UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Silver Spring, Maryland 20910

APR 3 1998

MEMORANDUM FOR: Distribution

FROM: George H. Darcy
Chief, Domestic Fisheries Division

SUBJECT: Amendment 3 to the Fishery Management Plan for the Scallop Fishery off Alaska

Attached are the subject amendment and associated documents prepared by the North Pacific Fishery Management Council for formal review under the Magnuson-Stevens Fishery Conservation and Management Act. This amendment would delegate to the State of Alaska the authority to manage all aspects of the scallop fishery, except for limited access.

Please provide your comments (including "no comment") by May 22, 1998. If you have any questions, please call Don Leedy at 301-713-2341.

Attachments

* Distribution

F/SF - Matlock/Morehead
F/SF5 - [redacted]
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AMENDMENT 3 - TEXT TO AMEND THE FISHERY MANAGEMENT PLAN FOR THE SCALLOP FISHERY OFF ALASKA

The Fishery Management Plan for the Scallop Fishery off Alaska is amended as follows:

1. Section 2.2 Optimum Yield and Overfishing is redesignated as section 4.0

2. New sections 2.0 Procedures for FMP Implementation, 3.0 Management Goals and Objectives, 5.0 Management Measures are added.

3. Section 2.8 Limited Access Management is redesignated as section 5.2.

4. A new Appendix C is added to describe the State's regulatory process.

5. Section 2.6 Data assessment and collection, and section 2.7 Administrative and Enforcement Costs are redesignated as sections 6.0 and 7.0, respectively.

2.0 PROCEDURES FOR FMP IMPLEMENTATION

The Secretary (through the Council and NMFS) and the State of Alaska have established the following protocol which describes the roles of the Federal and State governments in managing the scallop fishery off Alaska.

1. The Council will maintain the FMP (and develop future amendments) to govern management of the scallop fisheries in Federal waters off Alaska. The FMP prescribes objectives and any management measures found by the Secretary to be necessary for effective management. The State will promulgate regulations applicable to all vessels fishing for scallops in Federal waters that are consistent with the FMP, Magnuson-Stevens Act, and other applicable Federal law. The FMP contains two types of management measures: (1) General management measures delegated to the State for implementation that may be freely adopted or modified by the State, subject to other Federal law, and (2) Limited access management measures that will fixed in the FMP, implemented by Federal regulation, and require an FMP amendment to change.

2. If at any time the Secretary determines that a State law or regulation applicable to a vessel fishing for scallops in Federal waters is not consistent with the FMP, the Secretary shall promptly notify the State and the Council of such determination and provide an opportunity for the State to correct any inconsistencies identified in the notification. If, after notice and opportunity for corrective action, the State does not correct the inconsistencies identified by the Secretary, the delegating of authority granted to the State under this FMP shall not apply until the Secretary and the Council find that the State has corrected the inconsistencies.

3. ADF&G will have responsibility for developing the information upon which to base State fishing regulations, with continued assistance from NMFS. In carrying out this responsibility, ADF&G will consult actively with the NMFS (Alaska Regional Office and Alaska Fisheries Science Center), NOAA General Counsel, the plan team, and other fishery management or research agencies in order to prevent duplication of effort and assure consistency with the Magnuson-Stevens Act, the FMP, and other applicable Federal law.

4. An annual area management report discussing current biological and economic status of the fisheries, GHL ranges, and support for different management decisions or changes in harvest strategies will be prepared by the State (ADF&G lead agency), with NMFS and scallop plan team input incorporated as appropriate. This report will be available for public review.

5. Federal enforcement agents (NOAA) and the U.S. Coast Guard (DOT) shall work in cooperation with the State to enforce scallop fishing regulations in the EEZ off Alaska.

3.0 MANAGEMENT GOALS AND OBJECTIVES

The Council, in cooperation with the State, is committed to developing a long-range plan for managing the scallop fishery that will promote a stable regulatory environment for the seafood industry and maintain the health of the resources and environment. The management system conforms to the Magnuson-Stevens Act's national standards as listed in Appendix B.

3.1 Management Goal

The management goal is to maximize the overall long-term benefit to the nation of scallop stocks by coordinated Federal and State management, consistent with responsible stewardship for conservation of the scallop resource and its habitats.

3.2 Management Objectives

Within the scope of the management goal, seven specific objectives have been identified. These relate to stock condition, economic and social objectives of the fishery, gear conflicts, habitat, weather and ocean conditions affecting safe access to the fishery, access of all interested parties to the process of revising this FMP and any implementing regulations, and necessary research and management. Each of these objectives requires relevant management measures. Several management measures may contribute to more than one objective, and several objectives may mesh in any given management decision on a case-by-case basis.

3.2.1 Biological Conservation Objective: Ensure the long-term reproductive viability of scallop populations.

To ensure the continued reproductive viability of each scallop population through protection of reproductive potential, management must prevent overfishing. Management measures may also be adopted to address other biological concerns such as restricting harvest of scallops during spawning periods and maintaining low bycatch of finfish and crab. The maintenance of adequate reproductive potential in each scallop stock will take precedence over economic and social considerations.

3.2.2 Economic and Social Objective: Maximize economic and social benefits to the nation over time.

Economic benefits are broadly defined to include, but are not limited to: profits, income, employment, benefits to consumers, and less tangible or less quantifiable social benefits such as the economic stability of coastal communities. To ensure that economic and social benefits derived for fisheries covered by this FMP are maximized over time, the following will be examined in the selection of management measures:

1. The value of scallops harvested during the season for which management measures are considered,

2. The future value of scallop stocks,

3. Economic impacts on coastal communities.

This examination will be accomplished by considering, to the extent that data allow, the impact of management alternatives on the size of the catch during the current and future seasons and their associated prices, harvesting costs, processing costs, employment, the distribution of benefits among members of the harvesting, processing and consumer communities, management costs, and other factors affecting the ability to maximize the economic and social benefits as defined in this section.

Social benefits are tied to economic stability and impacts of commercial fishing associated with coastal communities. While social benefits can be difficult to quantify, economic indices may serve as proxy measures of the social benefits which accrue from commercial fishing. In 1984, 7 percent of total personal income or 27 percent of total personal income in the private sector in Alaska was derived from commercial fishing industries. On a statewide basis, shellfish accounted for 21 percent of the total exvessel value of commercial fish harvested in Alaska in 1984, the bulk of which was king and Tanner crab.

3.2.3 Gear Conflict Objective: Minimize gear conflict among fisheries.

Management measures developed for the scallop fisheries will take into account the interaction of those fisheries, and the people engaged in them, with other fisheries. To minimize gear conflict among fisheries, the compatibility of different types of fishing gear and activities on the same fishing grounds should be considered. Scallop fisheries are conducted with dredge gear. Many other fisheries in the fishery management unit are conducted with fixed gear (pot and hook-and-line). Fishing seasons, gear storage, and fishing areas may be arranged to eliminate, insofar as possible, conflicts between gear types and preemption of fishing grounds by one form of gear over another.

3.2.4 Habitat Objective: Preserve the quality and extent of suitable habitat.

The quality and availability of habitat supporting the scallop populations are important. Fishery managers should strive to ensure that optimal habitat is available for juvenile and breeding, as well as the exploitable, segments of the population. It also will be important to consider the potential impact of scallop fisheries on other fish and shellfish populations.

Those involved in both management and exploitation of scallop resources will actively review actions by other human users of the management area to ensure that their actions do not cause deterioration of habitat. Any action by a State or Federal agency potentially affecting scallop habitat in an adverse manner may be reviewed by the Council for possible action under the Magnuson-Stevens Act. The Council will also consider the effect on scallop habitat of its own management decisions in other fisheries.

3.2.5 Vessel Safety Objective: Provide public access to the regulatory process for vessel safety considerations.

Upon request, and when appropriate, the Council and the State shall consider, and may provide for, temporary adjustments, after consultation with the Coast Guard and persons utilizing the fishery, regarding access to the fishery for vessels otherwise prevented from harvesting because of weather or other ocean conditions affecting the safety of vessels.

3.2.6 Due Process Objective: Ensure that access to the regulatory process and opportunity for redress are available to all interested parties.

In order to attain the maximum benefit to the nation, the interrelated biological, economic and social, habitat, and vessel safety objectives outlined above must be balanced against one another. A continuing dialogue between fishery managers, fishery scientists, fishermen, processors, consumers, and other interested parties is necessary to keep this balance. Insofar as is practical, management meetings will be scheduled around fishing seasons and in places where they can be attended by fishermen, processors, or other interested parties.

Access to the FMP development and regulatory process is available through membership in a Council work group, testimony on the record before the Council's Advisory Panel or SSC, or before the Council itself, testimony before the Board, conversations with members of the plan team or officials of regulatory agencies,

and by commenting on the FMP, any subsequent amendments and any regulations proposed for their implementation.

This FMP defers much of day-to-day scallop management to the State. Means of access to the regulatory process at the State level and of redress of perceived wrongs by the State are necessary. Appendix C describes the State management system and mechanisms for public input.

3.2.7 Research and Management Objective: Provide fisheries research, data collection, and analysis to ensure a sound information base for management decisions.

Necessary data must be collected and analyzed in order to measure progress relative to other objectives and to ensure that management actions are adjusted to reflect new knowledge. Achieving the objective will require new and ongoing research and analysis relative to stock conditions, dynamic feedback to market conditions, and adaptive management strategies.

An annual area management report discussing current biological and economic status of the fisheries, GHL ranges, and support for different management decisions or changes in harvest strategies will be prepared by the State (ADF&G lead agency), with NMFS and scallop plan team input when appropriate. Such information will be made available to the public.

4.0 OPTIMUM YIELD AND OVERFISHING

[This section is unchanged under Amendment 3 and will be amended as necessary under Amendment 4 which will revise the overfishing and essential fish habitat sections of the FMP]

A fishery management plan for scallops must specify an optimum yield (OY) for the scallop fishery. The OY for a fishery means the amount of fish which will provide the greatest overall benefit to the nation, with particular reference to food production and recreational activities. The OY is specified on the basis of the maximum sustainable yield from the fishery, as modified by any relevant economic, social, or ecological factors. The advisory guidelines established under 50 CFR part 602 for the national standards for fishery conservation and management state the most important limitation on the specification of OY is that the choice of OY, and the conservation and management measures proposed to achieve it, must prevent overfishing (§602.11(b)).

The determination of OY requires a specification of maximum sustainable yield (MSY). Biomass estimates for scallops are lacking, and the continuing exploratory nature of this fishery into new areas makes numerical estimation of MSY for weathervane and other scallop species not possible at this time. NOAA recognizes that there are cases where the specification of MSY may either be impossible or irrelevant. This may be due to lack of assessment data ... or because biological resiliency or high fecundity of some stocks or other fishery characteristic may allow OY to become a descriptive statement only, making a numerical calculation of MSY unnecessary. Nonetheless, the OY should still be based on the best scientific information available (§ 602.10(f)(4)(v)).

Overfishing is a level of fishing mortality that jeopardizes the long-term capacity of a stock or stock complex to produce MSY on a continuing basis. The definition of overfishing for a stock or stock complex may be expressed in terms of maximum level of fishing mortality or other measurable standard designed to ensure the maintenance of the stock's productive capacity. Overfishing must be defined in a way to enable the Council and the Secretary to monitor and evaluate the condition of the stock or stock complex relative to the definition. Overfishing definitions must be based on the best scientific information available and reflect appropriate consideration of risk. Risk assessments should take into account uncertainties in estimating harvest levels, stock conditions, or the effects of environmental factors.

4.1 Assessment of the available scientific data

The State of Alaska's draft fishery management plan for scallops (Kruse, 1994) presents a succinct summary of the best scientific data available on Alaska scallop life history traits and other biological parameters that should be considered in assessing an appropriate concept of MSY, OY, and overfishing for the scallop fishery. Pertinent portions of the State's management plan addressing current management concerns about recruitment overfishing and sustainable yield are incorporated in this FMP and are repeated below as follows:

Recruitment Overfishing

Definition. It is widely accepted that fishery harvest levels should be prescribed in ways to prevent "recruitment overfishing"--the condition that occurs when stocks are reduced to levels too low to produce adequate numbers of young scallops--the future recruits to the fishery (Gulland 1983). Recruitment is a prerequisite for maintenance of a viable population, and is needed for sustainable harvests that support long-term economic benefits from the fishery.

Worldwide History of Scallop Overfishing. Although there are a number of cases of scallop fisheries that have been sustainable over long time periods....overfishing has occurred in many, if not

most, scallop fisheries worldwide...Stock recovery has been either slow or non-existent. Attempts to develop aquaculture in many countries ... are largely attributable to the collapse of natural populations [Kruse (1994) provides examples of numerous cases of scallop overfishing that are not repeated here]. . .

Implications of Stock Structure. Prevention of overfishing requires knowledge about a species stock structure and the biological productivity of each stock. For species with populations that are well-connected by extensive larval drift, risk of overfishing is relatively low at least on an area-specific level. In such cases, local depletions can be replenished by settlement of larvae carried by ocean currents from spawning stocks located elsewhere. However, as described in section [1.3.4], a growing body of evidence indicates that many benthic invertebrates, such as scallops, exist as a number of discrete, self-sustaining populations. To prevent overfishing for species with such a population structure, it is necessary to manage each stock separately (Caddy 1989; Fevolden 1989; Sinclair et al. 1985.)

Unfortunately, the stock structure of weathervane scallops in Alaska is not well understood. Studies of genetic structure and comparative population characteristics (e.g., growth rate, gonadal somatic index) are needed to resolve uncertainties. In the absence of such information, a reasonable and conservative approach is to assume that each major fishing area compromises a separate stock (Caddy 1989; Sinclair et al. 1985). However, even with this approach, the possibility exists that multiple self-sustaining populations exist within a fishing area. For example, the apparent existence of separate self-sustaining populations of sea scallops on the Northern Edge and Northeast Peak of Georges Bank (Tremblay and Sinclair 1992; McGarvey et al. 1993) is somewhat unexpected given ocean currents and proximity of these areas to other scallop fishing grounds on Georges Bank.

Importance of Spawning Stock Biomass. Even after scallop stocks have been defined, overfishing will occur unless fishing mortality is limited to a level commensurate with the productivity of each stock based on life history and other biological characteristics. Worldwide, scallop populations are characterized by recruitment variability....Often, scallop populations are dominated by a few strong year classes that are separated by long periods of poor recruitment... Potential stock-recruitment relationships have not been well studied for scallops. A recent study by McGarvey et al. (1993) provides a rare example with good evidence of a relationship between spawning stock (total egg production) and recruitment for sea scallops on Georges Bank. In that instance, higher egg production was directly related to higher recruitment.

[Conversely], it is commonly assumed that scallop recruitment is linked to environmental conditions (Hanock 1973)... However, even when recruitment of a marine species is primarily driven by environmental effects, it is commonly held that parental spawning biomass affects recruitment, at least at low population sizes...Recently, Peterson and Summerson (1992) showed that the bay scallop (Argopecten irradians concentricus) was recruitment limited due to reduced abundance of adults caused by a red tide (Ptychodiscus brevis) outbreak. In relating their findings to fishery management, the authors noted that a common assumption of shellfish fisheries management was that fishing pressure on adults will not adversely affect subsequent recruitment. Peterson and Summerson (1992) concluded that this assumption was unjustified.

Sustainable Yield

Ideally, an appropriate harvest rate is developed from yield models based on a species' life history traits and other biological parameters. Then, annual catches are specified by applying these harvest rates to annual biomass estimates derived from stock assessment surveys. Unfortunately, limited

information on biological productivity is available for weathervane scallops to promote the conservation of stocks and sustained yields of the fishery. Biomass estimates are unavailable and yield models have not been developed.

In Alaska, most available information was collected during the early years of the fishery (Haynes and Powell 1968; Hennick 1970b, 1973), although it has been summarized more recently by Kaiser (1986). In the early 1950's the Bureau of Commercial Fisheries began systematic surveys to determine whether commercial quantities were available. The only assessment survey since 1972 was conducted in 1984 in lower Cook Inlet (Hammarstrom and Merritt 1985). Likewise, until the implementation of [the State's] onboard observer program in 1993, there have been no routine biological or fishery sampling programs conducted on weathervane scallops in Alaska.

Implications of Natural Mortality Rate. Natural mortality is one of the biological reference points commonly used in fisheries management to establish appropriate exploitation rates (Clark 1991). As discussed in section [1.3.3], the longevity (28 years) of weathervane scallops in Alaska implies that this species experiences a very low natural mortality rate (M approximates 0.16 or 15 percent annual mortality). The biological reference point, obtained by setting instantaneous fishing mortality (F) equal to M, implies that scallop harvest rates should not exceed 15 percent annually on any given stock. Unfortunately, other potentially useful benchmarks that would bear on the choice of appropriate exploitation rates for weathervane scallops are not presently available. A study of alternatives in is progress [by the ADF&G].

The biological reference point, F=M=0.16, implies that weathervane scallop stocks are at greater risk of overfishing than red king crab (Paralithodes camtschaticus) and Tanner crab (Chionoecetes bairdi) for which an M=0.3 has been estimated (NPFMC 1990). Also, unlike many crab stocks [off Alaska], there are not stock assessments of weathervane scallop biomass. Given these two observations, maintenance of healthy weathervane scallop stocks poses a serious challenge to fishery managers.

Implications of Recruitment Variability. Large annual fluctuations in recruitment, typical of scallop populations, have management implications. Weathervane scallops spawn annually after reaching maturity at age 3 or 4. This feature of multiple spawning (termed *iteroparity*) is likely to be an evolutionary response to environmentally-induced recruitment variations (Murphy 1968). Iteroparous species, with highly variable recruitment, are particularly vulnerable to overfishing when high levels of harvest create a recruit-only fishery.

Murphy (1967) simulated the effects of fishing on Pacific sardine (Sarinops sagax) age structure so that the population approached a single reproducing age class. Compared to an unfished populations with a protracted age structure, abundance of the fished population was much lower and more variable. The fished population recovered slowly even when fishing was terminated and it had a higher probability of extinction than the unfished population.

These results led Murphy (1967) to assert the need to maintain age structure in populations with long life spans that experience environmentally-driven recruitment. This same advice was advanced by Leaman (1991) for the long-lived rockfishes (Sebastes). By comparison of longevity with other scallop species (Orensanz et al. 1991), weathervane scallops, with a maximum age of 28 (Hennick 1973), may be the longest-lived scallop species in the world. That is, the advice of Murphy (1967, 1968) and Leaman (1991) is apropos.

Sustainability of Weathervane Scallop Harvests. Changes in the Alaskan scallop fishery through 1992 raised concerns that recent (through 1992) harvests may not be sustainable on a local or regional level for several reasons. First, recent landings were 2-3 times higher than the long-term average harvest taken over a 20-year period during the 1970s and 1980s. In fact, these harvests are at levels comparable to those taken in the late 1960s and early 1970s which proved not to be sustainable by the fishery. Reduced scallop abundance was at least partly responsible for the fishery collapse in the 1970s. Second, high harvests since 1990 were at least partly attributable to shifts in fishing effort to new scallop beds. Third, during 1992 limited inseason catch reports from some areas indicated that small scallops were constituting an increased portion of landings as had occurred prior to the fishery decline in the mid-1970s. Last, misreporting was suspected. If misreporting was widespread, it would seriously compromise the data base of historical catches upon which assessments of sustainable harvests are based.

4.2 Specification of OY and Overfishing

Instead of specifying OY as a fishing rate or constant catch level, the long-term OY specification for the scallop resource in Federal waters off Alaska (all species) is specified as a numerical range. In the absence of biomass estimates needed to implement an exploitation rate harvest strategy, the OY is specified as the long-term productivity. The OY range is zero to 1.8 million lbs (814 mt) of shucked scallop meats, and is derived from historical catches from State and Federal waters in the GOA and BSAI. The low end of the range is the lowest catch on record (zero pounds in 1978). The high end of the OY approximates the highest catch taken from the GOA and BSAI since the 'fishing up' period (1.8 million pounds in 1993).

As discussed above in section 4.1, the lack of biological information on Alaskan scallops inhibits the numerical specification of overfishing. Although it is difficult to define precisely the level at which overfishing jeopardizes recovery of a stock, there are indicators of existing or impending overfishing that should be heeded. For the reasons discussed above, recent harvest levels of scallops off Alaska may not be sustainable. This concern, as well as other uncertainties about the scallop biomass and stock dynamics must be taken into account in developing an overfishing definition. Although overfishing could be defined as a fishing mortality rate for weathervane scallops, based on existing life history data, the lack of stock assessment information (surveys, population age or size structure) limit the use of an overfishing rate at this time. As in the case for other stocks where very little biological information is available (Rosenberg et al. 1993), overfishing can be defined as landings that exceed optimum yield. As data collected from the fisheries and/or assessment surveys of the scallop resource are analyzed, overfishing for scallops may be defined on a fishing mortality rate basis. Until better information becomes available, overfishing is defined as landings that exceed optimum yield.

Because scallops have only been harvested by U.S. vessels in the past, and effort remains high, it is likely that the OY can be fully harvested by U.S. vessels, and fully processed by U.S. processors in future years. In fact, current capacity of the U.S. scallop fleet in Alaska exceeds current guideline harvest levels for scallops. Hence, no considerations have been made to allow a foreign fishery on Alaskan scallops.

5.0 MANAGEMENT MEASURES

This chapter describes management measures that may be used to achieve the FMP's management objectives. Most of these management measures are currently used by the State to manage the scallop fishery. Some measures are appropriate for more than one management objective.

Two categories of management measures are described in the FMP (Table 5.1): Category 1 measures are general management measures delegated to the State for implementation. These measures may be freely adopted or modified by the State, subject to other Federal law. Category 2 measures are limited access management measures that are fixed in the FMP, implemented by Federal regulation and require an FMP amendment to change.

Table 5.1 Management measures used to manage the scallop fishery off Alaska by category.

CATEGORY 1 (Delegated to the State)	CATEGORY 2 (Fixed in FMP, Implemented by Federal Regulation)
Guideline Harvest Levels	Vessel moratorium
Registration Areas, Districts, Subdistricts and Sections	License limitation program
Gear Limitations	
Crew and Efficiency Limits	
Fishing Seasons	
Observer Requirements	
Prohibited Species and Bycatch Limits	
Recordkeeping and Reporting Requirements	
In-season Adjustments	
Closed Areas	
Other	

The following description of management measures is not intended to limit the State government to only these measures. However, implementation of other management measures not described in the FMP must be consistent with the FMP, the Magnuson-Stevens Act, and other applicable Federal law. Although specific strategies for attainment of objectives in the FMP are not described, management measures described in this chapter are all derived to attain one or more of those objectives.

5.1 Category 1: Management Measures Delegated to the State

5.1.2 Guideline Harvest Levels

The FMP authorizes the State to set preseason GHLs under State regulations. The term GHL corresponds closely to the term total allowable catch (TAC) used in the groundfish FMPs for the Bering Sea and Aleutian Islands Management Area and the Gulf of Alaska, although GHL is often expressed as a range and TAC is not. A range of harvest levels allows the State to make in-season management decisions based on current data obtained from the fishery. Seasons or areas may be closed when the GHL is reached, or earlier or later based on current in-season information. GHL is used in this FMP in lieu of TAC because the State has used this term and it corresponds with the State's current management program. The sum of all upper ranges of the GHLs for scallops crab must fall within the OY ranges established in this FMP.

The GHL is the result of a process which includes the examination of the effects of different harvesting strategies on the seven objectives of management listed previously in this FMP. While harvest strategies will be evaluated relative to all seven of these objectives, GHL will most frequently be used as a management measure to achieve only the first two objectives. For this reason, the GHL is primarily composed of two interrelated components: a biological component and a socioeconomic component.

In overview, the biological component, acceptable biological catch (ABC), is set to achieve the biological conservation objective of preventing overfishing. Because the maintenance of adequate reproductive potential takes precedence over economic and social considerations, the ABC serves as an upper bound constraint on harvest. A target harvest level is then chosen within ABC to maximize the anticipated discounted benefits to the fishery over the long term. These benefits include: profits, personal income, employment, benefits to consumers, and less tangible or less quantifiable social benefits such as the economic stability of coastal communities. The GHL range represents a confidence interval around the proposed harvest level reflecting the uncertainty in stock status and the uncertainty in estimates of socioeconomic benefits. Ideally, bioeconomic analysis such as Matulich, et al. (1987a, b, c) should be used to determine the GHL. However, such modeling efforts are relatively new and complex; in the future they should be employed along with more conventional means of determining the GHL.

Regardless of the specific approach, the process of determining a GHL which prevents overfishing and maximizes socioeconomic benefits includes the routine collection and analysis of biological, economic, social, and other data. Scallop resources in various registration areas off Alaska vary in the level of scientific information available for management. Consequently, exact procedures for determining appropriate ABCs and GHLs vary due to differences in the quality and quantity of resource data bases.

As discussed within the Research and Management Objective, an annual area management report will be prepared which describes the determination of GHLs and ABCs for all types of stocks using the best available information. The GHLs contained in this report will be updated when new information is available. This information will be made available to the public.

5.1.2 Registration Areas, District, Subdistrict, and Section Boundaries

This FMP adopts existing State registration areas. The management unit historically has been divided by the State into nine scallop registration areas composed of the Federal waters and adjacent State waters described in each area (Figure 5.2). Registration areas may be further divided into fishing districts, subdistricts, and sections for purposes of management. For the purpose of scallop management, the State has divided the Yakutat, Cook Inlet, and Kodiak Registration Areas into districts..

Registration areas are characterized by relatively homogeneous established fisheries on scallop stocks. State regulations require vessels to register for fishing in these areas, and may require vessels to register for specific fishing districts within a registration area. Registration requirements allow estimation of fishing effort and the rate at which the resource will be harvested. Existing

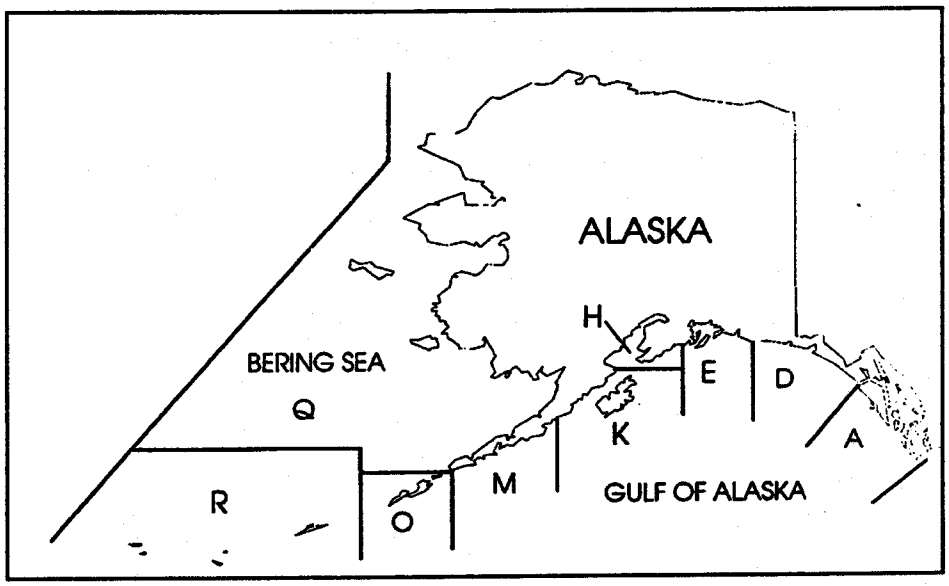

Figure 5.2 Scallop Registration Areas

Registration Areas and districts are defined in Appendix D.

5.1.3 Gear Limitations

Gear limitations may include restrictions on the number and width of dredges that may be deployed by vessels fishing in a particular area, and minimum ring sizes for dredges to prevent the taking of undersize scallops. Gear restrictions will be specified in State regulations.

5.1.4 Crew and Efficiency limits

Efficiency limits may be necessary to prevent overcapitalization in the Scallop fishery off Alaska. Efficiency limits may include prohibitions on automatic shucking machines and restrictions on the number of crew that may be on board a vessel when engaged in fishing for scallops. Efficiency limits will be specified in State regulations.

5.1.5 Fishing Seasons

Fishing seasons will be specified in State regulation to achieve various management objectives including (1) limiting fishing during spawning periods, (2) timing fishing seasons during periods when product quality is highest, (3) limiting gear conflicts with other fisheries, (4) and increasing vessel safety.

5.1.6 Observer Requirements

Observer coverage requirements may be specified in State regulations. The State may place observers aboard scallop fishing and/or processing vessels to obtain, for example, catch and effort data; species, and size composition data. Observers provide better scientific and enforcement information than is otherwise available. The State currently has a mandatory observer requirement on all vessels fishing for scallops outside the Cook Inlet Registration Area as a condition to obtaining a processing permit. It is important that the State observer program and any future Federal observer program be coordinated to prevent duplication of effort and reduce costs to industry. No one shall forcibly assault, resist, impede, intimidate, or interfere with an observer placed aboard a fishing vessel under this FMP.

5.1.7 Prohibited Species and Bycatch Limits

State regulations may prohibit vessels fishing under this FMP from retaining certain species identified as prohibited including salmon, halibut, king crab, Tanner crab, and herring. Species identified as prohibited must be avoided while fishing and must be immediately returned to the sea with a minimum of injury when caught and brought aboard. Prohibited species bycatch limits may be established for specified areas or subareas to limit bycatch of prohibited species in the scallop fishery.

5.1.8 Recordkeeping and Reporting Requirements

The State may implement recordkeeping and reporting requirements as necessary to meet the management objectives of the FMP. As the commercial scallop fisheries have grown over recent years, so has our knowledge of this species. Information gained through scientific surveys, research, and fishermen's observations have all led to a better understanding of the biology, environmental requirements, and behavior of the scallop stocks. Since fishery managers monitor harvest rates in-season to determine areas of greatest fishing effort, thereby preventing overharvest of individual scallop stocks, State catch and processing reporting requirements are an important component in achieving the biological conservation, economic, social, research and management objectives of this FMP.

5.1.9 In-season Adjustments

The State may make in-season adjustments to GHLs, fishing seasons, bycatch limits, and to close areas under State regulations. In making such in-season adjustments, the State may consider appropriate factors to the extent in-season data is available on: (1) overall fishing effort, (2) catch per unit of effort and rate of harvest, (3) relative scallop abundance, (4) achievement of GHLs and bycatch limits, (5) general information on stock condition, (6) timeliness and accuracy of catch reporting, and (7) other factors that affect ability to meet objectives of the FMP.

All in-season adjustments must be recorded and justified in writing. These justifications are attached to the emergency order and will be made available for review to the public, the State, NMFS, and other regulatory agencies.

5.1.10 Closed areas

State regulations implementing the FMP may include time and area closures designed to minimize bycatch and protect habitat. Existing State regulations close most areas to that are also closed to bottom trawling to protect crab and other sensitive habitat.

5.1.11 Other

As previously noted, the State government is not limited to only the management measures described in this FMP. However, implementation of other management measures not described in the FMPmust be consistent with the FMP, the Magnuson-Stevens Act, and other applicable Federal law.

5.2 Category 2 Measures: Limited Access Management

[Note: This section is unchanged under Amendment 3]

A system for limiting access, which is an optional measure under section 303(b) of the Magnuson-Stevens Act, is a type of allocation of fishing privileges that may be used to promote economic efficiency or conservation. For example, "*limited access may be used to combat overfishing, overcrowding, or overcapitalization in a fishery to achieve OY*" (50 CFR 600.330(c)). The Magnuson-Stevens Act (Section 3(28)) further defines"... The "optimum" with respect to the yield from a fishery, means the amount of fish which -- (A) will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities, and taking into account the protection of marine ecosystems; (B) is prescribed on the basis of the maximum sustainable yield from the fishery, as reduced by any relevant social, economic, or ecological factor; and (C) in the case of an overfished fishery, provides for rebuilding to a level consistent with producing the maximum sustainable yield in such fishery.

The existence of an overcapitalized fleet increases the potential of overfishing the resource in an unrestricted fishery. At its January 1993 meeting, the Council determined that unrestricted access to this fishery may be harmful to the resource and result in a net loss to the Nation. The need to limit access was the primary motivation for the Council to prepare the FMP in lieu of State management of the scallop fishery. A control date of January 20, 1993, was set to place the industry on notice that a moratorium for this fishery may be implemented. This control date was again reaffirmed at the Council's June 1993 and June 1995 meetings. As anticipated, effort in this fishery increased in 1993; 32 permits, representing 21 vessels were issued to fish scallops in 1993. Eleven of these vessels had made landings as of July 31, 1993, and a total of 15 vessels had made landings by the end of 1993.

Even without additional vessels entering the fishery, the 1993 fishery was overcapitalized. In 1992, seven vessels harvested 1.8 million lb (816 mt), for an average of 257,143 lb (116.6 mt) harvested per vessel. The 1993 quota was set at 890,000 lb (403.7 mt) for areas with specified guideline harvest levels, or about one-half of the 1992 landings. Harvesting of this quota could be done by only three to four vessels. Preliminary estimates of 1993 landings from areas without guideline harvest levels total 524,000 lb (237.7 mt), that potentially could have been taken by an additional two vessels. Yet, 11 vessels participated in the 1993 fishery by July 31. Hence, the 1993 fishery was overcapitalized, meaning that too much capital was invested relative to the fleet size necessary to conduct the fishery. In 1994 the fishery continued the trend; 16 vessels harvested 1,235,269 lb (560.3 mt) of scallops.

In June 1995, the Council included a vessel moratorium with Amendment 1 to the FMP which was the suite of management measures needed to reopen the fishery. In April 1996, the Council chose to recommend the vessel moratorium as Amendment 2 in order to prevent moratorium issues from delaying the reopening of the scallop fishery. The following moratorium criteria were adopted by the Council in June 1995 and reaffirmed in April 1996.

5.2.1 Moratorium period

The vessel moratorium will remain in effect until 3 years after date of implementation or until repealed by the Council or replaced by a permanent limited access program. The Council may recommend that the moratorium be extended for 2 years through regulation if a permanent limited access program is imminent.

5.2.2 Qualification Criteria

A vessel would qualify for inclusion in the moratorium if it made a legal landing of scallops during 1991, 1992 or 1993; or during at least 4 separate years from 1980 through 1990.

5.2.3 Area Endorsements

Moratorium permits would include area endorsements for fishing in waters inside Registration Area H (Cook Inlet) and/or waters outside Registration Area H.

Waters Outside Registration Area H. A vessel is moratorium qualified to fish for scallops in waters outside Scallop Registration Area H if it made at least one legal landing of scallops in waters outside Scallop Registration H Area during the qualification period in paragraph 2.8.2

Registration Area H. A vessel is moratorium qualified to fish for scallops in waters inside Registration Area H if it made at least one legal landing of scallops in waters inside Scallop Registration Area H during the qualification period in paragraph 2.8.2

5.2.4 Ownership

Scallop moratorium permits would be issued to the person (or successor in interest) who owned the qualifying vessel when it most recently made qualifying landings. If a vessel was sold during or after the moratorium qualification period, the moratorium rights attach to the owner of the vessel when it most recently made qualifying landings under paragraph 2.8.2 such that each vessel generates only one moratorium permit.

5.2.5 Vessel Reconstruction

Vessels may be reconstructed during the moratorium. If physical reconstruction started on or after January 20, 1993, the new size may not exceed 1.2 times the original qualifying vessel length overall (LOA) at time of qualification. For vessels under reconstruction on January 20, 1993, the maximum LOA would be the LOA on the date reconstruction was completed with no additional increases allowed.

5.2.6 Vessel Replacement

Qualifying vessels can be replaced with non-qualifying vessels as often as desired so long as the replaced vessel leaves the fishery or bumps another qualifying vessel out in the case of multiple transactions. Vessel size can be increased as many times as desired, but is restricted to 1.2 times the original qualifying vessel length (LOA). For vessels lost or destroyed before or during the moratorium, qualifying vessels can be replaced with non-qualifying vessels no longer than 1.2 times the original qualifying vessel length (LOA). Replaced vessels cannot be salvaged and come back into the fishery.

5.2.7 Exemptions

Vessels 26 ft (7.9 m) or less in the GOA and vessels 32 ft (9.8 m) or less in LOA in the BSAI are exempted from the moratorium when fishing for scallops only if they use gear other than dredges or trawls.

5.2.8 Appeals

An appeals process will be established in the implementing regulations consistent with the process established for the groundfish and crab vessel moratorium.

6.0 DATA ASSESSMENT AND COLLECTION

[Note: This section is unchanged under Amendment 3]

NMFS, in coordination with other management agencies, should initiate efforts to identify and gather the data needed to improve management agency understanding of the dynamics of the scallop resource and the effect of exploitation on the stocks capacity to produce MSY on a continuing basis. The type of information that should be pursued Alaska include (1) stock abundance and size/age structure, (2) scallop biology, life history, and stock production parameters, (3) analyses of population thresholds and recruitment overfishing; (4) estimation of optimum dredge ring size or minimum shell height based on studies of rates of growth and mortality; (5) investigations of exploitation rates and alternative management strategies; (6) genetic stock structure; and (7) new gear designs to reduce bycatch and to minimize adverse effects on bottom habitat. This objective may be attained, in part, with data collected by the Alaska State observer program. However, assessments of the scallop resource off Alaska, as well as the conduct of other scallop research will be dependent on Federal funding, State of Alaska general fund appropriations, or future amendments to the FMP that would authorize experimental fishing under Federal permit conditions.

7.0 ADMINISTRATIVE AND ENFORCEMENT COSTS

[Note: This section is unchanged under Amendment 3]

Administrative costs will increase as staff resources are required to develop future management measures. Significant costs would result from a meaningful data collection program that, ideally would include a resource assessment of the Alaska scallop stocks. A comprehensive survey of the sea scallop grounds in the Gulf of Alaska and the Bering sea would require a 90-day cruise. Such a cruise probably cannot be part of ongoing groundfish research cruises because a different type of sampling gear, such as a specialized scallop dredge, likely would be required. The estimated cost of such a survey would be about $540,000 (assume a vessel charter with scientific personnel cost at $6,000 per day for a 90-day cruise). There would also be a need for data entry, data workup, and general staffing functions to make the information useable, estimated to be one staff -year. A desirable part of the data collection program would involve collection of fisheries statistics and biological specimens from the fisheries for status of stocks analyses.

Appendix C State of Alaska Management Structure

Institutions: The State Organizational Act of 1959 provided for Alaska Statutes, Title 16, which deals with Alaska Fish and Game Resources. Article 1 provides for a Department of Fish and Game whose principal executive officer is the Commissioner of Fish and Game. The Commissioner is appointed by the Governor for 5 years. The Commercial Fisheries Division was established to manage all commercially harvested fish species in Alaska. The Division is headed by a director who supervises four regional supervisors. The regions are further separated into management areas. Area management biologists are responsible for collecting catch data and monitoring fisheries in their areas. A Subsistence Section within the Commissioner's Office was recently established to document subsistence needs and utilization and to make recommendations for developing regulations and management plans to ensure subsistence use preference.

The enforcement of fish and game laws and regulations is provided by ADF&G and the Alaska Department of Public Safety (ADPS). The fish and wildlife protection officers of the ADPS operate independently of the ADF&G, although communication between the two departments is maintained and activities are coordinated.

Jurisdiction: ADF&G asserts management authority over all migratory fish and shellfish species which enter and leave territorial waters of the State, including the migratory fish and shellfish taken from State waters which are indistinguishable, in most instances, from those taken from adjacent high seas areas. Regulations governing migratory fish and shellfish cover both areas and are enforced by the State's landing laws. These landing laws prohibit the sale or transportation within State waters of migratory fish and shellfish taken on the high seas unless they were taken in accordance with State regulations.

The Fisheries Regulatory Process: The Alaskan system has a seven-member Board, composed of fishermen and other businessmen appointed by the Governor, which considers both public and staff regulatory proposals in deciding on regulatory changes. The Board is required by law to meet or hold a hearing at least once a year in each of the following areas of the State in order to assure all people of the State ready access to the Board: (a) Upper Yukon-Kuskokwim-Arctic, (b) Western Alaska (including Kodiak), (c) South Central, (d) Prince William Sound (including Yakutat), and (e) Southeast. Since the late 1960s, the Board, and before it, the Board of Fish and Game, has usually held a minimum of two meetings annually to adopt changes in the fisheries regulations. The fall Board meeting, usually held in early December, considers proposals for changes in sport fishing regulations and in commercial and subsistence finfish regulations. A spring Board meeting, usually held in late March or early April, considers commercial and subsistence shellfish regulatory proposals (see Chapter 2). Regulations which may be adopted by the Board cover seasons and areas, methods and means of harvesting, quotas, and times and dates for issuing or transferring licenses and registrations.

Advisory committees, composed of people concerned about the fish and game resources of their locality, serve as local clearinghouses and sources of proposals for Board consideration. Following submission of advisory committees and public proposals, ADF&G staff members review the proposals and redraft the wording, when necessary, to conform to the style required. ADF&G also submits proposals for the Board's consideration.

In adopting new regulations, the Board follows Alaska's Administrative Procedure Act. This act has several requirements: At least 30 days prior to the adoption of new regulations, a notice giving the time and place of the adoption proceedings, reference to the authority under which the regulations are proposed, and a summary of the proposed action, must be published in a newspaper of general circulation and sent to all interested people who have asked to be informed of the proposals. During the proceedings, the public must be given an opportunity to testify on the proposed changes. If a new regulation is adopted, it must be submitted to the Lieutenant Governor through the Attorney General's office. Thirty days after being filed with the Lieutenant

Governor, the new regulation becomes effective. Because of these requirements, new regulations usually do not become effective until about 2 months after being adopted by the Board. Regulatory flexibility is given to the Commissioner of Fish and Game and to his authorized designees to adjust seasons, areas, and weekly fishing periods by emergency order.

The requirements outlined in the preceding paragraph do not apply in the case of emergency regulations, which may be adopted if needed for the immediate preservation of public peace, health, safety, or general welfare. An emergency regulation remains in effect 120 days unless it is adopted as a permanent regulation through the procedure described above. Emergency regulations have the same force and effect as permanent regulations. The Board has delegated authority to the Commissioner to adopt emergency regulations where an emergency exists as described in AS 44.62.250.

Appeals to the Board of Fisheries

Reconsideration of issues during a meeting: During a Board meeting, any Board member may move to reconsider an issue regardless of how the member voted on the original issue. Board Policy #80-78-FB requires that the motion be made prior to the adjournment of the meeting, that the motion be supported with new evidence, unavailable at the time of the original vote, and that public notice be given as to when reconsideration will occur.

Petitions to the Board: Under Section AS 44.62.220, an interested person may petition the Board for the adoption or repeal of a regulation. Upon receipt of a petition requesting the adoption, amendment or repeal of a regulation, the Board shall, within 30 days, deny the petition in writing or schedule the matter for public hearing. The Board and the Board of Game adopted a Joint Board Petition Policy which limits the scope of petitions they are willing to act upon outside of the normal regulatory cycle. The Joint Board recognized that in rare instances extraordinary circumstances may require regulatory changes outside this process. Therefore, it is the policy of the Board and the Board of Game that petitions will only be accepted if the problem outlined in the petition results in a finding of emergency. In accordance with State policy (AS 44.62.270), emergencies will be held to a minimum and rarely found to exist. Alaska Statute 44.62.250 specifies that in order to adopt emergency regulations, the agency must find that it is necessary for the immediate preservation of the public peace, health, safety, or general welfare. If such a finding is made, the agency adopting the emergency regulation shall submit a copy to the Lieutenant Governor for filing and for publication in the "Alaska Administrative Register". Notice of adoption shall be given within five days of the adoption. Failure to give notice within ten days automatically repeals the regulation. For fish and game regulations, the Boards determined that an emergency is an unforeseen, unexpected event that either threatens a fish or game resource, or an unforeseen, unexpected resource situation where a biologically allowable resource harvest would be precluded by delayed regulatory action and such delay would be significantly burdensome to the petitioners since the resource would be unavailable in the future.

In 1995, the Board of Fisheries modified its petition policy for category 2 measures in the BSAI king and Tanner crab FMP (see State Regulation 5 AAC 39.998). The Board of Fisheries recognizes that in rare instances, circumstances may require regulatory changes outside the process described in 5 AAC 96.625(b) - (d). Notwithstanding 5 AAC 96.625(f), a petition for a regulatory change may be submitted under this section and 5 AAC 96.625(a) for a Category 2 management measure in a Bering Sea/Aleutian Islands king or Tanner crab fishery described in the federal Fishery Management Plan (FMP) for the Commercial King and Tanner Crab Fisheries in the Bering Sea/Aleutian Islands. It is the policy of the Board of Fisheries that a petition submitted under this section will be denied and not scheduled for hearing unless the petition:

(1) addresses a Category 2 management measure and is filed within 30 days from the date that the board adopted that Category 2 management measure;

(2) presents an issue that is not solely allocative; and

(3) presents new legal, biological, or management information that indicates the regulation may not be consistent with the federal FMP."

Appeals to the Commissioner of Fish and Game

Petitions: Board Policy #79-53-FB delegates authority to the Commissioner to adopt emergency regulations, during times of the year when the Board is not in session. The Commissioner may adopt, in accordance with the Administrative Procedure Act (AS 44.62), an emergency regulation where an emergency exists as described in AS 44.62.250. All emergency actions shall, to the full extent practicable, be consistent with Board intent. The Commissioner is further required to consult, if possible, with members of the Board to obtain their views.

In-season Management Actions: Within 5 days after the closure of any registration area, an individual holding a king or Tanner crab permit issued by the Commercial Fisheries Entry Commission or the owner of any vessel registered to that area may formally request the commissioner to reopen the area. The commissioner shall personally review pertinent information on the condition of crab within the area, and shall formally announce his decision within 14 days of the request. 5AAC 34.035(d), 35.035(d).

Judicial Review: The APA in Section 44.62.300 provides for court review of regulatory actions of the Board or commissioner. An interested person may get a judicial declaration on the validity of a regulation by bringing an action for declaratory relief. All actions are to be brought in the Superior Court. The court may declare the regulation invalid for a substantial failure to comply with required administrative procedures (AS 44.62.010-44.62.320) or, in the case of an emergency regulation or order of repeal, upon the grounds that the facts recited in the statement do not constitute an emergency under AS 44.62.250.

Appendix D: Scallop Registration Areas

Registration Area A (Southeastern Alaska) has as its southern boundary the international boundary at Dixon Entrance, and as its northern boundary Loran-C line 7960-Y-29590, which intersects the western tip of Cape Fairweather at 58° 47' 58" N. lat., 137° 56' 30" W. long., except for ADF&G District 16 defined as all waters north of a line projecting west from the southernmost tip of Cape Spencer and south of a line projecting southwest from the westernmost tip of Cape Fairweather.

Registration Area D (Yakutat) has as its western boundary the longitude of Cape Suckling (143° 53' W. long.), and as its southern boundary Loran-C line 7960-Y-29590, which intersects the western tip of Cape Fairweather at 58° 47' 58" N. lat., 137° 56' 30" W. long., and ADF&G District 16 defined as all waters all waters north of a line projecting west from the southernmost tip of Cape Spencer and south of a line projecting southwest from the westernmost tip of Cape Fairweather.

Registration Area E (Prince William Sound) has as its western boundary the longitude of Cape Fairfield (148° 50' W. long.), and its eastern boundary the longitude of Cape Suckling (143° 53' W. long.).

Registration Area H (Cook Inlet) has as its eastern boundary the longitude of Cape Fairfield (148° 50' W. long.) and its southern boundary the latitude of Cape Douglas (58° 52' N. lat.).

Kamishak Bay District: all waters enclosed by a line from 59° 46' 12" N. lat., 153° 00' 30" W. long., then east to 59° 46' 12" N. lat., 152° 20' W. long., then south to 59° 03' 25" N. lat., 152° 20' W. long., then southwesterly to Cape Douglas (58° 52' N. lat.). The seaward boundary of the Kamishak Bay District is three nautical miles seaward from the shoreline between a point on the west shore of Cook Inlet at 59° 46' 12" N. lat., 153° 00' 30" W. long., and Cape Douglas at 58° 52' N. lat., 153° 15' W. long., including a line three nautical miles seaward from the shorelines of Augustine Island and Shaw Island, and including the line demarking all state waters shown on NOAA chart 16640, 21st Ed., May 5, 1990.

Outer District: all waters enclosed by a line from the tip of Point Adam to the tip of Cape Elizabeth, then south to 58° 52' N. lat., 151° 53' W. long., then east to the longitude of Aligo Point (149° 44' 33" W. long.), then north to the tip of Aligo Point.

Eastern District: all waters east of the longitude of Aligo Point (149° 44' 33" W. long.), west of the longitude of Cape Fairfield (148° 50' W. long.), and north of 58° 52' N. lat.

Registration Area K (Kodiak) has as its northern boundary the latitude of Cape Douglas (58° 52' N lat.), and as its western boundary the longitude of Cape Kumlik (157° 27' W. long.).

Northeast District: all waters east of a line extending 180° from the easternmost tip of Cape Barnabas, east of a line from the northernmost tip of Inner Point to the southernmost tip of Afognak Point, east of 152° 30' W. long. in Shuyak Strait, and east of the longitude of the northernmost tip of Shuyak Island (152° 20' W. long.).

Semidi Island District: all waters west of the longitude of Cape Kilokak at 156° 19' W. long and east of the longitude of Cape Kumlik at 157° 27' W. long.

Shelikof District: all waters north of a line from the westernmost tip of Cape Ikolik to the southernmost tip of Cape Kilokak, west of a line from the northernmost tip of Inner Point to the

southernmost tip of Afognak Point, west of 152° 30' W. long., in Shuyak Strait, and west of the longitude of the northernmost tip of Shuyak Island (152° 20' W. long.).

Registration Area M (Alaska Peninsula) has as its eastern boundary the longitude of Cape Kumlik (157° 27' W. long.), and its western boundary the longitude of Scotch Cap Light. The registration area also includes all waters of Bechevin Bay and Isanotski Strait south of a line from the easternmost tip of Chunak Point to the westernmost tip of Cape Krenitzen.

Registration Area O (Dutch Harbor) has as its eastern boundary the longitude of Scotch Cap Light,(164° 44' W long.), its western boundary 171° W. long, and as its northern boundary the latitude of Cape Sarichef (54° 36' N. lat.).

Registration Area Q (Bristol Bay-Bering Sea) all waters north of a line from Cape Sarichef (54° 36' N. lat.), to 54° 36' N. lat., 171° W. long., to 55° 30' N. lat., 171° W. long., to 55° 30' N. lat., 173° 30' E. long., and west of the U.S.-Russian Convention line of 1867 as depicted on NOAA Chart #513 (5th Ed., November 6, 1982).

Registration Area R (Adak) has as its eastern boundary 171° W. long., as its northern boundary 55° 30' N. lat., and as its western boundary the U.S.-Russian Convention line of 1867 as depicted on NOAA Chart #513 (5th Ed., November 6, 1982).

DRAFT FOR SECRETARIAL REVIEW

ENVIRONMENTAL ASSESSMENT / REGULATORY IMPACT REVIEW

FOR

AMENDMENT 3 TO THE FISHERY MANAGEMENT PLAN FOR THE SCALLOP FISHERY OFF ALASKA

TO

DELEGATE AUTHORITY TO THE STATE OF ALASKA TO MANAGE THE SCALLOP FISHERY IN FEDERAL WATERS OFF ALASKA

Prepared by
National Marine Fisheries Service
Alaska Regional Office

March 1998

EXECUTIVE SUMMARY

The Scallop fishery off Alaska is currently managed under a cumbersome State-Federal management regime established by Amendment 1 to the Fishery Management Plan for the Scallop Fishery off Alaska (FMP) under which each State regulation and management action must be duplicated by a parallel Federal action. In discussing this amendment, the Council noted that it could serve as a temporary program to prevent unregulated fishing in Federal waters until changes in the Magnuson-Stevens Act would provide the Council with the authority to delegate to the State authority to manage the scallop fishery in Federal waters. While this management regime has enabled NMFS to reopen Federal waters to fishing for scallops, it has proven to be cumbersome in practice. NMFS inseason management staff must draft and publish Federal Register notices that duplicate every State scallop management action, and State scallop managers are constrained in their ability make rapid management decisions because they must coordinate each action with NMFS and provide sufficient lead-time for publication of the action in the Federal Register.

Amendments to Magnuson-Stevens Act in 1996 now enable the Council to delegate to the State, with a three-quarter majority vote, the authority to manage some or all aspects of the scallop fishery in Federal waters off Alaska. This document examines two alternatives, in addition to the requisite "no action" alternative, for an Amendment 3 to the FMP that would delegate to the State authority to manage the scallop fishery in the Federal waters off Alaska.

Alternative 1: No Action. Under this alternative, the cooperative State-Federal management regime established by Amendment 1 would remain unchanged. ADF&G and NMFS would continue to maintain duplicate regulations and mirror each other's management actions to provide for the orderly management of the scallop fishery off Alaska.

Alternative 2 (PREFERRED): Delegate to the State authority to manage all aspects of the scallop fishery in Federal waters off Alaska except limited access. Under this alternative, limited access management would remain a Federal responsibility under the FMP, and would require an FMP amendment to change. All other Federal scallop regulations would be repealed and the authority to manage all other aspects of the scallop fishery would be delegated to the State under the FMP, including the authority to regulate any vessels not registered under the laws of the State. Two categories of management measures would be established. Limited access measures would be designated as Category 1 measures. Such measures would be fixed in the FMP, reserved for Federal implementation, and would require an FMP amendment to change. All other management measures would be designated as Category 2 measures and would be delegated to the State for implementation.

Alternative 3: Delegate to the State authority to manage all aspects of the scallop fishery in Federal waters off Alaska. Under this alternative, all Federal regulations governing the scallop fishery off Alaska would be repealed and authority to manage all aspects of the scallop fishery would be delegated to the State under the FMP, including the authority to limit access and to regulate any vessel not registered under the laws of the State.

With respect to the environmental effects of Amendment 3, the purpose of Amendment 3 is to eliminate an unnecessary and duplicate layer of regulation without altering the manner in which the fishery is currently managed by the State. Consequently, neither of the alternatives to the status quo is expected to alter the nature of the scallop fishery in a manner that would affect the human environment or impact other fisheries off Alaska.

Alternatives 2 and 3 differ only with respect to limited access management. Under Alternative 2, the scallop fishery would continue to be governed by the Federal scallop vessel moratorium under which 18 vessels qualify for moratorium permits. The current State scallop vessel moratorium program would apply only to State waters as is the case under the status quo. Under Alternative 3, the Federal moratorium would be repealed and the State would be authorized to extend its moratorium program to Federal waters. Under Alternative 3, eight vessels that qualify to participate under the Federal moratorium would be excluded from the fishery. Four of these vessels are currently participating in the 1997 scallop fishery.

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1.0 INTRODUCTION

The scallop fishery in the Exclusive Economic Zone (EEZ) (3 to 200 miles offshore) off Alaska is jointly managed by NMFS and the Alaska Department of Fish and Game (ADF&G) under the Fishery Management Plan for the Scallop Fishery off Alaska (FMP). The FMP was developed by the North Pacific Fishery Management Council (Council) under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) and approved by NMFS on July 26, 1995.

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).

This Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis (EA/RIR/IRFA) addresses Amendment 3 to the FMP. 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 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.

1.1 Purpose of and Need for the Action

The Scallop fishery off Alaska is currently managed under a cumbersome State-Federal management regime established by Amendment 1 to the FMP. Under Amendment 1, NMFS has implemented scallop regulations to duplicate each aspect of the State's scallop management program. This joint State-Federal management regime was designed as a temporary measure to prevent unregulated fishing in Federal waters until changes in the Magnuson-Stevens Act would enable the Council to delegate management responsibility to the State.

Under Amendment 1, both the State and NMFS must specify and publish on an annual basis, total allowable catch (TAC) amounts and crab bycatch limits (CBLs). In addition, every scallop opening and closure must be coordinated so that State and Federal actions are simultaneously effective. While this management regime has enabled NMFS to reopen Federal waters to fishing for scallops, it has proven to be cumbersome in practice. NMFS inseason management staff must draft and publish Federal Register notices that duplicate every State scallop management action, and State scallop managers are constrained in their ability make rapid management decisions because they must coordinate each action with NMFS and provide sufficient lead-time for publication of the action in the Federal Register.

The only purpose to maintaining duplicate regulations at the State and Federal level is to prevent unregulated fishing by vessels not registered under the laws of the State. Because the Sustainable Fisheries Act of 1996, which amended the Magnuson-Stevens Act, now provides authority for the Council to delegate to the State management responsibility for the scallop fishery in Federal waters off Alaska, the State-Federal management regime established under Amendment 1 is no longer necessary to prevent unregulated fishing for scallops in Federal waters. Consequently, in December 1996, the Council voted to proceed with develop of alternatives for an Amendment 3 to the FMP which would delegate to the State the authority to manage some or all aspects of the scallop fishery in Federal waters, including the authority to regulate vessels not registered

under the laws of the State. Amendment 3 would simplify scallop management in the Federal waters off Alaska by delegating to the State the authority to manage some or all aspects of the fishery and would eliminate the unnecessary duplication of regulations at the State and Federal levels. Section 306(a)(3)(B) of the Magnuson-Stevens Act, as amended, requires that such a delegation of authority be made through an FMP amendment and be approved by a three-quarters majority vote of the Council.

1.2 Alternatives Considered

1.2.1 Alternative 1: No Action

Under this alternative, the joint State-Federal management regime established by Amendment 1 would remain unchanged. ADF&G and NMFS would continue to maintain duplicate scallop regulations and mirror each other's management actions to provide for the orderly management of the scallop fishery off Alaska.

1.2.2 Alternative 2 (PREFERRED): Delegate to the State authority to manage all aspects of the scallop fishery in Federal waters off Alaska except limited access

Under this alternative, limited access management would remain a Federal responsibility under the FMP, and would require an FMP amendment to change. All other Federal scallop regulations would be repealed and the authority to manage all other aspects of the scallop fishery would be delegated to the State under the FMP, including the authority to regulate any vessels not registered under the laws of the State. Two categories of management measures would be established. Limited access measures would be designated as Category 1 measures. Such measures would be fixed in the FMP, reserved for Federal implementation, and would require an FMP amendment to change. All other management measures would be designated as Category 2 measures and would be delegated to the State for implementation. Under Alternative 2, State management measures would have to be consistent with the goals and objectives of the FMP, the Magnuson-Stevens Act and other applicable law.

Table 1. Distribution of management responsibilities under Alternative 2.

Category 1 Measures Federally implemented, fixed in FMP	Category 2 Measures Delegated to the State
Vessel Moratorium (in Federal waters) Other limited access measures (in Federal waters)	All other management measures not specifically reserved for Federal implementation that are consistent with the goals and objectives of the FMP, the Magnuson-Stevens Act and other applicable Federal law. These may include: • Minimum size limits • Guideline harvest levels • Observer requirements • Legal gear • Permit requirements • In-Season adjustments • Management areas and districts • fishing seasons • bycatch limits • recordkeeping and reporting requirements • crew and effort limits

1.2.3 Alternative 3: Delegate to the State authority to manage all aspects of the scallop fishery in Federal waters off Alaska.

Under this alternative, all Federal regulations governing the scallop fishery off Alaska would be repealed and authority to manage all aspects of the scallop fishery would be delegated to the State under the FMP, including the authority to limit access and to regulate any vessel not registered under the laws of the State. Existing Federal regulations that would be repealed include gear and effort restrictions, procedures for specifying TACs and CBLs, management areas, closed areas, observer coverage requirements, inseason management procedures. In addition, the Federal scallop vessel moratorium, which varies substantially from the State scallop vessel moratorium, would be repealed and the State would be authorized to limit access to the fishery in both State and Federal waters. Under Alternative 3, State management measures would have to be consistent with the goals and objectives of the FMP, the Magnuson-Stevens Act and other applicable law.

1.3 Statutory Authority for State Management in the EEZ

The Magnuson-Stevens Act, as amended in 1996, now provides statutory authority for a State to regulate fishing vessels operating in the Federal waters. Prior to the 1996 amendments, a State could only regulate vessels fishing in Federal waters that were also registered under the laws of that State.

1.3.1 Conditions under which a State may regulate fishing in Federal waters

Section 306(a)(3) of the Magnuson-Stevens Act provides the following conditions under which a State may regulate vessels fishing in Federal waters (emphasis added).

> *(3) A State may regulate a fishing vessel outside the boundaries of the State in the following circumstances:*
>
> *(A) **The fishing vessel is registered under the law of that State**, and (i) there is no fishery management plan or other applicable Federal fishing regulations for the fishery in which the vessel is operating; or (ii) the State's laws and regulations are consistent with the fishery management plan and applicable Federal fishing regulations for the fishery in which the vessel is operating.*
>
> *(B) **The fishery management plan** for the fishery in which the fishing vessel is operating **delegates management of the fishery to a State** and the State's laws and regulations are consistent with such fishery management plan. If at any time the Secretary determines that a State law or regulation applicable to a fishing vessel under this circumstance is not consistent with the fishery management plan, the Secretary shall promptly notify the State and the appropriate Council of such determination and provide an opportunity for the State to correct any inconsistencies identified in the notification. If, after notice and opportunity for corrective action, the State does not correct the inconsistencies identified by the Secretary, the authority granted to the State under this subparagraph shall not apply until the Secretary and the appropriate Council find that the State has corrected the inconsistencies. **For a fishery for which there was a fishery management plan in place on August 1, 1996 that did not delegate management of the fishery to a State as of that date, the authority provided by this subparagraph applies only if the Council approves the delegation of management of the fishery to the State by a three-quarters majority vote of the voting members of the Council.***
>
> *(C) **The fishing vessel is not registered under the law of the State of Alaska and is operating in a fishery in the exclusive economic zone off Alaska for which there was no fishery management plan in place on August 1, 1996**, and the Secretary and the North Pacific Council find that there is a legitimate interest of the State of Alaska in the conservation and management of such fishery. The authority provided under this subparagraph shall terminate when a fishery management plan under this Act is approved and implemented for such fishery.*

Paragraph (3)(B) applies to the scallop fishery off Alaska as the FMP was approved by the Secretary on July 26, 1995 with the closure of Federal waters to fishing for scallops as the sole management measure. A three-quarter majority vote of the Council is required to delegate to the State any management measures.

1.3.2 Repeal of the FMP--Not a Viable Option

Section 304(h) of the Magnuson-Stevens Act provides authority to the Secretary to repeal a Fishery Management Plan under certain circumstances.

> *(h) REPEAL OR REVOCATION OF A FISHERY MANAGEMENT PLAN.--The Secretary may repeal or revoke a fishery management plan for a fishery under the authority of a Council only if*

the Council approves the repeal or revocation by a three-quarters majority of the voting members of the Council.

However, in the case of the scallop fishery off Alaska, repeal of the FMP **would not provide** authority to the State to regulate vessels fishing in Federal waters that are not registered under the laws of the State. Under Section 306(a)(3) of the Magnuson-Stevens Act. Such authority would be possible under paragraph (a)(3)(C) only if "there was no fishery management plan in place on August 1, 1996..."

1.4 Background on the Scallop Fishery off Alaska

1.4.1 Biology and Distribution

Weathervane scallops (*Patinopectin caurinus*),are distributed from Point Reyes, California, to the Pribilof Islands, Alaska. The highest known densities in Alaska have been found to occur in the Bering Sea, off Kodiak Island, and along the eastern gulf coast from Cape Spencer to Cape St. Elias. Weathervane scallops are found from intertidal waters to depths of 300 m, but abundance tends to be greatest between depths of 40-130 m on beds of mud, clay, sand, and gravel. Sexes are separate and mature male and female scallops are distinguishable based on gonad color. Although spawning time varies with latitude and depth, weathervane scallops in Alaska spawn in May to July depending on location. Eggs and spermatozoa are released into the water, where the eggs become fertilized. After a few days, eggs hatch, and larvae rise into the water column and drift with ocean currents. Larvae are pelagic and drift for about one month until metamorphosis to the juvenile stage when they settle to the bottom. Weathervane scallops begin to mature by age 3 at about 7.6 cm (3 inches) in shell height, and virtually all scallops are mature by age 4. Growth, maximum size, and size at maturity vary significantly within and between beds and geographic areas. Weathervane scallops are long-lived; individuals may live 28 years old or more. The natural mortality rate is thought to be about 15 percent annually ($M = 0.16$). Scallops are likely prey to various fish and invertebrates during the early part of their life cycle. Flounders are known to prey on juvenile weathervane scallops, and sea stars may also be important predators.

Several other species of scallop found in the EEZ off Alaska have commercial potential. These scallops grow to smaller sizes than weathervanes, and thus have not been extensively exploited in Alaska. Pink scallops, *Chlamys rubida*, range from California to the Pribilof Islands. Pink scallops are found in deep waters (to 200 m) in areas with soft bottom, whereas spiny scallop occur in shallower (to 150 m) areas characterized by hard bottom and strong currents. Pink scallops mature at age 2, and spawn in the winter (January-March). Maximum age for this species is 6 years. Spiny scallops, *Chlamys hastata*, are found in coastal regions from California to the Gulf of Alaska. Spiny scallops grow to slightly larger sizes (75 mm) than pink scallops (60 mm). Spiny scallops also mature at age 2 (35 mm) and spawn in the autumn (August-October). Rock scallops, *Crassadoma gigantea*, range from Mexico to Unalaska Island. Rock scallops are found in relatively shallower water (0-80 m) with strong currents. Apparently, distribution of these animals is discontinuous, and the abundance in most areas is low. These scallops attach themselves to rocks, attain a large size (to 250 mm), and exhibit fast growth rates. Rock scallops are thought to spawn during two distinct periods, one in the autumn (October -January), and one in the spring-summer (March-August).

1.4.2 History of the Fishery

The scallop resource off Alaska has been commercially exploited for 30 years. Weathervane scallop stocks off Alaska were first commercially explored by a few vessels in 1967. The fishery grew rapidly over the next 2 years with about 19 vessels harvesting almost 2 million pounds of shucked meat. Since then vessel

participation and harvests have fluctuated greatly, but have remained below the peak participation and harvests experienced in the late 1960's. Between 1969 and 1991, about 40 percent of the annual scallop harvest came from State waters. Since 1991, Alaska scallop harvests have increasingly occurred in Federal waters. In 1994, only 14 percent of the 1.2 million lbs landed were harvested in State waters, with the remainder harvested in Federal waters. Prior to 1990, about two-thirds of the scallop harvest has been taken off Kodiak Island and about one-third has come from the Yakutat area; other areas had made minor contributions to overall landings. The increased harvests in the 1990's occurred with new exploitation in the Bering Sea.

Scallop vessels average 90-110 ft long. Scallops are harvested using dredges of standard design. Weathervane scallops are processed at sea by manual shucking, with only the meats (adductor muscles) retained. Scallops harvested in Cook Inlet are bagged and iced, whereas scallops harvested from other areas are generally block frozen at sea. The fishery has occurred almost exclusively in the EEZ in recent years, but some fishing in State waters occurs off Yakutat, Dutch Harbor, and Adak.

To date, only 1 vessel has made commercial landings of scallops other than weathervanes. In 1991 and 1992 this vessel fished for pink scallops in the Dutch Harbor and Adak registration areas. These landings remain confidential.

Table 2. Landings and effort in the Alaska weathervane scallop fishery, 1980 - 1996.

Year	*Number of Vessels*	*Landings (lb shucked meats)*	*Price ($/lb)*
1980	8	633,000	4.32
1981	18	924,000	4.05
1982	13	914,000	3.77
1983	6	194,000	4.88
1984	10	390,000	4.47
1985	8	648,000	3.12
1986	9	683,000	3.66
1987	4	583,000	3.38
1988	4	341,000	3.49
1989	7	526,000	3.68
1990	9	1,489,000	3.37
1991	7	1,191,000	3.76
1992	7	1,811,000	3.88
1993	15	1,429,000	5.00
1994	16	1,235,000	6.00
1995	10	283,000	n/a
1996	9	728,424	6.38

Source: Alaska Department of Fish and Game.

1.4.3 Federal Involvement in the Scallop Fishery

Between 1968 and 1995 the ADF&G managed the scallop fishery in both State and Federal waters off Alaska, consistent with the Magnuson-Stevens Act, under which a State may regulate any fishing vessel outside State waters if the vessel is registered under the laws of that State. Prior to 1995, all vessels participating in the Alaska scallop fishery were registered under the laws of the State and the fishery was monitored and controlled under State jurisdiction. The Council had concluded that the State's scallop management program provided sufficient conservation and management of the Alaska scallop resource and did not need to be duplicated by direct Federal regulation.

Initial Council involvement. By 1992, fishery participants and management agencies developed growing concerns about overcapitalization and overexploitation in the scallop fishery. In 1993, due to mounting resource concerns, the Commissioner of ADF&G declared scallops a High Impact Emerging Fishery. At the same time, the Council was presented with information indicating that the stocks of weathervane scallops were fully exploited and any increase in effort could be detrimental to the stocks. Information indicated that dramatic changes in age composition had occurred after the fishing-up period (1980-90), with commensurate declines in harvest. In the early 1990's, many fishermen had abandoned historical fishing areas and searched for new areas to maintain catch levels. Increased numbers of small scallops were reported. These events, raised concerns because scallops are highly susceptible to overfishing and boom/bust cycles worldwide.

At its January 1993 meeting, the Council determined that the scallop fishery may require Federal management to protect the fishery from overexploitation and further overcapitalization. The need to limit access was the primary motivation for the Council to begin consideration of Federal management of the scallop fishery. The Council believed that Federal action was necessary because existing State statutes precluded a State vessel moratorium and at that time, the State did not have authority under the Magnuson-Stevens Act to limit access in Federal waters. At its January 1993 meeting, the Council also set a control date of January 20, 1993, to notify the industry that a moratorium for this fishery may be implemented.

In 1993, the Council began analysis of a variety of options for Federal management of the scallop fishery in Federal waters off Alaska and a vessel moratorium was proposed as an essential element of a Federal management regime to stabilize the size and capitalization of the scallop fleet while the Council considered permanent limited entry alternatives for the fishery. At the September 1993 Council meeting, the Council received public testimony on scallop management, particularly on the qualifying criteria for a moratorium. At that meeting, the Council tentatively identified its preferred alternative of a separate FMP for the scallop fishery that would establish a Federal vessel moratorium and shared management authority with the State. A draft FMP and analysis were released to the Public in November 1993.

In April 1994, the Council and its advisory bodies reviewed the draft FMP, received public testimony, and approved the draft FMP for the scallop fishery which would establish a vessel moratorium and defer most other routine management measures to the State. Under the moratorium qualification criteria adopted by the Council, 18 scallop vessels would qualify for moratorium permits. Under the draft FMP, most other management measures were deferred to the State based on the premise that all vessels fishing for scallops in the Federal waters off Alaska would also be registered with the State. The Council recognized the potential problem of unregistered vessels fishing in Federal waters, but noted that all vessels fishing for scallops in Federal waters were registered in Alaska and that no information was available to indicate that vessels would not continue to register with the State.

Unregulated Fishing and the Emergency Closure of Federal Waters. During the period of time that NMFS was developing regulations to implement the Council's proposed FMP, a vessel that had nullified its State registration began fishing for scallops in Federal waters of the Prince William Sound management area, waters that had already been previously closed by ADF&G to fishing by State-registered vessels. Because the vessel was outside State jurisdiction, ADF&G was unable to stop this uncontrolled fishing activity. On February 17, 1995, the Council held a tele-conference to address concerns about uncontrolled fishing for scallops in Federal waters by one or more vessels fishing outside the jurisdiction of State regulations and requested that NMFS implement an emergency rule to close Federal waters to fishing for scallops to prevent overfishing of the scallop stocks. Subsequent to the Council's recommendation, the U.S. Coast Guard boarded the vessel in question and was informed that 54,000 lbs of shucked scallop meat were on board.

This amount exceeded the State's guideline harvest level for the Prince William Sound area (50,000 lbs) by over 100 percent.

On February 13, 1995, NMFS implemented a 90-day emergency rule to close Federal waters off Alaska to fishing for scallops to respond to concerns that continued uncontrolled harvest of scallops in Federal waters would result in localized overfishing of the scallop resource. On the recommendation of the Council, NMFS subsequently extended the emergency rule for a second 90-day period, through August 28, 1995.

After the unregulated fishing event that warranted the emergency interim rule, the Council and NMFS determined that the Council's draft FMP was no longer an appropriate option for the management of the scallop fishery in Federal waters. As a result, the draft FMP was not submitted for review and approval by the Secretary of Commerce. The decision by one vessel owner to fish outside the jurisdiction of the State, the contemplation of other vessel owners to follow the same course of action, and the likelihood that uncontrolled fishing for scallops could occur anywhere off Alaska by the highly mobile scallop processor fleet now made direct Federal regulations necessary to control vessels that choose not to register with the State.

Approval of a Federal FMP. To respond to the need for Federal management of the scallop fishery once the emergency rule expired, the Council prepared a second FMP for the scallop fishery which was subsequently approved by NMFS on July 26, 1995. The only management measure authorized under this FMP was an interim closure of Federal waters off Alaska to fishing for scallops for 1 year, or until an amendment was prepared that would provide for a managed fishery in Federal waters. The purpose of the interim closure was to prevent uncontrolled fishing for scallops in Federal waters while a Federal scallop management program was under development. The Council recommended this approach because it determined that the suite of alternative management measures necessary to support a controlled fishery for scallops in Federal waters could not be prepared, reviewed, and implemented before the emergency rule expires.

Amendment 1: State-Federal Management Regime. During the period of the interim closure, the Council developed Amendment 1 to the FMP to replace the interim closure with a Federal management regime. The Council's initial recommendation for Amendment 1 was to Federalize the State's management regime and implement a vessel moratorium, based on the criteria originally adopted in April 1994. However, in April 1996, the Council recommended that the scallop vessel moratorium be separated from the other management measures contained in Amendment 1 and that the moratorium be approved as Amendment 2 in order to prevent moratorium issues from delaying the reopening of the fishery. Amendment 1 was subsequently approved by NMFS on July 10, 1996 and Federal waters were re-opened to fishing for scallops on August 1, 1996.

Amendment 1 established a joint State-Federal management regime under which NMFS has implemented Federal management measures to parallel most State management measures. This Federal management program was developed in close coordination with ADF&G and is designed to be consistent with existing State management of the scallop fishery. Amendment 1 does not preclude the State from imposing additional regulations on State-registered vessels fishing in Federal waters, providing such regulations are consistent with the Magnuson-Stevens Act.

Under Amendment 1, Federal regulations were established to duplicate existing State regulations. Parallel State and Federal regulations now control the fishery through permits, registration areas and districts, seasons, closed waters, gear restrictions, efficiency limits, crab bycatch limits, scallop catch limits, inseason adjustments, and observer monitoring. Most of these regulations were developed by the State prior to 1995 and duplicated at the Federal level under Amendment 1. Dredge size is limited to a maximum width of 15 ft, and only 2 dredges may be used at any one time. In the Kamishak District of Cook Inlet, only 1 dredge with a

6 ft maximum width is allowed. Dredges are required to have rings with a 4" minimum inside diameter. To reduce incentives to harvest small scallops, crew size on scallop vessels is limited to 12 persons and all scallops must be manually shucked. Dredging is prohibited in areas designated as crab habitat protection areas, similar to the groundfish FMPs. Amendment 1 also established procedures under which NMFS will establish an annual total allowable catch (TAC) for each registration area. Under Amendment 1, initial GHLs are proposed by the State at the annual March Board of Fisheries meeting and are reviewed by the Council in April and by NMFS prior to publication in the *Federal Register*. In registration areas where crab bycatch is a concern, NMFS also specifies annual CBLs for red king crab and Tanner crab species using similar procedures.

While this management regime has enabled NMFS to reopen the EEZ to fishing for scallops, it has proven to be cumbersome in practice. Every management action including openings and closures must be coordinated so that State and Federal actions are simultaneously effective. NMFS must draft and publish *Federal Register* notices that duplicate every State inseason scallop action and State scallop managers are now constrained in their ability to make rapid management decisions because they must coordinate each action with NMFS and provide sufficient lead-time for publication of the action in the *Federal Register*.

Amendment 2: Federal Vessel Moratorium. On March 5, 1997, NMFS approved Amendment 2 to the FMP which established a moratorium on the entry of new vessels into the scallop fishery off Alaska. A final rule implementing the vessel moratorium was published on April 11, 1997 (62 FR 17749). The moratorium period runs from July 1, 1997 through June 30, 2000, or until repealed or replaced by a permanent limited access program. Under Amendment 2, the Council may recommend that the moratorium be extended for not more than 2 years if a limited access program is imminent. Key elements of the Federal vessel moratorium are outlined in Table 2.

1.4.4 Recent State Actions: The State Scallop Vessel Moratorium

In May 1997, the State legislature approved a statute establishing a scallop vessel moratorium program. This State scallop vessel moratorium differs substantially from the existing Federal scallop vessel moratorium. At present, the State vessel moratorium is only applicable to State waters and is superseded by the Federal moratorium program in Federal waters. The full text of the State's scallop vessel moratorium is included as Appendix A. Table 2 provides a comparison of the State and Federal scallop vessel moratorium programs.

Table 3. Comparison of Federal and State scallop vessel moratorium programs.

	Federal Moratorium	*State Moratorium*
Moratorium period	July 1, 1997 - June 30, 2000	July 1, 1997 - June 30. 2001
Qualifying Criteria	A vessel must have made a legal landing of scallops from any waters off Alaska during 1991, 1992, or 1993, or during at least 4 separate years from 1980 through 1990.	Statewide: A vessel must have landed at least 1,000 lbs of scallops from statewide waters during 1995 or 1996, and during each of at least 4 years between 1984 and 1996 inclusive. Cook Inlet: A vessel must have landed at least 1,000 lbs of scallops from Cook Inlet during 1994 or 1996, and during each of at least 3 years between 1984 and 1996 inclusive.
Area endorsements	Separate endorsements are needed for Area H (Cook Inlet) and statewide waters outside Area H. Once a vessel meets the qualifying criteria for a moratorium permit, a single legal landing of scallops from an area during the qualifying period is required to receive an endorsement for that area.	Separate permits are required for Area H (Cook Inlet) and statewide waters outside Area H. A vessel must meet the qualifying criteria in each area to receive a permit for that area.
Vessel reconstruction	Vessels may be reconstructed or lengthened, however length may not exceed a maximum length overall (LOA) of 1.2 times the length of the vessel on January 23, 1993. This maximum LOA will be listed on all moratorium permits.	No limits on vessel lengthening or reconstruction.
Vessel replacement	A permit holder may use a moratorium permit on any vessel that does not exceed maximum LOA listed on the permit	A vessel owner may transfer a moratorium permit to another vessel that does not exceed the LOA or horsepower rating of the originally permitted vessel.
Permit transfers	Moratorium permits may be transferred to any person and used on any vessel not exceeding the maximum LOA listed on the permit.	Except as provided for under vessel replacement, permits may not be transferred to a new owner except through sale of the permitted vessel.
Qualifying recipient	In the case of multiple owners of a single vessel, the moratorium permit will be issued to the most recent owner of the vessel who made a qualifying landing during the moratorium period such that each vessel generates only one permit.	Permits are issued to the current owner of a qualifying vessel. However, a vessel owner who does not own a vessel that qualifies for a moratorium permit may receive a moratorium permit if he owned two or more vessels whose combined participation in the scallop fishery would satisfy qualifying criteria. In such a case, the moratorium permit would be issued to the last vessel that made qualifying landings.
Fees	none	Annual fee of $1000 per permit.

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.

The effects of scallop fishing on the biological environment and associated impacts on marine mammals, seabirds, and other threatened or endangered species are analyzed in the final EA/RIR/FRFA for Amendments 1 and 2 to the FMP (NMFS 1997a). The alternatives to the status quo are not expected to allow substantial damage to the ocean and coastal habitats, or to jeopardize the long-term productive capability of crab, herring, or groundfish stocks in any manner not previously analyzed in the EA for Amendment 1. Scallop dredges may have potential, in some situations, to affect other organisms comprising benthic communities; however, these effects are not likely to be substantial for the relatively small scale scallop fisheries in Alaska. In addition, the alternatives under consideration are not expected to change the manner in which the scallop fishery is currently conducted in the Federal waters off Alaska

2.2 Potential Impacts on Benthic Communities and the Physical Environment

Determination of significance requires evaluation whether any fishery management plan or amendment may reasonably be expected to allow substantial damage to the ocean and coastal habitats (NOAA Administrative Order 216-6). Like trawl gear, scallop dredges may have some potential to affect adversely other organisms comprising benthic communities. Potential effects of scallop gear have been described in the EA/RIR/FRFA for Amendments 1 and 2 to the FMP (NMFS 1997a). Studies on the potential effects of trawling and dredging are summarized below.

An article from the January 1992 New Zealand Journal of Marine and Freshwater Research, titled "Environmental Impact of Trawling on the Seabed: A Review" (Jones 1992) attempts to review available knowledge on the subject of trawl impacts on the benthic environment. Evidence of trawling, such as furrows from the trawl doors, varies in its depth into the sea-floor and its duration depending upon the "softness" of the bottom being trawled. Potential effects of this bottom alteration are not directly addressed in this report.

In terms of sediment re-suspension, the report notes that there are two facets to this issue: (1) Increased, and usually temporary turbidity and (2) vertical redistribution of sediment layers. Both of these results of bottom disturbance by trawl gear were noted to vary in their duration, primarily dependent upon the depths at which they occurred. The report also concludes that "From the work performed under the aegis of ICES, it would appear that beam trawls, otter trawls, and dredges are all basically similar in their effects. Generally, the heavier the gear in contact with the seabed, the greater the damage. The effects vary greatly, depending on the amount of gear contact with the bottom, together with the depth, nature of the seabed, and the strengths of the currents or tides....The removal of the macrobenthos has variable effects. In shallow water areas where the damage is intermittent, recolonization soon occurs. However, where the macrobenthos is substantially removed and recovery is not permitted, the change is permanent....The evidence is that bottom trawling has an impact on the environment, but that the extent and duration of that impact varies depending on local conditions."

Other sources of information on the effects of trawling or dredging are limited. The GOA Groundfish FMP contains a section titled "Benthic habitat damage by fishing gear." The section concludes that "Any effect of gear dragged along the bottom depends on the type of gear, its rigging, and the type of bottom and its biota. In addition to the target species, the movement of a bottom trawl through an area primarily affects the slow-moving macrobenthic fauna such as sea stars and sea urchins. Some bivalves can also be damaged. Although little is known of the effects of these disturbances and damages have on the affected species or their local communities, only minor impacts are suspected."

A report prepared by the Washington Department of Fisheries (1985), titled "Final EIS for the Continued Harvest of Bottomfish in Puget Sound by Commercial Otter Trawl Gears", evaluates the potential adverse effects of otter trawl gear on the marine species, associated biota, marine substrate, water quality, and human activities. The EIS notes negative impacts of trawling including: disturbance of substrate such as otter board tracks, silt suspension, shearing of eel grass and other large algae, some wastage of bottomfish and crab, and net negative impact on recreational bottomfish fisheries. In the conclusions section of the EIS, which addresses effects on long-term productivity, the document state that "Trawling does not cause permanent habitat damage. Biota potentially impacted by trawling show the capability to naturally repopulate a harvested area."

Based on the above trawl studies, any adverse effects of scallop dredges on benthic communities in Alaska are likely lower in intensity than trawl gear. Scallop dredges generally weigh less than most trawl doors, and the relative width they occupy is significantly smaller. A 15 ft (4.57 m) wide New Bedford style scallop dredge weighs about 1,900 lb (0.86 mt) (Kodiak Fish Co. data). Because scallop vessels generally fish two dredges, the total weight of the gear is 3,800 lb (1.72 mt). Trawl gear can be significantly heavier. An 850 HP vessel pulling a trawl with a 150 ft (45.7 m) sweep may require a pair of doors weigh that about 4,500 lb (2.04 mt) each. Total weight of all trawl gear, including net, footrope, and mud gear would weigh about 16,400 lb (45.7 m) (T. Kandianis, personal communication 5/26/95). ICES research has indicated that the heavier the gear in contact with the seabed, the greater the damage, suggesting that scallop fishing may have less impact than bottom trawling.

Although small amounts of coral are caught or damaged by groundfish trawls (NPFMC 1992), distribution data and limited observer information suggest that little or none is taken by scallop dredges in Alaska. Generally, corals do not have the same habitat requirements as weathervane scallops. Most corals, such as fan corals, bamboo corals, cup corals, soft corals, and hydrocorals occur at greater depths than scallops. The two more abundant species of coral that live at similar depths as scallops occur in habitat consisting of boulders and bedrock, habitats that are not inhabited by most scallop species.

Similar to trawling, dredging may place fine sediments into suspension, bury gravel below the surface and overturn large rocks that are embedded in the substrate (NEFMC 1982). Dredging can also result in dislodgement of buried shell material, burying of gravel under re-suspended sand, and overturning of larger rocks with an appreciable roughening of the sediment surface (Caddy 1968). A study of scallop dredging in Scotland showed that dredging caused significant physical disturbance to the sediments, as indicated by furrows and dislodgement of shell fragments and small stones (Eleftheriou and Robertson 1992). However, the authors note that these changes in bottom topography did not change sediment disposition, sediment size, organic carbon content, or chlorophyll content. Observations of the Icelandic scallop fishery off Norway indicated that dredging changed the bottom substrate from shell-sand to clay with large stones within a 3-year period (Aschan 1991). For some scallop species, it has been demonstrated that dredges may adversely affect substrate required for settlement of young to the bottom (Fonseca et al. 1984; Orensanz 1986). Mayer et al. (1991), investigating the effects of a New Bedford scallop dredge on sedimentology at a site in coastal Maine, found that vertical redistribution of bottom sediments had greater implications than the horizontal translocation associated with scraping and ploughing the bottom. The scallop dredge tended to bury surficial metabolizable organic matter below the surface, causing a shift in sediment metabolism away from aerobic respiration that occurred at the sediment-water interface and instead toward subsurface anaerobic respiration by bacteria (Mayer et al. 1991). Dredge marks on the sea floor tend to be short-lived in areas of strong bottom currents, but may persist in low energy environments (Messieh et al. 1991).

Two studies have indicated that intensive scallop dredging may have some direct impacts on the benthic community. Eleftheriou and Robertson (1992), conducted an experimental scallop dredging in a small sandy bay in Scotland to assess the effects of scallop dredging on the benthic fauna. They concluded that while dredging on sandy bottom has a limited effect on the physical environment and the smaller infauna, large numbers of the larger infauna (mollusks) and some epifaunal organisms (echinoderms and crustaceans) were killed or damaged after only a few hauls of the dredge. However, long term and cumulative effects were not examined. Aschan (1991) examined the effects of dredging for islandic scallops on macrobenthos off Norway. Aschan found that the faunal biomass declined over a 4-year period of heavy dredging. Several species, including *Stronylocentrotus droebachiensis*, *Pagurus pubescens*, *Ophiura robusta*, and polychaetes showed an increase in abundance over the time period. In summary, scallop gear, like other gear used to harvest living aquatic resources, may impact the benthic community and physical environment relative to the intensity of the fishery.

Current State and Federal regulation of the scallop fishery is designed to reduce potential impacts. Fishing seasons are established, in part, to protect scallop during the spawning portions of their life cycle, and protect young during critical periods. In addition, many areas have been closed to dredging to protect important benthic communities. Weathervane scallops occur at depths ranging from intertidal waters to 300 m, with highest abundance at depths between 45 and 130 m on substrates consisting of mud, clay, sand, or gravel (Hennick 1970a, 1973). In addition to weathervane scallops, such substrates are likely to support populations of starfish, skates, crabs, snails, flatfish, and other groundfish species. Other scallop species are found in different habitats.

Based on the available information detailed above, the alternatives to the status quo are not reasonably expected to allow substantial damage to the ocean and coastal habitats (NOAA Administrative Order 216-6). Scallop dredges may have some potential, in some situations, to affect other organisms comprising benthic communities; however, these effects are not likely to be substantial for the relatively small scale scallop fisheries in Alaska.

2.3 Potential Impacts on Bycatch of Non-target Species

As with trawl and other gear, scallop dredges have some potential to catch non-target species, particularly those that are slow moving or stationary. Limited data have been collected in past years on incidental catches of crab by dredges targeting weathervane and other scallop species, but the information remains confidential. In some areas, the catches of king and Tanner crabs may be high, and many captured crabs may be lethally damaged (Haynes and Powell 1968; Hennick 1973; Kaiser 1986). Some catches from scallop dredges contain small amounts of other species of crabs, shrimps, octopi, and fishes such as flatfishes, cod, and others (Hennick 1973, Kruse et al. 1993). Starfish, a scallop predator (Bourne 1991), was found to be the primary bycatch in weathervane scallop fisheries off Yakutat (Kruse et al. 1993). Seasonal and area-specific differences in bycatch rates exist. For example, in some areas incidental catches of king crabs may increase in spring as adult crabs migrate inshore for molting and mating, whereas other areas of dense scallop concentrations may possess few king crabs (Hennick 1973) and bycatch may be of little concern in these locations.

More recent bycatch data were collected during the 1993 ADF&G observer program (Urban et al. 1994). Nearly 900 days of scallop dredging were observed, comprising 12,881 hauls. By weight, the catch consisted of weathervane scallops (72.2 percent), starfish (11.4 percent), shells (4.9 percent), skates (1.9 percent), *C. bairdi* Tanner crab (1.5 percent), and arrowtooth flounder (1.1 percent). Flatfish and other invertebrate species comprised the remaining bycatch. No salmon bycatch was reported. Total bycatch of halibut ranged from less than 30 in Prince William Sound (Area E) to 1,750 in Kodiak (Area K). Total bycatch of Tanner crab in the 1993 scallop fishery was estimated to exceed 580,000 animals. Another 15,000 *C. opilio* snow crabs were captured. Estimated bycatch of red king crab was 200 or less in all registration areas.

Bycatch of Tanner crabs during the 1993 scallop fishery was analyzed in detail (Urban et al. 1994). Total Tanner crab bycatch varied widely between areas, ranging from 200 in Prince William Sound to 227,000 in the Bering Sea (Area Q). Crab bycatch consists primarily of small (<40 mm cw) immature Tanner crabs. Bycatch rates varied among vessels and areas fished, and ranged from zero to 2,600 crabs per tow-hour. Highest bycatch rates were associated with high scallop catch rates. New injuries were observed in 28 percent of the crabs sampled during the Shelikof scallop fishery. Approximately 13 percent of the Tanner crabs were recorded as dead or moribund before being discarded, with the highest mortality rates occurring on small (<40 mm cw) and large (>120 mm cw) crabs.

Other studies have also enumerated mortality and injury of crab taken as bycatch in the Alaska scallop fisheries. During a scallop survey of Cook Inlet in August 1984, a total of 5 red king crabs and more than 399 Tanner crabs were taken as bycatch in 47 tows (Hammarstom and Merritt 1985). Of the crab taken as bycatch, 19 percent of the Tanner crabs were injured and mortality was estimated at 8 percent, with most injuries and mortality occurring when the catch was dumped on deck (Hammarstom and Merritt 1985). Another scallop survey conducted around Kodiak Island in January 1968 had an unspecified bycatch (up to 33 per tow) of red king crabs, with an estimated mortality rate of 79 percent (Haynes and Powell 1968). Observations of the 1968-1972 scallop fishery around Kodiak Island indicated an average bycatch of 4.1 red king crab and 42.5 Tanner crab per tow (Kaiser 1986), with mortality estimated at 19 percent for Tanner crab and 48 percent for red king crab. An average of 0.6 Dungeness crabs per tow were also captured with mortality estimated to be 8 percent.

Bycatch of crab may vary by area, season, and depth. Off Yakutat, Hennick (1973) noted no king crab bycatch. Around Kodiak, king crab catches tended to increase in spring as adults migrated inshore for molting and mating (Hennick 1973). Consistent with other handling studies, newly molted crabs experience

higher rates of injury and mortality than hard shelled crab, as a result of scallop dredges (Starr and McCrae 1983). Bycatch rates, injury rates, and mortality estimates do not take into account that scallop vessels dredge over the same bottom, tow after tow. Therefore, impacts of scallop fishing on crab bycatch may be overestimated in some situations.

Current regulations limit bycatch and interaction of crabs and the scallop fishery. King and Tanner crab bycatch limits for Alaskan scallop fisheries were instituted by the State in July 1993 and by NMFS under Amendment 1 in 1996. With the exception of Yakutat and Southeast areas, crab bycatch limits were specified for scallop fisheries in all registration areas. In addition, large areas in State and Federal waters have been closed to scallop fishing, as these areas have showed high concentrations of crabs.

Bycatch data collected by State observers in the 1993 scallop fishery (Urban et al. 1994) can be used to analyze bycatch rates of crabs and other species. During the 1993 Bering Sea area scallop fishery (occurring over a 4 month period), a total of 10 vessels made 7,208 tows, to harvest 598,093 lb (271.3 mt) of scallop meat, with a bycatch of 276,500 Tanner crab and 212 king crab (Morrison 1994). On a rate basis, this equates to 83 lb (0.038 mt) of scallops and 38 Tanner crab per tow, or put another way, about 0.46 Tanner crabs per pound (1 Tanner crab per kilogram) of scallop meat harvested. At an average exvessel price of $6.02 per pound for scallops, gross exvessel value was $500 per tow. Bycatch rates varied greatly among vessels fishing in the 1993 Bering Sea scallop fishery (Urban et al. 1994). Catch of Tanner crabs per tow-hour ranged from 17 crabs to 203 crabs per tow-hour (median=53, mean=90). Length frequency of Tanner crabs taken as bycatch was not reported, but likely consisted primarily of small juvenile crab.

Because alternatives 2 and 3 would repeal Federal management measures that duplicate existing State management measures, the environmental impacts of these alternatives are not expected to differ from the status quo. Given the best available information, as summarized above, none of the alternatives are expected to jeopardize the long-term productive capability of crab, herring or groundfish stocks.

2.2 Impacts on Endangered, Threatened or Candidate Species

Species listed as endangered and threatened under the ESA that may be present in the Federal waters off Alaska include:

Endangered

Northern right whale	*Balaena glacialis*
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	*Diomedea albatrus*
Steller sea lion (western stock)	*Eumetopias jubatus*

Threatened

Steller sea lion (eastern stock)	*Eumetopias jubatus*
Snake R. spring and summer chinook salmon	*Oncorhynchus tshawytscha*
Snake R. fall chinook salmon	*Oncorhynchus tshawytscha*
Spectacled eider	*Somateria fischeri*
Steller's eider	*Polysticta stelleri*

The impact of the groundfish fisheries off Alaska on endangered and threatened species has been addressed extensively in a series of formal and informal consultations. The scallop fishery off Alaska (which consists of a much smaller fleet of vessels, and uses gear less likely to generate bycatch of finfish, seabirds or marine mammals) is not expected to affect ESA-listed species, seabirds or marine mammals in any manner or extent not already addressed under these previous consultations. In a formal consultation pursuant to section 7 of the ESA that culminated in a biological opinion dated April 19, 1991, NMFS concluded that the GOA and BSAI groundfish fisheries were not likely to adversely affect listed cetaceans or to jeopardize the continued existence or recovery of Steller sea lions. NMFS determined that section 7 consultation should be reinitiated for Steller sea lions if any proposed change in the GOA or BSAI groundfish fisheries was likely to adversely affect them, if new information regarding the effects of the fishery on Steller sea lions was obtained, or if there was a change in the status of sea lions. Since April 1991, NMFS has reinitiated section 7 consultation for several GOA and BSAI regulatory amendments (e.g., inshore/offshore) and for the annual TAC specifications.

Endangered, threatened, and candidate species of seabirds that may be found within the regions of the GOA and BSAI where the groundfish fisheries operate, and potential impacts of the groundfish fisheries on these species are discussed in the EA prepared for the 1997 TAC specifications. The U.S. Fish and Wildlife Service (USFWS), in consultation on the 1997 specifications, concluded that groundfish operations using gear other than hook-and-line gear are not likely to adversely affect short-tailed albatrosses (letter, Rappoport to Pennoyer, February 10, 1997).

2.3 Potential Impacts on ESA-listed Pacific salmon

Capture of salmon by the scallop dredges is reported to be extremely rare (Hennick 1973), as scallop dredges are small in size, and remain within one meter of the ocean bottom. Bycatch of all fish species by scallop dredges is composed primarily of flounders and skates (Kruse et al. 1993; Urban et al. 1994). No salmon bycatch was reported during the 1993 ADF&G observer program, with nearly 900 days fishing observed (Urban et al. 1994), and there have been no other reports of salmon bycatch in the scallop fishery off Alaska. None of the alternatives will affect the continued existence of listed species of Pacific salmon, or result in disturbance or adverse modification of critical salmon habitat.

2.4 Potential Impacts on Seabirds

Many seabirds occur in Alaskan waters and have the potential for interaction with scallop fisheries. The most numerous seabirds in Alaska are northern fulmars, storm petrels, kittiwakes, murres, auklets, and puffins. These groups, and others, represent 38 species of seabirds that breed in Alaska. Eight species of Alaska seabirds breed only in Alaska and in Siberia. Populations of five other species are concentrated in Alaska but range throughout the North Pacific region. Marine waters off Alaska provide critical feeding grounds for

these species as well as others that do not breed in Alaska but migrate to Alaska during summer, and for other species that breed in Canada or Eurasia and overwinter in Alaska. Additional discussion about seabird life history, predator-prey relationships, and interactions with commercial fisheries can be found in an EA prepared for the 1997 Groundfish Total Allowable Catch Specifications (NMFS 1997b).

Fishing interactions occur directly through entanglements or collisions with fishing gear, or indirectly through competition for fish prey; and indirect mortality from encounters with marine debris or pollution, and disruption of the ecosystem from habitat degradation. An assessment of impacts of groundfish fisheries on colonial and pelagic seabirds and migratory birds was prepared as part of the Final Environmental Assessment for 1997 Groundfish TAC Specifications for the Bering Sea/Aleutian Islands and the Gulf of Alaska. The EA is incorporated by reference, as is the informal consultation with the USFWS on the 1997 TAC specifications, and a 1997 biological opinion prepared by the USFWS on the effects of the 1997 GOA/BSAI groundfish TAC specifications and all subsequent actions and amendments consistent with the terms and conditions of the consultation. These documents list the endangered, threatened, proposed and candidate species that may be found off Alaska where the groundfish fisheries operate the potential impacts of the groundfish fisheries on these species. The 1997 informal consultation with the USFWS determined that trawl and pot fishing activities off Alaska are not likely to adversely affect short-tailed albatross and limited the scope of the consultation to hook-and-line fisheries. Because scallop dredges are small in size, and remain within one meter of the ocean bottom, interactions with seabirds are much less likely in the scallop fishery than in the groundfish fishery, which consists of a much larger fleet of vessels using large nets or baited hooks or pots. In addition, there are no reported takes of seabirds by the scallop fishery off Alaska. Therefore, none of the alternatives will affect endangered or threatened seabirds or their critical habitat.

2.5 Potential Impacts on Marine Mammals

Cetacean and pinniped species are unlikely to have potential for interaction with scallop fisheries in the GOA and BSAI. Marine mammals not listed under 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*).

A list of marine mammal species and detailed discussion regarding life history and potential impacts of the 1997 groundfish fisheries of the BSAI and GOA on these species can be found in the EA prepared for the 1997 Total Allowable Catch Specifications for Groundfish (NMFS 1997b). Interactions of the scallop fishery with Steller sea lions and other pinnipeds, and sea otters are thought to be rare and less common than in the groundfish fisheries. In addition, there are no reported takes of marine mammals by the scallop fishery off Alaska. Therefore, none of the alternatives will have an adverse effect on marine mammals.

2.6 Coastal Zone Management Act

Each of the alternatives would be conducted in a manner consistent, to the maximum extent practicable, with the Alaska Coastal Zone Management Program within the meaning of Section 307(c)(1) of the Coastal Zone Management Act of 1972 and its implementing regulations.

2.7 Finding of No Significant Impact

For the reasons discussed above, implementation of any one of the alternatives to the status quo would not significantly affect the quality of the human environment, and the preparation of an environmental impact statement on the final action is not required under 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 Regulatory Flexibility Act 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 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 joint State-Federal management regime established by Amendment 1 would continue unchanged. ADF&G and NMFS would continue to maintain duplicate regulations and mirror each

other's management actions to provide for the orderly management of the scallop fishery off Alaska. This alternative is the most costly alternative due to the duplication of management effort at the State and Federal levels. Because NMFS has not increased staff or funding to accommodate scallop management responsibilities, these costs are difficult to measure directly and are realized in the allocation of staff time and resources away from other NMFS management responsibilities such as groundfish.

Under Alternatives 2 and 3 benefits to industry could increase because the State may be able to manage the fishery closures and other actions with more precision if State managers are no longer constrained by need to coordinate inseason management actions with *Federal Register* publication schedules. However, such benefits are impossible to quantify. To date, State actions have not been constrained unreasonably by the need to coordinate simultaneous implementation with NMFS.

3.2 Economic Effects of Alternative 2 (PREFERRED)

Under Alternative 2, the FMP would delegate to the State authority to manage all aspects of the scallop fishery in Federal waters off Alaska except limited access which would remain a Federal responsibility under the FMP, and would require an FMP amendment to change. This option would establish a management regime similar to that established under the fishery management plan for king and Tanner crab, although much simplified. Under this alternative, the State vessel moratorium would govern participation in the scallop fishery in State waters and the Federal vessel moratorium would govern participation in Federal waters, as is currently the situation under the status quo. Because this alternative would simply eliminate Federal regulations that duplicate existing State regulations, the economic effects of Alternative 2 on the industry would be the same as Alternative 1, the status quo.

3.3 Economic Effects of Alternative 3

Under Alternative 3, the FMP would delegate to the State, the authority to manage all aspects of the scallop fishery in Federal waters off Alaska. All Federal scallop regulations would be repealed. This alternative would represent the greatest cost savings for NMFS and the State but also would pose the greatest change for industry. At present, State and Federal regulations are consistent in all areas except limited access management. Under Alternative 3, the Federal vessel moratorium would be repealed and the State would be authorized to extend it's moratorium program to Federal waters. Using State fishticket data, NMFS estimates that 8 vessels currently eligible for Federal moratorium permits would be ineligible for State moratorium permits and would be eliminated from the fishery. However, of these eight vessels, only four are currently participating in the scallop fishery and have been issued Federal scallop moratorium permits. Table 3 lists the vessels believed to qualify under each moratorium program.

Table 4. **Scallop vessels qualifying for moratorium permits under the Federal and State Vessel Moratorium Programs (preliminary)[1].**

Vessel Name	*Federal Moratorium*		*State Moratorium*	
	Statewide	*Cook Inlet*	*Statewide*	*Cook Inlet*
ALASKA BEAUTY		Y	Y	Y
ARCTIC QUEEN (Formerly the JACQUELINE & JOSEPH)	Y		Y	
SEAWIND (formerly the ARCTIC ROSE)	Y			
CAROLINA BOY	Y		Y	
CAROLINA GIRL II	Y		Y	
FORTUNE HUNTER	Y			
FORUM STAR	Y			
KILKENNY		Y		
LA BRISA[2]			Y	Y
LORRAINE CAROL	Y			
MISTER. BIG	Y			
NORTHERN EXPLORER		Y	Y	Y
OCEAN HUNTER	Y			
PHOENIX	Y			
PROVIDER	Y		Y	
PURSUIT	Y		Y	
RUSH	Y		Y	
TRADE WIND	Y		Y	
MIRANDA ROSE (Formerly named WAYWARD WIND)[2]	Y	Y		

[1]This list should be considered preliminary. Eligibility was determined using the State's fish ticket files according to the eligibility criteria established for each moratorium program. Additional vessels could be eligible if it is determined through adjudicatory hearings that the fish ticket records do not accurately represent a vessel's participation history in the scallop fishery.

[2]The owner of the LA BRISA also owned the MIRANDA ROSE. Both vessels participated in the scallop fishery. Under the State moratorium program, the combined participation of both vessels qualifies the last vessel fished, the LA BRISA, for a State moratorium permit. Under the Federal moratorium program, the MIRANDA ROSE qualifies for a moratorium permit but not the LA BRISA which entered the scallop fishery after the end of the qualifying period for the Federal moratorium. As a result, the vessel owner is eligible for one moratorium permit under either moratorium program.

4.0 ECONOMIC EFFECTS 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 access 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.

Alternative 2 (preferred) would not have a significant economic impact on a substantial number of small entities. A substantial number of small entities would be affected by implementation of this rule, namely all 18 scallop vessels eligible to fish in Federal waters under the Federal vessel moratorium. However, the proposed action would not have a significant negative economic impact on these affected small entities. Compared to the status quo, the proposed action only eliminates duplicative Federal regulations. The fishery would continue to be governed under existing State scallop regulations. All vessels currently participating in the fishery are registered with the State and subject to these State regulations at present. Consequently, none of the participants in the fishery would face a meaningful regulatory change compared to the status quo. For this reason, the proposed action would not change 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, and would not force any small entities out of business. In addition, participation in the fishery would continue to be governed by the existing Federal moratorium program. No new vessels would be allowed to enter the fishery and no existing vessels would be eliminated. As a result, a regulatory flexibility analysis was not prepared.

Alternative 3 would have a significant impact on a substantial number of small entities compared to the status quo because four of the eleven vessels currently active in the scallop fishery in Federal waters would be eliminated from the fishery because they would not qualify for moratorium permits under the State scallop moratorium program. An additional four vessels are believed to qualify for Federal moratorium permits but

have not applied for permits or re-entered the fishery since the establishment of the Federal moratorium program in July 1997.

5.0 SUMMARY AND CONCLUSIONS

The Scallop fishery off Alaska is currently managed under a cumbersome State-Federal management regime established by Amendment 1 to the Fishery Management Plan for the Scallop Fishery off Alaska (FMP) under which each State regulation and management action must be duplicated by a parallel Federal action. The management regime established by Amendment 1 was designed as a temporary program to prevent unregulated fishing in Federal waters until changes in the Magnuson-Stevens Act would provide the Council with the authority to delegate to the State authority to manage the scallop fishery in Federal waters. While this management regime has enabled NMFS to reopen Federal waters to fishing for scallops, it has proven to be cumbersome in practice. NMFS inseason management staff must draft and publish Federal Register notices that duplicate every State scallop management action, and State scallop managers are constrained in their ability make rapid management decisions because they must coordinate each action with NMFS and provide sufficient lead-time for publication of the action in the Federal Register.

Amendments to Magnuson-Stevens Act in 1996 now enable the Council to delegate to the State, with a three-quarter majority vote, the authority to manage some or all aspects of the scallop fishery in Federal waters off Alaska. This document examines two alternatives, in addition to the requisite "no action" alternative, for an Amendment 3 to the FMP that would delegate to the State authority to manage the scallop fishery in the Federal waters off Alaska.

Alternative 1: No Action. Under this alternative, the cooperative State-Federal management regime established by Amendment 1 would remain unchanged. ADF&G and NMFS would continue to maintain duplicate regulations and mirror each other's management actions to provide for the orderly management of the scallop fishery off Alaska.

Alternative 2 (PREFERRED): Delegate to the State authority to manage all aspects of the scallop fishery in Federal waters off Alaska except limited access. Under this alternative, limited access management would remain a Federal responsibility under the FMP, and would require an FMP amendment to change. All other Federal scallop regulations would be repealed and the authority to manage all other aspects of the scallop fishery would be delegated to the State under the FMP, including the authority to regulate any vessels not registered under the laws of the State. Two categories of management measures would be established. Limited access measures would be designated as Category 1 measures. Such measures would be fixed in the FMP, reserved for Federal implementation, and would require an FMP amendment to change. All other management measures would be designated as Category 2 measures and would be delegated to the State for implementation.

Alternative 3: Delegate to the State authority to manage all aspects of the scallop fishery in Federal waters off Alaska. Under this alternative, all Federal regulations governing the scallop fishery off Alaska would be repealed and authority to manage all aspects of the scallop fishery would be delegated to the State under the FMP, including the authority to limit access and to regulate any vessel not registered under the laws of the State.

With respect to the environmental effects of Amendment 3, the purpose of Amendment 3 is to eliminate an unnecessary and duplicate layer of regulation without altering the manner in which the fishery is currently managed by the State. Consequently, neither of the alternatives to the status quo is expected to alter the nature of the scallop fishery in a manner that would affect the human environment or impact other fisheries off Alaska.

Alternatives 2 and 3 differ only with respect to limited access management. Under Alternative 2, the scallop fishery would continue to be governed by the Federal scallop vessel moratorium under which 18 vessels qualify for moratorium permits. The current State scallop vessel moratorium program would apply only to State waters as is the case under the status quo. Under Alternative 3, the Federal moratorium would be repealed and the State would be authorized to extend its moratorium program to Federal waters. Under Alternative 3, eight vessels that qualify to participate under the Federal moratorium would be excluded from the fishery. Four of these vessels are currently participating in the 1997 scallop fishery.

6.0 REFERENCES

Aschan, M.M. 1991. Effects of Iceland scallop dredging on benthic communities in the Northeast Atlantic. Special international workshop on the effects of physical disturbance on the sea floor on benthic and epibenthic ecosystems. Conseil International pour L'Exploration de la Mer, Benthos Working Group, Unpublished Manuscript.

Bourne, N. 1991. Fisheries and Aquaculture: West Coast of North America. *in* S.E. Shumway, (ed.), Scallops: biology, ecology, and aquaculture. Elsevier, N.Y. 1991.

Caddy, J.F. 1968. Underwater observations on scallop (*Placopecten magellanicus*) behavior and drag efficiency. Journal of the Fisheries Research Board of Canada 25: 2123-2141.

Caddy, J.F. 1989. A perspective on the population dynamics and assessment of scallop fisheries, with special reference to the sea scallop, *Placopecten magellanicus* Gmelin. Pages 559-589 in J.F. Caddy, editor. Marine invertebrate fisheries: their assessment and management. John Wiley and Sons, New York.

Eleftheriou, A., and M.R. Robertson. 1992. The effects of experimental scallop dredging on the fauna and physical environment of a shallow sandy community. Netherlands Journal of Sea Research 30:289-299.

Fonseca, M.S., G.W. Thayer, A.J. Chester, and C. Foltz. 1984. Impact of scallop harvesting on eelgrass (*Zostera marina*) meadows: implications for management. North American Journal of Fisheries Management 4:

Foster, N.R. 1991. Intertidal bivalves: a guide to the common marine bivalves of Alaska. University of Alaska Press, Fairbanks.

Hammarstom, L.F., and M.F. Merritt. 1985. A survey of Pacific weathervane scallops (*Pecten caurinus*) in Kamishak Bay, Alaska. Alaska Department of Fish and Game, Division of Commercial Fisheries, Informational Leaflet 252, Juneau.

Haynes, E.B., and G.C. Powell. 1968. A preliminary report on the Alaska sea scallop - fishery exploration, biology, and commercial processing. Alaska Department of Fish and Game, Division of Commercial Fisheries, Informational Leaflet 125, Juneau.

Hennick, D.P. 1970a. The weathervane scallop fishery of Alaska with notes on occurrence in Washington and Oregon. Pacific Marine Fisheries Commission, Annual Report for the Year 1969: 33-34.

Hennick, D.P. 1973. Sea scallop, *Patinopecten caurinus*, investigations in Alaska. Alaska Department of Fish and Game, Division of Commercial Fisheries, Completion Report 5-23-R, Juneau.

Jones, J.B. 1992. Environmental impact of trawling on the seabed: a review. New Zealand Journal of Marine and Freshwater Research 26:59-67.

Kaiser, R.J. 1986. Characteristics of the Pacific weathervane scallop (*Pecten [Patinopecten] caurinus, Gould* 1850) fishery in Alaska, 1967-1981. Alaska Department of Fish and Game, Division of Commercial Fisheries (Unpublished Report, Catalog RUR-5J86-01), Juneau.

Kruse, G.H., E. Krygier, R.D. Mecum, and M.C. Murphy. 1993. Synopsis of ADF&G scallop meeting, Anchorage, Alaska, July 15, 1993. ADF&G Regional Information Report No. 5J93-07.

Mayer, L.M., D.F. Schick, R.H. Findlay, and D.L. Rice. 1991. Effects of commercial dragging on sedimentary organic matter. Marine Environmental Research 31:249-261.

Morrison, R. 1994. Bering Sea Aleutian Islands Scallops. In: Westward Region Reports to the Board of Fisheries. March 1994.

New England Fishery Management Council (NEFMC). 1982. Fishery management plan, final environmental impact statement, regulatory impact review for Atlantic sea scallops (*Placopecten magellanicus*). New England Fishery Management Council, Saugus, Massachusetts.

National Marine Fisheries Service (NMFS). 1997a. Final Environmental Assessment/Regulatory Impact Review/Final Regulatory Flexibility Analysis for Amendments 1 and 2 to the Fishery Management Plan for the Scallop Fishery off Alaska. NMFS-Alaska Region, PO Box 21668, Juneau, AK 99802-1668.

NMFS. 1997b. Final Environmental Assessment for the 1997 Groundfish Total Allowable Catch Specifications. NMFS-Alaska Region, PO Box 21668, Juneau, AK 99802-1668.

North Pacific Fishery Management Council (NPFMC). 1992. Final Supplemental Environmental Impact Statement and Regulatory Impact Review/Initial Regulatory Flexibility Analysis of Proposed Inshore/Offshore Allocation Alternatives (Amendment 18/23) to the Fishery Management Plans for the Groundfish Fishery of the Bering Sea and Aleutian Islands and the Gulf of Alaska. March 5, 1992.

Orensanz, J.M. 1986. Size, environment, and density: the regulation of a scallop stock and its management implications. Pages 195-227 *in* G.S. Jamieson and N. Bourne, editors. North Pacific workshop on stock assessment and management of invertebrates. Canadian Special Publication of Fisheries and Aquatic Sciences 92.

Starr, R.M., and J.E. McCrae. 1983. Weathervane scallop (*Patinopecten caurinus*) investigations in Oregon, 1981-1983. Oregon Department of Fish and Wildlife, Information Reports 83-10, Newport.

Urban, D., D. Pengilly, and I. Vining, 1994. The scallop observer program and statewide data analysis summary to the Board of Fisheries. Alaska Department of Fish and Game, Kodiak, Alaska. 54p.

United States Fish and Wildlife Service (USFWS). 1997. Formal consultation with the U.S. Fish and Wildlife Service Pursuant to Section 7 of the Endangered Species Act. Amendment to Biological Opinion. February 10, 1997. National Marine Fisheries Service, Juneau, Alaska.

7.0 LIST OF PREPARERS

Kent Lind
NMFS-Alaska Region

8.0 APPENDIX A: State of Alaska Scallop Vessel Moratorium

HB0141
SCS CSHB 141(RES)
SENATE CS FOR CS FOR HOUSE BILL NO. 141(RES)
IN THE LEGISLATURE OF THE STATE OF ALASKA
TWENTIETH LEGISLATURE - FIRST SESSION
BY THE SENATE RESOURCES COMMITTEE
Offered: 5/8/97
Referred: Rules
Sponsor(s): REPRESENTATIVE AUSTERMAN

A BILL
FOR AN ACT ENTITLED

"An Act relating to a vessel permit moratorium for the Alaska weathervane scallop fishery; relating to management of the scallop fisheries; and providing for an effective date."

BE IT ENACTED BY THE STATE OF ALASKA:

* Section 1. LEGISLATIVE FINDINGS AND INTENT. (a) The legislature finds that

(1) the scallop fishing fleet in Alaska is overcapitalized;

(2) fishing effort in the Alaska weathervane scallop fishery has reached levels that may threaten the sustained yield management of the fishery;

(3) weathervane scallops are long-lived animals with few natural predators; these attributes are common to species that are the most susceptible to overfishing;

(4) the status of many Alaska weathervane scallop stocks is largely unknown, and the stocks are susceptible to localized depletion and general overfishing;

(5) scallop fisheries around the world have collapsed after relatively short periods of intense fishing;

(6) scallop dredges may adversely affect important bottom-dwelling species, such as king crab and Tanner crab, and without careful management may threaten the conservation of these other fishery resources;

(7) the conventional limited entry and moratorium system under AS 16.43 cannot adequately protect the economic health and stability of the Alaska weathervane scallop fishery or adequately promote the sustained yield management of the Alaska weathervane scallop fishery;

(8) the United States Department of Commerce has taken action to restrict access to the Alaska weathervane scallop fishery in the waters of the United States exclusive economic zone adjacent to Alaska;

(9) state management of the entire Alaska weathervane scallop fishery will provide a uniform and comprehensive management regime for the fishery, protect the economic health and stability of the fishery, and promote sustained yield management of the fishery;

(10) establishment of a moratorium on the issuance of vessel permits to new vessels seeking to enter the Alaska weathervane scallop fishery promotes the purposes of art. VIII, sec. 15, Constitution of the State of Alaska, and AS 16.43 while providing an opportunity to study and evaluate the feasibility of a permanent vessel permit limited entry system for the Alaska weathervane scallop fishery.

(b) It is the intent of the legislature that the Board of Fisheries maintain 100 percent observer coverage for all vessels engaged in the Alaska weathervane scallop fishery.

* Sec. 2. AS 16.05 is amended by adding a new section to article 5 to read:

Sec. 16.05.735. Management of offshore fisheries. The state may assume management of the scallop fisheries in offshore water adjacent to the state in the absence of a federal fishery management plan for scallops or in the event that a federal fishery management plan for scallops delegates authority to the state to manage scallop fisheries in the United States exclusive economic zone.

* Sec. 3. AS 16.43 is amended by adding a new section to read:

Sec. 16.43.906. Vessel permits for weathervane scallop fishery. (a) The commission shall issue annual vessel permits for commercial fishing vessels used in the weathervane scallop fishery. The commission shall issue vessel permits to the vessel upon application by the vessel owner. The commission shall issue separate vessel permits for each registration area. The weathervane scallop fishery registration areas are the statewide Alaska weathervane scallop fishery registration area and the area H weathervane scallop fishery registration area.

(b) A vessel permit is a use privilege authorizing the vessel to take weathervane scallops in the registration area for which the vessel permit is issued. The use privilege conveyed by a vessel permit may be modified or revoked by the legislature without compensation.

(c) On or after July 1, 1997, a commercial fishing vessel may not be used to take weathervane scallops in a registration area unless a vessel permit for that registration area has been issued under this section for the vessel.

(d) The commission may not issue a vessel permit under this section to a commercial fishing vessel for the statewide Alaska weathervane scallop fishery registration area for the period from June 30, 1997, through June 30, 2001, inclusive, unless

(1) the vessel has landed at least 1,000 pounds of weathervane scallops that were legally taken in the statewide Alaska weathervane scallop fishery registration area

(A) during calendar year 1995 or 1996; and

(B) during each of at least four calendar years between 1984 and 1996, inclusive; or

(2) the vessel qualifies for a vessel permit for the area H weathervane scallop fishery registration area under (e) of this section.

(e) The commission may not issue a vessel permit under this section to a commercial fishing vessel for the area H weathervane scallop fishery registration area for the period from July 1, 1997, through June 30, 2001, inclusive, unless the vessel has landed at least 1,000 pounds of weathervane scallops that were legally taken in the area H weathervane scallop fishery registration area

(1) during calendar year 1994 or 1996; and

(2) during each of at least three calendar years between 1984 and 1996, inclusive.

(f) Notwithstanding (d) and (e) of this section, a vessel owner who does not own a commercial fishing vessel that qualifies for a vessel permit for a scallop fishery registration area may receive a vessel permit for that registration area if the vessel owner owned two or more commercial fishing vessels whose combined participation in the scallop fishery for that registration area would satisfy the requirements for a vessel permit for that registration area under this section. The commission shall issue a vessel permit under this subsection to the last commercial fishing vessel that the vessel owner owned to satisfy the requirements for the vessel permit for the registration area if the vessel owner still owned that commercial fishing vessel on July 1, 1997. (g) Notwithstanding (d) - (f) of this section, the commission shall reissue a vessel permit upon request of a person who is the owner of a vessel for which a vessel permit has been issued under this section to another vessel owned by the person if the vessel to which the vessel permit is to be reissued does not have an overall length or horsepower rating exceeding the length or horsepower rating of the vessel for which the vessel permit was initially issued. The vessel from which the vessel permit was transferred may no longer be used in the fishery for which the vessel permit was issued unless another vessel permit is reissued to the vessel. This

subsection does not authorize the issuance of more vessel permits than are authorized under (d) - (f) of this section.

(h) Use of a vessel in a weathervane scallop fishery on or after July 1, 1997, may not be used to establish eligibility for a vessel permit for a weathervane scallop fishery that may be issued after June 30, 2001.

(i) Subsections (d) - (h) of this section may be superseded by regulations adopted by the commission under subsequent legislation enacted by the legislature authorizing

(1) a permanent vessel permit limited entry system for the weathervane scallop fishery; or

(2) termination of the temporary moratorium on issuance of new vessel permits established by this subsection.

(j) An application for a vessel permit under this section must contain the name of each permit holder authorized to operate the vessel in the weathervane scallop fishery and other information the commission may require to implement this section. The owner of a vessel for which a vessel permit is issued shall notify the commission in writing of a change in the permit holders who are authorized to operate the vessel in the weathervane scallop fishery. In this subsection, "permit holder" means a person who holds an entry permit or interim-use permit issued under this chapter for the weathervane scallop fishery.

(k) If a commercial fishing vessel that qualifies for a vessel permit under this section or that is issued a vessel permit under this section is sunk, destroyed, or damaged to the extent that the vessel is inoperable for a weathervane scallop fishing season, the commission may, upon the request of the owner of the vessel, reissue the vessel permit for that fishing season to another commercial fishing vessel with an overall length and horsepower rating that does not exceed the overall length and horsepower rating of the vessel that was sunk, destroyed, or damaged.

(l) The fee for the annual vessel permit is $1,000. A vessel permit is valid for the calendar year that is inscribed on the license.

(m) The commission shall, in cooperation with the Department of Fish and Game, conduct investigations to determine whether an alternative form of nontransferable vessel or limited entry permit system or other management program is appropriate for weathervane scallop fisheries in the state.

(n) The commission may adopt regulations that the commission considers necessary to implement this section.

(o) In this section,

(1) "area H weathervane scallop fishery registration area" means the marine waters of Cook Inlet north of the latitude of Cape Douglas (58 degrees 52 minutes North latitude) and west of the longitude of Cape Fairfield (148 degrees 50 minutes West longitude);

(2) "landed" includes catching or catching and processing of weathervane scallops taken in state waters or the adjacent United States exclusive economic zone for sale as evidenced by a Department of Fish and Game fish ticket;

(3) "statewide Alaska weathervane scallop fishery registration area" means the marine waters of the state and the adjacent United States exclusive economic zone, outside of the area H weathervane scallop fishery registration area.

* Sec. 4. AS 16.43.911 (c) is amended to read:

(c) Notwithstanding AS 16.05.815 and AS 16.43.975 , the commission may release to the owner of a vessel information on the vessel's history of harvests in a [THE KOREAN HAIR CRAB] fishery that is necessary to apply for a vessel permit under AS 16.43.901 - 16.43.906.

* Sec. 5. Section 5, ch. 126, SLA 1996, is amended to read:

Sec. 5. AS 16.43.901 [AND 16.43.911], added by sec. 3 of this Act, is [ARE] repealed July 1, 2000.

* Sec. 6. AS 16.43.906 , added by sec. 3 of this Act, and AS 16.43.911 are repealed July 1, 2001.

* Sec. 7. This Act takes effect immediately under AS 01.10.070 (c).

Klind: 04-10-97, 10-26-97
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UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Silver Spring, Maryland 20910

MAR 23 1998

MEMORANDUM FOR: Distribution

FROM: F/SF3 - Robert Gorrell

SUBJECT: Pacific Ocean Salmon Documents

Attached for your information and review are documents (Review of 1997 Ocean Salmon Fisheries and Preseason Report I, Stock Abundance Analysis for 1998) in a series, prepared by the Pacific Fishery Management Council (Council) and distributed by the National Marine Fisheries Service, as provided for in the framework regulations implementing the Pacific Coast Salmon Plan. Subsequent documents will be sent to you as we receive them.

The Council will be making final decisions on management measures for the 1998/99 season at its April 6-10, 1998, meeting in Portland, OR. Those regulations will need to be effective when the season opens the first of May 1998.

Attachment

*Distribution

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