

# Chapter 1: Purpose and need

## 1.1 Introduction

In 1976, Congress passed into law what is currently known as the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). This law authorized the United States (U.S.) to manage its fishery resources from 3 to 200 nautical miles (nm) (4.8 to 320 kilometers [km]) off its coast (the U.S. Exclusive Economic Zone [EEZ]). The management of these marine resources is vested in the Secretary of Commerce (Secretary) and in Regional Fishery Management Councils. In the Alaska region, the North Pacific Fishery Management Council (Council) has the responsibility to prepare Fishery Management Plans (FMP) for marine resources requiring conservation and management, as determined by the Council. The U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NOAA Fisheries) is charged with carrying out the federal mandates of the U.S. Department of Commerce with regard to commercial fisheries such as approving and implementing FMPs and FMP amendments recommended by the Council.

In January 2004, the U.S. Congress amended the Magnuson-Stevens Act through the Consolidated Appropriations Act of 2004 (Pub. L. No. 108-199, section 801(j)), by adding subparagraph (j) in section 313. This subparagraph requires the Secretary to approve, by January 1, 2005, the Voluntary Three-pie Cooperative Program<sup>2</sup> (Program) as it was approved by the Council between June 2002, and April 2003, including all trailing amendments reported to Congress on May 6, 2003. Additionally, the statute gives the Council the ability to recommend to the Secretary subsequent program amendments. In June 2004, the Council adopted the Program, with minor adjustments, as Amendments 18 and 19 to the FMP. The legislated Program, as modified by the Council, is represented by Alternative 2, the preferred alternative. Please see section 1.8 *Relationship of this action to federal law and action* and Appendix 2 for further information on this Magnuson-Stevens Act amendment.

Under the Magnuson-Stevens Act, the Council prepared and the Secretary approved the *Fishery Management Plan for the Commercial King and Tanner Crab Fisheries in the Bering Sea/Aleutian Islands* in 1989. A National Environmental Policy Act (NEPA) Environmental Assessment (EA) was prepared for the FMP with a finding of no significant impact (FONSI). Environmental analysis documents were prepared for each subsequent FMP amendment and regulatory action. In 1998, the Council updated this FMP and changed the name to the *FMP for Bering Sea/Aleutian Islands King and Tanner Crabs* (BSAI crab FMP). An EA was prepared for this revised FMP and a FONSI was determined.

The purpose of this Environmental Impact Statement (EIS) is to provide decision-makers and the public with an evaluation of the environmental, social, and economic effects of alternative management programs for the Bering Sea and Aleutian Islands (BSAI) crab fisheries. It is intended that this EIS serve as the central environmental document for management measures developed by NOAA Fisheries and the Council to implement the provisions of the proposed action. NOAA Fisheries determined that this proposed action was

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<sup>2</sup> The title ‘Voluntary Three-pie Cooperative Program’ is used in the Statute and in the Council’s motion, however the title ‘Three-pie Voluntary Cooperative Program’ more accurately reflects the Program because the three-pie portion is mandatory and the cooperative portion is voluntary. Both titles are used interchangeably in this EIS.

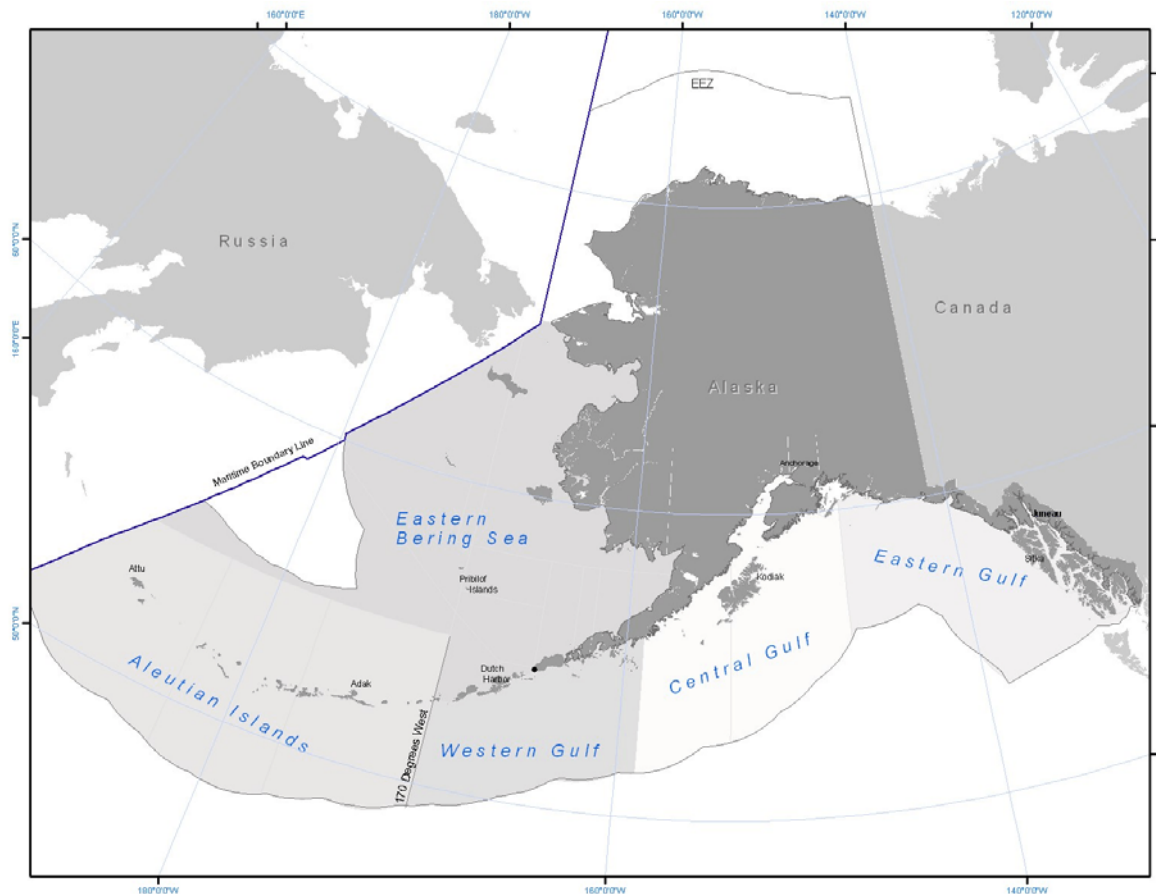
a major federal action with potentially significant impacts on the human environment, therefore, preparation of an EIS level analysis was considered appropriate.

The EIS contains three appendices: a regulatory impact review/initial regulatory flexibility analysis (RIR/IRFA), the Council's reports to Congress and the Congressional action, and a social impact assessment. The RIR/IRFA analyzes the economic impacts of the elements and options from which the EIS alternatives were developed. The RIR/IRFA includes a net benefit analysis of the preferred alternative. Although specific benefits cannot be quantified, net benefits should arise from implementation of the preferred alternative. These net benefits arise from gains in harvesting and processing efficiency, consumer benefits, and environmental benefits. The Council's reports to Congress, the Congressional action (including the statutory language that amends the Magnuson-Stevens Act), and related documents provide the history of Congressional consideration of a rationalization program for the BSAI crab fisheries. The social impact assessment provides detailed analyses of the impact of the alternatives on communities and regions.

## **1.2 Action area**

The action area for BSAI crab fisheries effectively covers all of the Bering Sea under U.S. jurisdiction, extending southward to include the waters south of the Aleutian Islands west of 170°W (west) to the border of the EEZ (Figure 1.2-1). These regions encompass those areas directly affected by fishing, and those that are likely affected indirectly by the removal of crab at nearby sites. The lack of important information on distribution and stock structure of target species confounds a clear and precise definition of the action area, but a review of areas fished by crab fisheries and the areas surveyed by the NOAA Fisheries trawl survey suggest that virtually the entire BSAI area, excluding the nearshore region (less than 50 meters deep), is utilized by one fishery or another. Maps containing the distribution of the BSAI crab fisheries and crab stocks are located in Section 3.4.6.

**Figure 1.2-1 The Exclusive Economic Zone (EEZ) in the waters off Alaska.**



### 1.3 Purpose and need for action

The proposed action is the review and assessment of the crab fisheries under the current BSAI crab FMP and the examination of alternative crab fishery management regimes. The purpose of this proposed action is to implement a management program that improves resource conservation and management, promotes safety of human life at sea, reduces excess capacity, and provides economic stability for harvesters, processors, and communities. These specific objectives further the Magnuson-Stevens Act's national standards for conservation and management. This EIS will provide decision-makers and the public with information on the current management regime and proposed changes to it. The purpose of the broad, programmatic review is to provide sufficient analysis to inform subsequent crab management decisions.

The alternatives analyzed focus on alternative rationalization programs; a three-pie voluntary cooperative program, an Individual Fishing Quota (IFQ) program, and a cooperative program ('rationalization' is explained in Section 1.3.1). The Council has determined that a rationalization program is the only reasonable alternative management regime to achieve the purposes listed above. The alternatives analyses will enable

NOAA Fisheries and the Council to identify the parts of the FMP that need to be changed to effectively manage the fisheries under a new management program. Equally important, this analysis allows decision-makers to predict the effects of crab management, as a whole, under the preferred rationalization program and its alternatives in order to make an informed decision on which alternative to implement.

The FMP was adopted in 1989 informed by an EA/FONSI. Since 1989, changes have occurred in the crab fisheries, the methods of crab management, and scientific understanding of crab and the BSAI ecosystem. An FMP-level review evaluates these changes and provides valuable information about the environmental impacts of the current crab fisheries and impacts that will likely occur if the current management regime is replaced with a rationalization-based management regime. This FMP-level review thereby serves to supplement the original NEPA environmental review for these fisheries.

The BSAI crab fisheries are experiencing the fundamental fisheries management problems of excess capacity and the consequent race for fish and related resource conservation and management difficulties. The management tools in the existing FMP do not provide managers with the ability to effectively solve these problems, thereby making Magnuson-Stevens Act goals difficult to achieve and forcing reevaluation of the existing FMP.

The race for fish exists as a result of harvest capacity greatly exceeding the amount of crab available for harvest. Harvest capacity has increased since 1989 as stocks have decreased due to changing environmental conditions in the BSAI. Under the current management regime, each fishery is opened on a specific date with a specified harvest limit. Fishermen must compete to harvest as much crab as possible before the harvest limit is reached and the fishery is closed. This race for fish causes short seasons, economic waste, unsafe fishing conditions, and complicates resource management and conservation efforts. These problems were illustrated in the 2001 Bristol Bay red king crab regular commercial fishery in which 232 vessels caught 7.8 million pounds of crab in 3 days and 8 hours. Due to the management difficulties of determining the harvest rate of so many vessels in such a short amount time, the preseason guideline harvest level of 6.6 million pounds was exceeded by 1.2 million pounds. Also, in an effort to harvest as many crabs as possible prior to the closure of the fishery, some vessels fished during a storm, causing significant damage to 3 vessels and the loss of one human life.

In an effort to alleviate the problems caused by excess capacity and the race for fish, the Council has determined that the institution of some form of rationalization program is needed to improve crab fisheries management in accordance with the Magnuson-Stevens Act. The need for a rationalized crab management regime is explained in the Council's *BSAI Crab Rationalization Problem Statement*:

Vessel owners, processors, and coastal communities have all made investments in the crab fisheries, and capacity in these fisheries far exceeds available resources. The BSAI crab stocks have also been highly variable and have suffered significant declines. Although three of these stocks are presently under rebuilding plans, the continuing race for fish frustrates conservation efforts. Additionally, the ability of crab harvesters and processors to diversify into other fisheries is severely limited and the economic viability of the crab industry is in jeopardy. Harvesting and processing capacity has expanded to accommodate highly abbreviated seasons, and presently, significant portions of that capacity operate in an economically inefficient manner or are idle between seasons. Many of the concerns identified by the Council at the beginning of the comprehensive rationalization process in 1992 still exist for the BSAI crab fisheries. Problems facing the fishery include:

1. Resource conservation, utilization and management problems;
2. Bycatch and its associated mortalities, and potential landing deadloss;
3. Excess harvesting and processing capacity, as well as low economic returns;
4. Lack of economic stability for harvesters, processors and coastal communities; and
5. High levels of occupational loss of life and injury.

The problem facing the Council, in the continuing process of comprehensive rationalization, is to develop a management program which slows the race for fish, reduces bycatch and its associated mortalities, provides for conservation to increase the efficacy of crab rebuilding strategies, addresses the social and economic concerns of communities, maintains healthy harvesting and processing sectors and promotes efficiency and safety in the harvesting sector. Any such system should seek to achieve equity between the harvesting and processing sectors, including healthy, stable and competitive markets.

The Council has designed three alternatives that address the issues as laid out in this problem statement. These alternatives address the objectives set forth in the purpose of the proposed action. Through an examination of these alternative rationalization programs, the analysis will comprehensively address all relevant aspects of crab management. The rationalization programs under consideration are a complex set of program elements that are designed to balance the interests of several identifiable groups that depend on these fisheries. These groups include harvesters, processors, communities, and captains.

Rationalization programs improve management's ability to address Magunson-Stevens Act conservation and safety goals by providing opportunities to utilize fishing methods that reduce bycatch, gear conflicts, and the incentive to fish during unsafe conditions. Measurable conservation goals of rationalization programs may include improved stock conservation through decreased bycatch and handling mortalities. Bycatch and handling mortalities would be reduced by improvements to fishing practices possible with longer seasons. The rationalization program may also include measures to provide increased observer coverage, prevent highgrading, and control deadloss. Eliminating the race for fish would likely decrease the potential for harvest limit overruns that can result from the difficulty of monitoring catches during short fishing seasons with many vessels participating. A reduction in fishing effort may also reduce the impacts of pot gear on benthic habitat. These conservation benefits would decrease the impacts of the crab fisheries on crab stock abundance and improve the effectiveness of the rebuilding plans.

Allocating a fishery resource to users causes fundamental changes in the management and prosecution of the fisheries. These fundamental changes have been documented in every fishery where a share-based management program has been implemented. In the North Pacific, fisheries managers have witnessed first hand the fundamental changes caused by the halibut and sablefish IFQ program and the implementation of the American Fisheries Act (AFA) for the pollock fishery.

Based on this experience with rationalization programs, the Council and NOAA Fisheries expect implementation of a rationalization program to greatly alter how the existing crab fisheries are managed and prosecuted. Rationalization will require new federal management measures, as well as improvements to existing measures, to implement the program. Rationalization requires new and extensive permitting, data collection, monitoring, and enforcement procedures. Likewise, rationalization will likely cause the State of Alaska (State) to make changes to existing State management measures to allow improvements in crab fishing patterns, such as changes to crab fishing seasons and pot limits. All of these management changes will result in an FMP and management regime that is substantially different than the existing regime. It is these changes

to fishing patterns, processing patterns, and fleet composition, and how management adapts to these changes, that will affect the human environment.

### **1.3.1 What is a rationalization program?**

Rationalization programs derive their name from their rationalizing effect on investment in the fishery. Technically speaking, a rationalization program is one that results in an allocation of labor and capital between fishing and other industries that maximizes the net value of production. In other words, the program removes individual incentives to overinvest labor and capital to secure or maintain one's share of the catch. Typically, rationalization programs are management programs that create a market in the fishery through the allotment of shares to participants. Investment decisions of share holders in the fishery are then geared toward receiving maximum returns on their allotted shares. The end result of these incentives is economic investments in the fishery commensurate with the amount of fish that can be efficiently harvested and processed. The assignment of harvest shares may not only eliminate the race for fish, but may also create incentives to improve safety and pursue marketing opportunities. However, because rationalization involves a total revamping of the way the fishery is run, its designers must be aware of the numerous economic, social, and environmental consequences that flow from the details of the program design. In particular, the distributional effects of decisions on the allotment of harvest shares is a major source of contention in the design of every rationalization program worldwide.

NOAA Fisheries has identified overcapacity as one of the most serious problems facing managers and policy makers (NMFS 2002d). NOAA Fisheries defines "excess capacity" as the capacity of a vessel/fleet to produce more than it actually does produce, and "overcapacity" as a condition in which a vessel/fleet's capacity exceeds the productivity of the resource or is above a management target (NMFS 2002d). Rationalization programs attempt to address overcapacity by removing incentives to harvest and process fish at a faster rate to preserve or increase the relative share of the harvest. Instead, participant's harvest and processing rates are determined in response to market conditions and management constraints that are intended to protect the resource and environment.<sup>3</sup>

The NOAA Fisheries National Excess Capacity Task Force identified regulated open-access management, which often results in a race for fish, as the principle cause of the overcapacity problem (NMFS 2002d). NOAA Fisheries recognizes that regional Councils have the lead in identifying fisheries that require a concerted effort to manage capacity. Any successful and effective policy or plan to reduce overcapacity in the fisheries sector needs the political support of the Council, NOAA Fisheries, and Congress. The management of overcapacity, and objectives and plans for Federally managed fisheries, are addressed on a case-by-case basis through recommendations developed by regional Councils.

NOAA Fisheries uses several qualitative indicators to analyze management problems in individual fisheries. Most of the indicators are symptoms of overcapacity, and programs that address overcapacity should be able to improve the status of each of the indicators. Qualitative indicators of overcapacity include the following:

- the biological status of the fishery (is it overfished?);
- management category (open access, limited access or rights-based);

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<sup>3</sup> For example, managers may limit season lengths or establish area closures to protect juvenile crab or limit the effects of fishing on molting and mating.

- actual harvest-allowable catch relationship (do catches exceed the quotas?);
- allowable catch-season length (is the season increasing or decreasing?);
- total catch levels and their allocations (how contentious is the quota setting process?);
- latent permits (what is the ratio of active permits to total permits?); and
- catch-per-unit-effort (are catch rates increasing or declining?).

Measures to address overcapacity fall into three broad categories: (1) controlling the number of permits through limiting entry, setting effort quotas, or managing permits in other ways; (2) buying back vessels to decrease the fleet size; and, (3) developing rationalization programs, also called share-based programs, which can include IFQs, Processor Quotas, Community Development Quotas (CDQ), and cooperatives.

Limited entry programs restrict participation, particularly by new entrants. The most fundamental shortcoming of limited entry as a means of managing capacity is that it controls the number of participants but does not constrain investment. This technique alone is unable to end the race for fish because each participant still has the incentive to increase capacity to catch a greater share of the total harvest. Limiting entry alone is therefore not an effective means of curbing overcapacity. However, because limited entry programs define the universe of participants, they can be a valuable first step in a more comprehensive plan to reduce capacity.

The most direct and explicit management response to overcapacity is to remove it through a buyback or “fishing capacity reduction” program. The major focus of a buyback program is to reduce existing capital in the fishery by removing vessels and to ensure that those vessels that are bought back do not return or move to other fisheries. However, these reductions in overcapitalization are temporary and incomplete because buyback programs do not eliminate the incentive for remaining participants to increase their capacity (through capital investments other than additional vessels and increased labor investments) to compete for a greater share of the overall catch. Therefore, with a buyback program, the race for fish continues. Buyback programs, like limited entry programs, may be useful as a step towards a more comprehensive rationalization program because they reduce the number of participants in a fishery.

Rationalization programs allocate the exploitable resource to fishery participants, thus enabling the participants to manage their operations in a more economically efficient manner, as they no longer must compete with other users for a share of the available resource. Theoretically, each shareholder will use its allocation to maximize returns from the fishery. Likewise, if the quota is allocated to a cooperative, the cooperative should maximize its returns from the quota. If the shares are transferable (meaning that they can be sold or leased) the market, (if operating according to theory,) will induce a rationalization process in which more economically efficient participants will acquire shares of less efficient quota holders. Quota programs generally have an impressive track record as a means of improving economic efficiency and mitigating overcapacity in the fish harvesting sector. Investments and participation vary sharply according to the objectives and structure of the quota program. Some quota programs have been criticized for their distributional effects because they consolidated interests in the hands of a few large-scale participants.

The Council has determined that the BSAI crab fisheries require concerted effort to manage capacity. The Council, therefore, is recommending alternative rationalization programs for these fisheries. The rationalization programs under consideration by the Council and NOAA Fisheries involve a complex set of program elements that are designed to balance the interests of several identifiable groups that depend on these fisheries as well as meet the requirements of the Magnuson-Stevens Act. The recommended rationalization programs for the crab fisheries include a combination of the following elements:

- **Harvester Allocation:** Harvesters, including vessel captains, may receive transferrable allocations to harvest portions of the total allowable catch (TAC). Rationalization of the harvesting sector would eliminate the derby-style race for fish and provide economic incentives to reduce capacity. Shares are expected to be consolidated on the most efficient vessels, thus removing excess capital from the fishery and allowing remaining vessels to fish for a longer amount of time. With assured access to a fixed share of the available quota, fishermen will be able to choose when to fish depending on weather conditions, market considerations, and other factors.
- **Processor Allocation:** Processors may receive allocations to process portions of the crab harvested. Alternatively, licenses may be issued to create a closed class of processors to protect the historic interests of existing crab processors. Share allocations to the processing sector would be an innovation of this Alaskan crab program, which has not been tried elsewhere. It is intended to reduce processing costs by reducing excess capacity in the processing sector and to provide stability to the processors. Concerns about the effect that assigning processing shares would have on ex-vessel pricing are being addressed through a binding arbitration structure.
- A Cooperative structure is intended to facilitate efficiency in the harvest sector by aiding harvesters in coordinating harvest activities among members and deliveries to processors. Cooperatives can be voluntary or mandatory. Under voluntary cooperatives, quota share is allocated to individuals, who can then choose to join cooperatives or fish their own quota share. Under mandatory cooperatives, annual allocations are made to cooperatives. Fishermen who do not join a cooperative are not allocated any shares. Harvesters and processors could realize efficiencies through well-coordinated activities and product flow.
- Additional program elements may be implemented to provide stability and protection to communities, including increasing the CDQ allocation of crab; right of first refusal for communities of sale of processing quota share; designated regions allocated landings and processing activities to preserve their historic interests in the fisheries; a loan program for crew members, and other community protection measures.

### **1.3.2 Scope of the EIS**

The purpose of this EIS is to provide decision-makers and the public with an evaluation of the environmental and economic effects of the proposed action and alternatives to the proposed action. This EIS examines the direct, indirect, and cumulative effects of the alternatives, including status quo, on the physical, biological, and human environment. The EIS is programmatic in scope because the proposed action encompasses a broad range of management measures for an entire fishery management program and this EIS looks at the environmental consequences of the program as a whole. According to the Council on Environmental Quality (CEQ) regulations, a programmatic EIS is prepared for a broad federal action, such as the adoption of a plan, program, or policy. A programmatic EIS is the comprehensive document in which the Agency considers a number of related actions being decided within one program. As such, a programmatic EIS looks at the environmental impact consequences of a program as a whole.

The scope of the analysis in this EIS includes decisions before the Council and NOAA Fisheries and also before the State, which shares the responsibility for the management of BSAI crab. The Council and NOAA Fisheries will decide whether to continue the existing crab management regime or to manage crab under a rationalization program. An underlying principle of this EIS is that a rationalization program will affect most



aspects of BSAI crab fisheries management by making some existing management measures unnecessary and requiring modification of other management measures. The State will make changes to State regulations governing the BSAI crab fisheries so that fisheries management responds to the unique demands of the rationalization program selected. To the extent possible, the EIS identifies the alternatives, modifications to the existing management measures in the FMP, and ranges of potential changes to State management measures. Once these have been identified, the EIS then analyzes the effects on the human environment of the status quo and each alternative, and discusses ways to avoid or mitigate any adverse effects. Alternatives considered but eliminated from detailed study are also addressed in this EIS.

In order to analyze the proposed action, the EIS provides the decision-makers and the public with a basic understanding of the fishery, including a description of the historic and existing fishery. This provides the background against which the alternatives can be judged. This EIS analyzes the environmental effects of all activities authorized under the FMP, the current suite of FMP management measures, as amended over the years, and the State and federal regulations developed to implement those measures. By thoroughly analyzing the status quo, subsequent amendments to the FMP could tier off this EIS, thus focusing that NEPA analysis on the issues specific to the future proposed action. Likewise, future modifications to the rationalization program, if adopted, could tier off this EIS. The EIS does not present alternatives to specific elements in the FMP that are not impacted by the proposed action because these are outside of the purpose and need for the action and were not brought up during scoping. FMPs are adaptive and alternatives to specific FMP measures can be adopted by the Council in the future, even if they are not foreseeable now and not specifically laid out in this EIS. A programmatic look at the existing FMP will also provide valuable information to the State in managing these fisheries and in making future management decisions beyond those required to manage under a rationalization program.

## **1.4 Public participation**

This EIS was developed with opportunity for public participation. Scoping is the term used for involving the public in the NEPA process at its initial stages. Scoping is designed to provide an opportunity for the public, agencies, and other interest groups to provide input on potential issues associated with the proposed action. Scoping is used to identify the scope of environmental issues related to the proposed action and can also identify new alternatives to be considered in the EIS. Scoping is accomplished through written communications, statements at public meetings, or formal and informal consultation with agency officials, interested organizations, and groups. Scoping for this EIS included a formal scoping process, with a Notice of Intent to prepare this EIS and several advertised scoping meetings. Additionally, members of the public had the opportunity to comment during the Council process. The Council process of Council meetings, ad-hoc industry meetings, and Council committee meetings started before the formal scoping process and continued after the formal scoping process ended. This section describes these avenues for public participation. This EIS is based on and prepared from the issues identified during the scoping process.

### **1.4.1 Notice of intent and scoping**

The formal scoping period began with the publication of a Notice of Intent in the Federal Register (FR) on September 20, 2001 (66 FR 48410). Public comments were initially due to NOAA Fisheries by November 16, 2001; however, NOAA Fisheries extended the scoping period until December 10, 2001 to provide the public with more time to develop comments (66 FR 59771, November 30, 2001). NOAA Fisheries held three public meetings: one in Anchorage, Alaska, and two in Seattle, Washington.

At the scoping meetings, NOAA Fisheries requested written comments from the public on the range of alternatives to be analyzed and on the environmental, social, and economic issues to be considered in the analysis. Each scoping meeting was held in conjunction with another formal public meeting on BSAI crab fishery management to make it convenient for interested public to attend. The scoping meeting in Anchorage was held in conjunction with the Council's Crab Plan Team meeting. The scoping meetings in Seattle were held in conjunction with the annual Pacific Northwest Crab Industry Advisory Committee and a Council meeting. In addition to the Notice of Intent, the scoping meeting was on the agenda for each of these meetings. The scoping meetings were attended by fishermen; vessel owners; fishing and processing industry representatives; representatives from environmental organizations; Alaska Department of Fish and Game (ADF&G), the Council, NOAA Fisheries, and NOAA-General Counsel (GC) staff; community representatives; and the general public. Attendance lists for each meeting are filed in the administrative record and available on request from NOAA Fisheries. NOAA Fisheries presented the Council with a report on the results of scoping in February 2002 and this report is posted on the NOAA Fisheries Alaska Region web page.

***Summary of comments and issues addressed in written comments received during scoping***

NOAA Fisheries received three written comments during the formal scoping period. Copies of the three comments were provided to the Council at the February Council meeting in the Draft Scoping Summary Report to the Council on the EIS for the BSAI Crab FMP (NMFS 2002e). The comments are available in the administrative record and are summarized below.

***Comment 1: Consider Alaskan communities.***

This comment requested consideration of the impacts of proposed rationalization programs on Alaskan coastal communities, and the City of Unalaska, specifically. The comment explained the importance of crab harvesters and processors to the economic viability of the city and the need for the development of an alternative management system that will lead to industry consolidation. The comment focused on four main areas of concern:

- Vessel safety;
- Resource management;
- Economic stability; and
- Excess harvesting capacity.

The comment also recommended that NOAA Fisheries comply with NEPA and the Magnuson-Stevens Act national standards as it develops the EIS.

***Comment 2: Analyze a harvester-only individual fishing quota alternative.***

This comment recommended moving forward with a harvester-only IFQ program before analysis of a processor quota (PQ) program. The comment discussed issues in support of a harvester-only IFQ program over a two-pie IFQ program, and asserted that:

- Considering PQ along with IFQ will delay implementation of an IFQ program because of the complexities of a PQ program;

- IFQs are an accepted and reasonable management tool for rationalization of the BSAI crab fleet, and will address significant resource conservation and management objectives, as well as specific economic and social objectives;
- PQs are not authorized by Congress and there is no precedent PQ program;
- PQ has anti-trust implications; and
- PQs equate to a distribution of ownership rights of a natural resource to a small class of large businesses, many of which are vertically integrated and multinational.

***Comment 3: Make conservation and sustainability of biological resources the highest priority for a rationalization program.***

This comment recommended that the EIS evaluate rationalization alternatives against the following conservation and community objectives:

- Reward clean fishing (promote low bycatch and minimize impact on ocean floor);
- Create opportunity for future generations of independent fishermen;
- Prevent excessive consolidation and vertical integration of the seafood industry;
- Preserve healthy competition among seafood processors and prohibit processor monopolies;
- Promote healthy community fishing economies and maintain diverse independent fishing fleets;
- Recognize historic regional fishing and processing patterns; and
- Require good stewardship of the public's marine resources as a condition for continuing participation in IFQ fisheries.

This comment also recommended that the EIS evaluate the success of the crab pot escape rings and mesh size required by State regulations in reducing crab bycatch in the crab fisheries. In addition, the comment recommends that the EIS detail with geographic information systems mapping the spatial extent of the crab fisheries, degree of fishing effort, and spatial extent of the crab stocks.

This comment raises a number of issues outside the scope of this EIS. The comment recommends changes to the groundfish fisheries that are not under the management jurisdiction of the BSAI crab FMP and therefore will not be directly considered in the EIS for the BSAI crab FMP.

***Additional comments***

In addition, one verbal public comment suggested an alternative structured around exclusive federal management of the BSAI crab fisheries.

#### **1.4.2 Public participation in development of the rationalization programs**

The complete suite of alternatives, elements, and options the Council considered when designing the alternative rationalization programs was developed through the public process. In developing alternative rationalization programs, a number of meetings to discuss rationalization have occurred in the Council arena. Beginning in late 1999, interested parties met on an informal basis in a series of meetings to discuss rationalization. In December 2000, this ad hoc industry committee was formalized into the Council's BSAI Crab Rationalization Committee. The Council appointed members to the BSAI Crab Rationalization Committee, which included representatives from harvesters, processors, skippers and crewmen, communities, and environmental organizations. The BSAI Crab Rationalization Committee was tasked with developing elements and options for analysis and reporting to the Council at the April 2001 meeting. The BSAI Crab Rationalization Committee met once in February and once in March, 2001. In summary, the BSAI Crab Rationalization Committee made significant progress during its meetings in developing a set of elements and options for Council consideration and analysis of a crab rationalization program. Also, the Council, the Advisory Panel (AP), and Scientific and Statistical Committee (SSC) have discussed rationalization at a number of meetings since October 1999. In June 2001, the Council adopted a suite of alternatives, elements, and options for analysis based on the BSAI Crab Rationalization Committee recommendation. The Council, AP, and SSC considered, revised and modified these alternatives, elements, and options in the following 10 Council meetings from June 2001 through April 2003. In June 2004, the Council revised binding arbitration, sideboards, and program review elements.

The Council, AP, and SSC accepted public testimony, written and oral, at each of these meetings. The public comments received and the issues discussed during these meetings are part of the scope of the EIS and are included under relevant issues below. The complete body of public comment on crab rationalization received by the Council is available in the administrative record.

The Council analyzed the suite of alternatives, elements, and options developed in this public process in the document *Bering Sea Crab Rationalization Program Alternatives Analysis*. Public comment presented at the Council meetings was also incorporated into this analysis. This analysis was first presented to the Council as a white paper in June 2001. In December 2001, a draft analysis was presented to the Council, AP, and SSC. The Council requested staff to analyze additional elements and options and to provide additional analysis. In February 2002, the Council, AP, and SSC reviewed a revised draft analysis, and again recommended revisions to the document and inclusion of additional analysis. In April 2002, the Council reviewed the document again and released the document for public review. The public review draft was distributed to interested members of the public in May 2002 (NPFMC 2002). In June 2002, the Council accepted public testimony on the analysis and on the rationalization program alternatives. At this meeting, the Council chose its preferred program alternative from the extensive range of elements and options contained in this analysis.

The Council incorporated the preferred program alternative and revised the *Bering Sea Crab Rationalization Program Alternatives Analysis* for its *Summary of the North Pacific Fisheries Management Council BSAI Crab Rationalization Program Submitted to the U.S. Congress*, August 5, 2002 (NPFMC 2002). The updated version of this report to Congress is included as Appendix 2.

In June 2002, the Council recognized that some program elements required further development and analysis before the Council could choose its preferred option. These program elements were: binding arbitration, community protection, Captain's quota shares, and sideboards. The Council established committees for each

of these issues. Over the next four Council meetings, the Council continued developing, analyzing and accepting public testimony on these rationalization program elements. The Council heard committee reports and was presented with staff analysis on these issues. In October 2002, the elements and options under consideration for these trailing amendments were analyzed in the document *BSAI Crab Rationalization Program Trailing Amendments: Community Protection, Binding Arbitration, Captain's Quota Shares, Sideboards*. In December 2002, the Council further refined its analysis of the trailing amendments. The document *BSAI Crab Rationalization Program Trailing Amendments: Additional Provisions: Captain's Quota Shares, Sideboards* was prepared by Council staff and presented to the Council and public at that meeting. In January 2003, the Council continued to work on the community protection, data collection, and binding arbitration and committee reports and the analysis *BSAI Crab Rationalization Program Trailing Amendments: Community Protection, Binding Arbitration, Data Collection* (NPFMC 2003) were presented to the Council. In April 2003, the Council continued to develop the community protection and binding arbitration elements. The Council forwarded to Congress an update of the BSAI crab rationalization report, May 6, 2003, which includes the Council preferred actions for the trailing amendments (NPFMC 2003), and is included in Appendix 2.

All of these Council reports are incorporated into the Regulatory Impact Review/Initial Regulatory Flexibility Analysis (RIR/IRFA) prepared for this action and included as Appendix 1<sup>4</sup>.

During the period from February 2002 to January 2003, the Council was also presented with materials related to the EIS. These documents were distributed to the Council and available to the public at the Council meetings and on the NOAA Fisheries web page. The Council heard public testimony on the EIS at each of these meetings. In February 2002, NOAA Fisheries presented to the Council the draft scoping report, as discussed above (NMFS 2002e). In April 2002, NOAA Fisheries presented preliminary materials for the Council for consideration in determining the scope of the EIS, selecting a range of alternatives for the EIS, and identifying relevant issues (NMFS 2002f). In June 2002, NOAA presented a revised version of these materials to the Council (NMFS 2002g). The Council chose its preferred rationalization program in June 2002. In December 2002, based on analysis and public testimony, the Council chose the additional two rationalization program alternatives for inclusion in the EIS. In January 2003, NOAA Fisheries presented, and the Council concurred, the alternatives framework for structuring the EIS. All of these documents are posted on the NOAA Fisheries Alaska Region web page at <http://www.fakr.noaa.gov>.

The Preliminary draft EIS for Council review was published November 2003 and distributed to the Council family and posted on the NMFS Alaska Region and Council web pages. The Council, SSC, and AP reviewed this document at the February 2004 meeting. The Council recommended releasing the draft EIS for public review, along with some revisions to the analysis. The Draft EIS was filed with the Environmental Protection Agency and released for public review on March 19, 2004. The 45-day public comment period closed on May 3, 2004. NOAA Fisheries received 16 letters of public comment. The Comment Analysis Report (CAR), in Chapter 8 of this EIS, provides the public comments received during the comment period and presents the agency's response to the public comments. Changes to the EIS from draft to final as a result of public comment are noted Chapter 8.

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<sup>4</sup>The structure of the analysis and the alternatives analyzed in the RIR/IRFA differ from those of the EIS because the RIR/IRFA analysis was used to narrow the option and elements for the alternatives in the EIS analysis.

Significant issues were also raised during a trip Council and NOAA Fisheries staff took to Dutch Harbor/Unalaska and Akutan in October 2001. The purpose of the trip was to meet with members of industry, harvesters (vessel owners, skippers, and crew) and processors (shore-based and catcher/processors), and ADF&G staff to listen to their positions on various issues surrounding crab rationalization. In addition, staff observed the landing and processing of red king crab from Bristol Bay.

## **1.5 Cooperating agencies and tribal governments**

The CEQ regulations for implementing the procedural provisions of NEPA emphasize agency cooperation early in the NEPA process. NOAA Fisheries is the lead agency for this EIS. ADF&G and the U.S. Coast Guard are cooperating agencies. Each agency agreed to participate in the development of this EIS and provide data, staff, and review for this analysis. ADF&G had an integral role in developing this EIS. ADF&G prepared sections of this EIS because they are co-managers of the BSAI crab resources and conduct the day-to-day management of the crab fisheries. The U.S. Coast Guard has expertise with enforcement, search and rescue, vessel accidents and incidents at sea, human safety at sea, and has contributed to sections of this EIS.

On November 1, 2001, NOAA Fisheries mailed a letter to 113 Alaska tribal governments, providing information about the EIS and soliciting consultation and coordination with interested tribal governments. To date, no requests for meetings and no correspondence has been received from any of the tribal governments. On March 4, 2004, NOAA Fisheries mailed a subsequent letter to Alaska tribal governments announcing the release of the draft EIS, providing information on how they can obtain a copy, and requesting comment on the draft EIS.

## **1.6 Issues to be addressed in this EIS**

This section defines and summarizes the relevant issues raised during scoping and the Council process. The Council's *BSAI Crab Rationalization Problem Statement* identified five problem areas including; 1) resource conservation, utilization and management problems; 2) bycatch and its associated mortalities, and potential landing deadloss; 3) excess harvesting and processing capacity, as well as low economic returns; 4) lack of economic stability for harvesters, processors and coastal communities; and 5) high levels of occupational loss of life and injury.

From this problem statement, public comments, and expertise from NOAA Fisheries, Council, and ADF&G staff, issues that are relevant to the decision on rationalizing the BSAI crab fisheries were identified. These issues are divided between environmental effects and economic and socio-economic effects.

### **1.6.1 Environmental effects**

These following effects will be analyzed in depth in this EIS, as required by the CEQ regulations (1501.7[2]).

- Crab mortality
- Reproductive success
- Benthic species mortality
- Species diversity in benthic community
- Habitat impacts

- Ecosystem effects
- Endangered Species Act (ESA) species and their critical habitat impacts

Relevant issues were identified for each of these effects. Indicators for each issue have been identified. Indicators are used as analytical tools for measuring significance and comparing the effects of each alternative on the relevant issues. These indicators gauge the potential impacts of the alternatives, including status quo, on the issues. From the analysis, determinations will be made about the extent to which each alternative results in an increase or decrease in each indicator. Indicators can be mitigated by management measures incorporated into the preferred alternative or by changes to State management measures.

### ***Crab mortality***

Relevant issues associated with crab mortality:

- fishery sources of legal male mortality;
- fishery sources of female and sublegal crab mortality;
- stock rebuilding;
- fishery sources of non-target crab mortality; and
- harvest methods.

Analysis of these issues provides a complete picture of all sources of crab mortality and an understanding of the effects of the alternatives on crab stock abundance.

**Fishery sources of legal male crab mortality:** Harvest strategies have been developed for the crab fisheries that set the harvest levels to for the removal of legal-sized male crabs. These harvest strategies set harvest levels that maintain healthy stock abundance by incorporating the best available scientific information. The goal of crab fisheries management is to allow a harvest rate that maintains stock abundance at the level necessary to produce the maximum sustainable yield (MSY). This is a challenge for crab stocks because crab stocks experience natural cyclical levels of abundance. NOAA Fisheries annually assesses crab abundance with an annual trawl survey for the stocks under consideration for the rationalization programs, except for Aleutian Islands red king crab and Aleutian Islands brown king crab, which are periodically assessed by ADF&G.

*Harvest above the guideline harvest level (GHL):* Potential effects of the different alternatives will be estimated based on the extent to which the harvest amount exceeds the harvest level. Harvests that exceed the GHL are difficult to prevent in the derby-style fisheries. Even with good in-season assessment and catch reporting, catches can change rapidly and a large efficient fleet can quickly surpass a harvest target when they locate high concentrations of crab. When stocks are low, management difficulties increase and actual harvest often exceeds the pre-season harvest limit.

*Highgrading:* Potential effects of the different alternatives will be estimated based on the extent the fishery practices highgrading. Highgrading is sorting through the legal crab for the largest, cleanest crab, and discarding the remaining legal crab to ensure that only the highest-priced portion of the catch is landed. Some of this discarded crab dies. This leads to additional fishing mortality of legal males in excess of the harvest level. Highgrading is an environmental concern because it may alter the composition of the stock by removing only the largest male crab. These crab are also thought to be the most successful at mating.

*Deadloss:* Potential effects of the different alternatives will be estimated based on the amount of deadloss. Deadloss is dead crab landed at the dock. Deadloss is a direct result of the amount of time a crab spends in the boat. Deadloss can be increased by having diseased or dead crab in the tank with live crab. If the deadloss is accounted for when crab is landed, then deadloss is not a biological problem because these are crab accounted for in the GHL. If deadloss is discarded at-sea, then it negatively effects crab abundance because this mortality is not accounted for.

**Fishery sources of female and sublegal male crab mortality:** The main source of female and sublegal male crab mortality is bycatch in the crab fisheries. All bycatch is discarded. Managers estimate that up to 25 percent of discarded crab die from handling. This is a precautionary estimate used for calculating total removals by the fishery, and includes unobserved mortality.

*Bycatch:* Potential effects of the different alternatives will be estimated based on the amount of female and sublegal male crab bycatch in the crab fisheries.

**Stock rebuilding:** Rebuilding plans for the overfished crab stocks implement conservative harvest strategies that promote stock rebuilding. Rebuilding plans close fisheries when the stocks decline below a threshold abundance level. The term overfished is used to define stocks at low levels of abundance, regardless of the causes of the low abundance. Currently, many crab stocks are in periods of low abundance and NOAA Fisheries has declared four stocks overfished.

*Abundance of overfished stocks:* The analysis will examine the extent the alternatives promote management under the rebuilding plan by reducing crab mortality.

**Fishery sources of non-target crab mortality:** The crab fisheries catch and discard crab species not targeted by the fishery. A portion of this bycatch dies from handling mortality.

*Bycatch of non-target crabs:* Potential effects of the different alternatives will be estimated based on the amount of bycatch of non-target crab species in the crab fisheries.

**Harvest methods:** The methods of harvest include when the harvest occurs, the fishing effort, and how the crabs are handled. Harvest methods also include the extent to which fishermen comply with regulations. Harvest methods impact the crab resources by causing mortality of legal male crabs in excess of the harvest level, and causing mortality of female and sublegal crabs of the target species and non-target crabs.

*Handling of crab:* Potential effects of the different alternatives will be estimated based on the rate of handling mortality, which is the rate that captured crabs die. Handling mortality depends on when the crab are harvested and how the crabs are handled on deck. The time of year when crab are harvested effects the crab survival rate. Evidence indicates that crabs captured in extremely cold and windy weather suffer higher rates of handling mortality. Crab captured when they are soft-shelled suffer a higher mortality than hard-shelled crabs. Also, capturing crabs during mating disrupts mating and can negatively effect reproduction. Fishing during these biologically sensitive periods can negatively effect crab abundance.

Season length and the pace of the fisheries influences handling mortality. With short seasons, crab are harvested very quickly and no time is afforded to carefully handling crabs. Longer fishing seasons slow down the pace of the fisheries and allow the fishermen to improve fishing methods,



such as gear operation and sorting on deck. Also, with more time, fishermen would be able to improve handling methods and reduce the mortality of all crabs brought on deck.

*Harvest effort:* Harvest effort is the amount of vessels and gear deployed to catch the harvest limit. Harvest effort above the amount required to catch the harvest limit results in crab harvests above the limits, increased bycatch, and increased habitat impacts. Excessive harvest capacity also causes wasteful fishing practices and results in the fleet deploying more pots than could be retrieved during a short fishing season, which results in lost pots. Potential biological effects of the different alternatives will be estimated based on the amount of harvest effort in relation to the harvest level.

*Manageability of fisheries:* Potential effects of the different alternatives will be estimated based on the manageability of the fishery and the extent of monitoring. Because the goal of most management measures is conservation, the increased ability of managers to ensure compliance with harvest limits and other regulations has stock conservation benefits. Monitoring provides information to managers on the amount of catch and bycatch, and the location of harvest. This information is vital for setting the harvest levels and measuring the effectiveness of bycatch reduction measures. Data collection is important for establishing the scientific foundation on which the fishery is managed. Improved manageability of the fisheries will have positive effects on stock abundance.

### ***Reproductive success***

The reproductive success of crab stocks determines the abundance levels. Reproductive success is due to a combination of many factors, many of which are not fully understood by scientists. Fishing pressure can influence a stock's reproductive success. The indicators for this issue are three ways that fisheries may impact a stock's reproductive success.

*Change in ratio of males to females:* Potential effects of the different alternatives will be estimated based on the extent the fishery causes changes to the ratio of males to females.

*Decrease in the size of male crabs:* Potential effects of the different alternatives will be estimated based on the extent the fishery causes a decrease in the size of male crabs.

*Genetic diversity:* Potential effects of the alternatives will be estimated based on the extent the fishery removes segments of a population impact a stock's genetic diversity by reducing the population size and/or removing segments of a population.

### ***Benthic species mortality***

Crab fisheries cause mortality of benthic species through bycatch (observed mortality) and from interactions with pot gear on the bottom (unobserved mortality).

**Bycatch of benthic species (not crab):** The crab fisheries catch a small amount of other species as bycatch. These species include octopus, Pacific cod, Pacific halibut, and other flat fish. All bycatch is discarded. Typically, low levels of bycatch of these species do not impact their abundance.

*Bycatch of other species in crab fishery:* Potential effects of the different alternatives will be estimated based on the amount of bycatch of other species. Increased observer coverage would result in better estimates of bycatch of other species.

**Unobserved mortality of benthic species:** Pot gear potentially causes benthic species mortality when the pots settle to the bottom and when they are hauled back to the surface. Lost pots also impact benthic species by continuing to capture and kill them, which is known as ghost fishing.

*Mortality during pot deployment and recoveries:* Potential effects of the different alternatives will be estimated based on the extent of mortality during pot deployment and recoveries.

*Ghost Fishing:* Potential effects of the different alternatives will be estimated based on the extent of ghost fishing.

### ***Habitat impacts***

The crab fisheries may impact benthic habitat through the setting and retrieval of pots. Most likely the extent of habitat impacts depends on the type of bottom habitat.

*Area and habitat type impacted:* Potential effects of the different alternatives will be estimated based on the total area impacted by pot gear and the extent pot gear impacts different habitat types.

### ***Ecosystem effects***

The crab fisheries are analyzed with respect to various ecosystem-level measures that might indicate the impacts of the alternatives from a broader ecological viewpoint.

*Predator/prey relationships:* Potential effects of the different alternatives will be estimated based on the amount of crab biomass removed from the system and crab predator/prey relationships.

*Energy flow and balance:* Potential effects of the different alternatives will be estimated based on the potential for altering the amount and flow of energy in an ecosystem by removing energy and altering energetic pathways through the return of discards and fish processing offal back into the sea.

*Biological diversity:* Potential effects of the different alternatives will be estimated based on the potential for removing species from the system.

### ***Fishery impacts on ESA species and their critical habitat***

Fisheries can effect ESA listed species of marine mammals and seabirds and their critical habitat. This analysis will look at the effects of the crab fisheries and their alternatives on ESA listed species and their critical habitat.

*Direct take, disturbance, and competition:* Potential effects of the different alternatives will be estimated based on the extent of direct take of listed marine mammals and seabirds, disturbance

of listed marine mammals and seabirds by fishing vessels, and competition between the fisheries and listed marine mammals and seabirds for food.

*Critical habitat modification:* Potential effects of the different alternatives will be estimated based on the extent modification of habitat causes a decrease in species survival or reproductive success.

### **1.6.2 Economic and socio-economic effects**

These following effects will be analyzed in depth in this EIS, as required by the CEQ regulations (1501.7[2]).

- Efficiency in harvesting
- Excess capacity in the crab harvesting sector
- Efficiency in processing
- Excess capacity in the processing sector
- Production efficiency (harvesting and processing)
- Consumer benefits
- Excessive shares
- Spillover effects on the harvest sector of other fisheries
- Entry to the fisheries
- Skipper/crew interests
- Community interests
- Safety

Relevant issues were identified for each of these effects. Indicators for each issue have been identified. Indicators are used as analytical tools for measuring significance and comparing the effects of each alternative on the relevant issues. These indicators gauge the potential impacts of the alternatives, including status quo, on the issues. From the analysis, determinations will be made about the extent to which each alternative results in an increase or decrease in each indicator. Indicators can be mitigated by management measures incorporated into the preferred alternative or by changes to State management measures.

#### ***Efficiency in harvesting***

Management of a fishery can affect the efficiency of the harvesting and processing sectors. If management creates incentives for participants to race for fish, efficiency in the harvesting sector can be compromised. If the incentives created by management promote cost minimizing production, benefits can be realized by both participants and consumers. The shift to a rationalized fishery could change efficiency in the crab fisheries.

*Harvest revenues and costs:* Harvest efficiency will be reflected in the difference between revenues and costs of the sector.<sup>5</sup>

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<sup>5</sup> Revenues are payments for goods sold. Costs are the sum of all amounts expended in production.

### ***Excess capacity in the crab harvesting sector***

Excess capacity in the harvesting sector occurs if the harvest capacity of vessels participating in the crab fisheries exceeds the amount of crab available to harvest. Crab abundance is cyclical and fishing effort in the crab fisheries has increased during times of high abundance. This level of fishing capacity is retained during periods of low abundance. Derby-style fisheries also encourage excess harvest capacity as fishermen increase fishing capacity to increase rates of harvests. The very short seasons in recent years suggest that the current fleet has substantial excess capacity. Additionally, public discussion of management structure change, such as rationalization, often create speculative incentives that may actually worsen economic and operational conditions in a fishery, at least in the short run. This occurs when vessels that would normally have left the fishery for economic reasons, are induced to remain active because of the potential to receive harvest privileges in a future rationalization program.

*Harvest capacity relative to stocks:* The analysis will examine potential changes in harvesting capacity under the different alternatives.

### ***Efficiency in processing***

In the current fishery, harvesters deliver their catch over a short period at the end of each season. With the abbreviated period of deliveries, processors may sacrifice efficiency to increase market share and avoid deadloss. Rationalization of the crab fisheries could extend the season enabling processors to reduce processing costs to realize gains in efficiency.

*Processing revenues and costs:* The analysis will examine the potential changes in processing revenues and costs to assess processor efficiency under the different alternatives.

### ***Excess capacity in the processing sector***

Excess capacity in the processing sector occurs if processing capacity dedicated to crab exceeds the amount of crab available to process. The current crab processing capacity is designed to process crab quickly to avoid deadloss and secure market share. A program that rationalizes the harvesting sector would spread deliveries to processors over a longer time period. Processors could then have excess processing capacity. The rationalization of the fishery could result in a reduction of processing capital utilized in the crab fisheries.

*Processing capacity relative to harvests:* The analysis will examine potential changes in processing capacity under the different alternatives.

### ***Production Efficiency (harvesting and processing)***

Slowing of the race for fish could allow for improvements in efficiency in both the harvesting and processing sectors. Input costs could be reduced. Product recovery and quality could improve and product developments could be facilitated.

*Harvesting efficiency and processing efficiency:* Overall efficiency in production is the sum of the efficiency in the harvesting and processing sectors.

### ***Consumer benefits***

Currently, crab is processed primarily at the end of the each season. The majority of the product is processed into frozen crab sections. Lengthening the seasons could provide processors with more time to process crab. With added time processors might be able to improve product quality and develop other products. Processors may also be able to provide live crab to the market over a longer period.<sup>6</sup>

*Changes in products, product quality, and product prices:* The analysis will examine potential product changes and improvements (including quality improvements) and possible changes in consumer prices under the different alternatives.

### ***Excessive shares***

Excessive share concerns in a fishery arise when interests are consolidated to the extent that persons can influence the market for outputs, influence labor markets, influence opportunities for entry, or capture a disproportionate share of the benefits of a fishery. Management structures can influence excessive shares by limiting entry or by prohibiting or permitting the consolidation of interests by a relatively few number of participants. Limits on excessive shares are typically intended to prevent excessive consolidation and vertical integration. The Magnuson-Stevens Act states that any new IFQ program shall prevent any person from acquiring an excessive share of the quotas issued (§ 303[d][5][C]).

*Concentration of shares in the fishery:* The analysis will examine the extent to which the different alternatives are likely to result in a concentration of interests in the fisheries.

### ***Spillover effects on the harvest sector of other fisheries***

If license holders are allocated shares for a portion of the crab harvest, this may alter fishing patterns, permitting these future share holders to increase participation in other fisheries, such as Pacific cod or crab in State waters. In addition, revenues generated in the BSAI crab fisheries could impact the ability of share holders in the BSAI crab fisheries to increase their participation in these other fisheries. Spillover effects could be mitigated by sideboard measures.

*Participation levels of BSAI crab fishermen in other fisheries:* The analysis will examine the participation levels of BSAI crab share holders in other fisheries and the potential for these activities to change under the alternatives.

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<sup>6</sup> Economic efficiency is the broadest measure of economic benefits. The net benefits estimate of the Regulatory Impact Review provides a qualitative estimate of economic efficiency benefits of the alternatives. Economic efficiency is the sum of consumer benefits, as estimated by consumer surplus, and producer benefits, as estimated by producer surplus. Consumer surplus is the difference between the sum of consumer willingness to pay for a good and the total amount paid for that good. Producer surplus is the difference between the sum of producer willingness to accept payment for a good and the total amount accepted for the good. Producer surplus is estimated by production efficiency.

### ***Entry to the fisheries***

Entry into the harvesting and processing sectors can be affected by fishery management. The current management program limits entry to those who meet certain participation criteria. Programs that allocate shares in a fishery can either create entry opportunities or limit opportunities based on several factors.

*Entry opportunities:* The analysis will examine the opportunities for entry under the alternatives. Both the harvesting and processing sectors will be examined.

### ***Skipper/crew interests***

Changes in management can affect the interests of skippers and crew in a fishery. If a management change results in a decline in the number of vessels participating in a fishery, skippers and crew could lose jobs. Skipper and crew shares, which are the percentage of the vessel earnings paid to skippers and crew, can be affected by management. A quota system that allocates quota to vessel owners only, without any provisions to allocate shares to skippers or crew or otherwise protect their interests could result in an erosion of those interests.

*Assessment of skipper and crew protections:* The protection of skipper and crew interests under the alternatives will be examined.

### ***Community interests***

Many communities are home to crab processors and harvesting vessels. With a change in management, (and consequent consolidation) decreases in the numbers of vessels and processing facilities in the crab fisheries may follow. Communities are concerned that, under rationalization, processors may leave the local area. In addition, communities could be affected by changes in the regional distribution of landings. On the other hand, a rationalization program could provide economic stability to communities that are home to the remaining vessels and processors. Public comment recommends that a rationalization program promote healthy community fishing economies, maintain diverse independent fishing fleets, and recognize historic regional fishing and processing patterns.

*Assessment of community interests:* The protection of community interests under the alternatives will be examined.

### ***Safety***

Safety is an important concern for the BSAI crab fisheries. The fisheries occur primarily in the winter when weather conditions are most dangerous. Crab vessels haul and transport pot gear, which tends to be more dangerous than other gear types. Between 1990 and 2001, 61 fatalities occurred and 25 vessels were lost in the BSAI crab fisheries. Management programs can create incentives for fishermen to risk vessels and lives. In the current fisheries, participants can maximize catch by fishing at all times when the season is open. Changes in management to a rationalized fishery could reduce incentives to fish and take risks in dangerous weather. Processors in the current fisheries are subject to similar time pressures as harvesters. The slowing of the race for fish could also provide an opportunity for improved safety at processing facilities.

*Management incentives to take safety risks:* The analysis will examine the incentives for risking participant's safety under the different alternatives.

## **1.7 Related NEPA documents**

This EIS is a stand-alone NEPA document that does not tier off any previous EISs because this will be the first EIS prepared for the BSAI Crab FMP. An EA/RIR was prepared for the current FMP in 1988. EAs have been prepared for each of the subsequent 17 amendments to the FMP, including revising the FMP in 1998. These EAs will be incorporated into the EIS to fully explain status quo and to analyze the cumulative effects of status quo on the human environment. Complete descriptions of these EA's are in Section 3.4.2, History of the crab FMP.

This EIS incorporates by reference information from other EISs produced by the NOAA Fisheries Alaska Region, where applicable. The Alaska Groundfish Fisheries Final Programmatic Supplemental EIS, June 2004, provides a detailed discussion of the BSAI physical environment and ecosystem; life history, habitat, and stock status of groundfish species; seabird life history, population biology, and foraging ecology; and marine mammal life history, population biology, and foraging ecology. Sections from that EIS are summarized and incorporated by reference into Chapter 3, Affected Environment. The Steller Sea Lion Protection Measures Supplemental EIS, November 2001, was used as a guide for developing the analytical method used in this EIS. The DEIS for Essential Fish Habitat Identification and Conservation in Alaska, January 2004, provided habitat information and analysis of the effects of the crab fisheries on habitat. Additionally, the Final EIS for AFA Amendments 61/61/13/8, February 2002, was used as a guide for developing issues and analysis for alternative rationalization programs.

## **1.8 Relationship of this action to federal law**

While NEPA is the primary law directing the preparation of this EIS, a variety of other federal laws and policies require environmental, economic, and socio-economic analysis of proposed federal actions. This EIS contains the required analysis of the proposed federal action to ensure that the action complies with the following applicable federal laws and executive orders (EO):

- Magnuson-Stevens Fisheries Conservation and Management Act
- Sustainable Fisheries Act of 1996
- Magnuson-Stevens Act section 313(j)
- Consolidated Appropriations Act of 2001 (Pub. L. No. 106-554)
- Endangered Species Act
- Marine Mammal Protection Act
- Coastal Zone Management Act
- Administrative Procedure Act
- Regulatory Flexibility Act
- Paperwork Reduction Act of 1995
- Executive Order 12866: Regulatory Planning and Review
- Executive Order 13175: Consultation and Coordination with Indian Tribal Governments
- Executive Order 12898: Environmental Justice
- Executive Order 13132: Federalism
- American Fisheries Act

- 1934 Fishermen’s Cooperative Act
- Anti-trust Laws
- Data Quality Act
- Executive Order 12630: Taking
- Executive Order 13158: Marine Protected Areas

***Magnuson-Stevens Fishery Conservation and Management Act***

In 1976, Congress passed into law what is currently known as the Magnuson-Stevens Act (16 U.S.C. 1801, *et seq.*). This law authorized the U.S. to manage its fishery resources in an area extending from a State’s territorial sea (extending in general and in Alaska to 3 nm from shore) to 200 nm (4.8 to 320 km) off its coast (termed the EEZ). The management of these marine resources is vested in the Secretary and in regional Fishery Management Councils. In the Alaska region, the Council is responsible for preparing FMPs for marine fishery resources requiring conservation and management. NOAA and NOAA Fisheries are charged with carrying out the federal mandates with regard to marine fish. The NOAA Fisheries Alaska Regional Office and Alaska Fisheries Science Center (AFSC) research, draft, and review the management actions recommended by the Council.

The Magnuson-Stevens Act established the required and discretionary provisions of an FMP and created ten national standards to ensure that any FMP or FMP amendment is consistent with the Magnuson-Stevens Act. Each FMP contains a suite of additional management tools that together characterize the fishery management regime. These management tools are either a framework type measure, thereby allowing for annual or periodic adjustment using a streamlined notice process, or are conventional measures that are fixed in the FMP and its implementing regulations and require a formal plan or regulatory amendment to change. Amendments to the FMP or its regulations are considered by the Fishery Management Council, with proposed amendments submitted by both the resource agencies and the public. As a result, the FMPs are dynamic and are continuously changing as new information or problems arise.

The Council prepared and the Secretary approved the *Fishery Management Plan for the Bering Sea Aleutian Islands King and Tanner Crabs* in 1989. This FMP is consistent with the provisions set out in the Magnuson-Stevens Act and contains the required FMP elements.

***Sustainable Fisheries Act of 1996***

The Sustainable Fisheries Act (SFA) (Pub. L. 104-297), enacted by Congress on October 11, 1996, re-authorized and made significant amendments to the Magnuson Fishery Conservation and Management Act of 1976 (renamed the Magnuson-Stevens Fishery Conservation and Management Act). While the original focus of the Magnuson-Stevens Act was to Americanize the fisheries off the coasts of the U.S., the SFA included provisions aimed at the development of sustainable fishing practices in order to guarantee a continued abundance of fish and continued opportunities for the U.S. fishing industry. The SFA included provisions to prevent overfishing, ensure the rebuilding of overfished stocks, minimize bycatch, and address impacts on fish habitat. The SFA also placed a four-year moratorium (until October 1, 2000) on the implementation of new IFQ programs and commissioned a comprehensive study of IFQ programs by the National Academy of Sciences (NAS). The Consolidated Appropriations Act of 2001 (Pub. L. 106-554) extended the moratorium on new IFQ programs until October 1, 2002. Finally, the SFA codified the Alaskan CDQ program already adopted by the Council, but also commissioned a NAS study of the CDQ program.



To address the concerns raised with respect to IFQs, the SFA 1) established a moratorium on new IFQ programs until October 1, 2000; 2) clarified certain rights associated with IFQs; 3) commissioned a comprehensive study of IFQs by the NAS; and 4) required, after October 1, 2000, that Fishery Management Councils and the Secretary consider the NAS study and recommendations for any new IFQ programs. These provisions of the SFA are briefly summarized below.

**Moratorium on new IFQ programs until October 1, 2000.** The moratorium on new IFQ programs came about largely because of the early success but high degree of controversy surrounding the three IFQ programs that had been implemented in the U.S., particularly the North Pacific halibut-sablefish IFQ program that went into effect in 1995. Because of their potential to address many of the problems associated with the race for fish, including overcapacity, high bycatch rates and safety, IFQ programs were recognized as promising fishery management tools that should be available to Fishery Management Councils for their consideration. On the other hand, IFQ programs raised concerns regarding potential negative and unknown effects. For example, concerns were raised regarding the new level of capital required for entry, whether fisheries would become investor owned under IFQs, the impact of IFQs on fishing communities, and potential foreign control of IFQs and the fisheries themselves.

**Clarifications on individual fishing quotas.** The SFA clarified that IFQs 1) shall be considered permits; 2) may be revoked or limited at any time in accordance with procedures under the Magnuson-Stevens Act; 3) shall not confer the right of compensation to the holder if revoked or limited; and 4) shall not create a private property right to the fish before the fish are harvested.

**National Academy of Sciences study on individual fishing quota programs.** The study on IFQs was intended to provide Congress with the guidance needed to assess IFQs as a fishery management tool and, if necessary, allow Congress to develop a broadly supported national policy on IFQs. The SFA directed the NAS to consider many of the unresolved issues regarding IFQs, including transferability, duration, processor quotas, conservation impacts, fishery characteristics, and potential social and economic costs and benefits to the U.S. and to participants in the fishery. The SFA also directed NAS to study mechanisms to prevent foreign control of U.S. fishery resources and mechanisms to ensure that vessel owners, vessel operators, crew members, and U.S. fish processors are treated fairly and equitably in initial allocations. The NAS, through its National Research Council (NRC), published a book of the results of its study entitled “Sharing the Fish: Toward a National Policy on Individual Fishing Quotas” (National Research Council 1999).

**Requirements for new individual fishing quota programs.** The SFA required, after the moratorium on new IFQ programs expired, that Fishery Management Councils and the Secretary consider the NAS report on IFQs and the report’s recommendations for any new IFQ programs. The SFA also required the Fishery Management Councils and Secretary to ensure that any new IFQ program:

(A) establishes procedures and requirements for the review and revision of the terms of any such program (including any revisions that may be necessary once a national policy with respect to IFQ programs is implemented), and, if appropriate, for the renewal, reallocation, or re-issuance of IFQs;

(B) provides for the effective enforcement and management of any such program, including adequate observer coverage, and for fees under Section 304(d)(2) to recover actual costs directly related to such enforcement and management; and

(C) provides for a fair and equitable initial allocation of IFQs, prevents any person from acquiring an excessive share of the IFQs issued, and considers the allocation of a portion of the annual harvest in the fishery for entry-level fishermen, small vessel owners, and crew members who do not hold or qualify for IFQs.

Finally, the SFA included several provisions with respect to CDQ programs. First, it amended the Magnuson-Stevens Act to include the western Alaska CDQ program, which the Council had already recommended and the Secretary approved. The amendment authorized the Council and the Secretary to “*establish a western Alaska CDQ program under which a percentage of the TAC of any Bering Sea fishery is allocated to the program.*” Second, the SFA authorized the Western Pacific Council to establish a CDQ program for any fishery under its jurisdiction in order to provide access to such fishery for western Pacific communities. Third, the SFA commissioned a NAS study of the CDQ program to investigate the implications of the program for the Native Alaskan communities and fishery participants.

The amendment that established the western Alaska CDQ program included a provision to phase in the CDQ allocation percentage for the Bering Sea crab fisheries as follows: 3.5 percent for 1998, 5 percent for 1999 and 7.5 percent for 2000 and thereafter, unless the Council submits and the Secretary approves any other percentage on or after October 1, 2001. The phase-in of the CDQ crab allocation was included because of the declining resource abundance in many of the Bering sea crab fisheries and the associated strain on participants.

**Essential fish habitat.** The SFA emphasizes the need to protect fish habitat. Under the law, regional Fishery Management Councils prepared amendments identifying essential fish habitat (EFH) as areas necessary to manage fish species for their basic life functions. The EFH provisions of the Magnuson-Stevens Act require NOAA Fisheries to provide recommendations to federal and state agencies for conserving and enhancing EFH, for any actions that may adversely impact EFH.

The action under examination in this EIS is the existing FMP management regime and alternative management regimes that rationalize the fisheries. In line with NOAA Fisheries policy of blending EFH assessments into existing environmental reviews, NOAA Fisheries intends the NEPA analysis contained in this EIS to double as an EFH assessment.

In terms of these requirements, Chapter 1 of this EIS includes a description of the proposed action. Chapter 3 includes a description of the environment in which the NOAA Fisheries crab fisheries occur (Sections 3.1 and 3.2), a description of the life cycles and stock status of managed species (Section 3.2), and an analysis of the impacts of fishing gear impacts on that environment (Section 4.2). NOAA Fisheries analysis of the effects of the BSAI crab fisheries on essential fish habitat are contained in Section 4.4.

The area affected by the proposed action has been identified as EFH for all of the FMP managed species in the BSAI. EFH for these species is described and identified in four FMP amendments which were approved January 20, 1999. These are: Amendment 55 to the FMP for the Groundfish Fishery of the Bering Sea and Aleutian Islands Area; Amendment 8 to the FMP for Bering Sea and Aleutian Islands King and Tanner Crabs; Amendment 5 to the FMP for Scallop Fisheries off Alaska; and Amendment 5 to the FMP for the Salmon Fisheries in the Exclusive Economic Zone off the Coast of Alaska. NOAA Fisheries developed an EFH EIS to analyze alternative definitions for EFH for all of the Federally managed species off Alaska and analyze alternative measures to mitigate the effects of the fisheries on EFH (NMFS 2003a).

### ***Magnuson-Stevens Act Section 313(j)***

The Consolidated Appropriations Act, 2004 (Public Law No.108-199) was signed into law by the president on January 23, 2004. This act and its conference report, and the floor statement of Senator Stevens are in Appendix 2 of this EIS. Title VIII, Section 801 of the Act amends Section 313 of the MSA to include a new subsection (j) establishing a Voluntary Three-pie Cooperative Program (Program) for crab fisheries of the Bering Sea and Aleutian Islands. Since the preferred alternative is that Program, as modified by the Council in June 2004, the preferred alternative complies with the requirements of the Act. Below is a brief description of the requirements contained in each provision of MSA Section 313(j):

- MSA Section 313(j)(1) requires that by no later than January 1, 2005 the Secretary shall approve and thereafter implement by regulation the Program approved by the NPFMC between June 2002 and April 2003, and all trailing amendments including those reported to Congress on May 6, 2003. This section does not preclude the Secretary from approving by January 1, 2005, and implementing any subsequent program amendments approved by the Council.
- MSA Section 313(j)(2) requires that the Secretary approve all parts of the Program and that no part of the program may be implemented if key provisions of the program are invalidated subject to a judicial determination. This section also establishes proscriptions against leveraging processor IPQ shares to acquire open-delivery “B shares.”
- MSA Section 313(j)(3) allows changes to, and/or the repeal of, conservation and management measures contained in the Program (in accordance with applicable law and following the usual MSA FMP amendment procedures) if after the implementation of the program the Council identifies such a need.
- MSA Section 313(j)(4) sets forth requirements for a loan Program.
- MSA Section 313(j)(5) provides funding for the Program.
- MSA Section 313(j)(6) states that nothing in the Act constitutes a waiver of antitrust laws and requires the Secretary to develop and implement a mandatory information collection and review process to provide the Department of Justice and Federal Trade Commission with the information necessary to determine if any IPQ holders have engaged in illegal anti-competitive acts. The same section also empowers the Secretary to revoke the IPQ shares held by any person found to have violated a provision of the antitrust laws.
- MSA Section 313(j)(7) establishes that IPQs shall be considered a permit for the purposes of MSA Sections 307, 308 and 309 and may be revoked or limited at any time in accordance with the Act.
- MSA Section 313(j)(8) waives the restriction on the collection of economic data in MSA Section 303 with respect to any fish processor who is eligible for, or who has received, IPQs. This section also waives the restriction on the disclosure of information in MSA Section 402(b)(1) when the information is used to determine eligibility for or compliance with an IPQ program.
- MSA Section 313(j)(9) specifically applies the civil penalties and permit sanctions provisions of MSA Sections 308, 310 and 311 to processing facilities and fish products of holders of IPQ and

applies the provisions of subparagraphs (D), (E), and (L) of MSA Section 307(1) to facilities owned or controlled by IPQ holders.

***Consolidated Appropriations Act 2001 (Pub. L. No. 106-554)***

The Consolidated Appropriations Act of 2001 (P. L. No. 106-554, as amended by P.L. No. 107-20 and 107-117) included three provisions relevant to the rationalization of the BSAI crab fisheries: (1) it established a fishing vessel buyback program for the BSAI crab fisheries; (2) it mandated the Council to analyze several options for rationalizing the Gulf of Alaska groundfish and BSAI crab fisheries under its jurisdiction; and (3) it extended the moratorium on new IFQ programs until October 1, 2002. These provisions are discussed briefly below.

**Buyback program.** Section 144 mandates a specific capacity reduction program. The statute authorized a U.S. Treasury loan for \$100 million for the buyback program. The buyback program is intended to reduce fishing capacity in the BSAI crab fisheries by buying fishing privileges of eligible vessels and permanently revoking all license limitation program (LLP) licenses, permits, and endorsements for fisheries subject to U.S. jurisdiction. Vessels removed under the program would be permanently ineligible to participate in any fishery worldwide. Finally, the owners of vessels or holders of permits for such vessels would forever relinquish any claim associated with such vessel, permits, and any catch history associated with such vessel for purposes of any present or future limited access system in the U.S.

On December 12, 2003, NOAA Fisheries published a final rule to implement a capacity reduction program for the BSAI crab fisheries, excluding the Norton Sound red king crab fishery (68 FR 69331). The objective of the program is to permanently remove harvesting capacity from the BSAI crab fisheries by permanently reducing the number of LLP licenses issued pursuant to the FMP. The action is necessary because the BSAI crab fisheries are overcapitalized. The program would, in exchange for payments: 1) prevent certain crab vessels from fishing again anywhere in the world; 2) revoke the crab LLP licenses NOAA Fisheries issues based on the vessels' fishing history; 3) revoke any NOAA Fisheries issued non-crab licenses that the vessels' owners still hold; and 4) revoke the vessels' fishing histories upon which NOAA Fisheries based the licenses to be revoked. NOAA Fisheries identified 247 vessels who are eligible for the buyback based on criteria in Section 144. The actual number of vessels that will be removed from the BSAI crab fisheries remains unknown. The enactment of the buyback program is, in part, the result of industry-led efforts to provide relief for the crab fleet.

**Analysis of rationalization options.** In addition to the vessel buyback program, the Consolidated Appropriations Act also mandated that the Council examine fisheries under its jurisdiction to determine whether rationalization is needed and directed the Council to analyze several specific options.

*The North Pacific Fishery Management Council shall examine the fisheries under its jurisdiction, particularly the Gulf of Alaska groundfish and Bering Sea crab fisheries, to determine whether rationalization is needed. In particular, the North Pacific Council shall analyze individual fishing quotas, processor quotas, cooperatives, and quotas held by communities. The analysis should include an economic analysis of the impact of all options on communities and processors as well as the fishing fleets. The North Pacific Council shall present its analysis to the appropriations and authorizing committees of the Senate and House of Representatives in a timely manner.*

The Council produced the *Report on Bering Sea Crab Rationalization Program Alternatives* (NPFMC 2002b) and the *Update on Bering Sea and Aleutian Islands Crab Rationalization Program Submitted to the U.S. Congress, April 2003* (NPFMC 2003b) to comply with this requirement. These documents are attached in Appendix 2.

### ***National Environmental Policy Act***

NEPA (42 United States Code [U.S.C.] 4331, *et seq.*) establishes our national environmental policy, provides an interdisciplinary framework for environmental planning by federal agencies, and contains action-forcing procedures to ensure that federal decision-makers take environmental factors into account. NEPA does not require that the most environmentally desirable alternative be chosen, but does require that the environmental effects of all the alternatives be analyzed equally for the benefit of decision-makers and the public.

NEPA has two principal purposes:

1. To require federal agencies to evaluate the potential environmental effects of any major planned federal action to ensure that public officials make well-informed decisions about the potential impacts.
2. To promote public awareness of potential impacts at the earliest planning stages of major federal actions by requiring federal agencies to prepare a detailed environmental evaluation for any major federal action significantly affecting the quality of the human environment.

As with the Magnuson-Stevens Act, NEPA requires an assessment of both the biological and the social and economic consequences of fisheries management alternatives and provides that members of the public have an opportunity to be involved in and to influence decision-making on federal actions. In short, NEPA ensures that environmental information is available to government officials and the public before decisions are made and actions taken.

Title II, Section 202 of NEPA (42 U.S.C. [United States Code] 4332) created the CEQ. The duties of the CEQ include, among other things, advising and assisting the President in preparing an annual environmental quality report, which is submitted to Congress. This report gathers information concerning trends in the quality of the environment, and developing policies to promote the goals of NEPA (42 U.S.C. 4344). The CEQ is also responsible for the development and oversight of regulations and procedures implementing NEPA. The CEQ regulations provide guidance for federal agencies regarding NEPA's requirements (40 Code of Federal Regulations [CFR] Part 1500) and require agencies to identify processes for issue scoping, for the consideration of alternatives, for developing evaluation procedures, for involving the public and reviewing public input, and for coordinating with other agencies—all of which are applicable to the Councils development of FMPs.

NOAA has also prepared environmental review procedures for implementing NEPA (NOAA Administrative Order 216-6). This Administrative Order describes NOAA's policies, requirements, and procedures for complying with NEPA and the implementing regulations issued by the CEQ. A 1999 revision and update to the Administrative Order includes specific guidance regarding categorical exclusions, especially as they relate to endangered species, marine mammals, fisheries, and habitat restoration. The Administrative Order also expands on guidance for consideration of cumulative impacts and "tiering" in the environmental review

of NOAA actions. This Administrative Order provides comprehensive and specific procedural guidance to NOAA Fisheries and the Council for preparing and adopting FMPs.

Federal fishery management actions subject to NEPA requirements include the approval of FMPs, FMP amendments, and regulations implementing FMPs. Such approval requires preparation of an EA. The purpose of an EA is to determine if the proposed action is a major federal action significantly affecting the environment and thereby requiring an EIS or whether the action does not significantly affect the environment, in which case a FONSI may be issued.

NEPA and the Magnuson-Stevens Act requirements for schedule, format, and public participation are compatible and allow one process to fulfill both obligations. If an EIS or Supplemental EIS (SEIS) is prepared, however, the notice of availability of a final EIS (or SEIS) must be published at least 30 days before the Secretary approves, disapproves, or partially approves an FMP or FMP amendment.

### ***Endangered Species Act***

The ESA of 1973 as amended (16 U.S.C. 1531, *et seq*), provides for the conservation of endangered and threatened species of fish, wildlife, and plants. The program is administered jointly by NOAA Fisheries and the U.S. Fish and Wildlife Service (USFWS). With some exceptions, NOAA Fisheries oversees marine mammal species, marine and anadromous fish species, and marine plant species. USFWS oversees walrus, sea otter, seabird species, and terrestrial and freshwater wildlife and plant species.

The listing of a species as threatened or endangered is based on the biological health of that species. Threatened species are those likely to become endangered in the foreseeable future (16 U.S.C. § 1532[20]). Endangered species are those in danger of becoming extinct throughout all or a significant portion of their range (16 U.S.C. § 1532[20]). Species can be listed as endangered without first being listed as threatened.

In addition to listing species under the ESA, the critical habitat of a newly listed species must be designated concurrent with its listing to the “maximum extent prudent and determinable” (16 U.S.C. § 1533[b][1][A]). The ESA defines critical habitat as those specific areas that are essential to the conservation of a listed species and that may be in need of special consideration. Federal agencies are prohibited from undertaking actions that destroy or adversely modify designated critical habitat. Some species, primarily the cetaceans (whales), which were listed in 1969 under the Endangered Species Conservation Act and carried forward as endangered under the ESA, have not received critical habitat designations.

Federal agencies have an affirmative mandate to conserve listed species (Rohlf 1989). One assurance of this is that federal actions, activities or authorizations (hereafter referred to as federal action) must be in compliance with the provisions of the ESA. Section 7 of the ESA provides a mechanism for consultation by the federal action agency with the appropriate expert agency (NOAA Fisheries or USFWS). Informal consultations, resulting in letters of concurrence, are conducted for federal actions that have no adverse effects on the listed species. The action agency can prepare a biological assessment to determine if the proposed action would adversely affect listed species or modify critical habitat. The biological assessment contains an analysis based on biological studies of the likely effects of the action on the species or habitat.

Formal consultations, resulting in biological opinions, are conducted for federal actions that may have an adverse effect on the listed species. Through the biological opinion, a determination is made about whether the proposed action poses “jeopardy” or “no jeopardy” of extinction to the listed species. If the determination

is that the action proposed (or ongoing) will cause jeopardy, reasonable and prudent alternatives may be suggested which, if implemented, would modify the action to no longer pose the jeopardy of extinction to the listed species. These reasonable and prudent alternatives must be incorporated into the federal action if it is to proceed. A biological opinion with the conclusion of no jeopardy may contain a series of management measures intended to further reduce the negative impacts to the listed species. These management alternatives are advisory to the action agency (50 CFR § 402.24[j]). If a likelihood exists of any taking<sup>7</sup> occurring during promulgation of the action, an incidental take statement may be appended to a biological opinion to provide for the amount of take that is expected to occur from normal promulgation of the action. An incidental take statement is not the equivalent of a permit to take.

### ***Marine Mammal Protection Act***

The Marine Mammal Protection Act (MMPA) of 1972 (16 U.S.C. 1361, *et seq.*), as amended, establishes a federal responsibility to conserve marine mammals with management responsibility for cetaceans and pinnipeds (seals) other than walrus vested with the U.S. Department of Commerce, NOAA Fisheries. The Department of Interior, USFWS, is responsible for all other marine mammals in Alaska including sea otter, walrus, and polar bear. Congress found that certain species and population stocks of marine mammals are or may be in danger of extinction or depletion due to human activities. Congress also declared that marine mammals are resources of great international significance, and should be protected and encouraged to develop to the greatest extent feasible commensurate with sound policies of resource management.

The primary management objective of the MMPA is to maintain the health and stability of the marine ecosystem, with a goal of obtaining an optimum sustainable population of marine mammals within the carrying capacity of the habitat. The MMPA is intended to work in concert with the provisions of the ESA. The Secretary is required to give full consideration to all factors regarding regulations applicable to the “take” of marine mammals, including the conservation, development, and utilization of fishery resources, and the economic and technological feasibility of implementing the regulations. If a fishery affects a marine mammal population, then the potential impacts of the fishery must be analyzed in the appropriate EA or EIS, and the Council or NOAA Fisheries may be requested to consider regulations to mitigate adverse impacts.

### ***Coastal Zone Management Act***

The Coastal Zone Management Act (CZMA) (16 U.S.C. 1451, *et seq.*) is designed to encourage and assist states in developing coastal management programs, to coordinate State activities, and to safeguard regional and national interests in the coastal zone. Section 307(C) (16 U.S.C. 1456[c]) of the CZMA requires that any federal activity affecting the land or water uses or natural resources of a State’s coastal zone be consistent with the State’s approved coastal management program, to the maximum extent practicable.

A proposed fishery management action that requires an FMP amendment or implementing regulations must be assessed to determine whether it directly affects the coastal zone of a State with an approved coastal zone management program. If so, NOAA Fisheries must provide the State agency having Coastal Zone Management (CZM) responsibility with a consistency determination for review at least 90 days before final action of NOAA Fisheries.

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<sup>7</sup> The term “take” under the ESA means “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct” (16 U.S.C. § 1538[a][1][B]).

### ***Administrative Procedure Act***

The Administrative Procedure Act (APA) (5 U.S.C. 553) requires federal agencies to give the public prior notice of rule making and an opportunity to comment on proposed rules. General notice of proposed rule making must be published in the *Federal Register*, unless persons subject to the rule have actual notice of the rule. Proposed rules published in the *Federal Register* must include reference to the legal authority under which the rule is proposed and explain the nature of the proposal including what action is proposed, why it is being proposed, what is its intended effect, and any relevant regulatory history that provides the public with a well-informed basis for understanding and commenting on the proposal. The APA does not specify how much time the public must be given for prior notice and opportunity to comment; however, Section 304 (b) of the Magnuson-Stevens Act provides that proposed regulations that implement an FMP or FMP amendment, or that modify existing regulations are to have a public comment period of 15 to 60 days.

Except for the emergency or interim rule provisions, a proposed rule is designed to give interested or affected persons the opportunity to submit written data, views or arguments for or against the proposed action. After the end of a comment period, the APA requires comments received to be summarized and responded to in the final rule notice. Further, the APA requires the effective date of a final rule to be no less than 30 days after publication of the final notice in the *Federal Register*. This delayed effectiveness, or “cooling off” period, is intended to allow the affected public to become aware of, and prepared to comply with the requirements of the rule. The 30-day delayed effectiveness period can be waived for a final rule only if it relieves a restriction, merely interprets an existing rule, or provides a statement of policy, or it must be made effective earlier than 30 days after publication for good cause. For fishery management regulations, the primary effect of the APA, in combination with the Magnuson-Stevens Act, NEPA, and other statutes, is to provide for public participation and input into the development of FMPs, FMP amendments, and regulations implementing FMPs.

### ***Regulatory Flexibility Act***

The Regulatory Flexibility Act (RFA) (5 U.S.C. 601, *et seq.*) of 1980, as amended by the Small Business Regulatory Enforcement Fairness Act of 1996, requires federal agencies to consider the impact of their regulatory proposals on directly regulated small entities, analyze alternatives that minimize small entity impacts, and make their analyses available for public comment. The RFA applies to a wide range of small entities, including small businesses, not-for-profit organizations, and small governmental jurisdictions.

The RFA applies to any regulatory actions for which prior notice and comment is required under the APA. Hence, emergency or interim rules that waive notice and comment are not required to have regulatory flexibility analyses. After an agency begins regulatory development and determines that the RFA applies, it must decide whether to conduct a full regulatory flexibility analysis or to certify that the proposed rule will not “have a significant economic impact on a substantial number of small entities.”

An agency must prepare an initial regulatory flexibility analysis (IRFA). The requirements of an IRFA are specified at 603(b) of the RFA; an IRFA should include information on the number and description of small entities directly regulated by the action, the impacts of the action on small entities, and a description of significant alternatives to the action that minimize significant economic impacts on the entities while accomplishing the agency objectives. Appendix 1 of this EIS contains the regulatory flexibility analysis prepared for the proposed action.



The SBA has established size criteria for all major industry sectors in the United States, including fish harvesting and fish processing businesses. A business involved in fish harvesting is a small business if it is independently owned and operated and not dominant in its field of operation (including its affiliates) and if it has combined annual receipts not in excess of \$3.5 million for all its affiliated operations worldwide. A seafood processor is a small business if it is independently owned and operated, not dominant in its field of operation, and employs 500 or fewer persons on a full-time, part-time, temporary, or other basis, at all its affiliated operations worldwide. A business involved in both the harvesting and processing of seafood products is a small business if it meets the \$3.5 million criterion for fish harvesting operations. Finally, a wholesale business servicing the fishing industry is a small businesses if it employs 100 or fewer persons on a full-time, part-time, temporary, or other basis, at all its affiliated operations worldwide. Non-profit organizations and governmental jurisdictions with populations up to 50,000 persons are also considered small entities.

When promulgating a final rule, agencies must prepare a final regulatory flexibility analysis (FRFA) unless the agency finds that the final rule will not have a significant economic impact on a substantial number of small entities or the final rule is issued under the APA provision allowing for good cause to forego notice and comment rulemaking. Several elements of a FRFA are (a) a summary of significant issues raised in public comment on the IRFA and the agency's response to those comments, and (b) a description of the steps the agency has taken to minimize the significant economic impacts on small entities, including a statement of factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why all other alternatives considered were rejected. Finally, the FRFA or a summary of it must be published in the Federal Register with the final rule.

NOAA Fisheries has published revised guidelines, dated August 16, 2000, for RFA analyses; they include criteria for determining if the action would have a significant impact on a substantial number of small entities. The NOAA Fisheries guidelines can be found at <http://www.nmfs.noaa.gov/sfa/prorules.html>

### ***Paperwork Reduction Act of 1995***

The Paperwork Reduction Act (PRA) (44 U.S.C. 3501, *et seq.*) is designed “to minimize the paperwork burden for individuals, small businesses, educational and nonprofit institutions, federal contractors, state, local and tribal governments, and other persons resulting from the collection of information by or for the federal government.” In brief, this law is intended to ensure that the government is not overly burdening the public with requests for information. This is accomplished through an information collection budget (ICB). The ICB for each agency is in terms of the total estimated time burden of responding to official inquiries. The President's Office of Management and Budget (OMB) oversees the ICB of each agency. Agencies must annually identify and obtain clearance from OMB for new or significant revisions to reporting and record keeping requirements.

Procedurally, the PRA requirements constrain what, how, and how frequently information will be collected from the public affected by a rule that requires reporting (e.g., the amount of fish caught during a fishing trip). New collections of information must be submitted to OMB for clearance before a final rule may take effect. For each rule that requires a collection of information, the agency must describe in detail what data will be collected, how it will be collected and how often, from whom it will be collected, how much time will be spent by each affected person in complying with the information requirements, why the information is necessary and how it will be used. Information collections approved by OMB have a maximum effectiveness

of three years. To be extended beyond that time requires another submission for OMB clearance. Required collection of information from the public can not be enforced without being included in an approved ICB.

A crab rationalization program, if adopted, would contain collection of information requirements subject to the PRA. These would include permit requirements for vessels and processors, reporting requirements for vessels and processors, and recordkeeping requirements for vessels and processors. These collection of information requirements will be submitted to OMB for review and clearance and will not be discussed further in this EIS.

### ***Executive Order 12866: Regulatory planning and review***

EO 12866 was signed by the President on September 30, 1993, and published October 4, 1993 (58 FR 51735). It replaced EO 12291 and EO 12498. Its purpose, among other things, is to enhance planning and coordination with respect to new and existing regulations, and to make the regulatory process more accessible and open to the public. In addition, EO 12866 requires agencies to take a deliberative, analytical approach to rule making, including assessment of costs and benefits of the intended regulations. For fisheries management purposes, it requires NOAA Fisheries to (a) prepare a RIR for all regulatory actions; (b) prepare a unified regulatory agenda twice a year to inform the public of the agency's expected regulatory actions; and (c) conduct a periodic review of existing regulations.

The purpose of an RIR is to assess the potential economic impacts of a proposed regulatory action. As such, it can be used to satisfy NEPA requirements and serve as a basis for determining whether a proposed rule will have a significant impact on a substantial number of small entities. The RIR is frequently combined with an EA or EIS and an IRFA in a single document that satisfies the analytical requirements of NEPA, RFA, and EO 12866. Criteria for determining "significance" for EO 12866 purposes, however, are different than those for determining "significance" for RFA purposes. A "significant" rule under EO 12866 is one that is likely to:

- Have an annual effect on the economy (of the nation) 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;
- Create serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
- Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in EO 12866.

Although fisheries management actions rarely have an annual effect on the national economy of \$100 million or more or trigger any of the other criteria, OMB makes the ultimate determination of significance under this EO based in large measure on the analysis in the RIR. However, the proposed crab rationalization program has been determined to be significant. An action determined to be significant is subject to OMB review and clearance before its publication and implementation.

The regulatory planning function of EO 12866 is served by the unified regulatory agenda, which is prepared twice a year to inform the public of the agency's expected regulatory actions and provide brief descriptions and timelines. In addition, a regulatory plan is prepared annually to report on the most significant regulatory actions that the agency reasonably expects to issue in proposed or final form in that fiscal year or later.

#### ***Executive Order 13175: Consultation and coordination with Indian tribal governments***

The EO on consultation and coordination with Indian tribal governments was signed by the President on November 6, 2000, and published November 9, 2000 (65 FR 67249). This EO supercedes the previous EO 13084: Consultation and coordination with Indian tribal governments. The purpose of this EO is to establish regular and meaningful consultation and collaboration with Indian tribal governments in the development of federal regulatory practices that significantly or uniquely affect their communities; to reduce the imposition on unfunded mandates on Indian tribal governments; and to streamline the application process for and increase the availability of waivers to Indian tribal governments. This EO requires federal agencies to have an effective process to involve and consult with representatives of Indian tribal governments in developing regulatory policies and prohibits regulations that impose substantial direct compliance costs on Indian tribal communities. The crab fisheries in the EEZ off Alaska are largely prosecuted from 3 to 200 nm offshore. In conjunction with the preparation of this EIS, NOAA Fisheries has initiated a government-to-government consultation process with affected Native communities.

#### ***Executive Order 12898: Environmental justice***

EO 12898, signed by the President on February 11, 1994, and published February 16, 1994 (59 FR 7629) requires that federal agencies make achieving environmental justice part of their mission by identifying and addressing disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low income populations in the U.S. A growing number of Alaska natives participate in the crab fisheries as a result of the federal CDQ program and, as a result, coastal native communities participating in the CDQ program derive substantial economic benefits from the crab fisheries. The effects of this federal action on minority populations are described in Section 4.7 on Environmental justice considerations.

#### ***Executive Order 13132: Federalism***

EO 13132, otherwise known as the Federalism EO, was signed by the President on August 4, 1999, and published August 10, 1999 (64 FR 43255). The EO superceded the previous Federalism EOs (12612 and 13083), but supplements EOs 12372, 12866, and 12988. This EO is intended to guide federal agencies in the formulation and implementation of "policies that have federalism implications." Such policies are regulations, legislative comments or proposed legislation, and other policy statements or actions that have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. This EO requires federal agencies to have a process to ensure meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications. A federalism summary impact statement is also required for rules that have federalism implications.

The EO establishes fundamental federalism principles based on the U.S. Constitution, specifies federalism policy making criteria, and special requirements for preemption of state law. For example, a federal action that limits the policy making discretion of a state is to be taken only where there is constitutional and statutory

authority for the action and it is appropriate in light of the presence of a problem of national significance. Also, where a federal statute does not have expressed provisions for preemption of state law, such a preemption by federal rule making may be done only when the exercise of state authority directly conflicts with the exercise of federal authority. To preclude conflict between state and federal law on fishery management issues, the Magnuson-Stevens Act explicitly establishes conditions for federal preemption of state regulations (and extension of state fishery management authority into the EEZ). Furthermore, close state-federal consultation on crab fisheries measures is provided by the Council process.

### ***American Fisheries Act - sideboards for crab harvesting and processing***

The AFA (Pub. L. 105-277, division C, title II) was signed into law during the fall of 1998. The purpose of the AFA was to tighten U.S. vessel ownership standards and to provide the BSAI pollock fleet the opportunity to conduct its fishery in a more rational manner while protecting non-AFA participants in the other fisheries. Since the passage of the AFA, the Council has taken an active role in the development of management measures to implement the various provisions of the AFA. The Council initiated an analysis of a suite of AFA-related management measures in late 1998 and took final action on the proposed amendments at its June 1999 meeting. At its December 1999 meeting, the Council recommended that NOAA Fisheries proceed immediately with an emergency interim rule to implement its June 1999 recommendations so that AFA regulations could be in place prior to the start of the 2000 fisheries. The emergency rule was published on January 28, 2000 and implemented in the 2000 season. NOAA Fisheries published the final rule on December 30, 2002 (67 FR 79692).

The AFA established a cooperative management program for the pollock fisheries of the BSAI. It also established harvesting and processing restrictions (known as sideboards) on fishermen and processors who received privileges under the AFA to protect participants in other fisheries, including the BSAI crab fisheries. The AFA is relevant to the proposed rationalization program for the BSAI crab fisheries from two standpoints: (1) the cooperative management program established by the AFA provides experience and serves as one potential model for the design of the crab rationalization program, and (2) the AFA sideboards for crab limit further entry of AFA vessels and processors into the already overcapitalized BSAI crab fisheries. The major features of the AFA cooperative management program are discussed as part of the analysis of the proposed BSAI crab rationalization program alternatives. The AFA crab sideboards are described in the following paragraphs.

The AFA required the Council to recommend by July 1, 1999, conservation and management measures to prevent AFA catcher vessels from exceeding in aggregate the traditional harvest levels of such vessels in other fisheries under the Council's authority as a result of fishery cooperatives in the directed pollock fishery. (The Council met this deadline by taking final action at its June 1999 meeting.) Because the BSAI king and Tanner crab fisheries are managed by the State under federal oversight, catcher vessel sideboards are implemented jointly through State and federal actions. Participation in the BSAI crab fisheries by AFA catcher vessels is generally limited by (1) AFA catcher vessel permit endorsements implemented by NOAA Fisheries, and (2) crab sideboard limits implemented by the State.

A catcher vessel that lacks the appropriate endorsements on its AFA permit is prohibited from retaining BSAI king and Tanner crab. In the Bristol Bay red king crab fishery, AFA catcher vessel harvest limits are equal to the percent of Bristol Bay red king crab harvested from 1991 through 1997 (excluding 1994 and 1995 when the fishery was closed). Under these provisions, AFA vessels are entitled to approximately 13 percent of the available quota in the Bristol Bay red king crab fishery. The Bering Sea Tanner crab fishery is

currently closed and will remain closed until the Council's rebuilding goal for that fishery is reached. When the fishery reopens, harvests by AFA vessels will be limited to their historic catch percentage from 1995 through 1996. Under these limits, AFA vessels will be entitled to approximately 7 percent of the Bering Sea Tanner crab fishery. In the Bering Sea snow crab, Pribilof king crab, and St. Matthew king crab fisheries, sideboards limit the number of AFA vessels that are permitted to participate. Catch limits do not apply to AFA vessels in these fisheries because seasons are very short and few AFA vessels participate in the fisheries.

The AFA also established limits on crab processing for AFA inshore processors and AFA motherships that receive pollock harvested by a fishery cooperative. Specifically, AFA processors are "*prohibited from processing, in the aggregate for each calendar year, more than the percentage of the total catch of each species of crab in directed fisheries under the (Council's) jurisdiction ... than facilities operated by such owners processed of each such species in the aggregate, on average, in 1995, 1996 (and) 1997.*" Because the primary inseason management for the BSAI crab fisheries is delegated to the State, NOAA Fisheries has worked closely with ADF&G to develop a management program to implement the crab processing sideboards. Meanwhile, in the final rule published, NOAA Fisheries established for each BSAI crab fishery entity-wide crab processing caps for each AFA inshore or mothership entity. These crab processing caps applied to all crab processed by the associated AFA crab processing facilities including any custom processing activity.

At its April 2000 meeting, the Council received testimony from crab fishermen who opposed the crab processing caps implemented in 2000. Some crab fisherman testified that AFA crab processing limits were restricting markets for crab fishermen and were having a negative effect on ex-vessel prices. At its September 2000 meeting, the Council voted to revise the base years used to calculate crab processing sideboard amounts by adding 1998 and giving it double weight. In other words, 1995 to 1998 would be used to determine crab processing history with the 1998 year counted twice. By adding 1998 and by giving it a double weight, the Council believed that the crab processing limits would more accurately reflect the status of the crab processing industry at the time of passage of the AFA. This change was implemented in the emergency interim rule published on January 22, 2001.

### ***Fisherman's Collective Marketing Act***

The Fisherman's Collective Marketing Act (15 U.S.C. 521, *et seq.*), also referred to as the Co-op Act of 1934 and patterned after the Capper-Volsted Act (7 U.S.C. 291, *et seq.*), permits persons engaged in the fishery industry, as fishermen that catch, collect, or cultivate aquatic products or as planters of aquatic products, to act together in associations for the purpose of collectively catching, producing, preparing for market, processing, handling, and marketing such products. "Aquatic products" is defined by the Co-op Act as "all commercial products of aquatic life in both fresh and salt water, as carried on in the several States, the District of Columbia, the several Territories of the United States, the insular possessions, or other places under the jurisdiction of the United States." *Id.*

The Co-op Act was enacted to extend to the fishing industry the exemption from the operation of antitrust laws that is granted to agricultural co-operatives in the Clayton Act (15 U.S.C. 17) and the Capper-Volstead Act. The intent of the Fisherman's Collective Marketing Act is to provide fishermen, acting through fishery co-operatives, an opportunity to compete on the same basis as may an individual corporation. However, the exemption from antitrust laws is limited. If an association of producers of aquatic products is engaging in monopolization or restraint of trade in interstate or foreign commerce to such an extent that the price of any

aquatic product is unduly enhanced, it may give rise to a violation of the Sherman Anti-Trust Act (15 U.S.C. 1, *et seq.*).

### ***Anti-Trust Laws***

There are three major federal antitrust laws: the Sherman Antitrust Act, (15 U.S.C. Sec. 1, *et seq.*) the Clayton Act, (15 U.S.C. Sec. 12, *et seq.*) and the Federal Trade Commission Act (15 U.S.C. Sec. 41, *et seq.*) The federal antitrust laws are enforced by criminal and civil enforcement actions brought by the Antitrust Division of the Department of Justice, civil enforcement actions brought by the Federal Trade Commission and lawsuits brought by private parties asserting damage claims.

The Sherman Antitrust Act criminalizes certain anti-competitive conduct, particularly contracts, combinations and conspiracies that unreasonably restrain interstate and foreign trade. It prohibits agreements among competitors to fix prices, rig bids and allocate customers. The Sherman Antitrust Act also criminalizes monopolization of any part of interstate commerce. The Department of Justice brings criminal prosecutions under the Sherman Antitrust Act. Violations are felonies and result in fines up to \$350,000 and sentences up to 3 years in federal prison for each offense. Corporations can be fined up to \$10 million for each offense. Under some circumstances, fines can be enhanced.

In contrast to the Sherman Act, the Clayton Act is a civil statute. The Clayton Act prohibits mergers or acquisitions that are likely to lessen competition. Under the Clayton Act, the government challenges mergers that economic analyses show are likely to increase prices to consumers. All persons (i.e. business entities) considering a merger or acquisition above a certain size must notify both the Antitrust Division and the Federal Trade Commission. Although not criminalizing conduct, the Clayton Act also prohibits other business practices that under certain circumstances may harm competition. The Clayton Act provides private parties injured by an antitrust violation the right to sue in federal court for three times their actual damages plus court costs and attorney's fees. State attorney generals may bring civil suits under the Clayton Act on behalf of injured consumers in their states. Consumer groups also bring suits under the Clayton Act.

The Federal Trade Commission Act prohibits unfair methods of competition in interstate commerce, but carries no criminal penalties. The Act created the Federal Trade Commission to investigate violations of the Act.

### ***Data Quality Act***

Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Public Law 106-554) directed the OMB to issue government-wide guidelines that provide policy and procedural guidance for ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by federal agencies. This bill is known as the Data Quality Act. The OMB's guidelines require all federal agencies to develop their own guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information disseminated by the agency. NOAA published its guidelines in February 2002 (available online at <http://www.commerce.gov>).

### ***Executive Order 12630: Takings***

This EO on Government Actions and Interference with Constitutionally Protected Property Rights was signed by the President on March 15, 1988, and published on March 18, 1988 (53 FR 8859). This EO requires that each federal agency prepare a "takings implications assessment" for any of its administrative, regulatory, and

legislative policies and actions that affect, or may affect, the use of any real or personal property. Fishery management measures that limit fishing seasons, areas, catch quotas, the size of harvested fish, and bag limits have received a categorical exclusion from a takings analysis. However, takings issues are raised frequently in the context of limited access systems, which confer a harvesting privilege on a fisherman in the form of a permit to catch a specific amount of fish or a license to enter and participate in a fishery. Although such permits and licenses may be transferrable, and therefore increase (or decrease) in market value, they do not convey any property rights in the fishery resource (i.e., the fish).

***Executive Order 13158: Marine Protected Areas***

This EO, signed by the President on May 26, 2000, and published on May 31, 2000 (65 FR 34909), directs the Departments of Commerce and the Interior to jointly develop a national system of marine protected areas (MPAs). The purpose of the system is to strengthen the management, protection, and conservation of existing protected areas and establish new or expanded MPAs. The MPA system is to be scientifically based, representing diverse U.S. marine ecosystems and the nation's natural and cultural resources. Establishing such a system is intended to reduce the likelihood that MPAs are harmed by Federally approved or funded activities.

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