

# **Initial Review Draft**

## **REGULATORY IMPACT REVIEW**

**and**

## **INITIAL REGULATORY FLEXIBILITY ANALYSIS**

### **OF PROVISIONS MODIFYING THE ARBITRATION SYSTEM**

For a proposed Regulatory Amendment to  
Implement Amendment \_\_\_ to the Fishery Management Plan for Bering Sea and  
Aleutian Islands King and Tanner Crabs

February 2008



**Table of Contents**

- 1 Introduction ..... 1
- 2 Regulatory Impact Review ..... 1
  - 2.1 Action to revise market reports and non-binding price formulas for fisheries unlikely to open ..... 2
    - 2.1.1 Purpose and need statement..... 2
    - 2.1.2 Alternatives..... 2
    - 2.1.3 Alternatives considered, but not advanced for analysis..... 2
  - 2.2 Action to modify the timeline for the golden king crab market report and formula does not allow for data from most recent fishery to be used ..... 3
    - 2.2.1 Purpose and need statement..... 3
    - 2.2.2 Alternatives..... 3
  - 2.3 Action to address staleness of the market reports ..... 3
    - 2.3.1 Purpose and need statement..... 3
    - 2.3.2 Alternatives..... 3
    - 2.3.3 Alternatives considered, but not advanced for analysis..... 4
  - 2.4 Existing Conditions ..... 4
    - 2.4.1 Management of the fisheries..... 4
    - 2.4.2 The harvest sector ..... 9
    - 2.4.3 The processing sector ..... 10
    - 2.4.4 Ex vessel pricing..... 13
    - 2.4.5 First wholesale and consumer markets ..... 14
    - 2.4.6 Communities..... 14
  - 2.5 Analysis of alternatives ..... 17
    - 2.5.1 Analysis of the action to revise market reports and non-binding price formula requirements for fisheries unlikely to open ..... 18
  - 2.6 Analysis of action to modify the timeline for the golden king crab market report and formula does not allow for data from most recent fishery to be used..... 21
  - 2.7 Action to address staleness of the market reports..... 22
    - 2.7.1 Net benefits to the Nation ..... 24
- 3 Regulatory Flexibility Analysis..... 24
  - 3.1 Introduction ..... 24
    - 3.1.1 Definition of a Small Entity..... 25
  - 3.2 A description of the reasons why action by the agency is being considered ..... 27
  - 3.3 The objectives of, and the legal basis for, the proposed rule..... 27
  - 3.4 A description of, and where feasible, an estimate of the number of small entities to which the proposed rule will apply ..... 27
  - 3.5 A description of the projected reporting, record keeping, and other compliance requirements of the proposed rule ..... 28
  - 3.6 An identification, to the extent practicable, of all relevant Federal rules that may duplicate, overlap, or conflict with the proposed rule ..... 28
  - 3.7 A description of any significant alternatives to the proposed rule that accomplish the stated objectives of the Magnuson-Stevens Act and any other applicable statutes, and that would minimize any significant adverse economic impact of the proposed rule on small entities..... 28
- 4 National Standards and Fishery Impact Statement..... 29
  - 4.1 National Standards..... 29
  - 4.2 Section 303(a)(9) – Fisheries Impact Statement ..... 31
- 5 References ..... 31

## List of Tables

Table 1. Catcher vessel owner quota share holdings as a percent of the catcher vessel owner share pool. ....	9
Table 2. Catcher vessel crew quota share holdings as a percent of the catcher vessel crew share pool. ....	9
Table 3. Catch and number of catcher vessels harvesting IFQ by share region (2005-2006).....	10
Table 4. Catch and number of catcher vessels harvesting IFQ by share region (2006-2007).....	10
Table 5. Processing quota share holdings as a percent of the processing quota share pool.....	11
Table 6. PQS regional and right of first refusal designations (2006-2007). ....	12
Table 7. First wholesale prices of crab species by product type (2001-2005). ....	14
Table 8. Distribution of processing in the Bristol Bay red king crab and Bering Sea <i>C. opilio</i> fisheries prior to the rationalization program (2001-2005). ....	15
Table 9. Due Date for market report and non-binding formula, TAC and closure announcements, and season opening by fishery (2005-2006 to 2007-2008).....	19

# 1 Introduction

In August of 2005, fishing in the Bering Sea and Aleutian Island crab fisheries began under a new share-based management program (the “program” or “rationalization program”). The program is unique in several ways, including the allocation of processing shares corresponding to a portion of the harvest share pool. Under the program, 90 percent of the annual catcher vessel owner harvest share allocation is issued as “Class A” individual fishing quota (IFQ), which must be delivered in a designated region and may only be delivered to a processor holding unused individual processing quota (IPQ). The program also includes an arbitration system that may be used to resolve ex vessel price and other delivery term disputes for landings of harvests using Class A IFQ. In the first two years of the program certain technical aspects of the arbitration system have limited the effectiveness of that system. This action includes alternatives that would modify three aspects of the arbitration system to improve its effectiveness.

This document contains a Regulatory Impact Review (Section 2) and an Initial Regulatory Flexibility Analysis (Section 3) of the alternative to exempt custom processing from the use cap of the processing platform. Section 4 contains a discussion of the Magnuson Stevens Act National Standards and a fishery impact statement.<sup>1</sup>

This document relies on information contained in the Bering Sea/Aleutian Islands Crab Fisheries Final Environmental Impact Statement/Regulatory Impact Review/Initial Regulatory Flexibility Analysis/Social Impact Assessment (NMFS/NPFMC, 2004). Throughout this analysis, this document is referred to as the “Crab EIS”.

## 2 Regulatory Impact Review

This chapter provides an economic analysis of the action, addressing the requirements of Presidential Executive Order 12866 (E.O. 12866), which requires a cost and benefit analysis of federal regulatory actions.

The requirements of E.O. 12866 (58 FR 51735; October 4, 1993) are summarized in the following statement from the order:

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

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

---

<sup>1</sup> The proposed action is a minor change to a previously analyzed and approved action and the proposed change has no effect individually or cumulatively on the human environment (as defined in NAO 216-6). The only effects of the action are the potential economic redistributive and production efficiency effects arising from minor changes in the arbitration system that can be used to resolve delivery terms of Class A IFQ. As such, it is categorically excluded from the need to prepare an Environmental Assessment.

- Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, local or tribal governments or communities;
- Create a 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 this Executive Order.

## **2.1 Action to revise market reports and non-binding price formulas for fisheries unlikely to open**

Under the current regulations, arbitration organizations representing holders of harvest shares and processing shares are required to contract for market reports and non-binding price formulas annually for each fishery regardless of whether the fishery opens. In the first two years of the program, the St. Matthew Island blue king crab, Pribilof red and blue king crab, and the Western Aleutian Island red king crab fisheries have not opened. Production of these reports is unnecessary, since no landings occurred during this period. A modification of the regulations could be developed to remove the requirement for producing a market report and non-binding price formula for fisheries unlikely to open.

### **2.1.1 Purpose and need statement**

*Under the current regulations, market reports and non-binding formulas are required to be generated annually for each fishery regardless of whether the fishery is likely to or does open. This requirement adds to the cost of arbitration by needlessly requiring participants to contract for the production of these documents. An amendment that allows participants to avoid this requirement when a fishery is unlikely to open could save on costs of the arbitration system. The amendment should include provision for the preparation of the market report, in the event the fishery should open.*

### **2.1.2 Alternatives**

#### Alternative 1 (status quo)

#### Alternative 2

In the event that the arbitration organizations representing at least 50 percent of the PQS holders and at least 50 percent of the unaffiliated QS holders agree that a fishery is unlikely to open, neither a market report nor non-binding formula will be required for the fishery. Any such agreement will include provision for the production of the market report and non-binding formula, in the event that an opening is later announced for a fishery, specifying a timeline for the production of those reports.

### **2.1.3 Alternatives considered, but not advanced for analysis**

Alternatives that would rely on preliminary notice of intent to close a fishery from State or Federal managers, after which the arbitration organizations would not be required to contract for a market report or non-binding formula for the fishery were considered and not advanced for analysis. The need for a formal notice from managers could be misinterpreted by participants and disruptive to planning for fishing in the upcoming season. Additionally, alternatives that would create a strict time frame for applying the exemption and producing the market report and non-binding formula were considered and not advanced for alternatives. These alternatives were believed to be overly restrictive, limiting the ability of the arbitration organizations to appropriately respond to changes in circumstances in providing the reports and formulas.

## **2.2 Action to modify the timeline for the golden king crab market report and formula does not allow for data from most recent fishery to be used**

Under the current regulation, data from the most recent season are not available for use in developing the market report and non-binding formula because those reports are required to be completed 50 days prior to the August 15 fishery opening. A modification to allow an additional 20 days for the completion of the report and formula would enable the market analyst and formula arbitrator to the use of data from the most recent fisheries in the production of the market report and non-binding formula, respectively.

### **2.2.1 Purpose and need statement**

*Under the current regulation, the market report and non-binding formula for the Aleutian Islands golden king crab fisheries are required to be completed 50 days prior to the August 15 fishery opening. Under this timeline, data from the most recent season are not available for use in development of those reports. The inability to use data from the most recent season could diminish the accuracy and quality of these reports. Postponing the due date of these reports to a later time in the preseason could allow for more complete and accurate reports that provide timely information to market participants.*

### **2.2.2 Alternatives**

#### Alternative 1 (status quo)

#### Alternative 2

The market report and non-binding price formula for the golden king crab fisheries will be required to be completed at least 30 days prior to the opening of those fisheries.<sup>2</sup>

## **2.3 Action to address staleness of the market reports**

The current requirement that market reports be complete at least 50 days prior to the season prevents the inclusion of the most current and relevant pricing information in the report. In addition, the prohibition on supplements to the report prevents modification of the requirement to provide useful market information in season or after completion of the initial report. Market reports would be more timely and informative, if those reports can be produced and supplemented at any time (provided those reports contain only publicly available information to allay any potential antitrust concerns).

### **2.3.1 Purpose and need statement**

*The current requirement that market reports be complete at least 50 days prior to the season prevents the inclusion of the most current and relevant pricing information in the report. In addition, the prohibition on supplements to the report prevents modification of the requirement to provide useful market information in season or after completion of the initial report. More timely and relevant market information to be used for price negotiations might be provided to participants in the fisheries, if those participants are permitted to negotiate agreeable terms (including due dates) for the provision of a market report and supplements to suit their needs.*

### **2.3.2 Alternatives**

#### Alternative 1 (status quo)

---

<sup>2</sup> It should be noted that, if the Council chooses to modify the requirements for producing market reports under the alternatives addressing staleness of those reports, that decision would supersede any decision with respect to changes to market report timing requirements.

## Alternative 2

The regulatory amendment could generally provide that at least 50 days prior to a season opening, the arbitration organizations representing at least 50 percent of the PQS holders and at least 50 percent of the unaffiliated QS holders are required to reach an agreement for the provision of a market report (which may include supplements at any time prior to the end of the season). The market report will utilize only publicly available information. Such an amendment would provide the arbitration organizations with the most latitude to define a market report that will best serve participants in a fishery.

### **2.3.3 Alternatives considered, but not advanced for analysis**

Alternatives that would establish strict timelines and fully defined contents for market reports were considered but not advanced for analysis. These alternatives were believed to be overly proscriptive, limiting the ability of arbitration organizations (and participants) to agree to terms for the provision of market reports that would be most useful and informative to participants. In addition, an alternative to remove the requirement for a market report was also considered but not advanced for analysis. The market report is thought to provide beneficial baseline market information for negotiations. In addition, small, independent participants in the program are thought derive benefit from the information in the report, which might otherwise be costly for them to gather. As a consequence, the alternative to remove the market report requirement was not advanced for consideration.

## **2.4 Existing Conditions**

This section describes the relevant existing conditions in the crab fisheries. The section begins with a brief description of the management of the fisheries under the rationalization program, followed by descriptions of the harvesting and processing sectors in the fisheries.

### **2.4.1 Management of the fisheries**

Nine Bering Sea and Aleutian Island crab fisheries are managed under the rationalization program. Under the program, holders of LLP licenses endorsed for a fishery were issued vessel owner quota shares (QS), which are long term shares, based on their qualifying harvest histories in that fishery. Catcher processor license holders were allocated catch processor vessel owner QS for their history as catcher processors; catcher vessel license holders were issued catch vessel QS based on their history as a catcher vessel. Annually, QS yield individual fishing quota (IFQ), which are privileges to harvest a particular amount of crab in pounds in a given season. The size of each annual IFQ allocation is based on the amount of QS held in relation to the QS pool in the fishery. So, a person holding 1 percent of the QS pool would receive IFQ to harvest 1 percent of the annual total allowable catch (TAC) in the fishery. Ninety percent of the catcher vessel owner IFQ are issued as “A shares” or “Class A IFQ,” which must be delivered to a processor holding unused individual processor quota (IPQ).<sup>3</sup> The remaining 10 percent of these annual IFQ are issued as “B shares” or “Class B IFQ,” which may be delivered to any processor.<sup>4</sup> Processor quota shares (PQS) are long term shares issued to processors. These PQS yield annual IPQ, which represent a privilege to receive a certain amount of crab harvested with Class A IFQ. IPQ are issued for 90 percent of the TAC, creating a one-to-one correspondence between Class A IFQ and IPQ.<sup>5</sup>

---

<sup>3</sup> Currently, the C shares issued to captains are an exception to this generalization. Those shares are not subject to IPQ landing privileges during the first three years of the program. During that period, the IPQ corresponding to the C share allocations are withheld.

<sup>4</sup> The terms “A share” and “Class A IFQ” are used interchangeably in this paper, as are the terms “B share” and “Class B IFQ”.

<sup>5</sup> Although 90 percent of IFQ issued each year are issued as A shares, individual allocations can vary from 90 percent. Holders of PQS and their affiliates receive their entire IFQ allocations as A shares (and are not allocated B shares). The rationale for issuing only A shares to PQS holders and their affiliates is that these persons do not need

In addition to processor share landing requirements, Class A IFQ (along with IPQ) are subject to regional landing requirements, under which harvests from those shares must be landed in specified regions. The following regional designations are defined for the different fisheries in the program:

Bristol Bay red king crab – North/South division at 56°20'N latitude  
Bering Sea *C. opilio* – North/South division at 56°20'N latitude  
Eastern Bering Sea *C. bairdi* – none (or undesignated)  
Western Bering Sea *C. bairdi* – none (or undesignated)  
Pribilof red and blue king crab – North/South division at 56°20'N latitude  
St. Matthew Island blue king crab – North/South division at 56°20'N latitude  
Western Aleutian Islands red king crab – South of 56°20'N latitude  
Eastern Aleutian Islands golden king crab – South of 56°20'N latitude  
Western Aleutian Islands golden king crab – Undesignated/West (west of 174°W longitude)

The A share/B share allocation structure has the effect of limiting market choices of participants, since only the 10 percent allocation of B shares are free to be sold to any buyer. Under this structure, the 90 percent A share allocation (with corresponding IPQ) is intended primarily to add stability to the processing sector and provide a means for compensated removal of processing capacity from the fisheries. The 10 percent B share allocation is intended to provide negotiating leverage to harvesters, an opportunity for entry to the processing sector, and a check on the processing market (by providing a negotiated market price)<sup>6</sup>. To aid participants in resolving price disputes, the Council developed a binding arbitration program.

### ***The arbitration system***

The arbitration system serves several important purposes in the program. It coordinates the matching of A share IFQ held by harvesters with IPQ held by processors. For a 5-day period starting when IFQ and IPQ are issued, shares are matched only by mutual agreement of share holders. After that period has expired, shares may be matched either by agreement or by unilateral commitment of the IFQ holder. Throughout, holders of unused IPQ are required to report the amount of unused shares held to holders of unused IFQ (updating that report within 24 hours of any change). Although this share matching process may aid in establishing commitments to deliver and receive A share IFQ landings, the terms of those transactions may be disputed. The arbitration system defines a procedure intended to assist participants in coming to reasonable terms for those deliveries. If the parties are unable to negotiate a settlement, an arbitration procedure may be used to resolve those terms.

The arbitration process begins with the two sectors (harvesters and processors) jointly selecting a “market analyst” who produces a market report, a “formula arbitrator,” who develops a price formula specifying an ex vessel price as a portion of the first wholesale price, and a pool of “contract arbitrators,” who preside over any binding arbitration proceedings. The market report and formula price are required to be released at least 50 days prior to the season opening. The market analyst and formula arbitrator (who may be the same person) generate the market report and formula price, respectively, based on any relevant information, which may include information received from IFQ holders and IPQ holders. Neither the

---

the extra negotiating leverage derived from B shares. To maintain 10 percent of the IFQ pool as B shares requires that unaffiliated QS holders receive more than 10 percent of their allocation as B shares (and less than 90 percent A shares).

<sup>6</sup> It should be noted that the limitation on the market resulting from the 90 percent A share/IPQ allocation dampens the market for B share landings by limiting the size of the open market for landings. So, the B share price (while providing an indication of the free market price) may not reflect the price that would exist in the absence of the A share/IPQ allocations.

market report nor the formula price has any binding effect. Instead, they are intended to provide baseline information concerning the market and a signal of a reasonable price.

An IFQ holder that is not able to resolve all terms of delivery with a processor to whom it has committed deliveries may unilaterally initiate an arbitration proceeding. The window for initiating arbitration is 10 days long, beginning 5 days after the allocation of IFQ and IPQ.<sup>7</sup> The starting point for initiating arbitration coincides with the start of the period during which harvesters may unilaterally commit IFQ to a processor. Once initiated, any holder of IFQ that has committed shares to the IPQ holder may join the arbitration proceeding. This ability to join is critical because the system limits each processor to a single arbitration proceeding. A last opportunity to make use of arbitration is available for harvesters that choose not to join a proceeding. After arbitration is completed, any holder of uncommitted IFQ can bind the IPQ holder to the terms of the proceeding by committing deliveries to the IPQ holder. Binding arbitration proceedings are conducted on a “last best offer” basis. Under this system, each party to the proceeding submits a “last best offer”. The role of the arbiter is to select one offer from each of the two competing offers. Since several harvesters may be involved in a single proceeding, in binding arbitration involving two or more harvesters, each harvester may either submit an independent offer or join a collective offer (as part of an Fishery Collective Marketing Act cooperative). The processor submits a single offer. For each harvester offer, the arbiter’s role is to select either that harvester’s offer or the processor’s offer (which applies to all harvesters).

Since the full effects of the program on the timing of fishing and marketing activities were not predictable, the arbitration system included a flexible component, allowing participants to modify the arbitration timeline. This ‘lengthy season’ approach to arbitration allows IFQ and IPQ holders that have committed deliveries to negotiate a modified schedule for arbitration. If the parties are unable to agree on the lengthy season approach, they may arbitrate whether to adopt that approach and the timing of the proceeding. Agreements to use the length season approach to arbitration must be entered prior to the opening of a fishery.

An important aspect of the arbitration system is the flow of information among the parties. To effectively participate in the program, holders of uncommitted IFQ need timely updates on the availability of unused IPQ, the initiation of arbitration proceedings, and the outcome of arbitration proceedings. Equally (or more) important are the limitations on flow of information, which are intended to prevent potential collusive behavior. Allowing this price and share holdings information, which is necessary for IFQ holders to participate in the system, to flow to IPQ holders could enable some IPQ holders to unfairly leverage their position in the limited landings market.

The arbitration program is administered through a series of contracts among share holders and arbitration organizations, which are formed by share holders in the fisheries. These organizations are responsible for establishing the administrative aspects of the arbitration system, including selecting arbitrators, coordinating the dissemination of information concerning uncommitted shares among the participants, ensuring confidentiality of sensitive information, and collecting payments to disburse program costs. All share holders from both sectors are required to join an arbitration organization.<sup>8</sup> Separate organizations

---

<sup>7</sup> As originally developed, this period was intended to begin 25 days prior to the season opening and end 15 days prior to the season opening. This timing was found to be incompatible with the TAC announcement and issuance of IFQ and IPQ, which will typically occur approximately 15 days prior to the season opening in the Bristol Bay red king crab and Bering Sea *C. opilio* fisheries. To address this inconsistency, the Council amended the program revising the timing of share matching and initiation of arbitration.

<sup>8</sup> Holders of catcher processor shares are exempt from the requirement of arbitration organization membership, since they are not subject to the processor landing requirements. In addition, C share holders are exempt from the requirement for the first three years of the program, when the processor landing requirements do not apply to C shares.

are required for harvest share holders and processing share holders. Holders of harvest shares that are affiliated with holders of processing shares are required to join an arbitration organization for purposes of facilitating share matching and administration. Due to antitrust concerns, these “affiliated harvesters” are not permitted to join an organization that includes unaffiliated harvesters and are not permitted to use a binding arbitration proceeding to settle terms of delivery.

Under the regulation, harvest share holders and processing share holders jointly select a pool of arbiters to preside over any binding arbitration proceedings. Once a proceeding is initiated, harvesters that are party to the proceeding select an arbiter from the pool to preside over the specific proceeding.

Perhaps the most important factor for determining price and delivery terms is the arbitration standard. The specific standard is set out twice in the regulations, once for the formula arbitrator (who develops the pre-season, non-binding price formula) and once for contract arbitrators (who decide specific cases, binding participating IFQ and IPQ holders to terms of delivery). The specific standards applicable to the two different arbitrators follow (with substantive differences bolded)<sup>9</sup>:

---

(2) **The contract with the Formula Arbitrator must specify that:**

**(i) The Formula Arbitrator will conduct a single annual fleet-wide analysis of the markets for crab to establish a Non-Binding Price Formula under which a fraction of the weighted average first wholesale prices for crab products from the fishery may be used to set an ex-vessel price; and**

**(ii) The Non-Binding Price Formula shall:**

(A) Be based on the historical distribution of first wholesale revenues between fishermen and processors in the aggregate based on arm’s length first wholesale prices and ex-vessel prices, taking into consideration the size of the harvest in each year; and

(B) Establish a price that preserves the historical division of revenues in the fishery while considering the following:

(1) Current ex-vessel prices, including ex-vessel prices received for crab harvested under Class A, Class B, and CVC IFQ permits;

(2) Consumer and wholesale product prices for the processing sector and the participants in arbitrations (recognizing the impact of sales to affiliates on wholesale pricing);

(3) Innovations and developments of the harvesting and processing sectors and the participants in arbitrations (including new product forms);

(4) Efficiency and productivity of the harvesting and processing sectors (recognizing the limitations on efficiency and productivity arising out of the management program structure);

(5) Quality (including quality standards of markets served by the fishery and recognizing the influence of harvest strategies on the quality of landings);

(6) The interest of maintaining financially healthy and stable harvesting and processing sectors;

(7) Safety and expenditures for ensuring adequate safety;

(8) Timing and location of deliveries; and

(9) The cost of harvesting and processing less than the full IFQ or IPQ allocation (underages) to avoid penalties for overharvesting IFQ and a mechanism for reasonably accounting for deadloss.

**(C) Include identification of various relevant factors such as product form, delivery time, and delivery location.**

**(D) Consider the “highest arbitrated price” for the fishery from the previous crab fishing season, where the “highest arbitrated price” means the highest arbitrated price for arbitrations of IPQ and Arbitration IFQ which represent a minimum of at least 7 percent of the IPQ resulting from the PQS in that fishery. For purposes of this process, the Formula Arbitrator may aggregate up to three arbitration findings to collectively equal a minimum of 7 percent of the IPQ. When arbitration findings are aggregated with 2 or more entities, the lesser of the arbitrated prices of the arbitrated entities included to attain the 7 percent minimum be considered for the highest arbitrated price. 80 CFR 680.20(g)(2)**

---

<sup>9</sup> Note that in the regulation, “Arbitration IFQ” refers to Class A IFQ held by harvesters that are not affiliated with a PQS holder. These “Arbitration IFQ” are the only IFQ for which delivery terms may be arbitrated.

(4) Basis for the Arbitration Decision.

**The contract with the Contract Arbitrator shall specify that the Contract Arbitrator will be subject to the following provisions when deciding which last best offer to select.**

(i) The Contract Arbitrator's decision shall:

- (A) Be based on the historical distribution of first wholesale revenues between fishermen and processors in the aggregate based on arm's length first wholesale prices and ex-vessel prices, taking into consideration the size of the harvest in each year; and
- (B) Establish a price that preserves the historical division of revenues in the fishery while considering the following:
  - (1) Current ex-vessel prices, including ex-vessel prices received for crab harvested under Class A IFQ, Class B IFQ, and CVC IFQ permits;
  - (2) Consumer and wholesale product prices for the processing sector and the participants in the arbitration (recognizing the impact of sales to affiliates on wholesale pricing);
  - (3) Innovations and developments of the harvesting and processing sectors and the participants in the arbitration (including new product forms);
  - (4) Efficiency and productivity of the harvesting and processing sectors (recognizing the limitations on efficiency and productivity arising out of the management program structure);
  - (5) Quality (including quality standards of markets served by the fishery and recognizing the influence of harvest strategies on the quality of landings);
  - (6) The interest of maintaining financially healthy and stable harvesting and processing sectors;
  - (7) Safety and expenditures for ensuring adequate safety;
  - (8) Timing and location of deliveries; and
  - (9) The cost of harvesting and processing less than the full IFQ or IPQ allocation (underages) to avoid penalties for overharvesting IFQ and a mechanism for reasonably accounting for deadloss.

**(C) Consider the Non-Binding Price Formula established in the fishery by the Formula Arbitrator. 80 CFR 680.21(h)(4)**

---

As set out, the standard is generally intended to “establish a price that preserves the historical division of revenues in the fishery” while considering several factors. The decision should be based on the historical division of “first wholesale revenues between fishermen and processors in the aggregate based on arm's length first wholesale prices and ex-vessel prices, taking into consideration the size of the harvest each year.” Within the context of this primary standard, the arbitrator is directed to take into account the listed factors.

The differences between the standards applicable to the formula arbitrator's non-binding formula and the contract arbitrator's last best offer finding are not extensive and do not appear to substantively change the general approach to be applied. The formula arbitrator is also required to identify relevant factors, including product form, delivery time, and location. The inclusion of this direction suggests that the arbitrator has the latitude to distinguish among product forms, delivery locations, and delivery times in the pricing formula, if appropriate. The Formula Arbitrator is also directed to consider the “highest arbitrated price” from the previous season. To ensure that the price is a generally applicable price, the price must apply to at least 7 percent of the IPQ in the fishery. The Contract Arbitrator is required to consider the non-binding price formula produced by the Formula Arbitrator in deciding a contract in a last best offer proceeding. These two provisions seem to create a feedback between the non-binding arbitration of the Formula Arbitrator and the binding arbitration of the Contract Arbitrator. The nature of that feedback is explored later in this paper.

Both arbitrators are directed to consider any relevant information presented by the parties. In this context, the standard appears to provide the arbitrators with direction to establish a price that preserves the historical division of first wholesale revenues, at the same time allowing latitude to consider other relevant information, including information relevant to the listed considerations.

## 2.4.2 The harvest sector

Under the rationalization program, QS are allocated in two types. Owner shares are allocated for 97 percent of the fishery; crew shares are allocated for the remaining 3 percent of the fishery. Both share types are divided among catcher vessels and catcher processors, depending on the type of operation that led to the initial allocation. Catcher vessel QS carry regional designations, which apply to annual allocations of Class A IFQ. The distribution of catcher vessel QS holdings varies substantially across fisheries (see Table 1 and Table 2). The regional distribution of shares differs with historic landing patterns, which arose from the geographic distribution of fishing grounds and processing activities. Class A IFQ, which are subject to IPQ and regional landing requirements, are only allocated to holders of catcher vessel owner QS. Catcher vessel crew shares have been exempt from the IPQ and regional landing requirements during the first three years of the program. Although that exemption was scheduled to lapse at the beginning of the fourth year of the program, a recent action by the Council will exempt catcher vessel crew shares are from those landing requirements indefinitely, on approval by the Secretary of Commerce.

**Table 1. Catcher vessel owner quota share holdings as a percent of the catcher vessel owner share pool.**

Fishery	Share holdings by region						Across regions			
	Region	QS holders	Percent of pool	Mean holdings	Median holdings	Maximum holding	QS holders	Mean holdings	Median holdings	Maximum holding
Bristol Bay red king crab	North	32	2.5	0.08	0.04	0.24	236	0.42	0.36	3.60
	South	234	97.5	0.42	0.36	3.60				
Bering Sea <i>C. opilio</i>	North	202	46.9	0.23	0.17	1.35	221	0.45	0.43	2.85
	South	205	53.1	0.26	0.19	2.82				
Eastern Bering Sea <i>C. bairdi</i>	Undesignated	234	100.0	0.43	0.33	2.83	234	0.43	0.33	2.83
Western Bering Sea <i>C. bairdi</i>	Undesignated	234	100.0	0.43	0.33	2.85	234	0.43	0.33	2.85
Eastern Aleutian Island golden king crab	South	13	100.0	7.69	6.98	21.39	13	7.69	6.98	21.39
Western Aleutian Island golden king crab	Undesignated	13	50.0	3.84	1.82	20.46	13	7.69	3.31	45.51
	West	9	50.0	5.56	2.33	25.04				
Western Aleutian Island red king crab	South	32	100.0	3.13	0.88	22.09	32	3.13	0.88	22.09
St. Matthew Island blue king crab	North	121	78.3	0.65	0.58	3.43	132	0.76	0.65	4.54
	South	84	21.7	0.26	0.14	2.23				
Pribilof red and blue king crab	North	85	67.5	0.79	0.55	3.10	112	0.89	0.53	3.43
	South	76	32.5	0.43	0.28	2.82				

Source: NMFS Restricted Access Management IFQ database, crab fishing year 2007-2008.

Note: These share holdings data are publicly available and non-confidential.

**Table 2. Catcher vessel crew quota share holdings as a percent of the catcher vessel crew share pool.**

Fishery	Share holdings by region						Across regions			
	Region	QS holders	Percent of pool	Mean holding	Median holding	Maximum holding	QS holders	Mean holding	Median holding	Maximum holding
Bristol Bay red king crab	North	13	2.6	0.20	0.17	0.32	153	0.65	0.55	2.07
	South	153	97.4	0.64	0.52	2.07				
Bering Sea <i>C. opilio</i>	North	129	47.6	0.37	0.31	1.94	134	0.75	0.69	2.11
	South	127	52.4	0.41	0.34	1.59				
Eastern Bering Sea <i>C. bairdi</i>	Undesignated	150	100.0	0.67	0.62	2.09	150	0.67	0.62	2.09
Western Bering Sea <i>C. bairdi</i>	Undesignated	150	100.0	0.67	0.62	2.09	150	0.67	0.62	2.09
Eastern Aleutian Island golden king crab	South	11	100.0	9.09	9.18	20.14	11	9.09	9.18	20.14
Western Aleutian Island golden king crab	Undesignated	8	51.4	6.43	4.87	18.30	8	12.50	9.67	37.75
	West	7	48.6	6.94	4.89	19.45				
Western Aleutian Island red king crab	South	4	100.0	25.00	16.53	57.26	4	25.00	16.53	57.26
St. Matthew Island blue king crab	North	63	80.9	1.28	1.26	2.72	69	1.45	1.41	3.32
	South	42	19.1	0.46	0.17	2.57				
Pribilof red and blue king crab	North	33	70.3	2.13	2.13	4.83	150	0.67	0.62	2.09
	South	31	29.7	0.96	0.79	4.03				

Source: NMFS Restricted Access Management IFQ database, crab fishing year 2007-2008.

Note: These share holdings data are publicly available and non-confidential.

During the first two years of the program, the distribution of catch across the fleet of catcher vessels varies across regions and fisheries (see Table 3 and Table 4). As expected, the number of vessels in a

region rises with the share of the TAC allocated to the region. In the Bering Sea *C. opilio* fishery, most vessels participated in both regions, with catch fairly equally distributed across the two regions, as is the TAC. No data could be revealed for the Western Aleutian Islands golden king crab fishery, since fewer than three catcher vessels participated in that fishery in the West region in each of the two first years of the program.

**Table 3. Catch and number of catcher vessels harvesting IFQ by share region (2005-2006).**

Fishery	Region	Number of vessels	Harvest (as a percent of total allocation)		
			Mean harvest	Median harvest	Average of four largest harvests
Bristol Bay red king crab	All	88	1.12	0.85	3.90
	North	9	0.24	0.21	0.32
	South	84	0.97	0.70	3.23
Western Bering Sea <i>C. bairdi</i>	All	42	1.25	0.25	6.97
Eastern Aleutian Islands golden king crab	All	6	15.74	12.92	18.86
	South	6	13.64	9.65	16.20
Bering Sea <i>C. opilio</i>	All	75	1.24	1.01	3.59
	North	59	0.63	0.47	1.86
	South	69	0.61	0.38	1.99

Source: RAM crab IFQ database (2007).

Note: "All" includes catch of Class B IFQ and C share IFQ.

**Table 4. Catch and number of catcher vessels harvesting IFQ by share region (2006-2007).**

Fishery	Region	Number of vessels	Harvest (as a percent of total allocation)		
			Mean harvest	Median harvest	Average of four largest harvests
Bristol Bay red king crab	All	79	1.22	1.05	3.27
	North	6	0.35	0.35	0.42
	South	75	1.08	0.81	2.76
Western Bering Sea <i>C. bairdi</i>	All	34	1.83	0.02	8.32
Eastern Bering Sea <i>C. bairdi</i>	All	33	2.20	0.30	9.58
Eastern Aleutian Islands golden king crab	All	5	19.79	14.98	22.66
	South	5	16.63	12.69	19.91
Bering Sea <i>C. opilio</i>	All	66	1.38	1.11	4.14
	North	43	0.86	0.75	1.95
	South	54	0.78	0.56	2.50

Source: RAM crab IFQ database (2007).

Note: "All" includes catch of Class B IFQ and C share IFQ.

### 2.4.3 The processing sector

Under the crab program, crab harvested with Class A IFQ, which make up 90 percent of the catcher vessel owner share allocation, must be delivered to the holder of IPQ. The remaining 10 percent of harvests made with catcher vessel owner shares (harvest made with Class B IFQ) are open to competition among all processors (including those who do not hold processing shares). Currently, annual allocations arising from C share QS are subject to the same competition that exists for Class B IFQ. In the absence of Council action to the contrary, annual C share allocations will be divided in a manner similar to the Class A/Class B IFQ division of catcher vessel owner shares after the third year of fishing under the program. Processing QS holdings are substantially more concentrated than either catcher vessel owner or catch vessel crew QS holdings (see Table 5).

Since processing share caps limit both holdings and processing of landings, share holdings may constrain some processors from engaging in custom processing arrangements. Based on current share holdings, the 30 percent cap constrains at least one processor in the Eastern Aleutian Islands golden king crab fishery, the Western Aleutian Islands golden king crab fishery, the Western Aleutian Islands red king crab fishery, and the St. Matthew Island blue king crab fishery from engaging in any custom processing. In the Western Aleutian Islands golden king crab and the St. Matthews Island blue king crab fishery, one processor's share holdings in a remote region alone almost equal the cap, effectively preventing any custom processing.

**Table 5. Processing quota share holdings as a percent of the processing quota share pool.**

Fishery	Share holdings by region				Across regions				
	Region	QS holders	Mean holding	Median holding	Maximum holding	QS holders	Mean holding	Median holding	Maximum holding
Bristol Bay red king crab	North	2	1.28	1.28	2.33	16	6.25	2.60	23.16
	South	16	6.09	2.60	20.83				
Bering Sea <i>C. opilio</i>	North	8	5.87	5.51	15.46	20	5.00	2.08	25.18
	South	18	2.95	0.25	9.72				
Eastern Bering Sea <i>C. bairdi</i>	Undesignated	23	4.35	0.83	24.26	23	4.35	0.83	24.26
Western Bering Sea <i>C. bairdi</i>	Undesignated	23	4.35	0.83	24.26	23	4.35	0.83	24.26
Eastern Aleutian Island golden king crab	South	8	12.50	6.04	45.91	8	12.50	6.04	45.91
Western Aleutian Island golden king crab	Undesignated	8	6.25	0.41	33.29	9	11.11	1.03	62.98
	West	9	5.56	0.49	29.69				
Western Aleutian Island red king crab	South	9	11.11	1.03	62.98	9	11.11	1.03	62.98
St. Matthew Island blue king crab	North	6	13.06	8.92	29.94	12	8.33	5.06	32.67
	South	9	2.41	1.76	7.81				
Pribilof red and blue king crab	North	6	11.26	12.01	23.28	14	7.14	3.17	24.49
	South	11	2.95	0.98	13.50				

Source: NMFS Restricted Access Management IFQ database, crab fishing year 2007-2008.

Note: These share holdings data are publicly available and non-confidential.

In addition to regional landing requirements that apply to most processor shares, most processor share allocations are also subject to two other different geographic provisions. Most processor quota shares are subject to a “cooling off” provision, which required IPQ to be used in the “community of origin” (or community of the processing history that led to the initial allocation of those processing quota shares) subject to minor exceptions.<sup>10</sup> In addition, most processor shares are subject to a ‘right of first refusal’ held by an entity designated by the community of origin. The right is triggered by the sale of shares for use outside the community of origin.<sup>11</sup> The right of first refusal is a weak protection in some respects. It does not apply to the use of shares outside the community of origin by the PQS holder. In addition, the right lapses after 3 consecutive years of use of IPQ outside of the community of origin by the PQS holder. The right also does not apply to transfers of IPQ, unless a person other than the PQS holder has used more than 20 percent of the IPQ outside the community of origin in three of the five years preceding the IPQ transfer. The permeability of the right of first refusal limits its potential to prevent the migration of processing from the community of origin.

Since the “cooling off” provision limited movement of processing from the community of origin during the first two years of the program, the distribution of processing of landings in the first two years of the program may not be representative of future landings distributions. The distribution of rights of first refusal should provide a reasonable indication of the starting point of the distribution of processing across

<sup>10</sup> Movement of the lesser of 10 percent of and 500,000 pounds of the IPQ in a community of origin may be moved annually during the cooling off period.

<sup>11</sup> In addition, the entity designated jointly by the City of Kodiak and Kodiak Island Borough has a right of first refusal on PQS initially allocated based on processing in communities in the Gulf of Alaska north of 56°20'N latitude.

communities.<sup>12</sup> In reviewing this distribution, it should be noted that changes are likely to occur as processors move shares to realize efficiencies in the fisheries. Since the right of first refusal does not apply to all transfers of IPQ and does not apply to the processing of shares by the PQS holder outside of the community of origin, that provision should be viewed as only a starting point for the examining the geographic distribution of processing. Changes in the distribution of processing are likely to vary with conditions in the fisheries and cannot be predicted.

**Table 6. PQS regional and right of first refusal designations (2006-2007).**

Fishery	Region	Community of Right of First Refusal	Number of PQS holders	Percent of PQS pool
Bristol Bay red king crab	North	St. Paul	2	2.6
		Akutan	1	19.9
	South	False Pass	1	3.7
		King Cove	1	12.8
		Kodiak	3	3.8
		None	3	2.7
		Port Moller	3	3.5
		Unalaska	11	51.1
		Total	16	97.4
	Bering Sea <i>C. opilio</i>	North	None	3
St. George			2	9.7
St. Paul			6	36.3
Total			8	47.0
South		Akutan	1	9.7
		King Cove	1	6.3
		Kodiak	4	0.1
		None	4	1.8
		Unalaska	12	35.0
		Total	18	53.0
E. Aleutian Islands golden king crab	South	Akutan	1	1.0
		None	1	0.9
		Unalaska	7	98.1
Pribilof Island red and blue king crab	North	None	1	0.3
		St. Paul	5	67.3
		Total	6	67.5
	South	Akutan	1	1.2
King Cove		1	3.8	
Kodiak		4	2.9	
Unalaska		5	24.6	
St. Matthews blue king crab	North	Total	11	32.5
		None	5	64.6
		St. Paul	4	13.8
W. Aleutian Islands golden king crab	North	Total	9	78.3
		Akutan	1	2.7
	South	King Cove	1	1.3
		Kodiak	1	0.0
		Unalaska	6	17.6
W. Aleutian Islands red king crab	Undesignated	9	21.7	
	West	NA	9	50.0
W. Aleutian Islands golden king crab	West	NA	10	50.0
W. Aleutian Islands red king crab	South	NA	10	100.0

Source: NMFS RAM PQS holdings 2006-2007.

<sup>12</sup> The distribution of community interests differ slightly under the cooling off period and the right of first refusal. Cooling off protections operate at the borough level, if a borough exists, and, if not, at the city level. The right of first refusal entity is jointly appointed by the city and borough, if both exist, and by the applicable community government, if only one exists.

#### 2.4.4 Ex vessel pricing

Assessing ex vessel prices under the rationalization program is complicated by several factors. The two different catcher vessel owner IFQ types may bring different prices because of the different limitations on use of those shares and the effects of the arbitration program. The two different types of IFQ that are unrestricted by limits on landings (catcher vessel owner Class B IFQ and C share IFQ) could bring different prices because of the difference in negotiating leverage of their holders. Data limitations, however, complicate efforts to discern differences in ex vessel prices across the share types. The most obvious source of information for establishing such leverage would be price information from deliveries. Current data sources, however, do not provide final prices by share type. The only data that show price by share type are elandings data collected by NOAA Fisheries. These data are collected at the time of landing and do not include any post-landing adjustments or bonuses, which are reported to be an important part of pricing under current practices. Those data suggest that on average B and C share landings received a premium relative to A share landings. The exception is the *C. bairdi* fishery in the first year of the program, when C shares received a lower price on landing than harvests by the other share types. Specific elandings prices are not reported here because the amount of any premium on B share and C share landings may not be accurate, since post-landing bonuses are not included in any prices.

Participants in the fisheries report the extent to which B and C share deliveries have drawn a premium varies across processors and fisheries. Some processors (including processors not holding IPQ) are reported to have paid bonuses to attract deliveries of B share harvests. Participants report that premiums for B and C share deliveries are typically a few cents, but have ranged as high as approximately ten cents. Some processors have chosen not to compete for landings of B share and C share harvests, but have accepted deliveries of B and C share harvests at the same price as A share landings.<sup>13</sup> Under these circumstances, the B and C share harvests received by the processor have typically come from the same fleet delivering A share harvests. In some cases, B and C share deliveries are reported to have brought lower prices than A share deliveries. This conclusion would appear to be supported by the average reported price in elandings data for C share deliveries in the *C. bairdi* fisheries, which was lower than the average reported price for A share deliveries in the first season.

Any absence of a substantial premium on B and C share landings in the program to date could be explained by a few factors other than the utility of those unrestricted shares serving their purpose as competitive market shares. In the first two years of the program, crab markets have been at some of their lowest levels in recent years. In such a market, it is possible that the difference between a competitive price and the price arrived at through the arbitration standard is relatively small. Even in better markets, it is possible that the standard, under which the historic division of revenues is a primary consideration, would result in a price similar to the competitive price. Those historic prices were determined in a competitive market, but one under a different management structure that may have affected the distribution. In addition, some harvesters are reported to have used B and C shares to realize efficiencies in harvesting. B and C share harvests have supplemented a partial delivery of A shares to limit the need for an additional trip to harvest (and independently market) the B and C share catch. Also, when making A share harvests, some harvesters avoid underages that would require an additional trip, knowing that B and C shares can be used to cover any A share harvest overage. These uses of B and C shares clearly benefit harvesters, but detract from the use of B and C shares to pursue competitive markets.

---

<sup>13</sup> Some participants have suggested that processors are reluctant to bid up the price for B shares in part because they fear that arbitrators may simply equate A share ex vessel prices with B share ex vessel prices.

## 2.4.5 First wholesale and consumer markets

This section briefly summarizes market conditions in the first two years of the program and the expected market condition in the coming year using the market report produced for participants in the arbitration system. A brief summary of recent first wholesale prices is also included.

Crab markets in general suffer from great volatility. In general, the red king crab market and prices are greatly influenced by Japanese demand, U.S. demand, and Russian production. In the first year of the program (2005), the Russian supply of red king crab increased substantially, pushing prices down substantially. In the second year, a drop in Russian production and a more aggressive Japanese market buoyed prices of red king crab. That recovery in prices has continued to date and is expected to continue (Sackton, 2007a).

Like red king crab prices, prices for *C. opilio* (snow crab) are greatly influenced by Japanese demand and U.S. demand. In the *C. opilio* market, however, the primary competition in production is the east coast of Canada. In the first year of the program prices for *C. opilio* reached extremely low levels due to poor demand in both the Japanese and U.S. markets. In the second year, the price recovered, approaching all time highs stimulated in part by demand from buyers drawn to the snow crab market by the low prices in the preceding year. In the coming year, it is possible that prices could decline significantly particularly from build up of Canadian inventories or if sellers of crab appear to eager to sell their product. *C. bairdi* prices have generally tracked closely with *C. opilio* prices with *C. bairdi* drawing a premium over *C. opilio* (Sackton, 2007c).

In the first year of the program, Aleutian Islands golden king crab prices declines substantially, tracking the price for red king crab products. In the second year an abundance of competing small sized red king crab imports further weakened prices. Going into the third year of the program it is thought that the price recovery could be stalled, as the increase in demand for golden king crab does not seems to have leveled. Overall, the increase in demand for crab products is expected to result in either stable or rising prices for golden king crab in the coming year (Sackton, 2007b).

First wholesale prices for red and golden king crab show a notable decline in 2005, the first year of the rationalization program (Table 7). The price drop is not evident in for *C. opilio*, likely because that fishery is prosecuted early in the year, so these data reflect prices for production from the January 2005 fishery.

**Table 7. First wholesale prices of crab species by product type (2001-2005).**

Species	Product	2001	2002	2003	2004	2005
Red King Crab	Shellfish Sections	8.93	11.58	9.82	9.25	8.52
	Whole	5.14	9.80	8.26	8.40	7.94
Golden King Crab	Shellfish Sections	6.95	7.58	7.89	6.02	6.00
	Whole	5.17	4.99	5.76	5.83	5.59
<i>C. opilio</i> (snow) crab	Shellfish Sections	3.73	3.58	4.40	4.79	3.85
	Whole	*	*	*	*	*

Source: ADFG COAR data.

\*Prices with fewer than 4 observations are confidential.

## 2.4.6 Communities

Several communities have historically been home to processors that have taken delivery of crab from the Bering Sea and Aleutian Islands crab fisheries. Limited information concerning the geographic distribution of processing in the crab fisheries can be released because relatively few processors participate in the fishery in any location. In the years preceding implementation of the rationalization program, only data from the Bristol Bay red king crab and the Bering Sea *C. opilio* fisheries can be

released (see Table 8). In addition, activity on floating processors may be associated with a particular community, but is not attributed to community in these records. Dutch Harbor processors received slightly less than a majority of the landings in both major fisheries. Discerning the landings of any other community in isolation is difficult because of aggregations required by confidentiality rules.

**Table 8. Distribution of processing in the Bristol Bay red king crab and Bering Sea *C. opilio* fisheries prior to the rationalization program (2001-2005).**

Fishery	Year	Communities	Number of processors	Pounds processed*	Percent of processed pounds
Bristol Bay red king crab	2001	Adak, Akutan, King Cove, Floaters	6	2,663,437	34.7
		Dutch Harbor	5	3,902,545	50.8
		Catcher processors	6	312,939	4.1
		Kodiak	6	798,932	10.4
	2002	Akutan, King Cove, Floaters	6	3,372,188	38.5
		Dutch Harbor	6	4,276,910	48.8
		Catcher processors	8	300,425	3.4
		Kodiak, St. Paul	4	820,497	9.4
	2003	Akutan, King Cove, Sand Point, Floaters	10	5,207,419	36.6
		Dutch Harbor	7	7,131,382	50.1
		Catcher processors	8	680,080	4.8
		Kodiak, St. Paul	5	1,218,494	8.6
	2004	Akutan, St. Paul, King Cove, Floaters	7	5,932,888	42.7
		Dutch Harbor	6	6,504,531	46.8
		Catcher processors	8	602,749	4.3
		Kodiak	4	848,879	6.1
Bering Sea <i>C. opilio</i>	2001	Akutan, King Cove, Kodiak	3	1,889,513	8.2
		Dutch Harbor	5	7,916,618	34.5
		Catcher processors	7	3,099,567	13.5
		St. Paul, Floaters	8	10,034,268	43.7
	2002	Dutch Harbor, King Cove, Kodiak	9	13,646,381	46.1
		Catcher processors	8	1,671,036	5.6
		St. Paul, Floaters	8	14,292,205	48.3
	2003	Akutan, King Cove, Kodiak	3	2,162,245	8.5
		Dutch Harbor	6	10,308,648	40.6
		Catcher processors	5	803,452	3.2
		St. Paul, Floaters	8	12,135,777	47.8
	2004	Akutan, King Cove, Kodiak	4	2,287,481	10.4
		Dutch Harbor	6	8,714,351	39.7
		Catcher processors	6	664,660	3.0
		St. Paul, Floaters	8	10,273,001	46.8
	2005	Akutan, King Cove, Kodiak	3	2,206,008	9.7
Dutch Harbor		6	9,759,358	43.1	
Catcher processors		6	648,967	2.9	
St. Paul, Floaters		5	10,041,444	44.3	

\*Excludes deadloss.  
Source: ADF&G fish ticket data

Rights of first refusal are granted to all communities with crab processing in recent history (see Table 6). The distribution of these rights is a general starting point for the distribution of landings in communities in the various fisheries.

Seven Alaska communities have historically received substantial landings from the Bering Sea and Aleutian Islands crab fisheries: Unalaska, Akutan, King Cove, St. Paul, St. George, Adak, and Kodiak. These communities vary in their geographic relation to the fishery; their historical relationship to the fishery; and the nature of their contemporary engagement with the fisheries through local harvesting, processing, and support sector activity or ownership. Each of these factors influences the direction and magnitude of potential social impacts associated with the proposed action.

Commercial fishing and seafood processing play a significant role in the economic success of Unalaska. The community is home to the greatest concentration of processing and catcher vessel activity than any other Alaska community (EDAW, 2005). Pollock accounts for nearly 70 percent of the total wholesale value processed in Dutch Harbor in 2005. The second largest contributor to total wholesale value processed in Dutch Harbor is crab at nearly 20 percent. Of the crab species, red king crab provided the

largest contribution at \$51 million in the 2005 followed by snow crab at \$33 million. Dutch Harbor based processors received a substantial share of the processor share allocations in most crab fisheries under the rationalization program. These shares are subject to rights of first refusal of the Dutch Harbor community entity. These shares are unlikely to migrate out of the community because crab processing at most facilities plays an important part in an integrated operation that serves several fisheries.

Once heavily dependent upon salmon, the community of King Cove is now more diversified, processing groundfish and crab from the GOA and BSAI. The community is home to several large crab vessels, and is also home to Peter Pan Seafoods, the only shore based processor located in the community. The plant processes salmon, crab, halibut, and groundfish. Approximately 80 percent of King Cove's work force is employed full time in the commercial fishing industry (EDAW, 2005). This likely underestimates the dependency of the local economy on the importance of commercial fishing in the community. For several years now, the amount of crab and the total value of the crab processed in King Cove have been declining, while groundfish has increased. The decline in crab production was due primarily to a decline in quotas related to reduced stocks. In addition, AFA sideboards caps on BSAI crab have also limited the amount of crab that can be processed in King Cove. Under the rationalization program, crab processing has remained an important component of the diversified processing undertaken at the shore plant in King Cove. Yet, rapid fleet contraction under the program, particularly in the Bristol Bay red king crab and Bering Sea *C. opilio* fisheries, has affected King Cove. Between 10 and 15 crew jobs are estimated to have been lost in each of these two fisheries. Fleet contraction is also believed to have caused a drop in demand for harbor and moorage services and goods and services from fishery support businesses in King Cove. Attribution of these effects on the change in crab management is difficult, since data isolating spending of crab vessels and fishery participants from spending associated with other fishery and non-fishery activities are not available (see Lowe, et al., 2006).

The economy of Akutan is heavily dependent upon the groundfish and crab fisheries in the BSAI and GOA. The community is home to a one of the largest shore based seafood processing plants in the area and is also home to a floating processor. The community also provides some limited support services to the fishing community. In addition, Akutan is a Community Development Quota (CDQ) community. The vast majority of catch landed in Akutan comes from vessels based outside of the community. Most of those vessels focus primarily on pollock, Pacific cod, and crab. The large shore plant is operated by Trident Seafoods. The shore processor is a multi-species plant, processing primarily pollock, Pacific cod, and crab. Given that the plant is an AFA-qualified plant with its own pollock co-op, pollock is the primary species in terms of labor requirements and economic value. However, the shore plant also accounts for a significant amount of the regional crab processing and also provides for a significant amount of the processing value at the plant (EDAW, 2005). As with plants in Dutch Harbor and King Cove, crab has remained an important part of a diverse operation at the shore plant in Akutan since implementation of the rationalization program.

Although the economy of Kodiak is more diversified compared to King Cove and Akutan, fishing is a significant player in the community. Excluding the USCG, four of the top ten employers in Kodiak in 2003 were fish processors. Salmon and herring account for 42 percent of the total wholesale value during 2005. Halibut, sablefish, and other groundfish contributed 22 percent of the total wholesale value, while Tanner crab contributed less than 5 percent of the total wholesale value. Unlike Unalaska, King Cove, and Akutan, Kodiak is home to an extensive resident fishing fleet. The total number of vessels is less than 600, with less than 300 that actively fished in 2002. Total estimated gross revenue of Kodiak permit holders was \$111 million for 2002. Kodiak is also home to numerous shore based processors. Species that typically contribute more than 10 percent of the total value are Pacific cod, pollock, and salmon. The processors located in Kodiak provide a large amount of diversity in size, volume, and species processed. The products produced by the shore plants range from large quantity canning of salmon to fresh and fresh-frozen products. The rapid fleet contraction under the crab rationalization program is also thought to

have affected Kodiak. Kodiak crew are estimated to have lost 125 positions in the Bristol Bay red king crab and approximately 60 positions in the Bering Sea snow crab fishery in the first year of the program. A study of the effects of the rationalization program on Kodiak during the program's first year found anecdotal evidence suggesting declines in spending at some businesses, but evidence of a broad decline in total local spending could not be identified. The study cautioned that effects may lag, so these findings should be viewed as preliminary (Knapp, 2006).

Unlike King Cove, Akutan, Unalaska, or Kodiak, St. Paul is primarily dependent upon the processing of snow crab harvested in the North Pacific. According to ownership data, all crab deliveries to the Pribilof Islands are made by non-resident vessels. Since 1992, the local shoreplant on St. Paul has been the primary processor for crab. St. Paul is a primary beneficiary of the North/South regional distribution of shares in the rationalization program. This limitation on landings should ensure that a substantial portion of the processing in the Bering Sea *C. opilio* fishery is undertaken in St. Paul. In the long run, it is possible that St. George could obtain a greater share of North landings, but most participants currently prefer St. Paul's harbor facilities to those available in St. George.

As with St. Paul, St. George has depended primarily on processing of crab from the Bering Sea *C. opilio* fishery. Processing of crab in St. George has been exclusively by floating processors. Since 2000, little or no crab processing has taken place in St. George. Prior to the rationalization program, the loss of processing activity is primarily attributable to the decline in crab stocks. Under the rationalization program, no processing has returned to St. George. Processing shares were subject to the 'cooling off' provision requiring the processing of landings with those shares to be undertaken in St. George. Yet, harbor breakwater damage caused by a storm has prevented deliveries to the community during the first two years of the program. Whether the community can attract crab landings in the future depends in large part on its ability to provide a harbor perceived to be safe by participants.

The community of Adak, until recently, had no direct or indirect ties to commercial fishing because the island was home to a Naval Air Station since the 1940s. However, the U.S. Navy closed the air station several years ago, leaving the island to the local residents. As a result, the Aleut Corporation is trying to transform the island into a commercial fishing center in the Western Aleutians area of the Bering Sea. Most commercial fishing deliveries to Adak are to a single processing plant from larger vessels from outside the area since the community has a very limited small boat residential fleet. Of the species processed, cod, halibut, and black cod are the primary species. A few aspects of the rationalization program are structured specifically to support Adak. First, 10 percent of the TAC in the Western Aleutian Islands golden king crab fishery is allocated to a community entity representing Adak. This allocation is intended to support fishery development (including both harvesting and processing) in the community. Adak is also an intended beneficiary of a regional designation on one-half of the shares in the Western Aleutian Islands golden king crab fishery, which require crab harvested with those shares to be processed west of 174° West longitude. Currently, Adak is the only community in the West region with a shore-based processing plant. Processing of the West region allocation in Adak is not a certainty, since the rules in the fishery permit processing of those landings on floating processors.

## **2.5 Analysis of alternatives**

The analysis is separated by specific provision (or program modification). For each modification to the program under consideration, the status quo (Alternative 1) is analyzed first, followed by the analysis of the proposed amendment. Since several amendments to the arbitration system are under consideration, in some cases these changes interact. To the extent that an action interacts with other actions under consideration, those interactions are described and analyzed.

## **2.5.1 Analysis of the action to revise market reports and non-binding price formula requirements for fisheries unlikely to open**

This action is intended to remove the requirement for the production of market reports and non-binding price formulas for fisheries that are unlikely to open.

### Alternative 1 (status quo)

Under the current regulations, arbitration organizations representing holders of harvest shares and processing shares are required to contract for market reports and non-binding price formulas annually for each fishery. In the first two years of the program, three of the rationalized fisheries have not opened due to stock conditions. Notwithstanding these closures, the regulations technically require the production of market reports and non-binding formulas. Since these documents are not needed for guiding negotiations in the closed fisheries, requiring these reports would seem to impose unnecessary costs on participants.

In the first three years of the program, participants have communicated with managers concerning potential fishery openings and have elected not to contract for market reports and non-binding formulas for fisheries that are very unlikely to open. To date, participants have not erred in their decisions. So, reports have not been prepared for fisheries that have not opened. In the absence of a regulatory amendment, it is likely that participants would continue to use an informal process to avoid producing market reports for fisheries that are unlikely to open. Since both sectors have agreed to these arrangements and fisheries for which market reports were not produced have not opened, no friction between sectors has occurred.

Under this arrangement, it is possible that in the future participants will be faced with an unexpected opening, in which case, tardy production of a report and formula could complicate negotiations. The extent of any disruption is not known and will depend on the circumstances. Regardless, the absence of a means to address various contingencies for fishery openings seems to be a shortcoming in the current management.

While the cost of producing the reports and formulas would seem to be unnecessary, one advantage of the current requirement for these reports is that the decision for opening a fishery is typically made very close to the fishery opening (see Table 9). Current management is structured to allow for the use of the most recent stock information when deciding whether to open a fishery and setting the TAC. By making the announcements shortly before the season opening occurs, arbitration participants are prevented from waiting until the fishery opening is certain before needing to contract for market reports and non-binding formulas. Given that little time is available to produce a report after a final decision on whether to open a fishery, some argument can be made that the unequivocal requirement for a market report and non-binding formula for every fishery under the status quo could be beneficial for those circumstances when an unexpected decision to open a fishery is made based on the most recent stock information.

**Table 9. Due date for market report and non-binding formula, TAC and closure announcements, and season opening by fishery (2005-2006 to 2007-2008).**

Fishery	Due Date for Market Report and Price Formula	TAC or Closure Announcement (2005-2006)	TAC or Closure Announcement (2006-2007)	TAC or Closure Announcement (2007-2008)	Season opening
Bristol Bay red king crab	August 26	September 29	September 29	October 1	October 15
Bering Sea <i>C. opilio</i>	August 26	September 29	September 29	October 1	October 15
Eastern Bering Sea <i>C. bairdi</i>	August 26	September 29*	September 29	October 1	October 15
Western Bering Sea <i>C. bairdi</i>	August 26	September 29	September 29	October 1	October 15
St. Matthew Island blue king crab	August 26	September 29*	September 29*	October 1	October 15
Pribilof red and blue king crab	August 26	September 29*	September 29*	October 1	October 15
Western Aleutian Islands red king crab	September 5	NA***	NA***	July 23*	October 25
Aleutian Islands golden king crab	June 26	July 29	July 18	July 23	August 15/16**

\* Denotes closure announcement. All other announcements are TAC announcements.

\*\* Opening occurred on August 16th in 2005.

\*\*\* In July 2004, a fishery closure was announced, effective until after the November 2006 survey of the fishery, effectively closing the fishery until the 2007-2008 closure.

Source: ADF&G TAC and closure announcements.

The costs of the additional reports required under the current regulation would be a relatively minor additional expense. In the first year of the program, two cents per pound were charged on all landings (with harvesters and processors each paying one cent). These charges were adequate to cover all non-adversarial arbitration expenses (including the market reports and non-binding formulas for all open fisheries) during the first two years of the program. In the first two years of the program, approximately 25 percent of the shared arbitration costs have been incurred for market reports and non-binding formulas. These costs amount to between \$25,000 and \$30,000 per species per year. Dispersed across the all participants, the charge on each landed pound is likely to amount to approximately \$0.0015 for each report/formula for each species (at current TACs).

In addition to the financial costs, the production of additional reports involves some logistical complications. Reports are required to be produced in a compressed period under the current regulations. Requiring additional reports and formulas adds to the burden of the person producing those reports and could limit time available to ensure that all sources fully utilized and are put to their most complete and best uses. In addition, the production of reports could affect the ability of participants to adequately communicate with the market analyst and formula arbitrator concerning reports produced for fisheries that are scheduled to open. This lack of attention could have consequences in future years, if the earlier reports are the starting point for reports in future years.

Alternative 2 (waiver of market report and non-binding formula requirement on agreement of arbitration organizations for fisheries unlikely to open)

Under this alternative, if arbitration organizations representing the holders of 50 percent or more of the QS eligible for arbitration and the PQS can agree not to produce a market report or non-binding formula for a fishery that the organizations believe is unlikely to open. The determination of whether the fishery is unlikely to open would be fully at the discretion of the arbitration organizations. Although managers may be in a better position to make an assessment of the potential for a fishery to open, it is believed by managers that any official declaration (or absence of a declaration) by managers concerning a fisheries closure could confuse participants, if a future, inconsistent determination is made to either open or close a fishery. Managers, in general, have been willing to discuss the potential opening of a fishery with industry, both informally and during meetings with industry, such as the annual Pacific Northwest Crab Industry Advisory Committee (PNCIAC) meetings. From these communications, arbitration organizations and their members can make reasonable decisions concerning the potential for a fishery to open, and whether a market report and non-binding formula are unnecessary.

To fully understand the potential application of this provision, several aspects of this provision should be clearly described. First, in the event the two arbitration organizations disagree concerning whether a fishery is likely to open, a market report and non-binding formula will be required for the fishery under the standard timeline.<sup>14</sup> Second, the arbitration organizations must also agree to terms for the provision of the market report and the non-binding formula, in the event that the fishery unexpectedly opens. This agreement must specify the timeline for production of the report and formula. This requirement is intended to ensure that participants are provided timely information to guide their negotiations in the event the fishery opens. This information is critical to participants, since the arbitration system is the fallback, if participants cannot agree to delivery terms. The non-binding formula is important to these negotiations, since the formula is based on the same arbitration standard that is applied by any contract arbitrator who is called on to settle any price disagreement. Given that a contingency plan for developing the market report and non-binding formula are required for the arbitration organizations to use this provision, the risk of fishery participants being left without adequate information to guide their negotiations is limited.

The greatest concern arising from this provision is that fisheries in which the provision is most likely to be used are fisheries for which a market report and non-binding formula have yet to be produced (i.e., the Western Aleutian Islands red king crab, the St. Matthew Island blue king crab, and the Pribilof red and blue king crab fisheries). For fisheries that have been open, these documents are largely derivative of the prior year's report. So, an unexpected opening of a fishery that has had prior reports and formulas will pose less of a time pressure on the market analyst and formula arbitrator contracted to produce the market report and non-binding formula, respectively. For a fishery that has never had a report or non-binding formula, the production of these documents could be more controversial and time consuming, particularly if produced under tight timelines. Although work from previous reports and formulas in other fisheries of the same or similar species will be useful in developing the reports and formulas, the most relevant information for the report is likely to come from the fishery to which the report and formula relate. The ability of participants to use the provision to avoid costs of an unnecessary report and formula should be weighed against the risk that the information in these documents may be less complete or fully developed for a fishery that opens unexpected. In considering this risk, it should be noted that the risk should be a concern only in fisheries that have yet to be analyzed in a non-binding formula – the more important of the two documents to negotiations in a fishery. It should also be noted that these fisheries are minor, in comparison to the larger Bristol Bay red king crab and Bering Sea *C. opilio* fisheries, in which most of their participants are also active.

Although the cost savings from using this provision to avoid producing unnecessary reports and formulas is rather minor, the provision should provide a benefit to participants who wish to avoid those costs. The provision does pose some risk that participants in a fishery will have inadequate information to guide their negotiations of A share deliveries. This risk arises only in fisheries that have not been opened, which are relatively small fisheries. Also, the risk is reduced to the extent that participants have chosen to wait in or after the season when market prices for production from the fishery's catch is more certain.

---

<sup>14</sup> Under the current regulations, the report and non-binding formula are required at least 50 days prior to the season opening. Under one provision under consideration in this action, that timeline could be modified for the Aleutian Islands golden king crab fisheries to allow for the use of data from the most recent season in the production of those reports. In a separate provision under consideration in this action, the requirement for market reports could be modified to allow arbitration organizations to agree to the timing of those reports, to ensure that participants negotiating landings from the fisheries have the most current information for those negotiations. While these modifications would change the required reports, in the event that the arbitration organizations do not agree that a fishery is unlikely to open, the changes are unlikely to influence the effects of this provision.

## **2.6 Analysis of action to modify the timeline for the golden king crab market report and formula does not allow for data from most recent fishery to be used**

Under the current regulation, data from the most recent season are not available for use in developing the market report and non-binding formula because those reports are required to be completed 50 days prior to the August 15<sup>th</sup> fishery opening. A modification to allow an additional 20 days for the completion of the report and formula would enable the market analyst and formula arbitrator to the use of data from the most recent fisheries in the production of the market report and non-binding formula.

### Alternative 1 (status quo)

Under the status quo, arbitration organizations are required to contract for delivery of the market report and non-binding formula at least 50 days prior to the fishery opening (50 CFR 680.20(f)(4)(i)). The rationale for this timing is that it would allow participants ample time to use the information in negotiations prior to the fishery opening. The timing with respect to the Aleutian Island golden king crab fisheries, however, prevents the market analyst and formula arbitrator from using the most current information from Commercial Operators Annual Reports. Since the golden king crab fisheries open in mid-August, the reports are due in late June. At this time, data from the prior year are typically not fully compiled.

Under the current schedule, the market report and formula lack information from the preceding season. These data could be important to identifying trends in pricing or specific changes in circumstance from the preceding year that could affect pricing under the arbitration standard. These factors are primarily those identified in the list of factors to be considered in setting the price, including current ex-vessel prices, consumer and wholesale product prices, innovations and developments of the harvesting and processing sectors, efficiency and productivity of the harvesting and processing sectors, quality, and timing and location of deliveries. Although information concerning these factors can be gathered from participants in the fisheries, the lack of official data for verifying that information could affect the quality of the market report and formula.

### Alternative 2 (requiring delivery of the market report and non-binding formula for the Aleutian Island golden king crab fishery 30 day prior to those fisheries opening)

Under this alternative, the market report and non-binding price formula for the golden king crab fisheries will be required to be completed at least 30 days prior to the opening of those fisheries (20 days later than is required under the status quo). This delay will allow the market analyst and formula arbitrator to use data from the most recent season in preparing their respective reports. Although public sources are not the only source of data relevant to the development of the market report and formula, public sources are reliable for verifying information from other sources and may be deemed more reliable by participants in the fisheries. This greater reliability could aid in reducing disputes during negotiations.

One concern that could arise under this alternative is that participants will not have adequate time to use for the market report and formula for negotiations. Although the delay does compress negotiations into a slightly tighter timeframe, the market report and non-binding formula would still be required prior to the announcement of the TAC, based on recent experiences (see Table 9). Also, given the few participants in the golden king crab fisheries (see Table 1 and Table 5), demands on participants to coordinate share matching and landings are less pressing than in other fisheries. In addition, since the golden king crab fisheries openings do not coincide with the openings of other fisheries, fewer pressures from the need to complete negotiations in several fisheries simultaneously. Given these circumstances, it is unlikely that

the delay in receiving the market report and formula will negatively affect negotiations (or any participants position in negotiations).

It should be noted that as a part of this action, the Council is also considering an provision to modify the requirements for producing market reports that would address the perceived staleness of those reports. If the Council chooses to amend the requirements for producing market reports under that provision, this alternative would be limited to delaying the production of the non-binding formula in the golden king crab fishery by 20 days. The effects of the proposed delay in production of the formula are the same, regardless of whether the action applies to the market report as well. The proposed action to modify market report requirements would likely result in periodic delivery of market information to participants, under which more complete and current information concerning markets would be provided to participants than is currently received (or would be received under the delay of the market report by 20 days, as proposed by this action).

## **2.7 Action to address staleness of the market reports**

The current requirement that market reports be complete at least 50 days prior to the season prevents the inclusion of the most current and relevant pricing information in the report. In addition, the prohibition on supplements to the report prevents modification of the requirement to provide useful market information in season or after completion of the initial report. Market reports would be more timely and informative, if those reports can be produced and supplemented at any time (provided those reports contain only publicly available information to allay any potential antitrust concerns).

### Alternative 1 (status quo)

The market report is intended to provide participants with a transparent view of market conditions to form the basis for negotiations. The report should rely on ex vessel prices, first wholesale prices, as well as downstream prices in consumer markets to analyze market conditions. Although crab price volatility is recognized as preventing this preseason analysis from being a good tool for setting a single, dollar ex vessel price for landings, it was thought that a unbiased review of markets could assist participants in negotiating prices and settling delivery terms (RIR, p. 400). The report is based on both publicly available market information and information provided to the analyst by participants in the fisheries. Processors are required to communicate with the analyst independently. Harvesters that are unaffiliated with processors can communicate with the analyst collectively, only as a part of a Fishermen's Collective Marketing Act (FCMA) cooperative. In the first two years of the program, many harvester share holders participated collectively in this process using an FCMA cooperative, which included members of several of the harvest cooperatives formed under the program.<sup>15</sup> This FCMA cooperative (known as the "Inter-Cooperative Exchange" or "ICE") represents holders of approximately 70 percent of the unaffiliated harvesters in the fisheries.

Some participants have questioned the utility of the market report. The market report is required to be released at least 50 days prior to the season opening (see 50 CFR 680.20(f)). Furthermore, any price information contained in the report is required to be at least 3 months old at the time of release, to prevent

---

<sup>15</sup> Under the rationalization program, IFQ holders may form "harvest cooperatives" that serve the exclusive purpose of coordinating catch of the allocations of their members. Under antitrust law, harvesters that intended to negotiate landings prices collectively must comply with the requirements of the FCMA. Because of their different purposes, the limitations on and requirements for forming cooperatives under the FCMA differ from those of the rationalization program. As a result, IFQ holders in different harvest cooperatives have been able to organize under the FCMA to collectively negotiate prices by meeting the requirements of the FCMA.

the use of private information used in the report for anticompetitive purposes.<sup>16</sup> Because of the timing of the report and the imitations on information it may contain, most participants in the fisheries believe that the information in the reports is stale by the time it would be useful for negotiations. The usefulness of the report is certainly questionable in the case of the Bering Sea *C. opilio* fishery. Although the fishery opens in October, simultaneously with the opening of the Bristol Bay red king crab fishery, participants have elected not to fish until after January 1<sup>st</sup>, when the fishery was traditionally prosecuted under the License Limitation Program (LLP). By the time of fishing begins, the market report itself is four months old, while the information it contains is approximately seven months old. Although less extreme in other fisheries, the four month old information in the market reports for other fisheries is viewed as stale by price negotiators. As a consequence, most participants in the fishery have needed to locate other sources of up-to-date information to support their negotiations.

#### Alternative 2 (allow arbitration organizations to agree to market report terms and timing)

The proposed regulatory amendment would provide that at least 50 days prior to a season opening, the arbitration organizations representing at least 50 percent of the PQS holders and at least 50 percent of the unaffiliated QS holders are required to reach an agreement for the provision of a market report (which may include supplements at any time prior to the end of the season). The market report will utilize only publicly available information. Such an amendment is intended to provide the arbitration organizations with the most latitude to define a market report that will best serve participants in a fishery.

The organizations have already discussed several ways that the market report process could be improved. First, the report can use information gathered from publicly available market reports (such as Urner Barry) to periodically inform all participants in the fishery of general market trends. Annually (or more frequently, if conditions merit) an analytical report could be provided to participants from a market expert (such as the current market analyst) to provide participants with a synthesized description of the market. Although this alternative structure for market reports sacrifices the use of private information, private information may not be useful, if the primary goal of the report is to provide a general description of market conditions and developments. Furthermore, aggregation of those data across 5 or more sources (as is required) may not always be possible in the small market of crab producers, limiting the availability of data from private sources for any report. At the same time, by limiting the information in the report to publicly available information, the report will not pose a risk of tainting the market with information that can be used for anticompetitive purposes.

It should be noted that this change in market report requirements gives extensive power to the arbitration organizations. Currently, a single organization represents unaffiliated harvesters and a single organization represents processor. The organizations have worked amicably to improve the arbitration system and seem to be sensitive to the needs of all members (including members with small holdings and little power). If conditions change (by larger members asserting their position) it is possible that the organizations could agree to do away with all but a minimal market report requirement. This could disadvantage smaller entities, who currently rely on the market report as a source of market conditions. Yet, the current market reports are not particularly costly when those costs are disbursed among the entire industry (i.e., less than ½ of one-cent per year per pound landed). Whether a group of share holders representing over 50 percent of the independent QS holdings and 50 percent of the PQS would attempt to

---

<sup>16</sup> All private price information used in the report must be aggregated across at least 5 sources and be at least 3 months old at the time the report is released (see 50 CFR 680.20(f) and Feinstein, et al., 2004).

assert their ability to avoid these costs to the detriment of the minority smaller share holders does not seem likely.<sup>17</sup>

Since the scope of the market report and any supplements would be subject to agreement of the arbitration organizations, its costs are difficult to predict and may change with time and circumstances. Depending on the scope of the agreed report, its costs could increase or decrease. The current report relies on an extensive annual analysis by the market analyst. The degree of analysis would likely decrease under this alternative, but some level of professional analysis of market data would likely be contracted for annually. Saved costs realized by reducing the scope of the analysis would be at least partially spent on subscription costs of periodic public reports (such as Urner Barry) that are intended to inform participants of market conditions throughout the season. It is likely that the organizations would make an effort to keep costs in most years lower than under the current standard market report requirement.

Overall, this alternative provides the arbitration organizations with the ability to develop a system for providing market information to their members. The flexibility of the requirement should allow the organization to provide the most useful, timely information to participants in need of market information for their price negotiations. The alternative, however, presents some risk (albeit minor) that majority QS and PQS holders could assert their position in the arbitration organizations to provide a market report that is not particularly beneficial to those small share holders, who are likely to derive the greatest benefit from the market reports.

### **2.7.1 Net benefits to the Nation**

A minor overall net benefit to the Nation is likely to arise from this action. Each of the proposed actions are likely to decreasing costs and transaction costs or by improving the quality of information provided to participants in the program.

## **3 Regulatory Flexibility Analysis**

### **3.1 Introduction**

The Regulatory Flexibility Act (RFA), first enacted in 1980, and codified at 5 U.S.C. 600-611, was designed to place the burden on the government to review all regulations to ensure that, while accomplishing their intended purposes, they do not unduly inhibit the ability of small entities to compete. The RFA recognizes that the size of a business, unit of government, or nonprofit organization frequently has a bearing on its ability to comply with a Federal regulation. Major goals of the RFA are: 1) to increase agency awareness and understanding of the impact of their regulations on small business; 2) to require that agencies communicate and explain their findings to the public; and 3) to encourage agencies to use flexibility and to provide regulatory relief to small entities.

The RFA emphasizes predicting significant adverse impacts on small entities as a group distinct from other entities and on the consideration of alternatives that may minimize the impacts, while still achieving the stated objective of the action. When an agency publishes a proposed rule, it must either, (1) “certify” that the action will not have a significant adverse effect on a substantial number of small entities, and support such a certification declaration with a “factual basis”, demonstrating this outcome, or, (2) if such a certification cannot be supported by a factual basis, prepare and make available for public review an Initial Regulatory Flexibility Analysis (IRFA) that describes the impact of the proposed rule on small entities.

---

<sup>17</sup> It should be noted that the ability to disadvantage holders of a substantial amount of shares in the fishery (i.e., a relatively large minority interest) is unlikely, since those share holders can likely afford to gather market information on their own. Only small share holders would be disadvantaged.

Based upon a preliminary evaluation of the proposed pilot program alternatives, it appears that “certification” would not be appropriate. Therefore, this IRFA has been prepared. Analytical requirements for the IRFA are described below in more detail.

The IRFA must contain:

1. A description of the reasons why action by the agency is being considered;
2. A succinct statement of the objectives of, and the legal basis for, the proposed rule;
3. A description of, and where feasible, an estimate of the number of small entities to which the proposed rule will apply (including a profile of the industry divided into industry segments, if appropriate);
4. A description of the projected reporting, record keeping, and other compliance requirements of the proposed rule, including an estimate of the classes of small entities that will be subject to the requirement and the type of professional skills necessary for preparation of the report or record;
5. An identification, to the extent practicable, of all relevant Federal rules that may duplicate, overlap, or conflict with the proposed rule;
6. A description of any significant alternatives to the proposed rule that accomplish the stated objectives of the Magnuson-Stevens Act and any other applicable statutes, and that would minimize any significant adverse economic impact of the proposed rule on small entities. Consistent with the stated objectives of applicable statutes, the analysis shall discuss significant alternatives, such as:
  - a. The establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities;
  - b. The clarification, consolidation or simplification of compliance and reporting requirements under the rule for such small entities;
  - c. The use of performance rather than design standards;
  - d. An exemption from coverage of the rule, or any part thereof, for such small entities.

The “universe” of entities to be considered in an IRFA generally includes only those small entities that can reasonably be expected to be directly regulated by the proposed action. If the effects of the rule fall primarily on a distinct segment of the industry, or portion thereof (e.g., user group, gear type, geographic area), that segment would be considered the universe for purposes of this analysis.

In preparing an IRFA, an agency may provide either a quantifiable or numerical description of the effects of a proposed rule (and alternatives to the proposed rule), or more general descriptive statements if quantification is not practicable or reliable.

### **3.1.1 Definition of a Small Entity**

The RFA recognizes and defines three kinds of small entities: 1) small businesses; 2) small non-profit organizations; and 3) and small government jurisdictions.

Small businesses: Section 601(3) of the RFA defines a “small business” as having the same meaning as a “small business concern,” which is defined under Section 3 of the Small Business Act. A “small business” or “small business concern” includes any firm that is independently owned and operated and not dominate in its field of operation. The U.S. Small Business Administration (SBA) has further defined a “small business concern” as one “organized for profit, with a place of business located in the United States, and which operates primarily within the United States, or which makes a significant contribution to the U.S. economy through payment of taxes or use of American products, materials, or labor. A small business concern may be in the legal form of an individual proprietorship, partnership, limited liability company, corporation, joint venture, association, trust, or cooperative, except that where the form is a

joint venture there can be no more than 49 percent participation by foreign business entities in the joint venture.”

The SBA has established size criteria for all major industry sectors in the U.S., 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 \$4.0 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 (including its affiliates) 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 \$4.0 million criterion for fish harvesting operations. A wholesale business servicing the fishing industry is a small business if it employs 100 or fewer persons on a full-time, part-time, temporary, or other basis, at all its affiliated operations worldwide.

The SBA has established “principles of affiliation” to determine whether a business concern is “independently owned and operated.” In general, business concerns are affiliates of each other when one concern controls or has the power to control the other or a third party controls or has the power to control both. The SBA considers factors such as ownership, management, previous relationships with or ties to another concern, and contractual relationships, in determining whether affiliation exists. Individuals or firms that have identical or substantially identical business or economic interests, such as family members, persons with common investments, or firms that are economically dependent through contractual or other relationships, are treated as one party, with such interests aggregated when measuring the size of the concern in question. The SBA counts the receipts or employees of the concern whose size is at issue and those of all its domestic and foreign affiliates, regardless of whether the affiliates are organized for profit, in determining the concern’s size. However, business concerns owned and controlled by Indian Tribes, Alaska Regional or Village Corporations organized pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. 1601), Native Hawaiian Organizations, or Community Development Corporations authorized by 42 U.S.C. 9805 are not considered affiliates of such entities, or with other concerns owned by these entities, solely because of their common ownership.

Affiliation may be based on stock ownership when: (1) A person is an affiliate of a concern if the person owns or controls, or has the power to control 50% or more of its voting stock, or a block of stock which affords control because it is large compared to other outstanding blocks of stock, or (2) If two or more persons each owns, controls or have the power to control less than 50% of the voting stock of a concern, with minority holdings that are equal or approximately equal in size, but the aggregate of these minority holdings is large as compared with any other stock holding, each such person is presumed to be an affiliate of the concern.

Affiliation may be based on common management or joint venture arrangements. Affiliation arises where one or more officers, directors, or general partners control the board of directors and/or the management of another concern. Parties to a joint venture also may be affiliates. A contractor and subcontractor are treated as joint venturers if the ostensible subcontractor will perform primary and vital requirements of a contract or if the prime contractor is unusually reliant upon the ostensible subcontractor. All requirements of the contract are considered in reviewing such relationship, including contract management, technical responsibilities, and the percentage of subcontracted work.

Small organizations: The RFA defines “small organizations” as any nonprofit enterprise that is independently owned and operated and is not dominant in its field.

Small governmental jurisdictions: The RFA defines small governmental jurisdictions as governments of cities, counties, towns, townships, villages, school districts, or special districts with populations of fewer than 50,000.

### **3.2 A description of the reasons why action by the agency is being considered**

The Council developed the following purpose and need statements defining its rationale for the different actions under consideration:

#### Action to revise market reports and non-binding price formulas for fisheries unlikely to open

*Under the current regulations, market reports and non-binding formulas are required to be generated annually for each fishery regardless of whether the fishery is likely to or does open. This requirement adds to the cost of arbitration by needlessly requiring participants to contract for the production of these documents. An amendment that allows participants to avoid this requirement when a fishery is unlikely to open could save on costs of the arbitration system. The amendment should include provision for the preparation of the market report, in the event the fishery should open.*

#### Action to modify the timeline for the golden king crab market report and formula does not allow for data from most recent fishery to be used

*Under the current regulation, the market report and non-binding formula for the Aleutian Islands golden king crab fisheries are required to be completed 50 days prior to the August 15<sup>th</sup> fishery opening. Under this timeline, data from the most recent season are not available for use in development of those reports. The inability to use data from the most recent season could diminish the accuracy and quality of these reports. Postponing the due date of these reports to a later time in the preseason could allow for more complete and accurate reports that provide timely information to market participants.*

#### Action to address staleness of the market reports

*The current requirement that market reports be complete at least 50 days prior to the season prevents the inclusion of the most current and relevant pricing information in the report. In addition, the prohibition on supplements to the report prevents modification of the requirement to provide useful market information in season or after completion of the initial report. More timely and relevant market information to be used for price negotiations might be provided to participants in the fisheries, if those participants are permitted to negotiate agreeable terms (including due dates) for the provision of a market report and supplements to suit their needs.*

### **3.3 The objectives of, and the legal basis for, the proposed rule**

Under the current regulatory structure, Bering Sea and Aleutian Islands crab resources are managed by NOAA Fisheries and the State of Alaska, under the FMP. The authority for this action and the FMP are contained in the Magnuson-Stevens Act, as amended by the Consolidated Appropriations Act of 2004.

### **3.4 A description of, and where feasible, an estimate of the number of small entities to which the proposed rule will apply**

[TO BE PROVIDED]

### **3.5 A description of the projected reporting, record keeping, and other compliance requirements of the proposed rule**

The reporting, record keeping, and other compliance requirements of the proposed rule will not change. As such, this action requires no additional reporting, record keeping, or other compliance requirements.

### **3.6 An identification, to the extent practicable, of all relevant Federal rules that may duplicate, overlap, or conflict with the proposed rule**

The analysis uncovered no Federal rules that would conflict with, overlap, or be duplicated by the pilot program alternatives.

### **3.7 A description of any significant alternatives to the proposed rule that accomplish the stated objectives of the Magnuson-Stevens Act and any other applicable statutes, and that would minimize any significant adverse economic impact of the proposed rule on small entities**

The following is a description of the alternatives being considered, the effects of those alternatives, and any alternatives that would minimize significant adverse impacts:

#### Action to revise market reports and non-binding price formulas for fisheries unlikely to open

Under the current regulations, arbitration organizations representing holders of harvest shares and processing shares are required to contract for market reports and non-binding price formulas annually for each fishery regardless of whether the fishery opens. In the first two years of the program, the St. Matthew Island blue king crab, Pribilof red and blue king crab, and the Western Aleutian Island red king crab fisheries have not opened. Production of these reports is unnecessary, since no landings occurred during this period. A modification of the regulations could be developed to remove the requirement for producing a market report and non-binding price formula for fisheries unlikely to open.

This action will save minor costs for small entities and allow those entities to attend strictly to negotiations for fisheries that are likely to open. In some circumstances, an unexpected opening could result in entities needing to engage in unexpected negotiations. Small entities could be disadvantaged, if market information and the non-binding price information are not available for their use in negotiations. These circumstances are likely to confront all participants in the fisheries, so small entities are unlikely to bear a disproportionate burden.

#### Action to modify the timeline for the golden king crab market report and formula does not allow for data from most recent fishery to be used

Under the current regulation, data from the most recent season are not available for use in developing the market report and non-binding formula because those reports are required to be completed 50 days prior to the August 15<sup>th</sup> fishery opening. Allowing an additional 20 days for the completion of the report and formula would allow the use of data from the most recent fisheries. Under this action, the market report and non-binding price formula for the golden king crab fisheries will be required to be completed at least 30 days prior to the opening of those fisheries.

This action will make the market report and non-binding formula for the golden king crab fisheries more useful, by ensuring that the most current data are included in those reports. The slight delay in production

of the reports should not disadvantage any participants in these small fisheries in negotiations. No negative effects on small entities are expected from this action.

#### Action to address staleness of the market reports

The current requirement that market reports be complete at least 50 days prior to the season prevents the inclusion of the most current and relevant pricing information in the report. In addition, the prohibition on supplements to the report prevents modification of the requirement to provide useful market information in season or after completion of the initial report. Under this action, at least 50 days prior to a season opening, the arbitration organizations representing at least 50 percent of the PQS holders and at least 50 percent of the unaffiliated QS holders are required to reach an agreement for the provision of a market report (which may include supplements at any time prior to the end of the season). The market report will utilize only publicly available information. Such an amendment would provide the arbitration organizations with the latitude to define a market report that will best serve participants in a fishery.

This action is expected to make market reports more useful to participants by allowing arbitration organizations the flexibility to define both the timing of those reports and the content. Allowing this flexibility should ensure that participants in the fisheries have more current information when engaged in negotiations and reduce costs associated with information that might be irrelevant because of poor timing under the current rule. Small entities could be disadvantaged by having limited authority for determining the content and timing of reports, which are set by arbitration organizations representing 50 percent or more of the QS held by independent harvesters and 50 percent of the PQS. Although it is unlikely that the market report timing or content would be intentionally used to alter negotiating leverage, it is possible that small entities could be unintentionally disadvantaged by choices of arbitration organizations that better represent preferences of larger interests. The potential for small entities to be disadvantaged is limited since the timing of fisheries and market cycles generally consistent for all participants, which should result in timing of market report information that is beneficial to all participants (including small entity participants).

## **4 National Standards and Fishery Impact Statement**

### **4.1 National Standards**

Below are the ten National Standards as contained in the Magnuson-Stevens Act, and a brief discussion of the consistency of the proposed alternatives with each of those National Standards, as applicable.

#### ***National Standard 1***

Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery

Nothing in the proposed alternatives would undermine the current management system that prevents overfishing.

#### ***National Standard 2***

Conservation and management measures shall be based upon the best scientific information available.

The analysis draws on the best scientific information that is available, concerning the Bering Sea and Aleutian Island crab fisheries. The most up-to-date information that is available has been provided by the managers of these fisheries, as well as by members of the fishing industry.

### ***National Standard 3***

To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination.

The proposed action is consistent with the management of individual stocks as a unit or interrelated stocks as a unit or in close coordination.

### ***National Standard 4***

Conservation and management measures shall not discriminate between residents of different states. If it becomes necessary to allocate or assign fishing privileges among various U.S. fishermen, such allocation shall be (A) fair and equitable to all such fishermen, (B) reasonably calculated to promote conservation, and (C) carried out in such a manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.

The proposed alternatives would treat all participants the same, regardless of their residence. The proposed changes would be implemented without discrimination among participants and is intended to contribute to the fairness and equity of the program by allowing participants to benefit from the arbitration system without adverse effects on others. The action will not contribute to an entity acquiring an excessive share of privileges.

### ***National Standard 5***

Conservation and management measures shall, where practicable, consider efficiency in the utilization of fishery resources, except that no such measure shall have economic allocation as its sole purpose.

This action will increase efficiency in the fishery by improving market information available to participants in the fisheries. The action will not affect allocations under the program.

### ***National Standard 6***

Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.

None of the alternatives would be expected to affect changes in the availability of Bering Sea and Aleutian Island crab resources each year. Any such changes would be addressed through the annual allocation process, which is not affected by the alternatives.

### ***National Standard 7***

Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.

This action should reduce costs of the arbitration system and will not duplicate other actions.

### ***National Standard 8***

Conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities.

This action should assist community-based participants in the fisheries and will have no detrimental effects on communities.

### ***National Standard 9***

Conservation and management measures shall, to the extent practicable, (A) minimize bycatch, and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch.

Implementing the proposed alternatives will have no effect on bycatch.

### ***National Standard 10***

Conservation and management measures shall, to the extent practicable, promote the safety of human life at sea.

The alternatives considered under this action do not affect safety.

## ***4.2 Section 303(a)(9) – Fisheries Impact Statement***

Section 303(a)(9) of the Magnuson-Stevens Act requires that any management measure submitted by the Council take into account potential impacts on the participants in the fisheries, as well as participants in adjacent fisheries. The impacts of the alternatives on participants in the harvesting sector and processing sector have been discussed in previous sections of this document. This action will have no effect on participants in other fisheries.

## **5 References**

EDAW (2005) Comprehensive Baseline Commercial Fishing Community Profiles: Unalaska, Akutan, King Cove, and Kodiak, Alaska, EDAW, San Diego, California.

Feinstein, Debbie, Donna Patterson, Jon Nathan, and Andrew Dick, (May 18, 2004) “Memorandum to NOAA General Counsel regarding NOAA Proposed Crab Arbitration Program, Arnold & Porter LLP.

North Pacific Fishery Management Council/National Marine Fisheries Service (August 2004b) Regulatory Impact Review/Initial Regulatory Flexibility Analysis, Voluntary Three-Pie Cooperative Program for the Bering Sea and Aleutian Islands Crab Fisheries.

North Pacific Fishery Management Council/National Marine Fisheries Service (August 2004a) Environmental Impact Statement, Voluntary Three-Pie Cooperative Program for the Bering Sea and Aleutian Islands Crab Fisheries.

Sackton, John (2007b) “2007 Market Analyst Report on Red King Crab”, August 25, 2007.

Sackton, John (2007b) “Golden King Crab Price Formula Arbitrator and Market Report”, June 25, 2007.

Sackton, John (2007c) “Snow Crab and Bairdi Market Report”, August 25, 2007.

**Prepared by**

Mark Fina  
Jeannie Heltzel

**Persons Consulted**

Keith Colburn  
Gretchen Harrington  
Arni Thomson  
Joe Sullivan

Joe Plesha  
Einar Sorvik  
Linda Kozak  
John Sackton

Steve Minor  
John Iani  
Bing Henkel  
Jake Jacobsen

Edward Poulsen  
Glenn Merrill  
Greg White