



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

JUL -2 1998

To All Interested Government Agencies and Public Groups:

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

TITLE: Environmental Assessment of Amendment 3 to the  
Fishery Management Plan for the Scallop Fishery  
off Alaska

LOCATION: Federal waters off Alaska

SUMMARY: Amendment 3 delegates to the State of Alaska the  
authority to manage all aspects of the scallop  
fishery off Alaska except limited access. Under  
Amendment 3, all Federal regulations governing  
the scallop fishery off Alaska will be repealed  
except for the Federal scallop vessel moratorium  
program.

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

Sincerely,

*Susan Fuchler*  
Acting NEPA Coordinator

Enclosure



**FINAL 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

*June 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 2 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 1 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.



## TABLE OF CONTENTS

1.0	INTRODUCTION .....	1
1.1	Purpose of and Need for the Action .....	1
1.2	Alternatives Considered .....	2
1.2.1	Alternative 1: No Action .....	2
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 .....	2
1.2.3	Alternative 3: Delegate to the State authority to manage all aspects of the scallop fishery in Federal waters off Alaska .....	3
1.3	Statutory Authority for State Management in the EEZ .....	3
1.3.1	Conditions under which a State may regulate fishing in Federal waters .....	4
1.3.2	Alternatives Not Considered--Repeal of the FMP .....	4
1.4	Background on the Scallop Fishery off Alaska .....	5
1.4.1	Biology and Distribution .....	5
1.4.2	History of the Fishery .....	6
1.4.3	Federal Involvement in the Scallop Fishery .....	7
1.4.4	Recent State Actions: The State Scallop Vessel Moratorium .....	10
2.0	NEPA REQUIREMENTS: ENVIRONMENTAL IMPACTS OF THE ALTERNATIVES ...	12
2.1	Environmental Impacts of the Alternatives .....	12
2.2	Potential Impacts on Benthic Communities and the Physical Environment .....	12
2.3	Potential Impacts on Bycatch of Non-target Species .....	15
2.4	Impacts on Endangered, Threatened or Candidate Species .....	16
2.5	Potential Impacts on ESA-listed Pacific salmon .....	17
2.6	Potential Impacts on Seabirds .....	17
2.7	Potential Impacts on Marine Mammals .....	18
2.8	Coastal Zone Management Act .....	18
2.9	Finding of No Significant Impact .....	19
3.0	REGULATORY IMPACT REVIEW: ECONOMIC AND SOCIOECONOMIC IMPACTS OF THE ALTERNATIVES .....	20
3.1	Economic Effects of Alternative 1: No Action .....	21
3.2	Economic Effects of Alternative 2 (PREFERRED) .....	21
3.3	Economic Effects of Alternative 3 .....	21
4.0	ECONOMIC EFFECTS ON SMALL ENTITIES .....	23
5.0	SUMMARY AND CONCLUSIONS .....	25
6.0	REFERENCES .....	27
7.0	LIST OF PREPARERS .....	29
8.0	APPENDIX A: State of Alaska Scallop Vessel Moratorium .....	30

## **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 prepared 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 (EA/RIR) 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 2 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 1 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 Delegated to the State	Category 2 Measures Federally implemented, fixed in FMP
<p>All 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:</p> <ul style="list-style-type: none"> <li>• Minimum size limits</li> <li>• Guideline harvest levels</li> <li>• Observer requirements</li> <li>• Legal gear</li> <li>• Permit requirements</li> <li>• In-Season adjustments</li> <li>• Management areas and districts</li> <li>• fishing seasons</li> <li>• bycatch limits</li> <li>• recordkeeping and reporting requirements</li> <li>• crew and effort limits</li> </ul>	<p>Vessel Moratorium (in Federal waters) Other limited access measures (in Federal waters)</p>

**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 Alternatives Not Considered—Repeal of the FMP**

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..." If there were no authority to manage the scallop fishery in Federal waters at the State or Federal level in the absence of an FMP, the result would be adverse effects on the fishery.

#### **1.4 Background on the Scallop Fishery off Alaska**

##### **1.4.1 Biology and Distribution**

Weathervane scallops (*Patinoplectin 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.**

<i>Year</i>	<i>Number of Vessels</i>	<i>Landings (lb shucked meats)</i>	<i>Price (\$/lb)</i>
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.**

	<i>Federal Moratorium</i>	<i>State Moratorium</i>
<i>Moratorium period</i>	July 1, 1997 - June 30, 2000	July 1, 1997 - June 30, 2001
<i>Qualifying Criteria</i>	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.	<u>Statewide:</u> 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.  <u>Cook Inlet:</u> 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.
<i>Area endorsements</i>	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.
<i>Vessel reconstruction</i>	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.
<i>Vessel replacement</i>	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.
<i>Permit transfers</i>	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.
<i>Qualifying recipient</i>	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.
<i>Fees</i>	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 states 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 *Strongylocentrotus 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 (Hammarstrom 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 (Hammarstrom 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.

## 2.4 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	<i>Balaena glacialis</i>
Sei whale	<i>Balaenoptera borealis</i>
Blue whale	<i>Balaenoptera musculus</i>
Fin whale	<i>Balaenoptera physalus</i>
Humpback whale	<i>Megaptera novaeangliae</i>
Sperm whale	<i>Physeter macrocephalus</i>
Snake River sockeye salmon	<i>Oncorhynchus nerka</i>
Short-tailed albatross	<i>Diomedea albatrus</i>
Steller sea lion (western stock)	<i>Eumetopias jubatus</i>

### Threatened

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

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).

#### 2.5 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.

#### 2.6 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, murre, 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.

## **2.7 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.

## **2.8 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.

## 2.9 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

JUN 30 1998

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 its moratorium program to Federal waters. Using State fish ticket 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)<sup>1</sup>.**

<i>Vessel Name</i>	<i>Federal Moratorium</i>		<i>State Moratorium</i>	
	<i>Statewide</i>	<i>Cook Inlet</i>	<i>Statewide</i>	<i>Cook Inlet</i>
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 <sup>2</sup>			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) <sup>2</sup>	Y	Y		

<sup>1</sup>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.

<sup>2</sup>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 excess of \$3,000,000 as small businesses. In addition, seafood processors with 500 employees or fewer, wholesale industry members with 100 employees or fewer, not-for-profit enterprises, and government jurisdictions with a population of 50,000 or less are considered small entities. NMFS has determined that a "substantial number" of small entities would generally be 20 percent of the total universe of small entities affected by the regulation. A regulation would have a "significant impact" on these small entities if it changed annual gross revenues by more than 5 percent, total costs of production by more than 5 percent, compliance costs for small entities by at least 10 percent compared with compliance costs as a percent of sales for large entities, or if 2 percent of the small entities affected by the regulation are forced out of business.

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

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

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.

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## **7.0 LIST OF PREPARERS**

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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).