Act, the most important of these are the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), the Marine Mammal Protection Act (MMPA), Executive Order (E.O.) 12866, and the Regulatory Flexibility Act (RFA).

NEPA, E.O. 12866 and the RFA require a description of the purpose and need for the proposed action as well as a description of alternative actions which may address the problem. This information is included in Section 1 of this document. Section 1 also examines implementation and enforcement issues related to the alternatives under consideration. Section 2 contains information on the biological and environmental impacts of the alternatives as required by NEPA. Impacts on endangered species and marine mammals are also addressed in this section. Section 3 contains a Regulatory Impact Review (RIR) which addresses the requirements of both E.O. 12866 and the RFA that economic impacts of the alternatives be considered including the impacts of the proposed action on small businesses.

This Environmental Assessment/Regulatory Impact Review examines Amendments 52/52 to the FMPs which would establish a vessel registration program for "at risk" short term fisheries and/or mandatory stand down requirement for certain vessels transiting between the BSAI and GOA and vice versa.

1.1 Purpose of and Need for the Action

Management of "at risk" short term fisheries. In recent years, several fisheries in the BSAI and GOA have been "at risk" of exceeding their specified total allowable catch (TAC) or prohibited species catch (PSC) limits. The fisheries that are "at risk" are characterized as short in duration, usually less than 2 weeks, due to TACs that are small relative to the fishing effort. Catch information in these fisheries, obtained through the current reporting procedures, are neither timely nor accurate enough to allow proper management. Under the existing management regime, NMFS does not have advance knowledge of fishery specific effort, nor the authority to obtain such information.

To manage fisheries so that the TAC is taken but not exceeded, inseason managers must know the amount of quota available for harvest (the directed fishing allowance) and the rate the directed fishing allowance will be harvested. That rate is dependent on the amount of fishing effort deployed in the fishery and the catchability or catch per unit effort (CPUE) realized. However, without advance information, the effort deployed in a particular fishery is difficult to predict. At times, available TACs or PSC limits are small enough that the fishery is kept closed to prevent risking an overrun of the TAC. At other times, when that risk is taken, small quotas are exceeded because unexpected effort materializes, or CPUE exceeds expectations. In the former instance, groundfish catch is forgone, in the latter, allowable

catches are exceeded, at best resulting in discards of further catches, and at worst, overfishing of the stock.

Displacement of western GOA fishermen. In addition to the problems associated with managing short term fisheries, individuals who participate primarily in western GOA fisheries have expressed concern that their fishing seasons are sometimes dramatically shortened when large vessels move from the BSAI fisheries into GOA fisheries. Various options have been proposed by western GOA fishermen over the years to help mitigate their concerns. These proposals have included (1) trip limits, (2) exclusive area registration for the BSAI and GOA, (3) a stand down requirements for vessels transiting between the BSAI and GOA, (4) shrinking Area 610 by shifting eastward its western boundary from 170°W. latitude to the latitude of Scotch Cap light on the west end of Unimak Island, (5) eliminating the June pollock opening in the GOA and reallocating its TAC among the January and September openings, and (6) dropping the requirement that NMFS publish fishery closures in the Federal Register in advance.

At its September 1997 meeting, the Council received a report from an industry committee that was formed to examine the possibility of trip limits for western GOA pollock and Pacific cod fisheries. However, because the industry committee failed to reach consensus on a trip limit proposal for western GOA fisheries, the Council delayed formal analysis of trip limit options and voted to proceed with analysis of only two short term measures for western GOA fisheries: (1) A 48-hour stand down period for vessels switching between the BSAI and GOA and vice versa, and (2) a requirement that vessels pre-register in western and central GOA fisheries before they are allowed to participate in those fisheries. In the longer term, the Council has scheduled a discussion of GOA management measures for pollock and Pacific cod in the western and central GOA for its February 1998 meeting. At that time, the Council intends to develop a problem statement and identify the specific alternatives to be developed further, with the intent of implementing the measures by January 1, 1999.

1.2 Alternatives Considered

The following alternatives are considered in this analysis. Alternatives 2 and 3 to the status quo should not be considered mutually exclusive and may complement each other. Either alternative or both could be adopted. Amendments 52/52 would provide a general framework that would authorize the types of management measures identified in Alternative 2 and/or Alternative 3, although the specific details of each management measure would be set out in regulation.

1.2.1 Alternative 1: No Action. The groundfish fisheries of the BSAI and GOA would continue to be managed under the existing management regime. The weekly production reports and daily production reports submitted to NMFS by processors and daily observer reports are the current tools for managing "at risk" fisheries.

1.2.2 Alternative 2: Vessel Registration Program for "At risk" fisheries which meet certain criteria. NMFS would establish criteria to determine which fisheries would require registration. Based on these criteria, NMFS would create a roster of "registration fisheries" that would be announced in the beginning of the year supplemented as necessary on an inseason basis throughout the year. Criteria for establishing a registration requirement for a fishery could include: (1) the size of the TAC amount or PSC limit specified for the fishery relative to the degree of interest in that fishery, (2) a fishery for which the TAC or PSC limit was exceeded by a significant amount in the previous year and the current year's quota and expected effort are similar, (3) a fishery for which the above two criteria may not apply but an expanded interest has developed inseason, and (4) a "mop-up" fishery. Vessel operators would be required to register with NMFS a certain number of days before beginning directed fishing in a

registration fishery and penalties would be established for non-compliance. The vessel registration program could begin with the pollock and Pacific cod fisheries of the western and central GOA, possibly as early as late-1998 depending upon staff resources. Additional fisheries could be assigned registration status in subsequent years once automated procedures for registering vessels are developed and tested.

1.2.3 Alternative 3: Stand Down Requirement for vessels transiting between the BSAI and GOA. Under such a requirement, vessels transiting between the BSAI and GOA or vice versa would be required to stand down for a period of time before beginning fishing in the new area.

Vessel and gear options.

- Option 1.** Stand down requirement would apply to all groundfish vessels
- Option 2.** Stand down requirement would apply to trawl vessels only
- Option 3.** Stand down requirement would apply to trawl catcher vessels only

Fishery options

- Option 1.** Stand down requirement would apply to all target fisheries.
- Option 2.** Stand down requirement would apply to vessels engaged in directed fishing for pollock and Pacific cod only.

Options for length of stand down period

- Option 1.** 48 hours
- Option 2.** 72 hours
- Option 3.** 96 hours

Options for beginning and ending of stand down period

- Option 1.** Stand down period begins at the time gear retrieval is completed in one area and ends when gear is deployed in the new area.
- Option 2.** Stand down period begins on the date of delivery and fishing may resume in the new area at 12:00 p.m. A.l.t 2, 3, or 4 days after the date of delivery.

1.3 "At Risk" Fisheries

A number of fisheries in the BSAI and GOA may be considered "at risk" of quota overruns due to small TACs relative to potential effort, or the unpredictability of effort in the fishery. These include pollock in all areas of the GOA, Pacific cod in the GOA, rockfish in the GOA, Atka Mackerel in the Aleutian Islands and Pacific Ocean Perch (POP) in the Aleutian Islands. Several of these fisheries are described below to underscore the problems associated with managing these fisheries without advance information on potential effort.

1.3.1 Pollock in the Western GOA

The pollock fishery in Area 610 has been one of the most difficult fisheries for NMFS to manage in recent years due to a small TAC relative to potential effort and the constant potential that numerous large catcher vessels based in the BSAI may crossover to the GOA to participate in this fishery. The

disposition of pollock catch from area 610 from 1992 to 1997 is displayed on Table 1, which illustrates the unpredictability of effort in this fishery. In 1992, the fishery was dominated by catcher vessels delivering to Bering Sea-based shore plants (Dutch Harbor and Akutan), and several at-sea factory trawlers and motherships. Vessels delivering to GOA-based shore plants accounted for only 11 percent of the total catch from Area 610. In 1993, catcher vessels delivering to Bering Sea-based shore plants did not participate in this fishery, however, catcher vessels delivering to a single Bering Sea-based floating processor accounted for over 50 percent of the catch from Area 610. In 1994 and 1995 the catch of pollock from Area 610 was distributed relatively evenly between catcher vessels delivering to Bering sea-based shore plants and catcher vessels delivering to GOA-based shore plants. At-sea processors (catcher/processors and floating processors) were largely absent from the fishery. During 1994 and 1995, participation by Bering Sea-based vessels occurred only during the June, July and October quarterly pollock openings in Area 610 during which time the Bering Sea pollock fisheries were closed.

In 1996, due in part to the unpredictable level of effort in GOA pollock fisheries, the Council approved Amendment 45 to the GOA FMP which combined the third and fourth quarterly pollock openings into a single seasonal opening on September 1. One of the objectives of Amendment 45 was to schedule this combined third pollock opening in the GOA at the same time as the Bering Sea pollock "B" season to reduce the incentive for Bering Sea-based vessels to crossover and participate in GOA pollock fisheries. In 1996, Amendment 45 achieved this objective as Bering Sea-based vessels accounted for only 3 percent of the total catch of Area 610 pollock.

Table 1. Total catch of pollock from Area 610 by location of processor in metric tons.

Year	BSAI ¹	GOA ²	At-sea ³	Total
1992	9,611	2,124	6,471	18,206
1993	388	9,024	11,671	21,083
1994	6,449	9,753	259	16,461
1995	14,523	14,200	1,194	29,917
1996	815	22,363	954	24,131
1997	7,663	14,680	1,342	23,686

¹Includes shore-based processors in Dutch Harbor and Akutan.
²Includes shore-based processors in Sand Point, King Cove, and Kodiak.
³Includes factory trawlers, factory longliners, and floating processors.

However, this situation changed again dramatically in 1997 as numerous Bering Sea-based catcher vessels chose, at the last moment, to cross over to the GOA during the September pollock opening in Area 610, despite the fact that the Bering Sea pollock fishery was still open at that time. On September 4, 1997, Based on the anticipated level of effort in the Area 610 pollock fishery, NMFS announced a closure for the fishery effective September 7, 1997. Once the closure date was announced, a large influx of Bering Sea-based vessels entered the GOA to participate in the final two days of the fishery and these vessels harvested approximately 7,000 mt of pollock from Area 610 in the final two days of the fishery. As a consequence of this unanticipated effort from Bering Sea-based vessels, the 1997 annual TAC for Area 610 of 18,600 mt was exceeded by 8,017 mt or 43 percent of the total. If a registration program had been in effect for this fishery in 1997, it would have provided NMFS with the information necessary to prevent such a substantial overrun of the TAC.

1.3.2 Inshore Pacific Cod in the Western GOA

The inshore Pacific cod fishery in Area 610 has a similar history of participation by vessels based on both the BSAI and GOA. The total inshore catch of Pacific cod from area 610 by location of processor is displayed in Table 2. While shifts of effort in this fishery are not as dramatic as with the pollock fishery in Area 610, effort is none-the-less sometimes difficult to predict in this fishery. The 1997 fishery is a case in point. In March 1997, after announcing the closure of the inshore Pacific cod fishery in Area 610

effective March 3, 1997, NMFS re-opened the fishery on March 10 for a 24 hour "mop-up" fishery to harvest a small amount of remaining TAC on the assumption that effort in the fishery would continue at the level experienced during January and February up to the March 3 closure.

Until March 3, 1997, catcher vessels based in the Bering Sea had not participated in the Pacific cod fishery in Area 610 to any great extent and were not expected to participate in the 24-hour "mop-up" fishery. However, a substantial number of Bering Sea-based catcher vessels entered the GOA on March 10, 1997, and harvested over 1,200 mt of Pacific cod during that 24 hour opening. As a

Table 2. Total inshore sector catch of Pacific cod from Area 610 by location of processor in metric tons.

Year	BSAI ¹	GOA ²	At-sea ³	Total
1992	1,091	16,229	1,318	18,638
1993	63	10,293	5,539	15,895
1994	161	10,789	3,777	14,728
1995	2,357	10,289	5,501	18,146
1996	155	13,769	3,939	17,862
1997	1,256	17,593	4,081	22,930

¹Includes shore-based processors in Dutch Harbor and Akutan
²Includes shore-based processors in Sand Point, King Cove, and Kodiak
³Includes inshore catcher/processors and inshore floating processors.

consequence of this unanticipated effort, the 21,803 mt Pacific cod TAC for Area 610 was exceeded by 1,288 mt or 6 percent of the total. If a registration program had been in effect for this fishery in 1997, it would have provided NMFS with the information necessary to prevent such a substantial overharvest of the TAC. An overharvest of the Pacific cod TAC in the GOA has the potential to significantly affect State-managed Pacific cod fisheries in State waters as well as IFQ fisheries that normally retain incidental catch of Pacific cod.

1.3.3 Pacific Ocean Perch (POP) in the Central GOA

In 1996, both the level of effort and CPUE in the central GOA POP fishery exceeded preseason expectations, and the TAC of 3,333 mt specified for that area was exceeded by 1,812 mt or 54 percent. As a result, NMFS was forced to close other fisheries that were expected to experience bycatch of POP in order to prevent overfishing of the species. A combination of factors made this fishery particularly difficult to estimate preseason and lead to the 1996 overharvest of POP. First, NMFS did not have adequate estimates of the effort that would be deployed in this fishery. In 1996, Amendment 49 to the FMP became effective which combined the July and October quarterly allowances of pollock TAC into a single seasonal allowance on September 1. Consequently, many catcher vessels were available in July to fish for POP at a time when they had fished for pollock in previous years. Second, the CPUE in this fishery exceeded the preseason expectations of both NMFS and the industry. While a vessel registration program would not have given NMFS advance warning of the high CPUE in the fishery, it would have provided NMFS with advance warning that a large number of catcher vessels intended to participate in the POP fishery for the first time, and would have given NMFS the information necessary to project the attainment of the TAC on an earlier date.

1.3.4 Offshore Pacific Cod in the GOA

The offshore Pacific cod fishery in the GOA is another fishery that has proven problematic for NMFS due to a small TAC relative to the potential effort. In the GOA, 90 percent of the Pacific cod TAC is allocated to the inshore sector leaving a very small TAC for the offshore sector relative to the size of the offshore fleet. In 1996, the difficulty of managing this fishery without advance information was

underscored. In 1996, a number of factory trawlers checked into the central GOA indicating flatfish as their target species. It was not until NMFS began to receive weekly production reports that it became apparent that most of these vessels had high catches of and were in part targeting on Pacific cod. By the time NMFS realized that numerous catcher/processors were targeting on Pacific cod and was able to close the fishery, the 1996 TAC of 4,290 for the offshore sector in the central GOA was exceeded by 1,061 mt or 25 percent of the total.

In 1997, industry favored a March opening for offshore Pacific cod in the GOA. However, due to the 1996 experience, the difficulty of projecting effort in the fishery, and the small available TAC, NMFS believed that a March opening would have been unmanageable and would have posed a substantial risk of overharvest of the TAC. As a result, NMFS delayed opening the offshore Pacific cod fishery until October at which time very few vessels remained interested in the fishery. If a vessel registration program had been in effect for this fishery in 1997, NMFS could have obtained sufficient information to safely open the fishery in March when the majority of the fleet would have preferred to fish.

1.4 Implementation and Enforcement of a Vessel Registration Program

Implementation and enforcement of a vessel registration program for short term fisheries requires: (1) establishing criteria to determine which fisheries would require pre-registration, and (2) designing procedures for registering vessels that wish to participate in registration fisheries.

1.4.1 Criteria for Determining which Fisheries would Require Registration

The first element to a vessel pre-registration program is establishing criteria to determine which fisheries would require pre-registration. Fisheries could be defined on the basis of area, gear type, target species or bycatch species. Initial criteria could include:

1. The amount of available TAC or PSC allowance relative to the degree of interest in the fishery. A small TAC would not necessarily indicate that pre-registration is necessary for management, sufficient interest in the fishery is also necessary. For example, squid has a relatively small TAC in the BSAI, however, there is little interest in fishing for it at this time.
2. Fisheries for which the TAC or PSC allowance was exceeded by a significant amount in the previous year when the current years numbers are similar.
3. A fishery for which the first two criteria may not apply but for which an expanded interest has developed inseason. Expanded interest in a fishery may develop inseason when closures in other fisheries reduce the opportunities to target on alternative species.
4. "Mop-up" fisheries. These typically occur inseason and are associated with fisheries that were closed prior to the attainment of the directed fishing allowance.

NMFS would provide prior notification of which fisheries would require pre-registration. For most "at risk" fisheries, the notification would occur at the beginning of the fishing year. Registration requirements for each fishery would be announced in the *Federal Register* and through news release on the NMFS, Alaska Region home page and bulletin board. However, a certain amount of flexibility should be built into the system. For example, if a fishery of intermediate size was anticipated to gain a large amount of participation during the season due to closures of other fisheries, NMFS could, with

notification, place it in registration status. Such notification would occur through news release and publication in the *Federal Register*.

1.4.2 Procedures for Registering Vessels

Time-frame for registration. Each vessel intending to participate in a registration fishery (e.g. retain catch in excess of the maximum retainable bycatch amount in effect for the fishery) would be required to register for that fishery in advance of participating. To be of benefit to management, registration would be necessary at least 4 days in advance of the time a vessel operator intends to enter a registration fishery. This is especially so for very short term fisheries such as "mop-up" fisheries where it is often necessary to set the closure date and time in advance.

Registration for multiple fisheries. A vessel registration program must be designed so that vessel operators may only be registered in one fishery at a time. Otherwise, vessel operators could speculatively register in fisheries for which they have no intent of participating. If vessels register for a fishery and do not subsequently participate in that fishery, the erroneous estimate of fishing effort could lead NMFS to close the fishery prematurely resulting in loss of fishing opportunity for the actual participants, or increased costs if a "mop-up" fishery became necessary. However, a registration program could be designed so that a vessel operator could register for several fisheries in sequence. For example, a vessel operator may indicate that he intends to participate in the pollock fishery in Area 610 until that area closes, and then shift immediately to Area 620 where he will continue to fish until that area closes. The greater the number of registration fisheries in the BSAI and GOA the more complex the program will be to implement.

A vessel registration program also must be designed to accommodate vessels that may, in the course of normal operations, retain more than one target species at a time. In these multi-species fishery situations, it may make more sense to base a vessel registration requirement on area and gear type rather than target species.

Registration methods. Several options exist for registering vessels for particular fisheries. Initially, vessels could be required to contact the NMFS Regional Office by telephone to provide the vessel name, Federal groundfish permit number, name of operator, intended fishery, and estimated daily fishing capacity. Vessel operators would receive a registration number for that fishery which would serve as proof of registration. Such a system would be relatively labor intensive for NMFS inseason management, and staff constraints would severely limit the number of fisheries that could be placed registration status at one time.

A second possible method for managing a vessel registration program would be through an automated telephone system that would allow a vessel operator to contact NMFS by telephone and respond to a series of automated questions by keying numbers on a touch tone phone pad to electronically register for a fishery. For security reasons, such a program would require some method for verification, such as a PIN number that could be issued to vessels on an annual basis with their Federal permits. Due to the complications associated with setting up an automated telephone system and assigning PIN numbers to vessels, such a system could not be in place prior to 1999 at the earliest.

Ultimately, the electronic reporting program currently under development by NMFS could be used to administer a vessel registration program for catcher/processors. Minor modifications could be made to the electronic reporting software currently under development by NMFS to accommodate electronic registration by catcher/processors for registration fisheries. However, the electronic reporting

requirements currently under development will not be extended to catcher vessels. Consequently, if the electronic reporting program is modified to accommodate a vessel registration program, processors and motherships would have to register their catcher vessels. Such a program would require close cooperation between catcher vessel operators and the processors to which they deliver and processors would have to be authorized to act on behalf of their catcher vessels.

Monitoring and enforcement. Monitoring vessel compliance with a registration program will be relatively simple and could be accomplished through after the fact examination of weekly processor reports, observer reports, and fish tickets.

NMFS has already established range of enforcement remedies for fisheries violations. The penalties for violating any of the proposed measures under Amendments 52/52 would fall within this range of enforcement remedies. Any person committing, or vessel used in the commission of a violation of a vessel registration requirement would be subject to the civil and criminal penalty provisions and civil forfeiture provisions of the Magnuson Act, and to other applicable law. The Magnuson Act provides several enforcement remedies for violations including:

1. Issuance of a citation (a type of warning), usually at the scene of the offense.
2. Assessment by the Administrator of a civil money penalty.
3. Permit sanctions.
4. For certain violations, judicial forfeiture action against the vessel and its catch.
5. Criminal prosecution of the owner or operator for some offenses.

It is the policy of NMFS to enforce vigorously and equitably the provisions of the Magnuson Act by utilizing that form or combination of authorized remedies best suited in a particular case to this end. Processing a case under one remedial form usually means that other remedies are inappropriate in that case. However, further investigation or later review may indicate the case to be either more or less serious than initially considered, or may otherwise reveal that the penalty first pursued is inadequate to serve the purposes of the Magnuson Act. Under such circumstances, NMFS may pursue other remedies either in lieu of or in addition to the action originally taken. Forfeiture of the illegal catch does not fall within this general rule and is considered in most cases as only the initial step in remedying a violation by removing the ill-gotten gains of the offense.

1.5 Shifts of Effort Between the BSAI and GOA

Table 1 displays the estimated number of trawl catcher vessels transiting between the BSAI and GOA and vice versa in 1997 displayed by vessel size, gear type (pelagic or bottom trawl) and length of stand down period. Comparable data was not compiled for catcher processors or vessels using fixed gear because these vessels have not posed the same management difficulties due to unpredictable shifts of effort between areas. Because the haul-by-haul data used to generate Table 1 does not identify target fisheries, it is not possible to calculate the number of

vessels transiting between the BSAI and GOA by target fishery. Figures 1 and 2 display the number of vessels transiting between the BSAI and GOA on a month-by-month basis. A cross comparison of the months in which vessel transits have occurred, with the fisheries that are open in both areas during that month, suggests that the vessels using bottom trawl gear are primarily engaged in directed fishing for Pacific cod, and the vessels using pelagic trawl gear are almost certainly engaged in directed fishing for pollock.

Table 3. Estimated number of catcher vessels transiting between the BSAI and GOA and vice versa in 1997 by gear type, vessel size, and length of stand down period. Stand down period is measured from the time of gear retrieval in one area to the time of gear deployment in the new area.

	Stand down period in hours				
	0-24	24-48	48-72	72-96	over 96
Transits from BSAI to GOA					
<i>Bottom trawl</i>					
Vessels under 125 ft	37	10	0	0	57
Vessels over 125 ft	11	2	2	1	1
<i>Pelagic trawl</i>					
under 125 pelagic trawl	13	3	3	10	23
over 125 pelagic trawl	13	2	3	0	5
Transits from GOA to BSAI					
<i>Bottom trawl</i>					
Vessels under 125 ft	3	7	7	0	33
Vessels over 125 ft	1	3	0	0	9
<i>Pelagic trawl</i>					
under 125 pelagic trawl	7	3	3	3	43
over 125 pelagic trawl	1	1	1	0	1

Source: NMFS Observer data

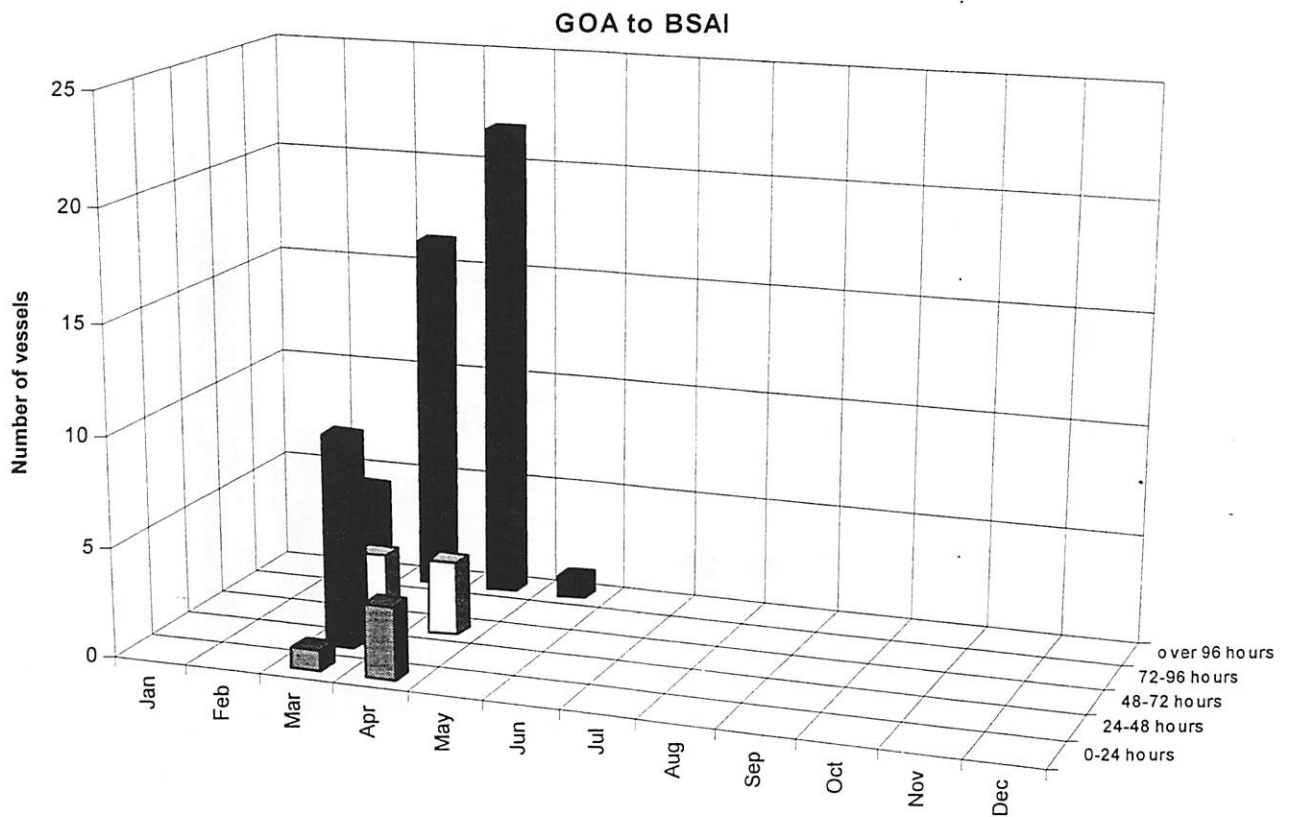
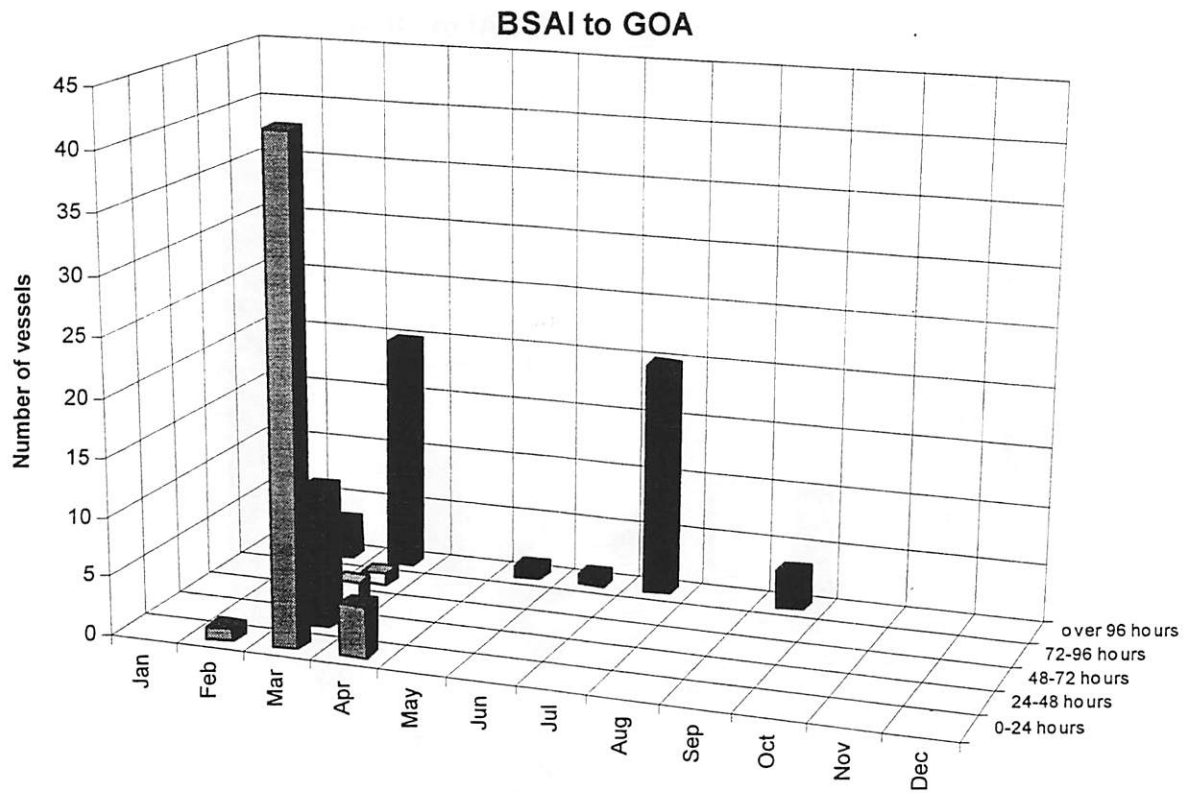
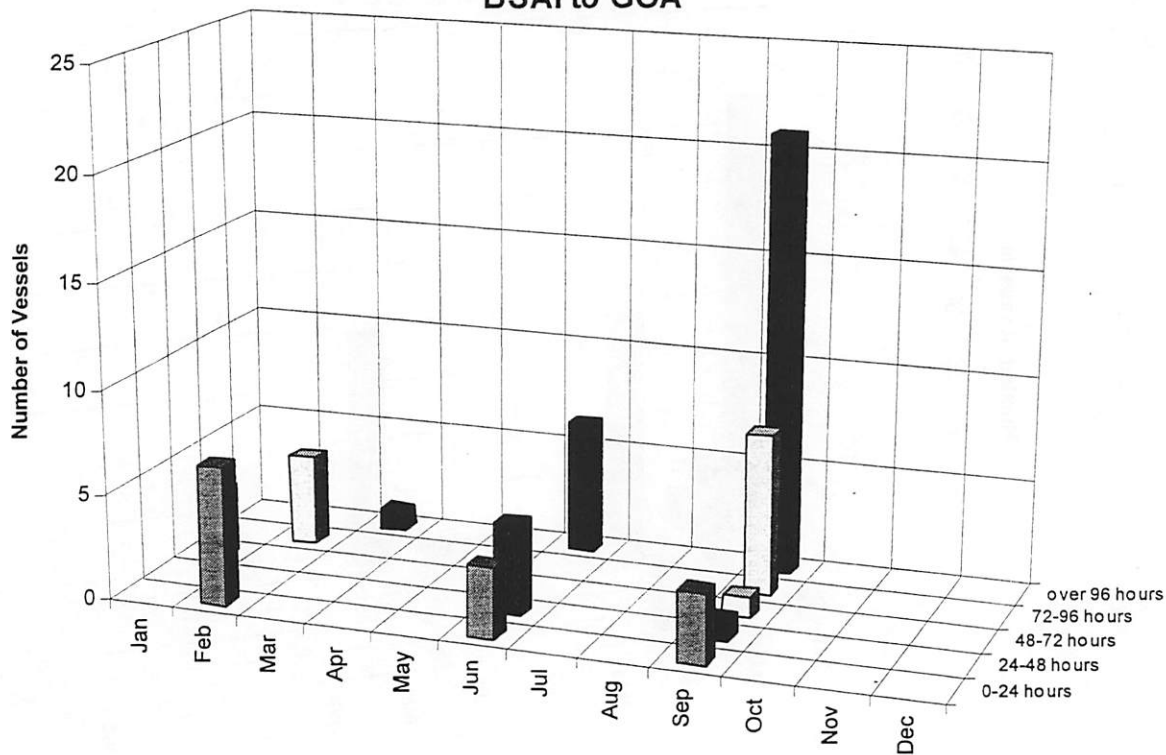


Figure 1. Estimated number of catcher vessels fishing with bottom trawl gear and transiting between the BSAI and GOA in 1997 by month and length of stand down period. Stand down period is measured from time of gear retrieval in one area to the time of gear deployment in the next area.

BSAI to GOA



GOA to BSAI

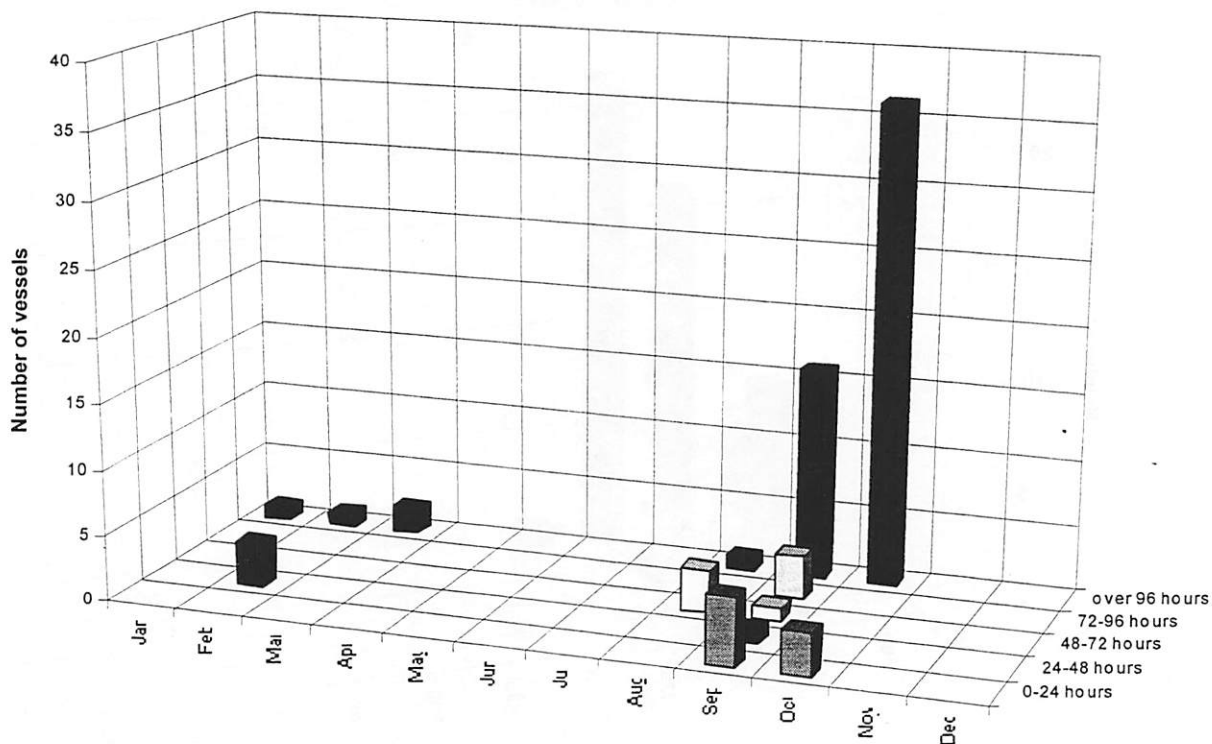


Figure 2. Estimated number of catcher vessels fishing with pelagic trawl gear and transiting between the BSAI and BSAI in 1997 by month and length of stand down period. Stand down period is measured from time of gear retrieval in one area to the time of gear deployment in the next area.

1.6 Implementation and Enforcement of a Stand Down Requirement for Vessels Transiting Between the BSAI and GOA

Several options exist for the design of hour stand down requirement for vessels transiting between the BSAI and GOA or vice versa including (1) determining the vessels and gear types to which such a provision would apply, (2) determining whether the stand down requirement would apply to specific target fisheries or all fishing activity (e.g. gear in the water), (3) determining the length of the stand down period, and (4) determining when the stand down period would begin and end.

1.6.1 Vessel and Gear Options

Option 1: Stand down requirement would apply to all groundfish vessels. This option is the most broad sweeping and would encompass fixed gear vessels which have not in the past caused management difficulties due to rapid and unexpected shifts of effort between areas. In addition, longline and pot gear does not lend itself to rapid shifts in fishing activity from area to area because of the time and effort required to retrieve all of the fishing gear in one area and deploy it in the new area. Because vessels fishing with fixed gear are inherently less mobile than trawl vessels, and most fixed gear groundfish fisheries are slower paced, little reason exists to impose a stand down requirement on vessels fishing with fixed gear.

Option 2: Stand down requirement would apply to trawl vessels only. A stand down requirement imposed on all trawl vessels would encompass both catcher vessels and factory trawlers. While factory trawlers are highly mobile, NMFS has not faced the same level of difficulty in predicting shifts of effort between the BSAI and GOA in the factory trawl fleet as it has with the catcher vessel fleet. This is so, primarily because the most problematic fisheries in the Western GOA, pollock and Pacific cod, are allocated 100 percent and 90 percent, respectively, to the inshore sector. A number of small factory trawlers under 125 ft are included in the inshore sector but these vessels do not participate in directed fishing for pollock and do not represent enough fishing effort to create unpredictable management problems in the GOA Pacific cod fishery.

Option 3: Stand down requirement would apply to trawl catcher vessels only. This option is the least restrictive on the fleet in general, and most precisely directed at the vessels and fisheries that have posed the greatest management difficulties due to unpredictable shifts of effort into short term fisheries. This option would encompass all of the fisheries that have proven difficult to manage due to rapid and unpredictable shifts of effort, but would not impose unnecessary restrictions on fisheries that do not present management difficulties.

1.6.2 Target Fishery Options

Option 1: Stand down requirement would apply to all target fisheries. This option would be the most easy to enforce and monitor. Enforcement officers could verify compliance by checking the time of gear retrieval and gear deployment in the vessel's daily fishing logbook. The numbers of catcher vessels switching between the BSAI and GOA in each month of 1997 as displayed on figures 2 and 3 suggests that a stand down requirement applied to all fishing activity (gear in the water) would primarily affect vessels participating in the pollock and Pacific cod fisheries in the BSAI and GOA.

Option 2: Stand down requirement would apply to vessels engaged in directed fishing for pollock and Pacific cod only. This option would pose greater enforcement difficulties than Option 1 because enforcement officers would be forced to determine the target or directed fishery in the previous area and

the target or directed fishery in the new area due to the possibility that a vessel could begin fishing in the new area at once but would be required to wait for a specified stand down period before beginning directed fishing on the specified species. On catcher vessels, a real time determination of target fisheries may be difficult or impossible for an enforcement officer to accomplish because it is not usually possible to determine the composition of catch in a vessel's fish holds at sea, especially on vessels that use refrigerated seawater holds.

Conflicts with Improved Retention/Improved Utilization (IR/IU). A stand down requirement that is limited to directed fishing for pollock and Pacific cod may be in conflict with the IR/IU program that was approved as Amendments 49/49 to the FMPs. If a vessel transiting between the BSAI and GOA is prohibited from directed fishing for pollock or Pacific cod but allowed to participate in other directed fisheries within the stand down period, then bycatch of pollock and Pacific cod becomes problematic. If the vessel operator is required to discard any pollock and Pacific cod in excess of the maximum retainable bycatch amount during the stand down period, such a requirement could increase regulatory discards of pollock and Pacific cod. In addition, vessels would be able to prospect for pollock or Pacific cod in the new area without standing down provided that they discard any catch in excess of the maximum retainable bycatch amount for that species. This outcome would be contrary to the objectives of the IR/IU program and Magnuson-Stevens Act mandates to reduce bycatch. If a stand down requirement is applied to all fishing activity, such conflicts with the IR/IU program would be avoided.

A vessel registration program also has the potential to produce conflicts with the IR/IU program if vessel operators who fail to register for a fishery find themselves forced to discard IR/IU species until their registration for a particular fishery becomes effective. The extent to which these various regulatory requirements will come into conflict is difficult to estimate at this point. However, care must be taken in the design and implementation of both a vessel registration program and a stand down requirement to prevent significant increases in regulatory discards.

1.6.3 Options for Length of Stand Down Period: 48, 72, or 96 hours

The data displayed in Table 3 suggests that most rapid transits between the BSAI and GOA occur within 48 hours or take longer than 96 hours. Clearly, a 48-hour stand down period for vessels switching between the BSAI and GOA will eliminate some rapid shifts of effort that occurred in the 1997 September pollock fishery in both areas. However, the bulk of these transits took longer than 96 hours between time of gear retrieval and time of gear deployment as displayed in Figure 2: The most rapid shifts between the BSAI and GOA appears to occur in March with vessels using bottom trawl gear. At that time, fishing for Pacific cod was open in both the BSAI and GOA. A cursory scan of the data suggests that several vessels may have been fishing along the line between the BSAI and GOA in places such as Unimak Pass and consequently, may have been crossing back and forth across the line in the course of normal fishing activity. In 1997, the catcher vessel fishery for Pacific cod in the Bering Sea closed on April 29. In the GOA, the inshore Pacific cod fishery in area 610 closed on March 3, reopened for a one-day mop-up fishery on March 10 and closed again on March 11. In areas 620 and 630, the Pacific cod fishery closed on March 11. It appears that in 1997, many of the catcher vessels switching from the BSAI to the GOA and back in March did so to participate in this one-day mop-up fishery in area 610. Since Pacific cod remained open in the BSAI during this time, a 48 hour stand down requirement may have served to deter many of these vessels from crossing over to the GOA. However, the marginal difference between 48, 72, and 96 hour stand down requirements is difficult to predict.

1.6.4 Options for Beginning and Ending of Stand Down Period

Option 1: Stand down from time of gear retrieval in one area to time of gear deployment the new area. This option would be simple to implement and enforce because enforcement officers will be able to use a vessel's existing daily fishing logbook to verify compliance. All vessels over 60 ft length overall (LOA) that are fishing for groundfish in the BSAI and GOA must report the time of gear deployment and gear retrieval for each tow within 2 hours in their daily fishing logbooks. These requirements do not extend to vessels under 60 ft LOA, however few trawl vessels in this size range are thought to venture between the BSAI and GOA.

Option 2: Stand down period begins on the date a vessel returns to port and ends 12:00 p.m. 2, 3, or 4 days after the date of delivery. Catcher vessel operators are currently required to record in their daily fishing logbooks the date and time of each gear deployment and gear retrieval as well as the date but not time of each delivery. Under this option, the stand down period would begin on the date of delivery and fishing could resume at 12:00 p.m. 2, 3, or 4 days after the date of delivery. Under this option, the actual stand down period for a vessel under the 48 hour option could range from 36 to 60 hours depending upon the exact time of delivery. However, the 12 noon start time would be easily enforced, even from afar.

Any option that would start the stand down requirement on the date and time of a vessel's delivery (as opposed to simply the date of delivery) would entail a new collection of information requirement subject to OMB review under the Paperwork Reduction Act. Any stand down requirement that entails a new collection of information requirement and changes to daily fishing logbooks could not be approved and implemented prior to 1999.

2.0 NEPA REQUIREMENTS: ENVIRONMENTAL IMPACTS OF THE ALTERNATIVES

An environmental assessment (EA) is required by the National Environmental Policy Act of 1969 (NEPA) to determine whether the action considered will result in significant impact on the human environment. If the action is determined not to be significant based on an analysis of relevant considerations, the EA and resulting finding of no significant impact (FONSI) would be the final environmental documents required by NEPA. An environmental impact statement (EIS) must be prepared for major Federal actions significantly affecting the human environment.

An EA must include a brief discussion of the need for the proposal, the alternatives considered, the environmental impacts of the proposed action and the alternatives, and a list of document preparers. The purpose and alternatives were discussed in Sections 1.1 and 1.2, and the list of preparers is in Section 6. This section contains the discussion of the environmental impacts of the alternatives including impacts on threatened and endangered species and marine mammals.

2.1 Environmental Impacts of the Alternatives

The environmental impacts generally associated with fishery management actions are effects resulting from (1) harvest of fish stocks which may result in changes in food availability to predators and scavengers, changes in the population structure of target fish stocks, and changes in the marine ecosystem community structure; (2) changes in the physical and biological structure of the marine environment as a result of fishing practices, e.g., effects of gear use and fish processing discards; and (3) entanglement/entrapment of non-target organisms in active or inactive fishing gear.

A summary of the effects of the annual groundfish total allowable catch amounts on the biological environment and associated impacts on marine mammals, seabirds, and other threatened or endangered species are discussed in the final environmental assessment for the annual groundfish total allowable catch specifications.

2.2 Impacts on Endangered or Threatened Species

Background. The ESA provides for the conservation of endangered and threatened species of fish, wildlife, and plants. The program is administered jointly by NMFS for most marine species, and the US Fish and Wildlife Service (FWS) for terrestrial and freshwater species.

The ESA procedure for identifying or listing imperiled species involves a two-tiered process, classifying species as either threatened or endangered, based on the biological health of a species. Threatened species are those likely to become endangered in the foreseeable future [16 U.S.C. §1532(20)]. Endangered species are those in danger of becoming extinct throughout all or a significant portion of their range [16 U.S.C. §1532(20)]. The Secretary, acting through NMFS, is authorized to list marine mammal and fish species. The Secretary of Interior, acting through the FWS, is authorized to list all other organisms.

In addition to listing species under the ESA, the critical habitat of a newly listed species must be designated concurrent with its listing to the "maximum extent prudent and determinable" [16 U.S.C. §1533(b)(1)(A)]. The ESA defines critical habitat as those specific areas that are essential to the conservation of a listed species and that may be in need of special consideration. The primary benefit of critical habitat designation is that it informs Federal agencies that listed species are dependent upon these areas for their continued existence, and that consultation with NMFS on any Federal action that may

affect these areas is required. Some species, primarily the cetaceans, listed in 1969 under the Endangered Species Conservation Act and carried forward as endangered under the ESA, have not received critical habitat designations.

Listed Species. The following species are currently listed as endangered or threatened under the ESA and occur in the GOA and/or BSAI:

Endangered

Northern Right Whale	<i>Balaena glacialis</i>
Bowhead Whale ¹	<i>Balaena mysticetus</i>
Sei Whale	<i>Balaenoptera borealis</i>
Blue Whale	<i>Balaenoptera musculus</i>
Fin Whale	<i>Balaenoptera physalus</i>
Humpback Whale	<i>Megaptera novaeangliae</i>
Sperm Whale	<i>Physeter macrocephalus</i>
Snake River Sockeye Salmon	<i>Oncorhynchus nerka</i>
Short-tailed Albatross	<i>Diomedea albatrus</i>
Steller Sea Lion ²	<i>Eumetopias jubatus</i>

Threatened

Snake River Fall Chinook Salmon	<i>Oncorhynchus tshawytscha</i>
Snake River Spring/Summer Chinook Salmon	<i>Oncorhynchus tshawytscha</i>
Steller Sea Lion ³	<i>Eumetopias jubatus</i>
Spectacled Eider	<i>Somateria fishcheri</i>

Section 7 Consultations. Because both groundfish fisheries are federally regulated activities, any negative affects of the fisheries on listed species or critical habitat and any takings⁴ that may occur are subject to ESA section 7 consultation. NMFS initiates the consultation and the resulting biological opinions are issued to NMFS. The Council may be invited to participate in the compilation, review, and analysis of data used in the consultations. The determination of whether the action “is likely to jeopardize the continued existence of” endangered or threatened species or to result in the destruction or modification of critical habitat, however, is the responsibility of the appropriate agency (NMFS or FWS). If the action is determined to result in jeopardy, the opinion includes reasonable and prudent measures that are necessary to alter the action so that jeopardy is avoided. If an incidental take of a listed species is expected to occur under normal promulgation of the action, an incidental take statement is appended to the biological opinion.

¹species is present in Bering Sea area only.

²listed as endangered west of Cape Suckling.

³listed as threatened east of Cape Suckling.

⁴ the term “take” under the ESA means “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct” (16 U.S.C. §1538(a)(1)(B)).

Section 7 consultations have been done for all the above listed species, some individually and some as groups. Below are summaries of the consultations.

Endangered Cetaceans. NMFS concluded a formal section 7 consultation on the effects of the BSAI and GOA groundfish fisheries on endangered cetaceans within the BSAI and GOA on December 14, 1979, and April 19, 1991, respectively. These opinions concluded that the fisheries are unlikely to jeopardize the continued existence or recovery of endangered whales. Consideration of the bowhead whale as one of the listed species present within the area of the Bering Sea fishery was not recognized in the 1979 opinion, however, its range and status are not known to have changed. No new information exists that would cause NMFS to alter the conclusion of the 1979 or 1991 opinions. NMFS has no plan to reopen Section 7 consultations on the listed cetaceans for this action or for the 1998 TAC specification process. Of note, however, are observations of Northern Right Whales during Bering Sea stock assessment cruises in the summer of 1997 (NMFS per. com). Prior to these sightings, and one observation of a group of two whales in 1996, confirmed sightings had not occurred.

Steller sea lion. The Steller sea lion range extends from California and associated waters to Alaska, including the Gulf of Alaska and Aleutian Islands, and into the Bering Sea and North Pacific and into Russian waters and territory. In 1997, based on biological information collected since the species was listed as threatened in 1990 (60 FR 51968), NMFS reclassified Steller sea lions as two distinct population segments under the ESA (62 FR 24345). The Steller sea lion population segment west of 144°W. longitude (a line near Cape Suckling, Alaska) is listed as endangered; the remainder of the U.S. Steller sea lion population maintains the threatened listing.

NMFS designated critical habitat in 1993 (58 FR 45278) for the Steller sea lion based on the Recovery Team's determination of habitat sites essential to reproduction, rest, refuge, and feeding. Listed critical habitats in Alaska include all rookeries, major haul-outs, and specific aquatic foraging habitats of the BSAI and GOA. The designation does not place any additional restrictions on human activities within designated areas. No changes in critical habitat designation were made as result of the 1997 re-listing.

Beginning in 1990 when Steller sea lions were first listed under the ESA, NMFS determined that both groundfish fisheries may adversely affect Steller sea lions, and therefore conducted Section 7 consultation on the overall fisheries (NMFS 1991), and subsequent changes in the fisheries (NMFS 1992). The most recent biological opinion on the BSAI and GOA fisheries effects on Steller sea lions was issued by NMFS January 26, 1996. It concluded that these fisheries and harvest levels are unlikely to jeopardize the continued existence and recovery of the Steller sea lion or adversely modify critical habitat. NMFS has no plan to reopen Section 7 consultations on Steller sea lions for this action or the 1998 TAC specification process.

Pacific Salmon. No species of Pacific salmon originating from freshwater habitat in Alaska are listed under the ESA. These listed species originate in freshwater habitat in the headwaters of the Columbia (Snake) River. During ocean migration to the Pacific marine waters a small (undetermined) portion of the stock go into the Gulf of Alaska as far east as the Aleutian Islands. In that habitat they are mixed with hundreds to thousands of other stocks originating from the Columbia River, British Columbia, Alaska, and Asia. The listed fish are not visually distinguishable from the other, unlisted, stocks. Mortal take of them in the chinook salmon bycatch portion of the fisheries is assumed based on sketchy abundance, timing, and migration pattern information.

NMFS designated critical habitat in 1992 (57 FR 57051) for the for the Snake River sockeye, Snake River spring/summer chinook, and Snake River fall chinook salmon. The designations did not include

any marine waters, therefore, does not include any of the habitat where the groundfish fisheries are promulgated.

NMFS has issued two biological opinions and no-jeopardy determinations for listed Pacific salmon in the Alaska groundfish fisheries (NMFS 1994, NMFS 1995). Conservation measures were recommended to reduce salmon bycatch and improve the level of information about the salmon bycatch. The no jeopardy determination was based on the assumption that if total salmon bycatch is controlled, the impacts to listed salmon are also controlled. The incidental take statement appended to the second biological opinion allowed for take of one Snake River fall chinook and zero take of either Snake River spring/summer chinook or Snake River sockeye, per year. As explained above, it is not technically possible to know if any have been taken. Compliance with the biological opinion is stated in terms of limiting salmon bycatch per year to under 55,000 and 40,000 for chinook salmon, and 200 and 100 sockeye salmon in the BSAI and GOA fisheries, respectively.

Short-tailed albatross. The entire world population in 1995 was estimated as 800 birds; 350 adults breed on two small islands near Japan (H. Hasegawa, per. com.). The population is growing but is still critically endangered because of its small size and restricted breeding range. Past observations indicate that older short-tailed albatrosses are present in Alaska primarily during the summer and fall months along the shelf break from the Alaska Peninsula to the Gulf of Alaska, although 1- and 2-year old juveniles may be present at other times of the year (FWS 1993). Consequently, these albatrosses generally would be exposed to fishery interactions most often during the summer and fall--during the latter part of the second and the whole of the third fishing quarters.

Short-tailed albatrosses reported caught in the longline fishery include two in 1995, one in October 1996, and none so far in 1997. Both 1995 birds were caught in the vicinity of Unimak Pass and were taken outside the observers' statistical samples.

Formal consultation on the effects of the groundfish fisheries on the short-tailed albatross under the jurisdiction of the FWS concluded that BSAI and GOA groundfish fisheries would adversely affect the short-tailed albatross and would result in the incidental take of up to two birds per year, but would not jeopardize the continued existence of that species (FWS 1989). Subsequent consultations for changes to the fishery that might affect the short-tailed albatross also concluded no jeopardy (FWS 1995, FWS 1997). The US Fish and Wildlife Service does not intend to renew consultation for this action or the 1998 TAC specification process.

Spectacled Eider. These sea ducks feed on benthic mollusks and crustaceans taken in shallow marine waters or on pelagic crustaceans. The marine range for spectacled eider is not known, although Dau and Kitchinski (1977) review evidence that they winter near the pack ice in the northern Bering Sea. Spectacled eider are rarely seen in U.S. waters except in August through September when they molt in northeast Norton Sound and in migration near St. Lawrence Island. The lack of observations in U.S. waters suggests that, if not confined to sea ice polynyas, they likely winter near the Russian coast (FWS 1993). Although the species is noted as occurring in the GOA and BSAI management areas no evidence that they interact with these groundfish fisheries exists.

Conditions for Re-initiation of Consultation. For all ESA listed species, consultation must be reinitiated if: the amount or extent of taking specified in the Incidental Take Statement is exceeded, new information reveals effects of the action that may affect listed species in a way not previously considered, the action is subsequently modified in a manner that causes an effect to listed species that was not

considered in the biological opinion, or a new species is listed or critical habitat is designated that may be affected by the action.

Impacts of the Alternatives on Endangered or Threatened Species. None of the alternatives under consideration would affect the prosecution of the groundfish fisheries of the GOA and BSAI in a way not previously considered in the above consultations. The proposed alternatives are administrative in nature and are designed to improve the inseason management of certain groundfish fisheries. None of the alternatives would affect TAC amounts, PSC limits, or takes of listed species. Therefore, none of the alternatives are expected to have a significant impact on endangered, threatened, or candidate species.

2.3 Impacts on Marine Mammals

Marine mammals not listed under the ESA that may be present in the GOA and BSAI include cetaceans, [minke whale (*Balaenoptera acutorostrata*), killer whale (*Orcinus orca*), Dall's porpoise (*Phocoenoides dalli*), harbor porpoise (*Phocoena phocoena*), Pacific white-sided dolphin (*Lagenorhynchus obliquidens*), and the beaked whales (e.g., *Berardius bairdii* and *Mesoplodon spp.*)] as well as pinnipeds [northern fur seals (*Callorhinus ursinus*), and Pacific harbor seals (*Phoca vitulina*)] and the sea otter (*Enhydra lutris*).

The proposed alternatives are administrative in nature and are designed to improve the inseason management of certain groundfish fisheries. None of the alternatives would affect TAC amounts, PSC limits, or takes of marine mammals. Therefore, none of the alternatives are expected to have a significant impact on marine mammals.

2.4 Coastal Zone Management Act

Implementation of each of the alternatives would be conducted in a manner consistent, to the maximum extent practicable, with the Alaska Coastal Management Program within the meaning of Section 30(c)(1) of the Coastal Zone Management Act of 1972 and its implementing regulations.

2.5 Conclusions or Finding of No Significant Impact

None of the alternatives are likely to significantly affect the quality of the human environment, and the preparation of an environmental impact statement for the proposed action is not required by Section 102(2)(C) of the National Environmental Policy Act or its implementing regulations.

Assistant Administrator for Fisheries, NOAA

Date

3.0 REGULATORY IMPACT REVIEW: ECONOMIC AND SOCIOECONOMIC IMPACTS OF THE ALTERNATIVES

This section provides information about the economic and socioeconomic impacts of the alternatives including identification of the individuals or groups that may be affected by the action, the nature of these impacts, quantification of the economic impacts if possible, and discussion of the trade offs between qualitative and quantitative benefits and costs.

The requirements for all regulatory actions specified in E.O. 12866 are summarized in the following statement from the order:

In deciding whether and how to regulate, agencies should assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating. Costs and benefits shall be understood to include both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify, but nevertheless essential to consider. Further, in choosing among alternative regulatory approaches, agencies should select those approaches that maximize net benefits (including potential economic, environment, public health and safety, and other advantages; distributive impacts; and equity), unless a statute requires another regulatory approach.

This section also addresses the requirements of both E.O. 12866 and the RFA to provide adequate information to determine whether an action is "significant" under E.O. 12866 or will result in "significant" impacts on small entities under the RFA.

E. O. 12866 requires that the Office of Management and Budget review proposed regulatory programs that are considered to be "significant". A "significant regulatory action" is one that is likely to:

1. Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;
2. Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
3. Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
4. Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order.

A regulatory program is "economically significant" if it is likely to result in the effects described above. The Regulatory Impact Review (RIR) is designed to provide information to determine whether the proposed regulation is likely to be "economically significant." None of the alternatives is expected to result in a "significant regulatory action" as defined in E.O. 12866.

3.1 Economic Effects of Alternative 1: No Action

Under Alternative 1, the groundfish fisheries of the BSAI and GOA would be managed unchanged. At times, available TACs or PSC limits are small enough that the fishery is kept closed to prevent risking an overrun of the TAC. At other times, when that risk is taken, small quotas are exceeded because unexpected effort materializes or CPUE exceeds expectations. In the former case, groundfish catch is forgone, in the latter, allowable catches are exceeded, at best resulting in discards of further catches and at worst, overfishing of the stock.

3.2 Economic Effects of Alternative 2: Vessel Registration Program for Fisheries Which Meet Certain Criteria

Under this alternative, NMFS would establish criteria to determine which fisheries would require pre-registration. Based on these criteria, NMFS would create a roster of "registration fisheries" that would be announced in the final specifications and supplemented on an inseason basis throughout the year. Criteria for establishing a pre-registration requirement for a fishery could include: (1) the size of the TAC amount or PSC limit specified for the fishery relative to the degree of interest in that fishery, (2) a fishery for which the TAC or PSC limit was exceeded by a significant amount in the previous year and the current year's quota and expected effort are similar, (3) a fishery for which the above two criteria may not apply but an expanded interest has developed inseason, and (4) a "mop-up" fishery.

The effects of this alternative on the fishing industry would be positive but difficult to quantify. The fleet as a whole would benefit if NMFS is able to manage "at risk" fisheries so that quotas more fully harvested and the overhead costs associated with re-crewing and transiting to the fishing grounds for short term "mop-up" openings could be avoided. Individual vessels have, in the past, benefitted by being in the area at the time of a late re-opening in which they have benefitted from reduced competition for the balance of a quota. These vessels could face increased competition relative to the status quo, however, no one can be certain of reaping these "windfall" benefits. A pre-registration requirement would reduce the flexibility of vessel operators to enter and leave fisheries at will. In some cases, this could pose costs for certain operations if they realize at mid-course that would prefer to be participating in a short term fishery for which they have not pre-registered. Nevertheless, while a pre-registration requirement for certain "at risk" fisheries will increase the general bureaucratic burden on the fleet, it will serve to increase the ability of NMFS to manage such fisheries to obtain optimum yield and provide the greatest net benefit to the nation.

3.3 Economic Effects of Alternative 3: Stand Down Requirement for Catcher Vessels Transiting Between the BSAI and GOA

Under such a requirement, all catcher vessels transiting between the BSAI and GOA or vice versa would be required to stand down for 48, 72, or 96 hours from the time gear is retrieved in one area until the time gear is deployed in the new area. Alternatively, the stand down requirement could be limited to catcher vessels participating in specific target fisheries such as pollock and Pacific cod.

The effects of this alternative on the fishing industry would be largely distributional. Smaller operations in the GOA that may lack the size, capacity, or markets necessary to range widely between the BSAI and GOA would benefit to the extent that a greater percentage of the pollock and Pacific cod TACs would be reserved for local fishermen, provided that vessels that normally switch between the BSAI and GOA would choose to remain in one area. When both the BSAI and GOA are open for a particular species, the stand down requirement would be expected to provide a substantial incentive for vessels to avoid

switching between areas in the manner that occurred in the 1997 pollock fishery in Area 610. However, when fisheries are only open in one area, such as during the July 1 pollock opening in the W/C Regulatory of the GOA, a stand down requirement of any length would not be expected to influence the activity of the fleet or impose any costs or benefits on specific participants in the fishery.

3.4 Economic Impacts on Small Entities

The objective of the Regulatory Flexibility Act is to require consideration of the capacity of those affected by regulations to bear the direct and indirect costs of regulation. If an action will have a significant impact on a substantial number of small entities an Initial Regulatory Flexibility Analysis (IRFA) must be prepared to identify the need for the action, alternatives, potential costs and benefits of the action, the distribution of these impacts, and a determination of net benefits.

The Small Business Administration has defined all fish-harvesting or hatchery businesses that are independently owned and operated, not dominant in their field of operation, with annual receipts not in excess of \$3,000,000 as small businesses. In addition, seafood processors with 500 employees or fewer, wholesale industry members with 100 employees or fewer, not-for-profit enterprises, and government jurisdictions with a population of 50,000 or less are considered small entities. NMFS has determined that a "substantial number" of small entities would generally be 20 percent of the total universe of small entities affected by the regulation. A regulation would have a "significant impact" on these small entities if it changed annual gross revenues by more than 5 percent, total costs of production by more than 5 percent, or compliance costs for small entities by at least 10 percent compared with compliance costs as a percent of sales for large entities.

If an action is determined to affect a substantial number of small entities, the analysis must include:

1. A description and estimate of the number of small entities and total number of entities in a particular affected sector, and total number of small entities affected; and
2. Analysis of economic impact on small entities, including direct and indirect compliance costs, burden of completing paperwork or recordkeeping requirements, effect on the competitive position of small entities, effect on the small entity's cashflow and liquidity, and ability of small entities to remain in the market.

Alternatives 2 and 3 would affect vessels participating in certain critical fisheries including the pollock fisheries of the GOA. However, the vessels participating in the pollock fisheries of the GOA compose less than 20 percent of groundfish vessels fishing in Alaska. In addition, none of the alternatives would reduce annual gross revenues for these vessels by more than 5 percent, increase total costs of production by more than 5 percent, or increase compliance costs for small entities by at least 10 percent compared with compliance costs as a percent of sales for large entities. Therefore, an initial regulatory flexibility analysis was not prepared.

4.0 SUMMARY AND CONCLUSIONS

The problems and risks associated with managing short term fisheries will continue to present themselves as long as NMFS does not have sufficient tools to project and manage fishing effort and CPUE in these fisheries. Amendments 52/52 would authorize NMFS to establish a vessel registration program for "at risk" fisheries and/or would authorize NMFS to establish a stand down period for groundfish vessels transiting between the BSAI and GOA or vice versa.

Under Alternative 2, vessel operators would be required to register with NMFS a certain number of days before beginning directed fishing in specified registration fisheries. A vessel registration program could first with the pollock and Pacific cod fisheries of the western and central GOA. Additional fisheries could be assigned registration status in subsequent years once automated procedures for registering vessels are developed and tested. Under a vessel registration program, the fleet as a whole will benefit if NMFS is able to manage "at risk" fisheries so that quotas more fully harvested and the overhead costs associated with re-crewing and transiting to the fishing grounds for short term "mop-up" openings could be avoided. A pre-registration requirement would reduce the flexibility of vessel operators to enter and leave fisheries at will. In some cases, this could pose costs for certain operations if they realize at mid-course that would prefer to be participating in a short term fishery for which they have not registered. Nevertheless, while a registration requirement for certain "at risk" fisheries will increase the constraints on the fleet, it will serve to increase the ability of NMFS to manage such fisheries to obtain optimum yield and provide the greatest net benefit to the nation.

Under Alternative 3, NMFS would establish a stand down requirement for vessels transiting between the BSAI and GOA or vice versa. Under such a requirement, all vessels fishing for groundfish and transiting between the BSAI and GOA or vice versa would be required to stand down for 48, 72, or 96 hours from the time gear is retrieved in one area until the time gear is deployed in the new area. The most precisely targeted stand down requirement would be a program applied to trawl catcher vessels only. Little reason exists to impose a stand down requirement on catcher processors or vessels using fixed gear, which have not posed management difficulties in the past due to rapid shifts of effort. The most effective and easily enforced stand down requirement would be one that applies to all fishing regardless of target fishery and begins either at the time of gear retrieval or the date of delivery. Because NMFS does not currently require vessels to log their time of delivery, any stand down requirement linked to the time of delivery (as opposed to the date of delivery) would require changes to daily fishing logbooks and could not be implemented until 1999.

A stand down requirement limited to certain target fisheries, such as pollock and Pacific cod, could be difficult or impossible to enforce, could increase regulatory discards of these species, and could be in conflict with the objectives of the IR/IU program approved as Amendments 49/49 to the FMPs. Care must be taken in the design and implementation of both a vessel registration program and a vessel stand down requirement to prevent inadvertent increases in regulatory discards.

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6.0 LIST OF PREPARERS

Kent Lind
NMFS-Alaska Region

Alaska Groundfish Data Bank

P.O. Box 2298 • Kodiak, Alaska 99615

TO: RICK LAUBER, CHAIRMAN
NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

RE: D-1(a) GOA TRIMESTER POLLOCK ALLOCATIONS

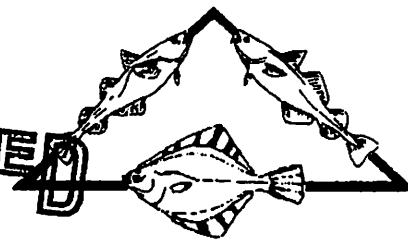
DATE: JANUARY 27, 1998

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N.P.F.M.C



COMMENTS ON AGENDA ITEM D-1(a) CENTRAL AND WESTERN GULF TRIMESTER POLLOCK ALLOCATIONS

The members of Alaska Groundfish Data Bank understand the necessity of taking further steps in the effort to reverse the decline of what are now designated endangered sea lions and are not opposing the proposed change in the trimester pollock apportionment from the current 25% first trimester, 25% 2nd trimester and 50% third trimester to 25% first trimester, 35% second trimester and 40% third trimester.

However we request that this change in the apportionment be consider an interim action which may be replaced by more reasoned, scientifically justifiable and hopefully more effective measures.

We want to point out that in 1989 there were 328 million age 2 pollock available in the Central/Western Gulf, in 1990 there were 1.7 billion age 2 pollock, 900 million age 2 pollock in 1991 and 347 million age 2 pollock in 1992.

These years 1989 - 1992 include years when the pollock catch was taken in the first part of the year and was taken quarterly and years when the availability of young pollock was low and years when availability was high. We understand a female sea lion returns to her natal rookery 4 to 6 years after birth. If the availability of pollock was the primary factor causing the sea lion decline, we should have seen some increase in sea lions by now.

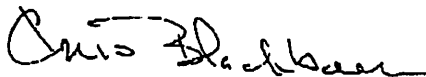
We are, predictably, persuaded by the recent paper "Diet diversity of Steller sea lions (*Eumetopias jubatus*) and their population decline in Alaska: a potential relationship" (Merrick, et al, 1997). which concludes in the abstract: *A strong positive correlation ($r = 0.949$ $P = 0.004$) was found between diet diversity and the amount of decline in an area; as diet diversity decreased, populations decreased. This suggests that sea lions need a variety of prey available, perhaps to buffer significant changes in abundance of any single prey.*

We would also like to point out that pollock taken in June (2nd trimester) have a lower recovery rate and a lower dollar value than pollock taken in the spring or fall as they have not yet recovered fully from spawning. Also, increasing the June pollock quota at the expense of the third trimester reallocates more pollock away from Kodiak to plants in other areas and thus the proposed measure has allocative implications.

AGDB COMMENTS ON D-1(A) GULF TRIMESTER POLLOCK ALLOCATIONS - JANUARY 27, 1998 -- PAGE 2 OF 2

We realize the marine mammal biologists are exploring different approaches to encouraging increases in sea lion survival and look forward to working with them. We appreciated Rich Farro's willingness to meet with industry and explore the options in an effort to find the least objectionable alternative to achieve the goals he felt, at this time, to be important.

Thank you for your consideration of our comments.



Chris Blackburn, Director
Alaska Groundfish Data Bank

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Alaska Groundfish Data Bank

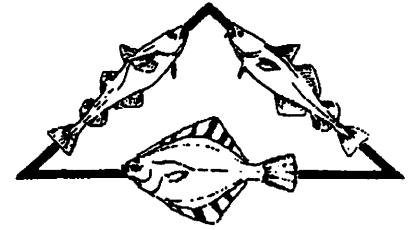
P.O. Box 2298 • Kodiak, Alaska 99615

TO: RICK LAUBER, CHAIRMAN
NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

RE: STANDDOWN & PREREGISTRATION

DATE: JANUARY 27, 1998

SENT BY FAX: 3 PP



COMMENTS ON AGENDA ITEM D-1(b) STANDDOWN AND PRE-REGISTRATION FOR TRAWL VESSELS MOVING BETWEEN THE GULF OF ALASKA AND BERING SEA AND VICE VERSA

The members of Alaska Groundfish Data Bank support the implementation of regulations which require vessel to "standdown" and pre-register before moving between the BSAI and Gulf of Alaska or between the Gulf of Alaska and BSAI.

AGDB's preferred alternatives are as follows:

1. 96 hour standdown
2. Standdown period begins when a catcher vessel has delivered. Start of standdown determined by date on the last fish ticket.
3. Standdown applies only to trawl vessels.
4. Standdown in effect when pollock or Pacific cod is open for fishing in either the Central and/or Western Gulf or the Bering Sea.
5. Registration required for a vessel changing areas. Registration should be made before changing areas. Registration will include vessel's capacity.

NEED FOR THE STANDDOWN AND PRE-REGISTRATION REGULATIONS

As shown in Table 1 attached to this comment, Pollock and Pacific cod quotas are routinely exceeded in the Gulf of Alaska and pollock is the species where the overage is greatest. Both first quarter and the year end data is shown to demonstrate that the overages start in the first quarter and are rarely made up by the end of the year.

Marine mammal biologists continue to show concern about the timing, intensity and amount of pollock taken which increases the concern over overages in the Gulf pollock fisheries.

In some years Pacific cod has become a prohibited species early in the year in either or both the Central and Western Gulf because the quota was exceeded. The prohibited species status increases discards in a species which has been selected as an IR/IU species and increases the need to avoid overages in the Pacific cod fishery.

To manage the fisheries without exceeding quotas, or closing a fishery before the quota is caught, NMFS can only project catch based on the previous week(s) or days catch. When catcher vessel effort suddenly changes oceans NMFS is not always aware of the change in effort and closes the fishery too late to avoid quota overages. When effort shifts after NMFS announces a closure but before the closure date an overage is almost inevitable.

The 96 hour standdown provision should prevent shifts of effort after a closure is announced as most closure notices occur two to four days prior to the closure date.

The preregistration requirement allows NMFS to better assess effort during a fishery.

AGDB COMMENTS ON D1-(B) STANDDOWN -- JANUARY 27, 1998 -- PAGE 2 OF 3

Though the Bering Sea is not as prone to exceeding quotas as the Gulf of Alaska due to effort shifts, it is felt by industry that the rules should apply to all effort changes in the interest of fairness. Also there was concern that if vessels were not required to standdown and pre-register before moving from the Gulf of the Bering Sea, vessels would find it beneficial to start in the Gulf and move to the Bering Sea after the Gulf closed -- in essence, a different effort shift would be encouraged.

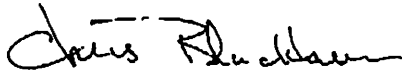
OTHER SOLUTIONS

The Gulf of Alaska communities feel that the standdown and preregistration provisions proposed are the most expedient methods to allow better management of the Gulf Pacific cod and pollock fisheries and are basically conservation measures.

Efforts to implement trip limits appear to have failed due to an inability to for the different Gulf fleets to agree on a trip limit poundage. Trip limits also have the potential to increase discards. Efforts to create exclusive registration areas between the Gulf and BSAI have also failed because many vessels have been dependent on moving between the two areas.

When electronic reporting reaches the point that NMFS can assess catch and effort daily measures such as the standdown/pre-registration may not be necessary.

Thank you for your consideration of our comments.



Chris Blackburn, Director
Alaska Groundfish Data Bank

AGDB COMMENTS ON D1-(B) STANDDOWN -- JANUARY 27, 1998 -- PAGE 3 OF 3

TABLE 1
CENTRAL AND WESTERN GULF POLLOCK AND PACIFIC COD CATCH AND QUOTAS

THRU	AREA	SPECIES	CATCH	QUOTA	RMDR	%OF QUOTA
3/29/97	610	PLK 610	6871	4650	-2221	147.76
3/29/97	620	PLK 620	9470	7812	-1658	121.22
3/29/97	630	PLK 630	8525	6138	-2387	138.89
3/29/97	WG	PC-I	22743	21803	-940	104.31
3/29/97	CG	PC-I	34117	31457	-2660	108.46
12/31/97	610	PLK 610	26141	18600	-7541	140.54
12/31/97	620	PLK 620	32839	31250	-1589	105.08
12/31/97	630	PLK 630	25023	24550	-473	101.93
12/31/97	WG	PC-I	22996	21803	-1193	105.47
12/31/97	CG	PC-I	43406	42321	-1085	102.56
03/30/96	610	PLK 610	8230	6370	-1860	129.20
03/30/96	620	PLK 620	3830	3210	-620	119.31
03/30/96	630	PLK 630	6510	3420	-3090	190.35
03/30/96	WG	PC-I	17518	16965	-553	103.26
03/30/96	CG	PC-I	37706	38610	904	97.66
12/31/96	610	PLK 610	24,200	25,480	1,280	94.98
12/31/96	620	PLK 620	12,293	12,840	547	95.74
12/31/96	630	PLK 630	13,360	13,680	320	97.66
12/31/96	WG	PC-I	17,867	16,965	-902	105.32
12/31/96	CG	PC-I	42,213	38,610	-3,603	109.33
04/01/95	610	PLK 610	10229	7595	-2634	134.68
04/01/95	620	PLK 620	4771	3826	-945	124.70
04/01/95	630	PLK 630	4255	4078	-177	104.34
04/01/95	WG	PC-I	18304	18090	-214	101.18
04/01/95	CG	PC-I	34251	41085	6834	83.37
12/09/95	610	PLK 610	30853	30380	-473	101.56
12/09/95	620	PLK 620	13257	15310	2053	86.59
12/09/95	630	PLK 630	26360	16310	-10050	161.62
12/09/95	WG	PC-I	18572	18090	-482	102.66
12/09/95	CG	PC-I	41547	41085	-462	101.12