Pollock TAC a...

UNITED STATES DEPARTMENT OF COMMERCE
Office of the Under Secretary for
Oceans and Atmosphere
Washington, D.C. 20230

JUN - 3 1998

To All Interested Government Agencies and Public Groups:

Under the National Environmental Policy Act, an environmental review has been performed on the following action.

TITLE: 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

LOCATION: Federal Waters of the Gulf of Alaska

SUMMARY: This regulatory amendment would change the seasonal apportionment of the pollock total allowable catch amount (TAC) in the combined Western and Central (W/C) Regulatory Areas of the Gulf of Alaska (GOA) by moving 10 percent of the TAC from the third fishing season, which starts on September 1, to the second fishing season, which starts on June 1. This seasonal TAC shift is a necessary measure to reduce the potential impacts on Steller sea lions of pollock fishing under an increased 1998 TAC by reducing the percentage of the pollock TAC that is available to the commercial fishery during the fall and winter months, a period that is critical to Steller sea lions.

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The environmental review process led us to conclude that this action will not have a significant impact on the environment. Therefore, an environmental impact statement was not prepared. A copy of the finding of no significant impact, including the environmental assessment, is enclosed for your information. Also, please send one copy of your comment to me in Room 5805, OP/SP, U.S. Department of Commerce, Washington, D.C. 20230.

Sincerely,

Susan Fuchs

Acting NEPA Coordinator

Enclosure

FINAL 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

May 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 is warranted 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

harvest 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).

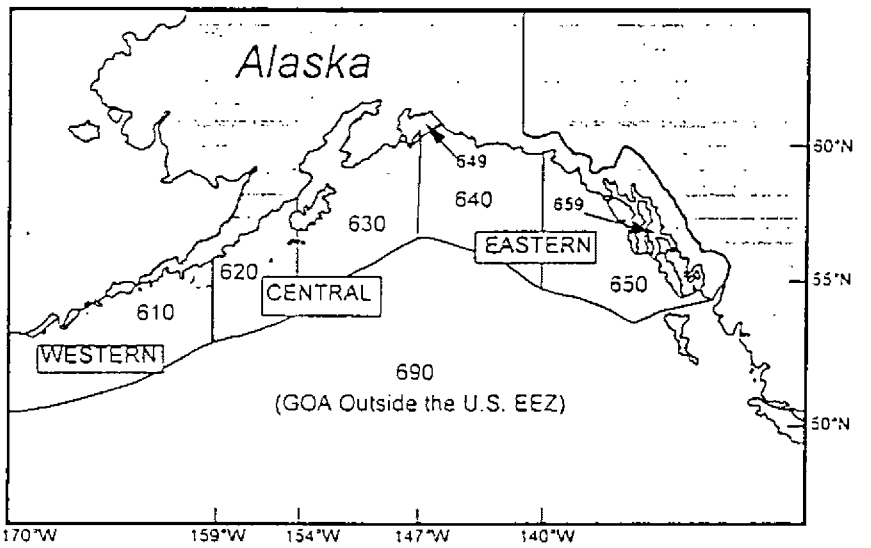

Figure 1. Regulatory and statistical areas in the Gulf of Alaska

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 1[1], 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

[1]Under 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 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.).

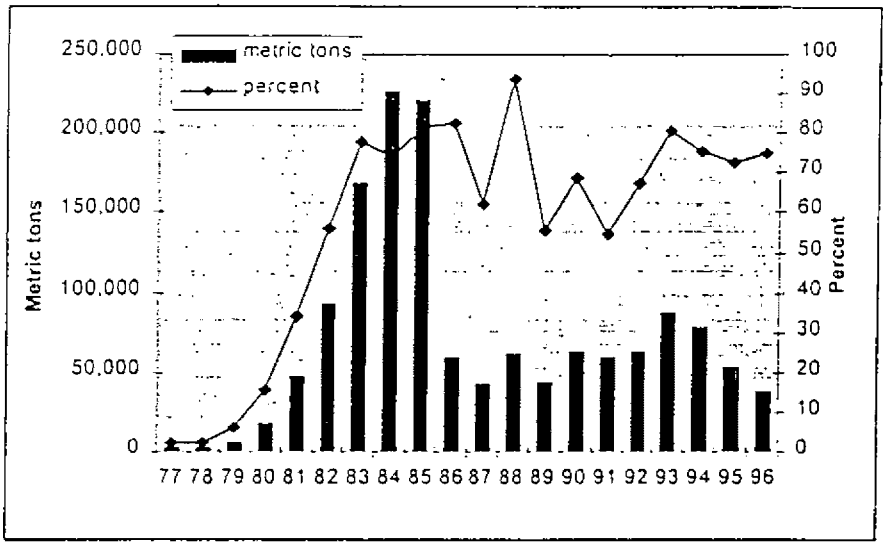

Figure 2. Pollock harvested within Steller sea lion critical habitat in the Gulf of Alaska expressed in metric tons and as a percentage of total pollock catch.

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: [PREFERRED] 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).

Statistical Area	Split by Area	1998 TAC	Jan. 20 (25%)	June 1 (35%)	Sept. 1 (40%)
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.

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

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

Statistical Area	Jan. 1	June 1	Sept. 1
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	*Balaena glacialis*
Bowhead Whale[2]	*Balaena mysticetus*
Sei Whale	*Balaenoptera borealis*
Blue Whale	*Balaenoptera musculus*
Fin Whale	*Balaenoptera physalus*
Humpback Whale	*Megaptera novaeangliae*
Sperm Whale	*Physeter macrocephalus*
Snake River Sockeye Salmon	*Oncorhynchus nerka*
Short-tailed Albatross	*Diomedia albatrus*
Steller Sea Lion[3]	*Eumetopias jubatus*

Threatened

Snake River Fall Chinook Salmon	*Oncorhynchus tshawytscha*
Snake River Spring/Summer Chinook Salmon	*Oncorhynchus tshawytscha*
Steller Sea Lion[4]	*Eumetopias jubatus*
Spectacled Eider	*Somateria fishcheri*

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 takings[5] 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.

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[2]species is present in Bering Sea area only.

[3]listed as endangered west of Cape Suckling.

[4]listed 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 on 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 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 issued on March 2, 1998 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 polyneas, 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 is 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

5-29-98
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.

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 - Chirikof	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, compliance costs for small entities by at least 10 percent compared with compliance costs as a percent of sales for large entities, or if 2 percent of the small entities affected by the regulation are forced out of business.

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 are available, 1,508 vessels participated in the groundfish fisheries of the GOA; 1,254 longline vessels, 148 pot vessels, and 202 trawl vessels. All of these vessels may be considered small entities under the RFA and all of these vessels may encounter pollock in the course of their fishing activity and are therefore, affected by regulations governing the taking of pollock in the GOA. These small entities would experience impacts from this rule in one of two ways depending on whether or not they participate in the directed fishery for pollock in the W/C Regulatory Area. Vessels that do not engage in directed fishing for pollock are nonetheless affected by regulations governing the pollock fishery because improved retention/improved utilization regulations require that vessels retain and utilize all pollock brought on board the vessel up to any maximum retainable bycatch amount in effect for pollock, regardless of whether pollock is the vessel's target fishery. A shift in pollock TAC from September to June will have the effect of shortening the September pollock fishery and lengthening the June pollock fishery which means that vessels engaged in fisheries other than pollock will have a longer period in June during which all incidental pollock catch must be retained, and a shorter period in September during which all incidental catch of pollock must be retained.

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.

	Estimated exvessel value			
Statistical Area	*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

Vessels engaged in directed fishing for pollock will be affected more directly by the proposed action. Of the 1508 vessels that fish for groundfish in the GOA in 1996, 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 the status quo, and $25,144,792 under Alternative 2 which represents a 2 percent reduction in exvessel value from the status quo (Table 9). Therefore, the 96 vessels in the GOA that engage in directed fishing for pollock may be expected to experience a 2 percent reduction in the exvessel value of their pollock catch under the proposed action, relative to the status quo. The actual impact on an individual vessel's gross annual revenue would vary depending on how much if its total annual revenue derives from the pollock fishery as most vessels participate in fisheries other than the GOA pollock fishery. However, in no case would the result be a decrease greater than 2 percent. This reduction in income relative to the status quo is not expected to force any small entities out of business, especially given that the 60 percent increase in pollock TAC for 1998 will result in a substantial increase in income to the pollock fishery relative to 1997. 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, would not

increase total costs of production, and would not increase compliance costs for small entities compared with compliance costs as a percent of sales for large entities, this action will not have a significant impact on a substantial number of small entities; consequently, an IRFA was not prepared.

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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