

Public Review Draft

REGULATORY IMPACT REVIEW

and

INITIAL REGULATORY FLEXIBILITY ANALYSIS

OF PROVISIONS DEFINING ACTIVE PARTICIPATION REQUIREMENTS FOR THE ACQUISITION AND USE OF C SHARES

For a proposed Regulatory Amendment to Implement
Amendment 31 to the Fishery Management Plan for Bering Sea and Aleutian Islands
King and Tanner Crabs

April 2008

Executive summary

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 the “rationalization program”). The program is unique in several ways, including the allocation of a portion of the harvest share pool to captains for exclusive use by captains and crew (C shares). Under the program, individuals holding C share IFQ are required to be onboard the vessel harvesting those IFQ. C share QS holders who choose to join a cooperative are exempt from this requirement, however. In addition, to acquire C shares a person must have actively participated in a fishery subject to the program during the preceding 365 days. At its June 2007 meeting, based on public testimony and input from the Advisory Panel, the Council directed staff to analyze elements and options revising the active participation requirements for C share acquisition and use.

Purpose and need statement

The Council has adopted the following the Purpose and Need Statement for this action:

Owner on board requirements and leasing prohibitions on C shares are scheduled to go into effect after the third year of fishing under the program. Those rules may be overly burdensome to active captains and crew given the current fleet fishing patterns in which vessels may not be active in all fisheries some years. Also, under the current rules in the program, C share holders that are cooperative members are exempt from owner on board requirements and leasing prohibitions. Revisions to the current participation requirements are necessary to establish reasonable participation requirements for C share holders and to ensure that the all C share holders remain active in the fisheries.

The current requirement that a person have participated in the fishery during the 365 days preceding an acquisition of C shares has the effect of preventing some displaced long-time captains and crew from acquiring share holdings to secure or maintain positions in the fisheries. A revision to the current requirements for active participation could address this problem by providing long-term participants with the opportunity to acquire shares.

Alternatives to modify active participation requirements for persons wishing to acquire C shares during the current transition:

Alternative 1 (Status quo)

Alternative 2 (may be adopted with alternative 3)

For a period of 5 or 7 years from the implementation of the program, C shares can also be acquired by an individual who:

- 1) is a U.S. citizen,
- 2) has at least 150 days of sea time as part of a harvesting crew in any U.S. commercial fishery (historic participation), and
- 3) received an initial allocation of C shares.

Alternative 3 (may be adopted with alternative 2)

For a period of 5 or 7 years from the implementation of the program, C shares can also be acquired by an individual who:

- 1) is a U.S. citizen,
- 2) has at least 150 days of sea time as part of a harvesting crew in any U.S. commercial fishery (historic participation), and
- 3) demonstrates participation in the BSAI rationalized crab fisheries during
 - i. 3 of the 5 seasons, or
 - ii. 2 of the 3 seasons,immediately preceding implementation of the rationalization program.

Alternatives for revision of active participation requirements for C share holders:

Alternative 1 (Status quo)

Alternative 2 (may be adopted with alternative 3)

To receive an annual allocation of IFQ, a C share holder must:

have participated in at least one delivery in a fishery subject to the crab rationalization program in the 3 seasons (i.e., crab fishing years) preceding the application for IFQ.

Suboption: have received an initial allocation of C shares and participated in 30 days of State of Alaska or Alaska Federal fisheries in the 3 seasons (i.e., crab fishing years) preceding the application for IFQ.

Suboption: Establish a mechanism for the annual allocation of C share IFQ to ensure that the portion of the TAC available to active C share holders is equivalent to the C share portion of the fishery as established by the Council (currently 3 percent).

Alternative 3 (may be adopted with alternative 2)

A C share holder who does not meet one of the following active participation criteria will have all C share QS holdings revoked:

The person must have participated in at least one delivery in one of the rationalized crab fisheries in the preceding 4-5 seasons (i.e., crab fishing years).

Suboption: The person must have received an initial allocation of C share QS and have participated in 30 days of fishing in State of Alaska or Alaska federal fisheries in the preceding 4-5 seasons (i.e.; crab fishing years).

This provision will not require individuals to divest of Quota Share until 5-10 seasons after implementation of the crab program.

Suboption: Persons who received an initial allocation of C share QS and are 60 years of age or older on the date of implementation of this amendment are exempt from active participation requirements. This exemption is limited to initially issued QS (i.e., not purchased QS).

Analysis of Alternatives

Status quo

Under the status quo, to acquire C shares a person must be an individual with at least 150 days of sea time in a harvest capacity in a U.S. commercial fishery and have been active in one of the rationalized crab fisheries in the preceding 365 days. Participation is defined as being on board a vessel as either captain or crew during at least one landing. Under this standard, captains and crew displaced by fleet contraction, who have not found a position in one of the fisheries, would not be permitted to acquire C shares, until participating in a landing. Based on the fleet contraction that occurred in the first two years of the program, it is likely that as many as two-thirds of the persons that would have met this standard prior to the implementation of the program would not currently meet the standard.

Initial allocations were made only to state permit holders (generally captains), who met specific historic and recent participation requirements as permit holders. Of the 231 permit holders who received initial allocations of C shares, 97 are estimated to have remained active as card holders (i.e., most likely as captains) in the first year of the program, while 84 are estimated to have remained active as card holders in the second year of the program. Data showing activity as crew are not available. It is possible that additional recipients of initial allocations were active as crew, but it is believed that most captains who have not retained a position as captain are not active in the fisheries. Under the status quo, inactive persons, including recipients of an initial allocation, would not be able to acquire additional C shares.

Two sets of persons active on vessels in the fisheries prior to implementation of the rationalization program did not receive an initial allocation. Captains that did not meet both the historic and recent participation criteria did not receive initial allocations. Comparing the number of recipients of initial allocations with the number of active vessels in the fisheries, it appears that captains of at least 25 vessels active in the fisheries in the 5 years preceding implementation of the program did not have captains that received an initial allocation. In addition, no crew, regardless of their record of participation, received initial allocations. Based on the difference in the number of vessels participating in the fisheries prior and subsequent to implementation of the rationalization program, at least 750 former crew who were active in the five years preceding implementation of the program are no longer active in the crab fisheries.¹ Together, in excess of 900 persons active in the 5 years prior to implementation of the rationalization program appear to be no longer active in the fisheries. These persons include inactive initial recipients of shares, inactive captains (who did not receive an initial allocation), and inactive crew. Any of these persons that did not secure a position on a vessel in the fisheries after the program was implemented would not be permitted to acquire C shares under the existing active participation requirement.

A few different influences could motivate the purchase of shares by persons no longer active in the fisheries. Some of these persons could view share holdings as providing a potential avenue to reemployment in the fisheries. These persons may believe that share holdings could improve their chances of gaining employment in the fisheries. If a vessel owner views a potential crewmember's share holdings as an indication of that person maintaining a long term interest in the fishery, that vessel owner could be induced to hire the person over other applicants that have no share holdings. In addition, some persons who have had extended careers in the fisheries could also view C share holdings as a reasonable means of maintaining an interest in the fisheries. These persons may accept being displaced from employment in the fisheries, but wish to maintain a long term interest in the fisheries. Under the status quo, these persons would not be permitted to acquire C shares.

Alternatives to change eligibility to acquire C shares

The action includes two alternatives defining persons receiving transitional eligibility to acquire C shares. One alternative would create eligibility for persons that received initial allocations of C share QS. The other alternative would create eligibility for persons who demonstrated threshold participation in the years preceding implementation of the program. In the second year of the program, approximately 147 persons who received an initial allocation under the program did not participate in program as a card holder. These persons would all be eligible to acquire C shares under the first alternative under consideration. While the alternative to extend transitional eligibility to recipients of initial allocations of C shares would address their concern, the provision will not help certain persons that may be similarly aggrieved under the current active participation requirements.

The second alternative would allow persons who participated in at least one of the rationalized fisheries during either 3 of the 5 years preceding implementation of the rationalization program, or 2 of the 3 years preceding the rationalization program, to purchase C shares. Since participation records for crew are not available, estimates of eligibility under this provision are not possible. Examining vessel participation patterns, however, provides some basis for assessing the potential effects of the provision. A total of 255 vessels participated in at least 3 of the 5 years immediately preceding the rationalization program, while 253 participated in at least 2 of the 3 years immediately preceding program implementation. Assuming consistent crew participation on these vessels, these data suggest that approximately 1500 crew (including captains) would meet these eligibility criteria. If the persons who received initial allocations of C shares that are currently active are assumed to be among those meeting the participation criteria, then approximately 800 persons would be eligible to acquire C shares under this provision. If it is assumed that the currently active captains and crew are among these people, approximately 900 persons would qualify under this alternative (excluding initial recipients who are no longer active in the fisheries).

Two competing effects are likely to arise from these provisions expanding eligibility to acquire C shares. First, persons provided eligibility by the provision, who wish to purchase shares could benefit from the ability to compete for their purchase. The benefit to those receiving transition eligibility and the effects on the market for

¹ This estimate is based on the assumption that each vessel employs 5 crew (excluding the captain).

C shares could be influenced by other factors. Most importantly, the rules governing C share use will affect whether persons with transitional eligibility will benefit from that eligibility. Specifically, if C share holders are required to be active in the crab fisheries to receive IFQ allocations (as is addressed in the second part of this action) or are required to divest after a period of inactivity, transitional eligibility could have little effect on persons receiving that eligibility.

The competing effect of the transitional eligibility will be felt by persons active as captains and crew in the fisheries. Persons currently participating in the fisheries as captain and crew are likely to be disadvantaged by an increase in competition for C shares that could arise from providing transition eligibility to persons no longer active in the fisheries. If only initial recipients of C shares are given eligibility, approximately 150 additional persons would be eligible to acquire C shares. Under the current rule, more than 600 persons are likely to be eligible to acquire C shares. So, the pool of eligible persons could increase by as much as 25 percent under the option that would grant eligibility to initial recipients of C shares. If the Council selects the broader alternative that grants eligibility to persons meeting participation thresholds for the years prior to implementation of the program, eligibility would be granted to substantially more persons. Under such a provision the number of persons who could acquire C shares would more than double from the current level (if crew participation patterns are similar to vessel participation patterns). Although the pool of eligible persons would expand substantially, the change in competition for C shares is uncertain. Many of the persons eligible under these provisions are unlikely to attempt to acquire C shares, as most are unlikely to attempt to reenter the fisheries by acquiring shares. Whether entry to the market by persons eligible under this provision will affect the cost of shares and the ability of currently active captains and crew to purchase shares is not known.

The Council has elected to consider two options defining the term of the transitional eligibility to acquire C shares. That eligibility could extend for 5 or 7 years from implementation of the program. Any action under this amendment is unlikely to be implemented prior the 2008-2009 fishing season (i.e., the fourth year of fishing under the program). Consequently, the option to extend transitional eligibility for 5 years from implementation would likely provide between 1 and 2 years of eligibility, while the option to extend that eligibility for 7 years from implementation would likely provide between 3 and 4 years of that eligibility. A short period during which a relatively large number of persons are eligible to acquire shares could cause some disruption to the market, if a noticeable portion of the group is very active. The shorter period is likely to cause greater disruption, particularly if persons benefiting from the transitional eligibility believe that a limited portion of the C share pool is likely to come onto the market during the brief period. The longer eligibility period could disperse the impact of qualifying additional persons for the market, but a 3 to 4 year period is a relatively short period of time during which additional persons in the market could be noticeable.

The effects of alternatives to provide transitional eligibility on managers are expected to be relatively minor. Under the current eligibility provisions, a participant can demonstrate activity as a permit holder on a fish ticket or through affidavits of vessel owners. These (with other additional forms of evidence) could also be used to show participation under the options for this action. The applications would be required to be slightly more extensive than the existing forms (requiring several years of participation instead of a single year's activity as required under the current rules), but would effectively use the same (or similar) evidence. In addition, since the transitional eligibility would only apply for a period of years, the added burden of accommodating persons receiving that eligibility would be only for the period of the provision. The enforcement burden arising out of this revision would also be relatively minor. Although a substantial number of persons could become eligible from this provision, the general approach to enforcement would be to pursue any case of possible inappropriate applications. Although this could result in a larger number of cases, the potential number of cases would be limited by the number of persons applying for eligibility and the potential for persons to misrepresent their prior fishing activity. Although some misreporting is possible, it is not believed that a substantial number of persons misreporting fishing history to create transitional eligibility will result.

Effects of provisions revising active participation requirements for C share holders

The second part of this action considers revision of the rules governing active participation requirements of C share holders.

Status quo

Under the status quo, individuals who hold C share IFQ are required to be on board the vessel harvesting those IFQ. If a C share holder joins a cooperative, the IFQ are allocated to the cooperative, effectively removing the onboard requirement with respect to those IFQ. This disparate treatment of individual C share holders and C share holders who are cooperative members has several effects. First, the incentive for a C share holder to join a cooperative is increased by relief from the owner on board obligation. Second, to the extent that the current rule is intended to ensure C share holders are on board when their IFQ holdings are harvested, the rule is likely ineffective. Data are unavailable to show the extent to which C share holders are onboard for the harvest of their IFQ; however, card holder activity suggests that a large majority of the permit holders who received an initial allocation of C shares are no longer active as captains.

In the long run, as active C share holders retire from captain and crew positions, it can be expected that many may elect to continue to remain members of cooperatives and retain their C share holdings through established relationships. Over time, the retirement of active C share holders from crab fishing jobs will contribute to a reduction in the number of C share holders active in the fisheries. Some C share holders can be expected to remain, particularly as new acquisitions will only be permitted by persons active in the crab fisheries. Yet, at any one time, a large portion of the C share pool could be held by persons that are not active as captains or crew.

An additional effect of the current participation requirements is that the market for C shares could be less fluid. If only active captains and crew are permitted to receive benefits from C shares, it is likely that the market for these shares will be more active, since persons who retire or exit from captain and crew positions will transfer shares. Without this requirement for active participation, it is likely that C shares will be held persons who have left their captain and crew positions and participate as cooperative members. The added flexibility for C share holders allowed through the absence of active participation requirements for cooperative members could also increase the value of C shares. Whether a price increase is observed depends on whether the absence of active participation requirements for cooperative members under the status quo reduces supply of C shares in the market.

Alternatives to change active participation requirements for C share holders

Two alternatives are under consideration that would change the active participation requirements for C share holders. Under the first option, C share QS holders who have not participated in at least one of the crab fisheries for a period of three consecutive years would not receive an annual allocation of IFQ. Examining activity of C share holders in the first two years of the program provides some perspective on the effects of this provision. During the third year of the program, 108 of the 213 C share holders in the fisheries are estimated to have not participated as card holders (i.e., captains) in the preceding two seasons. Also, 130 of these C share holders were not active in the immediately preceding season as a card holder. Whether these C share holders were active as crew is not known. Those who remain inactive for a period of three consecutive years would not receive IFQ allocations under the first option. The share of the C share QS pool held by persons inactive as card holders for the first two years of the program is a substantial (and in some cases a majority) of the C share QS pool.

Whether this drop is an actual decline in C share holder activity is not known. It is possible that some C shares have been acquired by crew (other than captains) who are less likely to be card holders. It is also notable that the percent of the C share QS pool held by persons active as card holders dropped in all fisheries. Again, the extent to which this decline represents an actual decline in active participation by holders of C share QS or a change in the composition of C share holders (from captains to crew) is not known.

An option would allow persons who received an initial allocation of C share QS, but who are not active in the crab fisheries, to receive annual IFQ allocations provided they have at least 30 days of participation in State of Alaska fisheries or federal fisheries off Alaska in the 3 years preceding the allocation. This more liberal approach to active participation requirements for C share QS holders would provide substantially greater opportunities for people who received initial allocations of C share QS to receive annual allocations of C share IFQ. Crew data for Alaska fisheries are incomplete, limiting the accuracy of any estimates of crew participation.

Based on available data, upwards of 21,000 persons may have participated in the Alaska fisheries in 2006. In 2005, in excess of 20,000 people are estimated to have worked as crew in Alaska's State and federal fisheries during the month of July alone. Many of these jobs are short term positions in Alaska's summer salmon fisheries. This provision will clearly expand the opportunity for the persons who received an initial allocation of C share QS to continue to receive annual IFQ allocations by meeting the 30 day participation requirement for the preceding 3 year period.

Under the current rules, approximately 3 percent of the QS pool is allocated as C share QS. If these IFQ allocations are not made to C share QS holders who are not active, it is possible that the C share IFQ allocation could be reduced by as much as 50 percent (i.e., C share IFQ would total approximately 1.5 percent of the total IFQ pool, instead of 3 percent). To ensure the C share IFQ pool remains at the percentage intended by the Council, an option is proposed that would maintain the C share IFQ issuance at the percentage set by the Council (which is currently 3 percent). If this provision is adopted, the agency would annually allocate 97 percent of the IFQ pool to vessel owners and 3 percent of the IFQ to holders of C shares. The 3 percent allocation to C share holders would be allocated only to C share QS holders that meet the active participation requirements based on their respective C share holdings. By separating the calculation of IFQ allocations to C share QS holders from allocations of IFQ to vessel owner QS holders, the allocation of IFQ to C share QS holders would be maintained at 3 percent of the total IFQ pool regardless of whether some C share QS holders do not receive IFQ allocations because of their failure to meet active participation requirements. This approach to allocations could be justified, if the Council believes that the 3 percent IFQ allocation to active captains and crew should be maintained, regardless of whether some C share QS holders fail to meet the requirements for an annual allocation. If the Council later chose to change the size of the C share IFQ allocation, this provision would be implemented by maintaining the C share IFQ allocation as the percentage of the total IFQ pool identified by the Council.

The withholding of annual IFQ allocations from C share QS holders not meeting active participation requirements could be complemented by the selection of an alternative that would revoke C share QS, if active participation requirements are not met for a period of 4 or 5 consecutive years. The rationale for revoking C share QS is that holders who are inactive for an extended period effectively withhold these shares from other active captains and crew, who might wish to develop or expand their C share holdings. Failing to revoke these shares, it is possible that some C share holders may maintain their holdings for an extended period. The incentive for inactive C share holders divesting their QS, absent a pending revocation, could be rather minor, especially for persons who received their C share QS in the initial allocation. Precise estimates of the number of C share QS holders and quantities of C share QS that could be affected by this action are not available since the program has only been in effect for 2 years. Estimates of the number of C share QS holders that would not receive annual IFQ allocations may also be viewed as preliminary estimates of the number of persons that could be affected by this provision.

This alternative also contains options that would extend the time prior to which it takes effect. Under this provision, no revocations would occur until between 5 and 10 years after implementation of the program. Delaying implementation of the provision could allow participants time to assess the transition of the fishery under the new management and determine whether they will be active in the new fishery. Under the current timeline for implementation of this action, it is likely that the 5th year implementation option would provide between one and two years notice to C share holders that are inactive. Extending implementation beyond 5 years would provide additional time (up to approximately 7 years notice if 10th year implementation is selected) for persons to decide whether to divest of their shares, become active, or have those shares revoked. Any of the proposed implementation timelines should provide sufficient notice to C share holders to allow them to prepare for implementation of the provision. Although these share holders might be able to plan for implementation of the provision, the more compressed timeline (5 years after implementation) could have some ramifications for C share holders and those wishing to acquire C shares.

Implementation of either of the alternative revising active participation requirements for C share holders is likely to be challenging administratively and logistically. Effective implementation of a provision to withhold

IFQ must include a process for submission of documentation of participation and an opportunity for appeal to the person whose IFQ are withheld. Until the finding that IFQ may be withheld is final, IFQ would need to be reserved to ensure shares are available in the event the C share QS holder prevails. Typically, NOAA Fisheries makes all allocations of IFQ at one time. To effectively withhold IFQ and redistribute that IFQ to others in the fishery requires that decisions concerning eligibility to receive IFQ be finalized prior to the allocation of any IFQ. A timeline to complete the processing of documentation of participation to finalize these findings is needed to ensure of timely processing of applications and appeals. Critical aspects of that timeline are:

- 1) submission of a statement of active participation annually;
- 2) submission of a statement of active participation as a condition (or portion) of the IFQ application;
- 3) submission of statement of active participation in advance of the remainder of the IFQ application.
- 4) 30-45 day period for appealing findings of inactivity.

Although the requirement for participation is based on activity in a three year period, since IFQ allocations are made annually, the most effective way to document participation is annually. Annual documentation limits staleness of information and could benefit both applicants and the agency. To ensure that C share QS holders annually submit documentation of participation that submission (a ‘statement of participation’) could be made a requirement for IFQ issuance. To allow for timely processing of applications of C share holders (and particularly finalizing decisions with respect to active participation prior to IFQ issuance) will require the submission of statements of active participation in advance of the current application deadline. Depending on the NOAA Fisheries Office of Administrative Appeals’ ability to process appeals, it is possible that appeals that fail to assert that the active participation requirement was met (i.e., making no claim to support a favorable finding) could be summarily dismissed prior to the issuance of IFQ. In addition, NOAA Fisheries Office of Administrative Appeals might be able to summarily dismiss cases involving late submissions that do not claim extraordinary circumstance beyond the appellant’s control. Creating a system that allows some decisions to be finalized prior to the issuance of IFQ will allow the provision for withholding IFQ to better serve its purpose, since IFQ would need to be reserved for any claims that are not finalized. Once findings are final those IFQ can be issued to other persons. So, if any determinations that are not finalized prior to issuance of IFQ will require that a portion of the IFQ not be allocated for the year. Appeals disputing evidence of activity would likely require additional time to resolve, requiring IFQ to be reserved to cover the contingency of a successful appeal by the QS holder. In considering the structure for resolving findings concerning active participation, it should be noted that any unresolved adjudications will have spillover effects, particularly if the Council adopts a mechanism to ensure that 3 percent of the IFQ pool is allocated to active C share holders. Since a portion of the IFQ pool must be reserved to address the possible claims of initially disallowed C share QS holders, it is assumed that IFQ reserved against those claims would count toward the C share IFQ pool. Depending on the level of active participation in the pool of C share QS holders, it is possible that a substantial portion of the C share QS pool could be made up of reserved, but unallocated IFQ, if decisions cannot be finalized for a substantial number of shares and the reserved shares are counted toward the C share IFQ allocation.

The option to maintain C share IFQ as a specific portion of the IFQ pool (currently 3 percent) would be implemented by identifying the pool of C share QS that will receive IFQ, and allocating 3 percent of the TAC in the rationalization program to those IFQ. Under the current system, C share QS is approximately 3 percent of the total QS pool, with division of the annual IFQ allocations between C share IFQ and owner IFQ generally close to the QS pool split. If a substantial amount of the C share IFQ are not issued because of failure of C share holders to meet active participation requirements, it is possible that C shares could be substantially less than 3 percent of the IFQ allocation. Finalizing determinations of active participation prior to IFQ issuance is critical to this provision having its intended effect.

Implementing the alternative to revoke shares from persons not meeting active participation requirements for a period of years could be implemented using the same process as used for implementing the requirements for IFQ allocations. The annual submissions of active participation could be used to determine whether a person’s shares should be revoked by considering activity in the requisite number of years preceding the submission of the most recent statement.

The overall effect of the C share IFQ eligibility and the C share QS revocation provisions is that over time C share QS will be held by persons meeting the minimum participation threshold specified by the applicable provisions. Persons who hold C share QS, but do not meet the applicable participation threshold, will either divest of their C share holdings (or, if the revocation provision is adopted and they fail to divest, have their shares revoked). These persons (including persons intended to benefit from the initial allocation) will have an opportunity to receive a benefit from their C share QS holdings through the sale of that QS to persons eligible to acquire those shares. Although the provisions governing eligibility to acquire C shares and the provisions limiting those who may receive C share IFQ and retain C share QS holdings will affect the pool of persons in the C share market as buyers, a substantial number of persons are likely to be eligible and interested in C share acquisition. As result, the C share QS prices are likely to be lower than owner QS prices, but a market for those shares will exist.

The Council has also included for consideration an option to exempt persons who received an initial allocation of C shares and who are over 60 years of age from any active participation requirements applicable to any C share QS received in the initial allocation. So, persons meeting these criteria would not be required to participate in any fisheries as captain or crew to continue to receive C share IFQ from their initial allocation of C share QS or to retain C share QS holdings received in the initial allocation. Data are not available to determine the specific number of persons who would qualify for this exemption, but the number is limited since only persons who currently hold C share QS received in the initial allocation would qualify for this provision. A large majority of the current C share QS holders in each fishery received initial allocations of C shares, but several may not qualify for the exemption based on their ages.

The Council's rationale for considering this exemption is not clear. If adopted, it would appear that the Council would be interested in ensuring that older initial recipients of C share QS are able to retain that QS and derive annual allocations from it. The rationale for applying an age limit to the exemption is not apparent. Stock fluctuations would appear to make crab QS a relatively risky investment. Increasing the incentive for older people to retain risky interests would appear to run counter to investment norms. If the objective is to prevent inactive persons from losing annual allocations or being required to sell very soon after receiving the initial allocation, the length of the grace period during which application of revocation is suspended could be extended and a grace period could be applied to eligibility to receive IFQ. These grace periods could benefit initial recipients of C share QS by increasing the value of that QS, particularly if stock growth increases TACs or leads to opening of fisheries that have been closed in recent years. On the other hand, stock and TAC declines could pose a similar risk of loss to QS holders.

Net benefits to the Nation

Although the changes this action will have distributional effects on persons holding or interested in holding C shares, it will not affect production from the fisheries. As a consequence, this action is likely to have little or no effect on net benefits to the Nation.

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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 the “rationalization program”). The program is unique in several ways, including the allocation of a portion of the harvest share pool to captains for exclusive use by captains and crew (C shares). Under the program, individuals holding C share IFQ are required to be onboard the vessel harvesting those IFQ; however, C share QS holders who choose to join a cooperative are exempt from this requirement. After the third year of the program, leasing of C shares is prohibited. In addition, to acquire C shares a person must have actively participated in a fishery subject to the program during the preceding 365 days. At its June 2007 meeting, based on public testimony and input from the Advisory Panel, the Council directed staff to analyze elements and options revising these active participation requirements for C share acquisition and use.

This document contains a Regulatory Impact Review (Section 2) and an Initial Regulatory Flexibility Analysis (Section 3) of alternatives to modify the active participation requirements for the acquisition and use of C shares. Section 4 contains a discussion of the Magnuson Stevens Act National Standards and a fishery impact statement.²

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, that 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:

- 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

² 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 action only addresses changes in eligibility to purchase, retain, or receive annual allocations from shares and will have no effect on the human environment, beyond those examined in the EIS.

- 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 Purpose and Need Statement

The Council has adopted the following the Purpose and Need Statement for this action:

Purpose and need for alternatives to address active participation requirements for persons wishing to acquire C shares during the current transition:

The current requirement that a person have participated in the fishery during the 365 days preceding an acquisition of C shares has the effect of preventing some displaced long-time captains and crew from acquiring share holdings to secure or maintain positions in the fisheries. A revision to the current requirements for active participation could address this problem by providing long-term participants with the opportunity to acquire shares.

Purpose and need statement for alternatives to revise active participation requirements for C share holders:

Owner on board requirements and leasing prohibitions on C shares are scheduled to go into effect after the third year of fishing under the program. Those rules may be overly burdensome to active captains and crew given the current fleet fishing patterns in which vessels may not be active in all fisheries some years. Also, under the current rules in the program, C share holders that are cooperative members are exempt from owner on board requirements and leasing prohibitions. Revisions to the current participation requirements are necessary to establish reasonable participation requirements for C share holders and to ensure that the all C share holders remain active in the fisheries.

2.2 Description of Alternatives

The Council has identified the following alternatives for this action:

Alternatives to modify active participation requirements for persons wishing to acquire C shares during the current transition:

Alternative 1 (Status quo)

Alternative 2 (may be adopted with alternative 3)

For a period of 5 or 7 years from the implementation of the program, C shares can also be acquired by an individual who:

- 1) is a U.S. citizen,
- 2) has at least 150 days of sea time as part of a harvesting crew in any U.S. commercial fishery (historic participation), and
- 3) received an initial allocation of C shares.

Alternative 3 (may be adopted with alternative 2)

For a period of 5 or 7 years from the implementation of the program, C shares can also be acquired by an individual who:

- 1) is a U.S. citizen,
- 2) has at least 150 days of sea time as part of a harvesting crew in any U.S. commercial fishery (historic participation), and
- 3) demonstrates participation in the BSAI rationalized crab fisheries during
 - iii. 3 of the 5 seasons, or
 - iv. 2 of the 3 seasons,immediately preceding implementation of the rationalization program.

Alternatives for revision of active participation requirements for C share holders:

Alternative 1 (Status quo)

Alternative 2 (may be adopted with alternative 3)

To receive an annual allocation of IFQ, a C share holder must:

have participated in at least one delivery in a fishery subject to the crab rationalization program in the 3 seasons (i.e., crab fishing years) preceding the application for IFQ.

Suboption: have received an initial allocation of C shares and participated in 30 days of State of Alaska or Alaska Federal fisheries in the 3 seasons (i.e., crab fishing years) preceding the application for IFQ.

Suboption: Establish a mechanism for the annual allocation of C share IFQ to ensure that the portion of the TAC available to active C share holders is equivalent to the C share portion of the fishery as established by the Council (currently 3 percent).

Alternative 3 (may be adopted with alternative 2)

A C share holder who does not meet one of the following active participation criteria will have all C share QS holdings revoked:

The person must have participated in at least one delivery in one of the rationalized crab fisheries in the preceding 4-5 seasons (i.e., crab fishing years).

Suboption: The person must have received an initial allocation of C share QS and have participated in 30 days of fishing in State of Alaska or Alaska federal fisheries in the preceding 4-5 seasons (i.e.; crab fishing years).

This provision will not require individuals to divest of Quota Share until 5-10 seasons after implementation of the crab program.

Suboption: Persons who received an initial allocation of C share QS and are 60 years of age or older on the date of implementation of this amendment are exempt from active participation requirements. This exemption is limited to initially issued QS (i.e., not purchased QS).

Notes:

- 1) **The Council should specifically include in its motion a statement that the prohibition against leasing (or transfer of C share IFQ) would be removed by this action.**
- 2) **The suboption exempting initial recipients of C share QS from active participation requirements does not appear to respond to any issue identified in the Council's purpose and need statement. If the Council intends to adopt that suboption, it should consider modifying its purpose and need statement to include the concern that is addressed by this provision.**

2.3 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. The description of the harvesting sector includes information concerning captains and crew and the allocations of C shares necessary to understand the conditions in the fishery related to this action.

2.3.1 Management of the fisheries

The following nine crab fisheries are managed under the rationalization program:

Bristol Bay red king crab,
Bering Sea *C. opilio*,

Eastern Bering Sea *C. bairdi*,
Western Bering Sea *C. bairdi*,
Pribilof red and blue king crab,
St. Matthew Island blue king crab,
Western Aleutian Islands red king crab,
Eastern Aleutian Islands golden king crab, and
Western Aleutian Islands golden king crab.

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 catcher processor vessel owner QS for their history as catcher processors; catcher vessel license holders were issued catcher vessel QS based on their history as a catcher vessel. QS annually 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).³ The remaining 10 percent of these annual IFQ are issued as “B shares” or “Class B IFQ,” which may be delivered to any processor.⁴ 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.⁵

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 and 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

³ Currently, C shares are excepted from this generalization. Those shares are not subject to IPQ landing requirements during the first three years of the program. During that period, the IPQ corresponding to the C share allocations are withheld. The Council has adopted an amendment to extend the exemption of IPQ landing requirements on C shares indefinitely, which is currently being prepared for review by the Secretary of Commerce.

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

⁵ 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 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 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).

check on the processing market (by providing a negotiated market price)⁶. To aid participants in resolving price disputes relative to A share landings, the Council developed a binding arbitration program. The arbitration program is established through a set of private contracts that must meet requirements set out in the regulation. Holders of Class A IFQ and holders of IPQ must join arbitration organizations. These organizations, in turn, must enter contracts that define the arbitration program and select arbitrators. The arbitration program is an elaborate structure that serves several functions, including establishing a system for more orderly matching of Class A IFQ with IPQ, developing a market report and non-binding price formula to inform price negotiations, and providing a binding arbitration process to resolve impasses in negotiations.

Under the rationalization program, 97 percent of the initial allocation of QS was allocated to vessel owners. Vessel owner shares may be acquired by any individual who is a U.S. citizen with at least 150 days of sea time in a harvest capacity in a U.S. commercial fishery. Corporations and partnerships can also acquire these shares provided a U.S. citizen who meets the 150 day sea time requirement owns at least 20 percent of the corporation. The remaining three percent of the initial allocation of QS was issued to captains as “C shares”, based on their harvest histories as captains. C share allocations are subject to management provisions not applicable to owner shares to ensure that active fishermen receive the benefits of those shares. C shares may only be acquired by individuals who meet the sea time requirement and are active in the fisheries, where ‘active’ is defined as having participated in a landing within 365 days of the share acquisition. An owner-on-board provision and leasing prohibition are also applied to C shares, intended to ensure that C shares would benefit active captains and crew. The Council recognized that logistical complications would likely arise early in the program, as a result of the interaction of owner-on-board requirements, leasing prohibitions, fleet contraction, and the landing requirements on A shares. To aid in overcoming these complications, the Council exempted C shares from the landing requirements of A shares and prohibitions on leasing for the first three seasons under the program (see 50 CFR 680.41(e) and 50 CFR 680.42(b)(6) and (c)(5)).⁷ Since the arbitration system applies only to A shares, the exemption of C shares from the 90/10 A share/B share split effectively exempts C share from the arbitration system. The Council is currently considering an amendment to the program that would indefinitely exempt C shares from the A share/B share division, effectively removing any processor share and regional landing requirements from C shares. The effects of an amendment exempting C shares from processor share and regional landing requirements currently under consideration are discussed where relevant in this analysis.

Holders of harvest shares are permitted to form harvest cooperatives to coordinate the harvest of their allocations. If a harvester chooses to join a cooperative, the annual allocation of IFQ is made to the cooperative and fished in accordance with the cooperative agreement. To ensure captains and crew are an integral part of the overall fishery, C share holders are permitted to join cooperatives (see 50 CFR 680.21(a)(1)). As incorporated into regulation, this provision effectively removes any prohibition on leasing of and owner-on-board requirements for C shares. Once a C share QS holder joins a cooperative, any IFQ are allocated to the cooperative. So, after the third season of fishing under the program, the leasing prohibition will apply, but only to individual holders of C share IFQ; separate use provisions apply to IFQ held by a cooperative (see 50 CFR 680.21(c)(2)).

2.3.2 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 QS holdings among these share types varies substantially across fisheries (see

⁶ 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.

⁷ Although the owner-on-board exemption is not explicitly created, by allowing leasing of C share IFQ for the first three years of the program, a holder of those shares is effectively relieved of the owner-on-board requirement.

Table 1 and Table 2). The regional distribution of shares differs with landing patterns that arise from the geographic distribution of fishing grounds and processing activities. In general, crew share holdings are more concentrated than vessel owner shares.⁸ This concentration arises both from the initial allocation and from consolidation that has occurred since implementation (see p. 23, RAM, 2006 and Table 1 and Table 2).

Table 1. Owner quota share holdings as a percent of the owner share pool.

Fishery	Share holdings by region						Across regions			
	Region/Catcher processor	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	32	8.9	0.1	0.0	0.2	245	0.41	0.34	3.44
	South	234	46.7	0.4	0.3	3.4				
	Catcher processor	12	44.4	0.4	0.3	1.0				
Bering Sea <i>C. opilio</i>	North	202	18.4	0.2	0.2	1.2	231	0.43	0.41	2.59
	South	205	20.5	0.2	0.2	2.6				
	Catcher processor	13	61.1	0.7	0.7	2.2				
Eastern Bering Sea <i>C. bairdi</i>	Undesignated	234	43.5	0.4	0.3	2.6	244	0.41	0.31	2.91
	Catcher processor	13	56.5	0.5	0.5	1.1				
Western Bering Sea <i>C. bairdi</i>	Undesignated	234	43.5	0.4	0.3	2.7	244	0.41	0.31	2.91
	Catcher processor	13	56.5	0.5	0.5	1.1				
Eastern Aleutian Island golden king crab	South	13	86.7	13.0	7.3	6.6	15	6.67	5.97	20.35
	Catcher processor	2	13.3	2.0	2.4	2.4				
Western Aleutian Island golden king crab	Undesignated	13	10.1	2.1	1.0	11.0	16	6.25	1.74	45.73
	West	9	14.6	3.0	1.3	13.5				
	Catcher processor	3	75.3	15.4	0.5	45.7				
Western Aleutian Island red king crab	South	32	8.9	1.9	0.5	13.5	33	3.03	0.62	45.16
	Catcher processor	2	91.1	19.5	19.5	37.8				
St. Matthew Island blue king crab	North	121	49.5	0.6	0.6	3.4	136	0.74	0.62	4.45
	South	84	19.8	0.3	0.1	2.2				
	Catcher processor	5	30.8	0.4	0.3	0.9				
Pribilof red and blue king crab	North	85	45.5	0.8	0.5	3.1	113	0.88	0.52	3.42
	South	76	24.5	0.4	0.3	2.8				
	Catcher processor	1	30.0	0.5	0.5	0.5				

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. C share quota share holdings as a percent of the C share pool.

Fishery	Share holdings by region						Across regions			
	Region/Catcher processor	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	15.4	0.2	0.2	0.3	156	0.64	0.54	2.00
	South	153	49.3	0.6	0.5	2.0				
	Catcher processor	8	35.3	0.4	0.4	1.2				
Bering Sea <i>C. opilio</i>	North	129	22.1	0.3	0.3	1.8	136	0.74	0.66	1.99
	South	127	24.7	0.4	0.3	1.5				
	Catcher processor	7	53.3	0.8	0.7	2.0				
Eastern Bering Sea <i>C. bairdi</i>	Undesignated	150	52.8	0.6	0.6	1.9	156	0.64	0.57	2.00
	Catcher processor	15	47.2	0.5	0.4	1.5				
Western Bering Sea <i>C. bairdi</i>	Undesignated	150	52.8	0.6	0.6	1.9	156	0.64	0.57	2.00
	Catcher processor	15	47.2	0.5	0.4	1.5				
Eastern Aleutian Island golden king crab	South	11	100.0	9.1	9.2	20.1	11	9.09	9.18	20.14
	Catcher processor	0	0.0	0.0	0.0	0.0				
Western Aleutian Island golden king crab	Undesignated	8	12.8	3.7	2.8	10.5	9	11.11	6.17	41.74
	West	7	13.8	4.0	2.8	11.2				
	Catcher processor	2	73.4	21.3	21.3	41.7				
Western Aleutian Island red king crab	South	4	61.3	21.6	14.3	49.5	4	25.00	20.84	49.46
	Catcher processor	1	38.7	13.6	13.6	13.6				
St. Matthew Island blue king crab	North	63	73.8	1.3	1.3	2.7	69	1.45	1.41	3.32
	South	42	26.2	0.5	0.2	2.6				
	Catcher processor	0	0.0	0.0	0.0	0.0				
Pribilof red and blue king crab	North	33	69.0	2.1	2.1	4.8	39	2.56	2.55	4.84
	South	31	31.0	1.0	0.8	4.0				
	Catcher processor	0	0.0	0.0	0.0	0.0				

Source: NMFS Restricted Access Management IFQ database, crab fishing year 2007-2008.
Note: These share holdings data are publicly available and non-confidential.

Annual harvest allocations are also issued in various classes (see Table 3), which limit the operation type and define share holder type and applicable landing restrictions.

⁸ It should be noted that the Council at its December 2007 meeting adopted an amendment to the program that would exempt C shares from all regional landing requirements. Once that amendment is approved by the Secretary of Commerce, regional designations will be removed from C shares.

Table 3. IFQ allocation by share type (2006-2007).

Fishery	Catcher vessel			Catcher processor		Total
	Owner		Captain/ crew	Owner	Captain/ crew	
	Class A	Class B				
Bristol Bay red king crab	11,647,090	1,294,110	402,768	615,655	14,669	13,974,292
Bering Sea <i>C. opilio</i>	26,121,324	2,902,364	929,338	2,898,453	57,982	32,909,461
Eastern Bering Sea <i>C. bairdi</i>	1,374,311	152,697	46,358	109,989	4,146	1,687,501
Western Bering Sea <i>C. bairdi</i>	801,857	89,097	27,047	64,175	2,419	984,595
Eastern Aleutian Islands golden king crab	2,245,212	249,468	80,075	125,227	0	2,699,982
Western Aleutian Islands golden king crab	1,140,787	126,752	41,914	1,089,563	30,989	2,430,005

Source: NMFS Restricted Access Management IFQ database, crab fishing year 2006-2007.

Prior to the implementation of the rationalization program, the BSAI crab fisheries were prosecuted as a limited access, derby fishery, under which the participants raced for crab after the opening with the fishery closing once managers estimated that the guideline harvest level (GHL)⁹ was fully taken. This limited access management creates an incentive for all license holders to participate in the fishery, since a person cannot receive a return from the fishery without participating. The results of this incentive were evident in the crab fisheries. For the last several years of limited access management, seasons in the two largest fisheries ranged from a few days to a few weeks, despite harvest levels near historic lows. From the 2000 season through 2004 season, Bristol Bay red king crab fishery harvests ranged from a low of 7.5 million pounds to high of 14.5 million pounds, while Bering Sea *C. opilio* harvests ranged from 22.2 million pounds to 30.8 million pounds. Between 150 and 250 vessels participated annually in each fishery.

Under the rationalization program, participants are allocated exclusive shares of the TAC. Since allocations are exclusive, participants do not need to race to prevent others from preempting their catch. To improve returns from the fisheries, participants have an incentive to reduce costs. One obvious means of reducing costs is fleet consolidation. Stacking quota on fewer vessels can save on costs not only of capital, but also maintenance, insurance, labor, fuel, and other variable input costs. An examination of data from the first two years of the program and the years immediately preceding implementation shows a drastic reduction in the fleet under the program (see Table 4). Although precise estimates of crew are not currently available, industry participants believe that most vessels are operated by a crew of six (including the captain). The fleet contraction that occurred after implementation of the rationalization resulted in substantial losses of crew positions in the crab fisheries, as those positions declined proportionally with fleet contraction. At the start of the program, C shares were allocated only to captains. Given the level of fleet consolidation, it is likely that many initial recipients of these shares have lost their captain positions under the program. This relatively high level of inactivity may explain the consolidation of C shares in cooperatives.

Under the rationalization program fleets (and likely corresponding captains and crews) declined to between one-half and one-third of their pre-rationalization levels. Assuming that each vessel employs 6 crew (including the captain)¹⁰, annual average captain and crew participation in the Bering Sea *C. opilio* and Bristol Bay red king crab fisheries dropped from in excess of 1000 to 500 or fewer. Captain and crew participation in the Eastern Aleutian Islands golden king crab fishery dropped from in excess of 100 to fewer than 40. Captain and crew participation in the Western Aleutian Islands golden king crab fishery dropped from annual averages of approximately 40 to approximately 20.

⁹ Historically, the GHL specified a range of allowable catch, providing in-season managers with some discretion to close the fishery based on their assessment of stock conditions. In making these assessments, managers would rely on survey information, as well as in-season and cross-season variations in catch rates. In more recent years, managers specified GHLs as specific amounts, managing the fishery in-season to allow harvest of that specific amount.

¹⁰ This estimate is consistent with preliminary review of data from the Economic Data Reporting datasets and estimates used in other analyses (see Knapp, 2006).

Table 4. Catch and number of vessels by operation type (2001 to 2006-2007).

Fishery	Season	Catch	Catch (as percent of total**) by		Number of vessels participating		
			catcher vessels	catcher processors	catcher vessels	catcher processors	all unique vessels
Bering Sea <i>C. opilio</i>	2001	22,940,704	86.5	13.5	201	8	207
	2002	29,609,702	94.4	5.6	182	9	190
	2003	25,410,122	96.8	3.2	185	5	190
	2004	21,939,493	97.0	3.0	183	6	189
	2005	22,655,777	97.1	2.9	161	6	167
	2005 - 2006	33,248,009	92.2	7.2	76	4	78
	2006 - 2007	32,699,911	90.9	8.4	66	4	70
Bristol Bay red king crab	2000	7,468,240	97.2	2.8	238	6	244
	2001	7,681,106	95.9	4.1	224	8	230
	2002	8,770,348	96.6	3.4	234	9	241
	2003	14,237,375	95.2	4.8	242	8	250
	2004	13,889,047	95.7	4.3	243	8	251
	2005 - 2006	16,472,400	96.7	3.3	88	4	89
	2006 - 2007	13,887,531	*	*	79	3	81
Eastern Bering Sea <i>C. bairdi</i>	2006 - 2007	1,267,106	*	*	33	3	36
Western Bering Sea <i>C. bairdi</i>	2005 - 2006	791,025	*	*	42	2	43
	2006 - 2007	633,910	*	*	34	2	36
Eastern Aleutian Islands golden king crab	2000 - 2001	3,086,890	*	*	15	0	15
	2001 - 2002	3,128,409	100.0	0.0	19	0	19
	2002 - 2003	2,765,436	100.0	0.0	19	0	19
	2003 - 2004	2,900,247	100.0	0.0	18	0	18
	2004 - 2005	2,846,273	100.0	0.0	20	0	20
	2005 - 2006	2,569,209	*	*	6	1	7
	2006 - 2007	2,692,009	*	*	5	1	6
Western Aleutian Islands golden king crab	2000 - 2001	2,902,518	*	*	11	1	12
	2001 - 2002	2,693,221	*	*	8	1	9
	2002 - 2003	2,605,237	*	*	5	1	6
	2003 - 2004	2,637,161	*	*	5	1	6
	2004 - 2005	2,639,862	*	*	5	1	6
	2005 - 2006	2,382,468	*	*	2	1	3
	2006 - 2007	2,002,186	*	*	2	1	3
All fisheries	2000 - 2001				246	10	253
	2001 - 2002				235	11	243
	2002 - 2003				238	11	247
	2003 - 2004				245	9	254
	2004 - 2005				247	9	256
	2005 - 2006				100	5	101
	2006 - 2007				87	5	91

Sources: ADFG fishtickets and NMFS RAM catch data (for 2005-2006 and 2006-2007)

* Withheld for confidentiality.

** Catch as a percent of IFQ allocations for 2005-2006 and 2006-2007 seasons.

Note: "All fishery" participation in a season includes all fisheries prosecuted between August 1 and July 31.

For 2005-2006 and 2006-2007, catcher processor vessel count include all vessels harvesting catcher processor shares.

Most harvesters (including C share holders) have elected to join cooperatives, so most annual allocations are made to cooperatives (see Table 5). In excess of 80 percent of the C share pool, by fishery, are held by cooperative members. As cooperative shares, these shares may be more easily consolidated, since transfers among cooperative members are administered by the cooperative (rather than by NOAA Fisheries).

Table 5. IFQ held by cooperatives by share type and fishery (2006-2007).

Fishery	Catcher vessel					
	Owner			Crew		
	Cooperative held	Total	Percent held by cooperatives	Cooperative held	Total	Percent held by cooperatives
Bristol Bay red king crab	16,771,150	16,979,337	98.8	497,688	528,407	94.2
Bering Sea <i>C. opilio</i>	49,779,135	50,034,349	99.5	1,520,136	1,601,490	94.9
Eastern Bering Sea <i>C. bairdi</i>	2,781,890	2,805,644	99.2	74,247	85,165	87.2
Western Bering Sea <i>C. bairdi</i>	1,757,159	1,772,163	99.2	46,896	53,792	87.2
Eastern Aleutian Islands golden king crab	2,492,311	2,492,311	100.0	77,738	80,995	96.0
Western Aleutian Islands golden king crab	1,267,539	1,267,539	100.0	38,303	41,914	91.4

Fishery	Catcher processor					
	Owner			Crew		
	Cooperative held	Total	Percent held by cooperatives	Cooperative held	Total	Percent held by cooperatives
Bristol Bay red king crab	807,708	807,708	100.0	19,247	19,247	100.0
Bering Sea <i>C. opilio</i>	4,994,834	4,994,834	100.0	99,922	99,922	100.0
Eastern Bering Sea <i>C. bairdi</i>	202,073	202,073	100.0	6,113	7,623	80.2
Western Bering Sea <i>C. bairdi</i>	127,637	127,637	100.0	3,859	4,812	80.2
Eastern Aleutian Islands golden king crab	126,663	126,663	100.0	0	0	NA
Western Aleutian Islands golden king crab	1,089,563	1,089,563	100.0	30,427	30,989	98.2

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

In the catcher vessel sector, the portions of annual allocations that are harvested are fairly consistent across the various share types (see Table 6 and Table 7). C share harvests, however, have lagged slightly behind A share and B share harvests. The reason for this lag is not apparent. In some cases, it is possible that C shares are given lower harvest priority than A shares or B shares. C share holders likely have less negotiating leverage because of their relatively small share holdings. It is also possible that some share holders (including cooperatives) have reserved C shares to address late season contingencies, because of absence of landing limitations on C shares.

Table 6. Percentage of catcher vessel allocation harvested by share type (2005-2006).

Fishery	Catcher vessel			Catcher processor	
	Owner A	Owner B	Crew	Owner	Crew
Bristol Bay red king crab	99.9	99.5	94.8	100.0	99.8
Bering Sea <i>C. opilio</i>	99.5	99.1	93.6	99.9	87.4
Western Bering Sea <i>C. bairdi</i>	58.3	40.9	27.7	*	*
Eastern Aleutian Islands golden king crab	95.1	92.6	95.9	100.0	**

Source: NMFS Restricted Access Management IFQ database, crab fishing year 2005-2006.

* Withheld for confidentiality

** No catcher processor crew QS were issued for the Eastern Aleutian Islands golden king crab fishery.

Information from the Western Aleutian Islands golden king crab fishery is withheld for confidentiality.

Table 7. Percentage of catcher vessel allocation harvested by share type (2006-2007).

Fishery	Catcher vessel			Catcher processor	
	Owner A	Owner B	Crew	Owner	Crew
Bristol Bay red king crab	99.5	98.6	94.6	99.9	100.0
Bering Sea <i>C. opilio</i>	99.3	97.9	96.4	100.0	86.8
Eastern Bering Sea <i>C. bairdi</i>	79.0	67.8	54.2	42.5	55.0
Western Bering Sea <i>C. bairdi</i>	68.3	55.2	48.2	33.4	*
Eastern Aleutian Islands golden king crab	100.0	100.0	*	56.5	NA**

Source: NMFS Restricted Access Management IFQ database, crab fishing year 2006-2007.

* Withheld for confidentiality.

** No catcher processor crew QS were allocated for the Eastern Aleutian Islands golden king crab fishery.

Information from the Western Aleutian Islands golden king crab fishery is withheld for confidentiality.

The distribution of harvests across vessels varies slightly by catcher vessel share type (see Table 8 and Table 9). A shares, which are the large majority of shares in the fisheries, are harvested by all vessels; B shares are harvested by slightly fewer vessels; and C shares are harvested by fewer vessels yet. The concentration of share use is higher for C shares than for the other two catcher vessel share types. In general, concentration of vessel harvests increased from the 2005-2006 season to the 2006-2007 season. An exception is the decline in concentration of catch on the four vessels harvesting the most crab in the Bristol Bay red king crab fishery, which fell by more than 0.5 percent from 2005-2006 to 2006-2007.

Table 8. Catch of catcher vessel shares by share type (2005-2006).

	<u>Bristol Bay</u> <u>red king crab</u>			<u>Bering Sea</u> <u>C. opilio</u>			<u>Western Bering</u> <u>Sea C. bairdi</u>			<u>Eastern Aleutian Island</u> <u>golden king crab</u>		
	A shares	B shares	C shares	A shares	B shares	C shares	A shares	B shares	C shares	A shares	B shares	C shares
Number of catcher vessels harvesting share type	85	67	64	73	54	50	27	14	8	6	6	4
Average vessel harvest as percent of the share type	1.2	1.5	1.6	1.4	1.9	2.0	3.7	7.1	12.5	16.7	16.7	25.0
Median vessel harvest as percent of the share type	0.9	0.9	0.9	1.1	1.2	1.0	2.0	2.8	8.2	11.9	14.7	18.4
Average of highest four vessel harvests as percent of the share type	3.9	5.6	6.3	3.8	7.0	8.2	13.3	18.9	22.8	19.8	20.1	25.0

Source: NMFS Restricted Access Management IFQ database, crab fishing year 2005-2006.
Information from the Western Aleutian Islands golden king crab fishery is withheld for confidentiality.

Table 9. Catch of catcher vessel shares by share type (2006-2007).

	<u>Bristol Bay</u> <u>red king crab</u>			<u>Bering Sea</u> <u>C. opilio</u>			<u>Eastern Bering</u> <u>Sea C. bairdi</u>			<u>Western Bering</u> <u>Sea C. bairdi</u>			<u>Eastern Aleutian Island</u> <u>golden king crab</u>		
	A shares	B shares	C shares	A shares	B shares	C shares	A shares	B shares	C shares	A shares	B shares	C shares	A shares	B shares	C shares
Number of catcher vessels harvesting share type	76	61	56	63	49	44	27	11	11	17	6	7	5	4	3
Average vessel harvest as percent of the share type	1.3	1.6	1.8	1.6	2.0	2.3	3.7	9.1	9.1	5.9	16.7	14.3	20.0	25.0	33.3
Median vessel harvest as percent of the share type	1.1	1.1	1.1	1.3	1.6	1.4	1.9	12.1	6.8	4.8	12.7	8.6	15.3	21.8	*
Average of highest four vessel harvests as percent of the share type	3.3	5.8	7.1	4.8	6.1	8.7	12.8	16.3	17.9	13.5	23.0	23.1	23.9	25.0	*

Source: NMFS Restricted Access Management IFQ database, crab fishing year 2006-2007.
* Withheld for confidentiality.
Information from the Western Aleutian Islands golden king crab fishery is withheld for confidentiality.

Since few catcher processors participate in the crab fisheries, limited data may be revealed showing the distribution of catch by catcher processors (see Table 10). In most of the fisheries, the number of vessels harvesting catcher processor crew shares is similar to the number of vessels harvesting catcher processor owner shares. In no case, does the number of vessels harvesting catcher processor crew shares exceed the number harvesting catcher processor owner shares.

Table 10. Number of vessels and catch of catcher processor shares by share type (2005-2006 and 2006-2007).

Season	Bristol Bay red king crab		Bering Sea <i>C. opilio</i>		Eastern Bering Sea <i>C. bairdi</i>	
	2005-2006	2006-2007	2005-2006	2006-2007	2005-2006	2006-2007
Number of vessels catching catcher processor owner shares	8	8	7	7	closed	5
Total catch of catcher processor owner shares	729,339	615,165	2,963,094	2,898,380		46,766
Number of vessels catching catcher processor crew shares	6	6	7	5		4
Total catch of catcher processor crew shares	17,338	14,669	51,859	50,319		2,281

Season	Western Bering Sea <i>C. bairdi</i>		Eastern Aleutian Island golden king crab		Western Aleutian Island golden king crab	
	2005-2006	2006-2007	2005-2006	2006-2007	2005-2006	2006-2007
Number of vessels catching catcher processor owner shares	2	3	3	0	2	2
Total catch of catcher processor owner shares	*	*	*	*	*	*
Number of vessels catching catcher processor crew shares	2	2	0	2	2	1
Total catch of catcher processor crew shares	*	*	0	**	*	*

Source: NMFS Restricted Access Management IFQ database, crab fishing year 2006-2007.

* Withheld for confidentiality.

Examining the distribution of C share landings by catcher vessels shows the relatively small amounts of landings attributed to C shares on a vessel basis (see Table 11).¹¹ The four vessels harvesting the most C shares in Bering Sea *C. opilio* fishery in the first two years of the program averaged approximately 75,000 pounds of C share landings (less than a full trip). Average and median vessel harvests in all fisheries were substantially lower than this amount. Given these relatively small amounts of C shares harvested, it is apparent that cost effective harvest of C share allocations requires their aggregation with owner shares.

Table 11. C share landings by catcher vessels (2005-2006 and 2006-2007 seasons).

Season	Bristol Bay red king crab		Bering Sea <i>C. opilio</i>		Eastern Bering Sea <i>C. bairdi</i>		Western Bering Sea <i>C. bairdi</i>		Eastern Aleutian Island golden king crab	
	2005-2006	2006-2007	2005-2006	2006-2007	2005-2006	2006-2007	2005-2006	2006-2007	2005-2006	2006-2007
Number of catcher vessels	64	56	50	44	closed	11	8	7	4	3
Average vessel harvest	7,120	6,806	18,108	20,840		2,286	1,385	1,863	19,427	23,585
Median vessel harvest	4,278	4,235	9,192	12,168		1,715	911	1,121	14,322	*
Average harvest of four highest harvesting vessels	28,606	26,982	73,890	78,001		4,511	2,527	3,016	19,427	*

Source: NMFS Restricted Access Management IFQ database, crab fishing year 2006-2007.

* Withheld for confidentiality.

Information from the Western Aleutian Islands golden king crab fishery is withheld for confidentiality.

2.3.3 C shares

Most C share holders have used their shares through cooperatives. Under this arrangement, the shares are allocated to the cooperative and fished in coordination with all of the cooperative's shares under the cooperative agreement. Cooperative use of shares simplifies transfers (particularly transfers within the cooperative which require no agency administration). The cooperative structure also simplifies share use in instances where the cooperative manager effectively oversees and coordinates share use across the cooperative's fleet. The ability to

¹¹ Comparable information cannot be revealed for catcher processors because of confidentiality protections.

rely on a cooperative manager to coordinate share use removes that burden from a crewmember who is engaged in the fishery.

Currently, most C share holders are compensated for landings based on a royalty, much as lessors of vessel owner shares are compensated. In most cases, the compensation is a percentage of the ex vessel price paid for the landing. Since C share landings are said to bring a price similar to B shares in the current market, the royalty payments are generally thought to be similar to those received for B share leases. Some cooperatives are said to average royalties across all cooperative IFQ, which could reduce C share royalties by averaging in pricing of Class A IFQ that may bring a lower ex vessel price. The use of a royalty system (and the amount of the royalty) generally applies whether or not the holder of the C shares fishes on the harvesting vessel. Likewise, crew shares paid by a vessel owner typically are not affected by C share holdings of the crew. So, in most cases, the monetary compensation for C share holdings is separate from and independent of the compensation for activity as a crewmember of the holder.

In general, cooperatives have managed their shares (including C shares) as a pool. Underages (or unused cooperative IFQ) are often distributed across all share holders, including C share holders, in proportion to share holdings. This method of distributing IFQ usage across share holders would ensure that C share holders share in both benefits and costs of the cooperative's ability to precisely manage the harvest of its share holdings.

Vessel owners report that C share holdings currently have little effect on hiring decisions. Most vessel owners continue to hire based on performance related criteria. Given the relatively small pool of C shares and limits on aggregation, whether C shares could have an influence on employment decisions in the future is questionable. Some vessel owners, however, have supported their crews' acquisition of C shares, including providing financial support. These vessel owners believe that C share purchases can instill an ownership interest that could add longevity particularly for proven crew.

In the first three calendar years since allocation of C share QS, substantial portions of the C share QS pools have been transferred (see Table 12). Over 20 percent of the C share QS has been transferred in four of the fisheries in the first three years of the program. The transfer market seems to have slowed in the third year, which may be a reflection of persons no longer employed in the fisheries, who have decided to leave the fisheries, divesting of their shares in the first two years. Although a large portion of the C share QS pool has been traded in each year, these transfers are a relatively small portion of the total QS pool. In most years and fisheries, a substantially larger portion of the total QS transfers have been transfers of vessel owner shares.

Table 12. Transfers of C share QS by year and fishery.

Year	Fishery	Sector	QS transferred	
			units	as a percent of total QS pool
2005 - 2006	Bristol Bay red king crab	Catcher processor owner	1,569,702	0.4
		Catcher vessel owner	15,337,188	3.8
		Catcher vessel crew	1,434,287	0.4
	Bering Sea <i>C. opilio</i>	Catcher processor owner	11,997,148	1.2
		Catcher vessel owner	40,969,076	4.1
		Catcher vessel crew	3,082,755	0.3
	Bering Sea <i>C. bairdi</i> *	Catcher processor owner	1,570,469	0.8
		Catcher processor crew	19,854	0.0
		Catcher vessel owner	11,870,491	5.9
	Eastern Aleutian Islands golden king crab	Catcher vessel owner	563,706	0.3
		Catcher vessel crew	1,021,237	10.2
	Pribilof red and blue king crab	Catcher vessel crew	43,372	0.4
St. Matthew Island blue king crab	Catcher vessel owner	387,936	1.3	
	Catcher vessel crew	766,644	2.5	
Western Aleutian Islands golden king crab	Catcher vessel owner	57,443	0.2	
	Catcher vessel crew	878,114	1.5	
2006 - 2007	Bristol Bay red king crab	Catcher processor owner	777,429	0.2
		Catcher vessel owner	28,744,461	7.2
		Catcher vessel crew	1,237,670	0.3
	Bering Sea <i>C. opilio</i>	Catcher processor owner	3,494,652	0.3
		Catcher processor crew	222,842	0.0
		Catcher vessel owner	60,901,248	6.1
	Bering Sea <i>C. bairdi</i> *	Catcher vessel crew	3,049,661	0.3
		Catcher vessel crew	181,990	0.1
	Eastern Bering Sea <i>C. bairdi</i>	Catcher processor owner	460,039	0.2
		Catcher vessel owner	17,195,877	8.6
		Catcher vessel crew	491,486	0.2
	Pribilof red and blue king crab	Catcher vessel owner	960,391	3.2
Catcher vessel crew		48,351	0.2	
St. Matthew Island blue king crab	Catcher vessel owner	1,620,414	5.4	
	Catcher vessel crew	79,301	0.3	
Western Aleutian Islands red king crab	Catcher vessel owner	1,232,580	2.1	
Western Bering Sea <i>C. bairdi</i>	Catcher processor owner	460,039	0.2	
	Catcher vessel owner	17,195,877	8.6	
	Catcher vessel crew	491,486	0.2	
2007 - 2008	Bristol Bay red king crab	Catcher vessel owner	4,734,563	1.2
		Catcher vessel crew	493,960	0.1
	Bering Sea <i>C. opilio</i>	Catcher vessel owner	18,434,596	1.8
		Catcher vessel crew	983,437	0.1
	Eastern Aleutian Islands golden king crab	Catcher processor owner	396,848	4.0
		Catcher vessel crew	35,191	0.4
	Eastern Bering Sea <i>C. bairdi</i>	Catcher vessel owner	2,886,182	1.4
		Catcher vessel crew	217,301	0.1
	Pribilof red and blue king crab	Catcher vessel owner	654,792	2.2
	St. Matthew Island blue king crab	Catcher vessel owner	1,374,990	4.5
Catcher vessel crew		48,781	0.2	
Western Aleutian Island golden king crab	Catcher processor owner	190,857	0.5	
Western Aleutian Island red king crab	Catcher vessel owner	265,488	0.4	
Western Bering Sea <i>C. bairdi</i>	Catcher vessel owner	3,208,167	1.6	
	Catcher vessel crew	217,301	0.1	

Source: NMFS Restricted Access Management transfer data.

Note: Percentages are based on quota share pool as of 2008. Annual transfers fishery and sector transfers of less than 5,000 units are excluded.

Data for 2007-2008 are partial year data, as of January 2008.

* Uses Eastern Bering Sea *C. bairdi* for the QS pool denominator.

Price differentials on transfers of C share QS and owner QS vary across time and fisheries (see Table 13). In general, C share prices have been approximately one-third lower than the prices of owner shares in the first three years of the program. It should be noted that the extent of any price differential could change with the introduction of the loan program and the exemption of C shares from processor share and regional landing requirements. Similarly, stringency of active participation requirements is likely to affect C share prices in the future.¹²

Table 13. QS transfer prices by fishery and sector (2005-2006 to 2007-2008).

Crab Fishing Year	Fishery	Sector	Total amount paid (\$)	Total QS units transferred	Number of transfers	Number of distinct transferors	Number of distinct transferees	Weighted average price per QS unit
2005 - 2006	Bristol Bay red king crab	CVC	873,724	1,221,051	21	19	14	0.72
		CVO	3,991,160	7,139,909	14	6	10	0.56
	Bering Sea <i>C. opilio</i>	CVC	683,516	2,793,091	25	14	12	0.24
		CVO	9,653,848	24,619,413	22	9	12	0.39
	Bering Sea <i>C. bairdi</i>	CVC	77,627	400,790	14	13	11	0.19
		CVO	1,523,445	5,203,128	10	8	9	0.29
2006 - 2007	Bristol Bay red king crab	CVC	774,159	1,130,330	24	20	17	0.68
		CVO	29,292,901	24,420,200	27	17	11	1.20
	Bering Sea <i>C. opilio</i>	CVC	543,372	2,864,463	35	17	15	0.19
		CVO	12,618,035	48,984,237	36	17	8	0.26
	Bering Sea <i>C. bairdi</i>	CVC	15,472	138,404	3	3	3	0.11
	Eastern Bering Sea <i>C. bairdi</i>	CVC	18,987	394,012	17	14	14	0.05
		CVO	432,038	6,577,526	17	13	8	0.07
	St. Matthew Island blue king crab	CVC	7,019	40,323	4	3	3	0.17
	Western Bering Sea <i>C. bairdi</i>	CVC	13,028	372,387	16	13	13	0.03
		CVO	699,338	8,511,781	22	18	9	0.08
2007 - 2008	Bristol Bay red king crab	CVO	620,603	662,170	6	4	4	0.94
	Bering Sea <i>C. opilio</i>	CVO	2,200,050	8,282,971	7	3	4	0.27
	Eastern Bering Sea <i>C. bairdi</i>	CVO	33,374	574,907	3	3	3	0.06
Total	Bristol Bay red king crab	CVC	1,647,883	2,351,381				0.70
		CVO	33,904,664	32,222,279				1.05
	Bering Sea <i>C. opilio</i>	CVC	1,226,888	5,657,554				0.22
		CVO	24,471,933	81,886,621				0.30
	Bering Sea <i>C. bairdi</i>	CVC	93,099	539,194				0.17
		CVO	1,523,445	5,203,128				0.29
	Eastern Bering Sea <i>C. bairdi</i>	CVC	18,987	394,012				0.05
		CVO	465,412	7,152,433				0.07
	St. Matthew Island blue king crab	CVC	7,019	40,323				0.17
	Western Bering Sea <i>C. bairdi</i>	CVC	13,028	372,387				0.03
CVO		699,338	8,511,781				0.08	

Notes: Includes only priced transfers through November of 2007. All transfers of Bering Sea *C. bairdi* occurred prior to division of those allocations into two areas and therefore include transfers of both Eastern and Western Bering Sea *C. bairdi*. The crab fishing year begins on July 1 and ends on June 30. A portion of these transfers included accompanying IFQ for the current season.

Source: Restricted Access Management, NOAA Fisheries.

2.3.4 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). Annual allocations arising from C share QS are exempt from IPQ landing requirements and are subject to the same level of competition as B share IFQ.

Processing QS holdings are substantially more concentrated than either catcher vessel owner or catcher vessel crew QS holdings (see Table 14).

¹² In considering price information, it should also be noted that in some instances transfers included accompanying IFQ for the current season. The effect of the inclusion of IFQ on transfer prices was not examined for this analysis, in part, due to time constraints. In general, the inclusion of IFQ is expected to be a function of the timing of the transfer relative to the crab fishing season and

Table 14. 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.

Processor share allocations are subject to up to three different geographic provisions. First, most shares are subject to regional landing requirements, under which the share holder must take delivery within a specified region. Second, for the first two years of the program, most processor quota shares were 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 the underlying processing quota shares) subject to minor exceptions.¹³ Third, 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.¹⁴ 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 communities.¹⁵ 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.

¹³ Movement of the lesser of 10 percent of and 500,000 pounds of the IPQ from a community of origin was permitted during the cooling off period.

¹⁴ 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.

¹⁵ 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.

Table 15. PQS regional and right of first refusal designations (2006-2007).

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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			97.4
	Bering Sea <i>C. opilio</i>	North	None	3
St. George			2	9.7
St. Paul			6	36.3
Total			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			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		
	South	Akutan	1	1.2
King Cove		1	3.8	
Kodiak		4	2.9	
Unalaska		5	24.6	
Total			32.5	
St. Matthews blue king crab	North	None	5	64.6
		St. Paul	4	13.8
		Total		
	South	Akutan	1	2.7
King Cove		1	1.3	
Kodiak		1	0.0	
Unalaska		6	17.6	
Total			21.7	
W. Aleutian Islands golden king crab	Undesignated	NA	9	50.0
	West	NA	10	50.0
W. Aleutian Islands red king crab	South	NA	10	100.0

Source: NMFS RAM PQS holdings 2006-2007.

2.3.5 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 appeared to receive 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.

Final price data are available for the various species harvested in the program (see Table 16). These data, however, are not collected by fishery and include catch from fisheries other than those subject to the rationalization program. Although catch from the rationalization program dominate these data, in some cases catch from other fisheries may affect final prices observed in these data. Overall, the data do show a declining price trend, which accurately characterizes price changes in recent years in the fisheries.

Table 16. Ex vessel prices by species, 2001 - 2006 (dollars/pound).

Year	Golden king crab	<i>C. opilio</i>	Red king crab	<i>C. bairdi</i>
2001	3.37	1.55	4.83	2.16
2002	3.46	1.39	6.21	2.20
2003	3.62	1.85	5.14	2.46
2004	3.15	2.07	4.69	2.59
2005	2.89	1.81	4.50	1.85
2006	2.18	1.15	3.85	1.52

Source: ADFG Commerical Operators Annual Reports

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.¹⁶ 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 would appear to be supported by the average reported price for C share deliveries in elandings data 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 in 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, albeit a market under a different management and economic structures. 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 facilitate competitive markets.

¹⁶ 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.

2.3.6 First wholesale and consumer markets

This section briefly summarizes market conditions in the first two years of the program and the expected market conditions 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. 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 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 too 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 declined 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 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 showed notable declines in 2006, the first full year of the rationalization program (Table 17). It is believed that market conditions have improved more recently, but data are not available to show those improvements.

Table 17. First wholesale prices of crab species by product type (2001-2006).

Species	2000	2001	2002	2003	2004	2005	2006
Golden king crab	7.20	6.95	7.58	7.89	6.02	6.00	4.35
Red king crab	9.11	8.93	11.58	9.82	9.25	8.52	7.49
<i>C. opilio</i>	4.16	3.73	3.58	4.40	4.79	3.85	2.89
<i>C. bairdi</i>	5.83	5.12	5.22	6.13	6.60	4.37	3.94

Source: COAR data

2.3.7 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 given location. For 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 18). In addition, activity on floating processors may be associated with a particular community, but is not attributed to a 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 18. 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
		Akutan, King Cove, Kodiak	3	2,162,245	8.5
	2003	Dutch Harbor	6	10,308,648	40.6
		Catcher processors	5	803,452	3.2
		St. Paul, Floaters	8	12,135,777	47.8
		Akutan, King Cove, Kodiak	4	2,287,481	10.4
2004	Dutch Harbor	6	8,714,351	39.7	
	Catcher processors	6	664,660	3.0	
	St. Paul, Floaters	8	10,273,001	46.8	
	Akutan, King Cove, Kodiak	3	2,206,008	9.7	
2005	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 communities based on recent crab processing history (see Table 15). 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 a greater 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 of processed seafood in Dutch Harbor in 2005. The second largest contributor was 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 PQS 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.

The community of King Cove, once heavily dependent upon salmon, 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 a Peter Pan Seafoods plant, 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 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 allowable catch quotas related to reduced stocks. In addition, AFA sideboard 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 adversely 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. It is difficult to attribute these effects to the change in crab management, since data isolating spending patterns of crab vessel operators 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 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 onshore facility 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 in the region (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 economic activity 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 are diverse in size, volume, and species processed. The products produced by the shore plants range from canned salmon, to fresh and fresh-frozen products. The rapid fleet contraction under the crab rationalization program is also thought to have adversely affected Kodiak. Kodiak crew are estimated to have lost 125 positions in the Bristol Bay red king crab fishery 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 shore plant 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. Approximately 10 percent of the processing shares in the Bering Sea *C. opilio* fishery 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. The community is currently requesting a new cooling off period for these shares and a renewal of the rights of first refusal, which will lapse, if those shares are processed outside of St. George for 3 consecutive years. Whether the community can attract crab landings in the future is not known and depends, in large part, on its ability to provide a harbor perceived to be safe and suitable 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 sablefish are the primary species. A few aspects of the rationalization program are structured specifically to support Adak. First, a community entity representing Adak is allocated 10 percent of the TAC in the Western Aleutian Islands golden king crab fishery. 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.

2.4 Analysis of alternatives

Through this action, the Council will determine active participation requirements for the acquisition and use of C shares. The effects of this action are almost exclusively those realized by C share holders, persons wishing to acquire C shares, and managers. As such the analysis of effects of each proposed alternative is contained in a single section, which discusses effects on these different persons.

In analyzing the alternatives in this action, the Council should consider the interaction of these measures with other aspects of the program, including the processor share and regional landing requirements applicable to Class A IFQ. Under current management, the 90/10 A share/B share split, including its A share landing requirements, is scheduled to apply to C share IFQ allocations, starting in the 2008-2009 fishing year. The Council recently recommended an amendment to that provision that would exempt C share IFQ allocations from the 90/10 A share/B share split indefinitely. Potential effects of the differences in landing requirements applicable to C share IFQ are discussed where relevant. Overall, the interactive effects of application of A share landing requirements on this action are limited. Those effects are mitigated substantially by C share holders choosing to join cooperatives. In the most recent fishing season, a large majority of C share holders elected to join cooperatives (see Table 5). Consequently, coordination requirements arising from the application of A share landing requirements to C share IFQ will have little effect on most C share holders.¹⁷

¹⁷ The A share landing requirements maybe expected to affect the price received by C share holders. The price effect is independent of the coordination effect at issue here.

2.4.1 Effects of alternatives revising eligibility to acquire C shares

The first part of this action considers providing persons formerly active in the fishery, who are no longer active, with eligibility to acquire C shares for a transition period.

Status quo

Under the status quo, to receive C shares by transfer a person must be an individual with at least 150 days of sea time in a harvest capacity in a U.S. commercial fishery and have been active as a crewmember in one of the rationalized crab fisheries in the preceding 365 days. Participation is defined as being on board a vessel as either captain or crew during at least one landing.¹⁸ Under this standard, captains and crew displaced by fleet contraction who have not found a position in one of the fisheries would not be permitted to acquire C shares, until participating in a landing. Based on the fleet contraction that occurred in the first two years of the program, it is likely that as many as two-thirds of the persons that would have met this standard prior to the implementation of the program would not currently meet the standard. Assessing the effects of the status quo, it is helpful to separate persons not meeting the standard into two categories, those who received an initial allocation of C shares and those who did not.

Initial allocations were made only to State permit holders, who are generally captains, who met specific historic and recent participation requirements as permit holders. Historic participation was demonstrated by having at least one landing in three of the qualifying years in the fishery. Recent participation was demonstrated by having landings in two of the three seasons preceding April of 2002 (when the Council selected its preliminary preferred alternative for the initial allocation of C shares).¹⁹ Based on these criteria, NOAA Fisheries made initial allocations to 231 permit holders (see Table 19). Of these initial recipients, 97 are estimated to have remained active as card holders²⁰ (i.e., most likely as captains) in the first year of the program, while 84 are estimated to have remained active as card holders in the second year of the program. Data showing activity as crew are not available. It is possible that additional recipients of initial allocations were active as crew, but it is believed that most captains who have not retained a position as captain are not active in the fisheries. Under the status quo, inactive persons, including recipients of an initial allocation, would not be able to acquire additional C shares.

¹⁸ Participation in a landing may be demonstrated by a fish ticket on which the person is the permit holder, an IFQ landing receipt showing the person as the hired master, or an affidavit of the vessel owner. These methods of demonstrating participation are not at issue in this action.

¹⁹ Exceptions to the recent participation requirements were made to address specific circumstances in certain fisheries. Recent participation requirements for the Bering Sea *C. bairdi*, the Western Aleutian Islands golden king crab, St. Matthew Island blue king crab, and the Pribilof red and blue king crab fisheries were based on participation on other fisheries included in the program, since those fisheries were closed in most years immediately preceding adoption of the program. Also, in the Pribilof fishery participants that worked on vessels less than 60 feet in length were exempt from any recency requirement, since most of those smaller vessels did not participate in other fisheries included in the program.

²⁰ Card holders are the IFQ holder or other person authorized to make deliveries of IFQ. In most instances, card holders are believed to be the captain of the vessel harvesting the IFQ.

Table 19. Initial allocation of C share QS.

initial - c share

Fishery	Initial recipients	Mean allocation (as percent)	Median allocation (as percent)
Bristol Bay red king crab	181	0.6	0.5
Bering Sea <i>C. opilio</i>	155	0.6	0.6
Bering Sea <i>C. bairdi</i>	176	0.6	0.5
Eastern Aleutian Island golden king crab	13	7.7	8.2
Western Aleutian Island golden king crab	9	11.1	6.2
Western Aleutian Island red king crab	4	25.0	20.8
St. Matthew Island blue king crab	72	1.4	1.4
Pribilof red and blue king crab	40	2.5	2.4
All - unique recipients	231		

Source: NMFS Restricted Access Management Database.

Note: The initial allocation originally included a single allocation of shares for harvest of Bering Sea *C. bairdi*

Two sets of persons active on vessels in the fisheries prior to implementation of the rationalization program did not receive an initial allocation. Captains that did not meet both the historic and recent participation criteria did not receive initial allocations. Comparing the number of recipients of initial allocations with the number of active vessels in the fisheries, it appears that captains of at least 25 vessels active in the fisheries in the 5 years preceding implementation of the program did not have captains that received an initial allocation. In addition, no crew, regardless of their record of participation, received initial allocations.²¹ Based on the difference in the number of vessels participating in the fisheries prior and subsequent to implementation of the rationalization program, at least 750 former crew who were active in the five years preceding implementation of the program are no longer active in the crab fisheries.²² Together, in excess of 900 persons active in the 5 years prior to implementation of the rationalization program appear to be no longer active in the fisheries. These persons include inactive initial recipients of shares, inactive captains (who did not receive an initial allocation), and inactive crew. Any of these persons that did not secure a position on a vessel in the fisheries after the program was implemented would not be permitted to acquire C shares under the existing active participation requirement.

Under the status quo, persons formerly active in the fisheries (including initial recipients of C shares, captains who did not receive an initial allocation of C shares, and crew), but currently inactive, cannot acquire C shares. Two different influences could motivate the desire to purchase shares by these persons. First, some of these persons could view share holdings as providing a potential avenue to reemployment in the fisheries. These persons may believe that share holdings could improve their chances of gaining employment in the fisheries. If a vessel owner views a potential crewmember's share holdings as an indication of that person maintaining a long term interest in the fishery, that vessel owner could be induced to hire the person over other applicants that have no share holdings. To date, vessel owners have not indicated that share holdings are a large consideration in hiring. Instead vessel owners are said to focus on performance related information when making crew hires. Given that C shares are only 3 percent of the quota share pool (and are subject to a cap limiting persons to holding no more than 2 percent of the C share pool in most fisheries), the potential for a C share holder to amass C share holdings in an amount that would induce a vessel owner to hire the person is somewhat limited (see Table 20). C share holdings, however, could affect a vessel owner's hiring decision between two candidates, only one of whom holds shares in the fishery.

A second influence that could motivate a person's desire to acquire C shares is the person's desire to maintain some interest in the fisher. Some persons who have had extended careers in the fisheries could view C share holdings as a reasonable means of maintaining a connection with the crab fisheries. Despite being displaced,

²¹ It is likely that some persons fall into both categories. Persons moving from the deck to a captain position did not meet the eligibility criteria for a captain, and therefore did not receive an allocation, would be in both categories.

²² This estimate is based on the assumption that each vessel employs 5 crew (excluding the captain).

these persons may wish to maintain an economic interest in the fisheries. Under the status quo, these persons would not be permitted to acquire C shares.

Table 20. Most recent TAC and C share caps based on that TAC.

Fishery	Most recent opening		Share cap	
	Year	TAC	as a percent of pool	in pounds (based on most recent TAC)
Bristol Bay red king crab	2007-2008	18,344,700	2	11,007
Pribilof red and blue king crab	1998	1,250,000	4	1,350
St. Matthews blue king crab	1998	4,000,000	4	4,320
Western Aleutian Islands red king crab	2003 - 2004	500,000	20	2,700
Eastern Aleutian Islands golden king crab	2007-2008	2,700,000	20	16,200
Western Aleutian Islands golden king crab	2007-2008	2,430,000	20	14,580
Bering Sea <i>C. opilio</i>	2007-2008	56,730,600	2	34,038
Western Bering Sea <i>C. bairdi</i>	2007-2008	1,558,400	2	935
Eastern Bering Sea <i>C. bairdi</i>	2007- 2008	3,100,500	2	1,860

Source: Crab SAFE, 2007 and ADFG Chellfish News Releases, October 2007.

Note: Estimates are based on assumption that C share IFQ are 3 percent of the TAC.

Alternatives to change eligibility to acquire C shares

This action is proposed to expand the pool of eligible persons to include persons who were active in the crab fishery immediately prior to implementation of the program, but who do not meet the requirement for activity in the 365 days preceding the transfer. This eligibility would exist for a transition period, after which the current active participation rule would apply to all share purchases. This analysis first considers the provisions that define eligibility to acquire C shares, then considers the provisions that define the term (or number of years) of eligibility, which are the same in both alternatives.

Alternative 2 (may be adopted with alternative 3)

For a period of 5 or 7 years from the implementation of the program, C shares can also be acquired by an individual who:

- 1) is a U.S. citizen,
- 2) has at least 150 days of sea time as part of a harvesting crew in any U.S. commercial fishery (historic participation), and
- 3) received an initial allocation of C shares.

Alternative 3 (may be adopted with alternative 2)

For a period of 5 or 7 years from the implementation of the program, C shares can also be acquired by an individual who:

- 1) is a U.S. citizen,
- 2) has at least 150 days of sea time as part of a harvesting crew in any U.S. commercial fishery (historic participation), and
- 3) demonstrates participation in the BSAI rationalized crab fisheries during
 - i. 3 of the 5 seasons, or
 - ii. 2 of the 3 seasons,
 immediately preceding implementation of the rationalization program.

The action includes two alternatives defining persons who could receive transitional eligibility to acquire C shares for a limited period of time. Under alternative 2, persons that received initial allocations of C shares would be eligible to acquire those shares. Under alternative 3, persons who demonstrated threshold participation in the years preceding implementation of the program would be eligible to acquire C shares. These alternatives are intended to allow persons displaced from captain and crew jobs by the fleet contraction that occurred after implementation rationalization, the opportunity to acquire C shares. This temporary opportunity could allow

these persons the opportunity to make use of C shares to maintain their connection to the crab fisheries and leverage a captain or crew position in the fisheries.

Several persons who received an initial allocation of C shares under the program have not maintained their activity in the fisheries. In the second year of the program, approximately 147 persons who received an initial allocation under the program did not participate in program as a card holder. These persons would all be eligible to acquire C shares under alternative 2. While alternative 2 would address concerns of recipients of initial allocations of C shares, the alternative will not help certain persons that may be similarly aggrieved under the current active participation requirements. By definition, the initial allocation was made only to captains (i.e., named permit holders on fish tickets). Displaced crew who had similar participation, but were not permit holders did not receive an initial allocation and would be excluded from eligibility under alternative 2. In addition, persons that had considerable participation in the years immediately preceding implementation of the rationalization program, but did not participate prior to 2001 were excluded from the initial allocation (as all qualifying periods ended by 2000). These persons may have more recent participation than some persons who received an initial allocation, since eligibility for an allocation could be achieved by participation prior to June 2001, but would be excluded from eligibility under alternative 2.²³

Alternative 3 would allow persons who participated in at least one of the rationalized fisheries during either 3 of the 5 years preceding implementation of the rationalization program or 2 of the 3 years preceding the rationalization program to purchase C shares. Since participation records for crew are not available, precise estimates of eligibility under this alternative are not possible. Examining vessel participation patterns, however, provides some basis for assessing the potential effects of alternative 3 (see Table 21). A total of 255 vessels participated in at least 3 of the 5 years immediately preceding the rationalization program, while 253 participated in at least 2 of the 3 years immediately preceding program implementation. Assuming consistent crew participation on these vessels, these data suggest that approximately 1500 crew (including captains) would meet these eligibility criteria. If the persons who received initial allocations of C shares that are currently active are assumed to be among those meeting the participation criteria, then approximately 900 additional persons would be eligible to acquire C shares under alternative 3 (including persons who received an initial allocation of C share QS).

Table 21. Vessel participation in the years immediately preceding implementation of the rationalization program (2000-2001 to 2004-2005).

Participation in years preceding implementation	Number of vessels	Percent of participating vessels
1 of 5 years	18	6.5
2 of 5 years	6	2.2
3 of 5 years	16	5.7
4 of 5 years	20	7.2
5 of 5 years	219	78.5
1 of 3 years	13	4.9
2 of 3 years	15	5.6
3 of 3 years	238	89.5

Source: ADFG fishtickets.

Two competing effects are likely to arise from the alternatives expanding eligibility to acquire C shares. First, persons provided eligibility by the provision, who wish to purchase shares could benefit from the ability to compete for their purchase. These persons may wish to acquire C shares to either maintain a connection or interest in the fisheries. Long term participants who are unlikely to reenter the fisheries as captain or crew, in particular, may use C share acquisitions to maintain a tie to the fisheries. In addition, some of these newly

²³ To receive an initial allocation a person also needed to meet a recent participation requirement. That requirement could be met by fishing that occurred on or before June of 2001.

eligible persons may acquire C shares to bolster their position to reenter the fisheries. Whether vessel owners will view C share holdings as a compelling reason to hire someone is questionable, but it is possible that the commitment to the fisheries shown by C share holdings could be a consideration in a hiring decision.

The benefit to those receiving transition eligibility and the effects on the market for C shares could be influenced by other factors. Most importantly, the rules governing C share use will affect whether persons with transitional eligibility will benefit from that eligibility. Specifically, if C share holders are required to be active in the crab fisheries to receive IFQ allocations (as is addressed in the second part of this action) or are required to divest after a period of inactivity, transitional eligibility could have little effect on persons receiving that eligibility. Persons who receive transition eligibility will be much less likely to enter the market for C shares, if they do not receive IFQ or are required to divest their C share holdings after a period of inactivity. Persons wishing to purchase C shares to maintain an interest in the fishery (but who do not intend to be active as crew) will be unlikely to enter the market during the period of transitional eligibility, if they will not derive any benefit from the shares unless they are active. Also, persons wishing to use C shares to leverage a crew position are much less likely to enter the C share market, if they perceive a risk that they will not be able to locate an acceptable crew position.

The competing effect of the transitional eligibility will be felt by persons active as captains or crew in the fisheries. Persons currently participating in the fisheries as captain or crew are likely to be disadvantaged by an increase in competition for C shares that could arise from providing transition eligibility to persons no longer active in the fisheries. If only initial recipients of C shares are given eligibility (under alternative 2), approximately 150 additional persons would be eligible to acquire C shares. Under the current rule, more than 600 persons are likely to be eligible to acquire C shares. So, the pool of eligible persons could increase by as much as 25 percent under alternative 2, which would grant eligibility to initial recipients of C shares. If the Council selects alternative 3, which grants eligibility to persons meeting participation thresholds for the years prior to implementation of the program, eligibility might be granted to substantially more persons. Under this alternative, the number of persons who could acquire C shares would more than double from the current level (if crew participation patterns are similar to vessel participation patterns). Although the pool of eligible persons could expand substantially, the change in competition for C shares is uncertain. Many of the persons eligible under these provisions are unlikely to attempt to acquire C shares, as most are unlikely to attempt to reenter the fisheries by acquiring shares. Whether entry to the market by persons eligible under this provision will affect the cost of shares and the ability of currently active captains or crew to purchase shares is not known.

The effects of the transitional eligibility proposed by this action will also depend on several other factors. The development of the loan program could influence the effects of transitional eligibility by affecting the availability of funds for share purchases. Depending on loan eligibility provisions, the program could either compound or limit the effect of any transitional eligibility provision adopted by the Council. If persons eligible under the transition provision are not eligible for loans, they may exert less pressure on the market. If persons eligible under the transition provision are also eligible for loans, additional market competition could arise. The removal of A share landing requirements on C shares could compound any additional market pressure on C shares arising from this action. C shares could trade for a higher price, if those landing requirements are removed, as is currently being considered by the Council. Lastly, the restructuring of the crab program, which is currently under consideration by the Council, can also be expected to affect share prices. If persons interested in C share acquisitions believe that changes to the program arising from Council restructuring of the program are likely, it is possible that those changes could affect the C share market. Potential buyers may be less or more likely to participate in the market, if they perceive that restructuring might change the terms of their share holdings (or the share holdings of others). Given the uncertainty of that action, it is not possible to predict these effects.

The Council has elected to consider two options defining the term of the transitional eligibility to acquire C shares under both alternatives. That eligibility could extend for 5 or 7 years from implementation of the program. Any action under this amendment is unlikely to be implemented prior the 2008-2009 fishing season (i.e., the fourth year of fishing under the program). Consequently, the option to extend transitional eligibility for

5 years from implementation would likely provide between 1 and 2 years of eligibility, while the option to extend that eligibility for 7 years from implementation would likely provide between 3 and 4 years of that eligibility. A short period during which a relatively large number of persons are eligible to acquire shares could cause some disruption to the market, if a noticeable portion of the group is very active. The shorter period is likely to cause greater disruption, particularly if persons benefiting from the transitional eligibility believe that a limited portion of the C share pool is likely to come onto the market during the brief period. Also, if C share holders perceive an increase in demand from these temporarily eligible persons, C share holders may be inclined to enter the market as sellers during this period. The relatively low ownership caps in the fisheries limit the potential for a few persons to disrupt the market, but if a large number of persons qualify for the provision, it is possible that their collective influence on the market could be more substantial. The longer eligibility period could disperse the impact of qualifying additional persons for the market, but a 3 to 4 year period is a relatively short period of time during which additional persons in the market could be noticeable. Under either option defining the term, it is possible that as the end of the eligibility period approaches additional activity in the market could be stimulated. Persons that are likely to lose their transitional eligibility could perceive a last opportunity to participate in the market leading to higher demand.²⁴

The effects of alternatives to provide transitional eligibility on managers are expected to be relatively minor. Under the current eligibility provisions, a participant can demonstrate activity as a permit holder on a fish ticket or through affidavits of vessel owners. These (with other additional forms of evidence) could also be used to show participation under the alternatives for this action.²⁵ The applications would be required to be slightly more extensive than the existing forms (requiring several years of participation instead of a single year's activity as required under the current rules), but would effectively use the same (or similar) evidence. In addition, since the transitional eligibility would only apply for a period of years, the added burden of accommodating persons receiving that eligibility would be only for the period of the provision. The enforcement burden arising out of this revision would also be relatively minor. Although a substantial number of persons could become eligible from this provision, the general approach to enforcement would be to pursue any case of possible inappropriate applications. Although this could result in a larger number of cases, the potential number of cases would be limited by the number of persons applying for eligibility and the potential for persons to misrepresent their prior fishing activity. Although some misreporting is possible, it is not believed that a substantial number of persons misreporting fishing history to create transitional eligibility will result. The potential for misreporting is reduced, if C share holders are required to be active in the fisheries to receive annual allocations (or to avoid a forced divestiture), since most persons who are not confident of meeting future active participation requirements are unlikely to acquire shares.

2.4.2 Effects of alternatives revising active participation requirements for C share holders

The second part of this action considers revision of the rules governing active participation requirements of C share holders.

Status quo

Under the status quo, individuals who hold C share IFQ are required to be onboard the vessel harvesting those IFQ. If a C share holder joins a cooperative, the IFQ are allocated to the cooperative, effectively removing the onboard requirement with respect to those IFQ. This disparate treatment of individual C share holders and C share holders who are cooperative members has several effects. First, the incentive for a C share holder to join a cooperative is increased by relief from the owner-on-board obligation. Second, to the extent that the current rule is intended to ensure C share holders are onboard when their IFQ holdings are harvested, the rule is likely

²⁴ These effects, however, will depend on the number of persons granted transitional eligibility and whether those persons are active in the C share market. This activity will greatly depend on the rules governing C share use; specifically, whether C share holders are required to be active to receive IFQ allocations and whether inactive C share holders will be required to divest of their shares.

²⁵ It may be advisable to allow other persons to sign affidavits attesting to participation, to address the contingency of a vessel owner being unavailable. These specifics could be addressed in the development of specific regulations.

ineffective. As currently formulated, the rule ensures either C share owner-on-board or cooperative membership. Data are unavailable to show the extent to which C share holders are onboard for the harvest of their IFQ; however, card holder activity suggests that a large majority of the permit holders who received an initial allocation of C shares are no longer active as captains.²⁶ The extent to which these persons are active as crew is not known. Also, a large majority of C share holders have elected to join cooperatives. Although the motivations for cooperative membership go far beyond avoiding owner on board requirements, the relief from owner-on-board requirements must especially appeal to C share holders who are no longer active in the fishery.

In the long run, as active C share holders retire from captain and crew positions, it can be expected that many may elect to continue to remain members of cooperatives and retain their C share holdings through established relationships. Over time, the retirement of active C share holders from crab fishing jobs will contribute to a reduction in the number of C share holders active in the fisheries. Some C share holders can be expected to be active, particularly as new acquisitions will only be permitted by persons meeting an active participation requirement in the crab fisheries. Yet, at any one time, a large portion of the C share pool could be held by persons that are not active as captains or crew.

An additional effect of the current participation requirements is that the market for C shares could be less fluid. If only active captains and crew are permitted to receive benefits from C shares, it is likely that the market for these shares will be more active, since persons who retire or exit from captain and crew positions will transfer shares. Without this requirement for active participation, it is likely that C shares will be held by persons who have left their captain and crew positions and participate as cooperative members. The added flexibility for C share holders allowed through the absence of active participation requirements for cooperative members could also increase the value of C shares. Whether a price increase is observed depends on whether the absence of active participation requirements for cooperative members under the status quo reduces supply of C shares in the market.

Alternatives to change active participation requirements for C share holders

Two alternatives are under consideration that would change the active participation requirements for C share holders. Under alternative 2, no IFQ would be issued to C share QS holders, unless that C share holder demonstrated active participation in one of the rationalized fisheries in the 3 years preceding the application for IFQ. Under an option, a person who received an initial allocation of C shares and participated in 30 days of fishing in Alaska State or Federal fisheries in the 3 years prior to the IFQ application would be eligible to receive an annual allocation of C share IFQ. Under alternative 3, persons inactive in the crab fisheries for 4 or 5 successive seasons would have their C share QS holdings revoked. An option would allow persons who received an initial allocation of C share QS and who participate in at least 30 days of fishing in Alaska State or Federal fisheries in the 4 or 5 season period to retain their C share QS. The Council has also identified two ancillary options for consideration. The first option, which would apply under alternative 2 or 3, is intended to maintain the C share IFQ allocation at its intended portion of the IFQ pool (3 percent currently), in the event that holders of a substantial portion of the C share QS pool are found to be ineligible to receive an annual allocation of IFQ or have their QS revoked. The second option, which also would be applied to either alternative 2 or 3, would exempt persons who received an initial allocation of C shares and who were over 60 years of age at the time this amendment is implemented from any active participation requirements.

Under alternative 2, C share QS holders who have not participated in at least one of the crab fisheries, over a period of three consecutive years, would not receive an annual allocation of IFQ. Examining activity of C share holders in the first two years of the program provides some perspective on the effects of this provision. During the third year of the program, 108 of the 213 C share holders in the fisheries are estimated to have not participated as card holders (i.e., captains) in the preceding two seasons (see Table 22). Whether these C share holders were active as crew is not known. Those who remain inactive for a period of three consecutive years would not receive IFQ allocations under the first option. The share of the C share QS pool held by persons

²⁶ In the second year of the program, 147 of the 231 initial recipients of C shares were not active as card holders.

inactive as card holders for the first two years of the program is a substantial portion (and in some cases a majority) of the C share QS pool.

Alternative 2 (may be adopted with alternative 3)

To receive an annual allocation of IFQ, a C share holder must:

have participated in at least one delivery in a fishery subject to the crab rationalization program in the 3 seasons (i.e., crab fishing years) preceding the application for IFQ.

Option: have received an initial allocation of C shares and participated in 30 days of State of Alaska or Alaska Federal fisheries in the 3 seasons (i.e., crab fishing years) preceding the application for IFQ.

Option: Establish a mechanism for the annual allocation of C share IFQ to ensure that the portion of the TAC available to active C share holders is equivalent to the C share portion of the fishery as established by the Council (currently 3 percent).

Alternative 3 (may be adopted with alternative 2)

A C share holder who does not meet one of the following active participation criteria will have all C share QS holdings revoked:

The person must have participated in at least one delivery in one of the rationalized crab fisheries in the preceding 4-5 seasons (i.e., crab fishing years).

Option: The person must have received an initial allocation of C share QS and have participated in 30 days of fishing in State of Alaska or Alaska federal fisheries in the preceding 4-5 seasons (i.e.; crab fishing years).

This provision will not require individuals to divest of Quota Share until 5-10 seasons after implementation of the crab program.

Option (applies to both alternatives): Persons who received an initial allocation of C share QS and are 60 years of age or older on the date of implementation of this amendment are exempt from active participation requirements. This exemption is limited to initially issued QS (i.e., not purchased QS).

Comparing the two tables shows that, in some fisheries, the number of C share holders who are not active as card holders increased in the second year of the program. The percent of C share holders that are inactive as card holders varies across the fisheries.

Whether this drop is an actual decline in C share holder activity is not known. It is possible that some C shares have been acquired by crew (other than captains) who are less likely to be card holders. It is also notable that the percent of the C share QS pool held by persons active as card holders dropped in all fisheries. Again, the extent to which this decline represents an actual decline in active participation by holders of C share QS or a change in the composition of C share holders (from captains to crew) is not known.

Table 22. C share QS holders in 2007-2008 with active participation (at least one landing in any rationalized crab fishery) in 2005-2006 or 2006-2007 as a card holder.

2007-2008 - 2 years

Fishery	Active (as a card holder)	Number of C share holders	Percent of C share holders	Percent of QS	Total C share holders in the fishery
Bristol Bay red king crab	Inactive	84	40.4	38.3	208
	Active	124	59.6	61.7	
Bering Sea <i>C. opilio</i>	Inactive	110	36.2	33.4	304
	Active	194	63.8	66.6	
Eastern Aleutian Islands golden king crab	Inactive	1	7.1	*	14
	Active	13	92.9	*	
Eastern Bering Sea <i>C. bairdi</i>	Inactive	90	47.4	43.7	190
	Active	100	52.6	56.3	
Pribilof red and blue king crab	Inactive	32	48.5	48.0	66
	Active	34	51.5	52.0	
St. Matthews Island blue king crab	Inactive	51	45.9	46.3	111
	Active	60	54.1	53.7	
Western Aleutian Island golden king crab	Inactive	6	35.3	33.6	17
	Active	11	64.7	66.4	
Western Aleutian Island red king crab	Inactive	2	40.0	*	5
	Active	3	60.0	*	
Western Bering Sea <i>C. bairdi</i>	Inactive	87	49.2	43.7	177
	Active	90	50.8	56.3	
All fisheries	Inactive	108	50.7	NA	213
	Active	105	49.3		

Sources: NMFS RAM catch data for 2005-2006 and 2006-2007 and QS holder data for 2007-2008.

* Withheld for confidentiality.

The option would create a second active participation threshold under which a person would receive C share IFQ, if the person received an initial allocation of C shares and had 30 days or more of participation in State of Alaska fisheries or Federal fisheries off Alaska, in the 3 years preceding the application for IFQ. Under this provision, persons who received an initial allocation of C share QS who did not participate in the crab fisheries, but did participate in other fisheries in Alaska, would continue to receive annual allocations of IFQ for their C share holdings. This more liberal approach to active participation requirements would create substantially greater opportunity for C share QS holders who received an initial allocation to maintain their eligibility to receive annual allocations of C share IFQ. Yet, by limiting the applicability of the provision to persons who received an initial allocation, the provision maintains a relatively narrow scope. Examining crew participation in State and Federal fisheries in and off Alaska provides some measure of the breadth of crew opportunities for maintaining active participation available to the 231 persons who received initial allocations of C share QS. Crew data for Alaska fisheries are incomplete, limiting the accuracy of any estimates of crew participation. Either a crew license or a permit is required for participation as a crewmember in Alaska fisheries.²⁷ In 2006, 18,426 crew licenses were issued by the State of Alaska (Tide, 2007). Persons holding these permits may not have participated in Alaska fisheries, but sought a license in anticipation of possible participation. In addition, approximately 13,964 permits were issued of which 9,122 had landings as the permit holder (CFEC, 2007). It is possible that some of these permit holders may have been active as crew, but did not have landings as the permit holder. Based on these data, upwards of 21,000 persons may have participated in these fisheries in 2006. In 2005, in excess of 20,000 people are estimated to have worked as crew in State of Alaska fisheries and federal fisheries off Alaska during the month of July alone. Many of these jobs are short term positions in Alaska's summer salmon fisheries (Robinson and Gilbertsen, 2006). Clearly, this broader provision creates a substantial opportunity for recipients of initial allocations to meet the 30 day participation requirement for any 3 year period, and continue to receive annual IFQ allocations.

²⁷ It should be noted that these "Alaska fisheries" include all fisheries (including the Bering Sea and Aleutian Island crab fisheries that are subject to the rationalization program).

Under the active participation definition proposed under this option, recipients of an initial allocation who are employed exclusively outside of the crab fisheries would not be permitted to acquire C share QS, but would maintain eligibility to receive annual C share IFQ allocations for any QS they hold.²⁸ This liberal approach to C share active participation requirements would substantially broaden the opportunity of persons formerly engaged in the crab fisheries who remain active in State of Alaska fisheries or Federal fisheries off Alaska to continue to benefit from their C share interests. By requiring at least 30 days participation over a three year period, the provision retains some level of exclusivity, since it would require some minimum time commitment from a person otherwise removed from fisheries work to maintain C share IFQ eligibility. Supporters of the provision are likely to argue that the provision is a reasonable response to the displacement of persons by fleet contraction that occurred after rationalization. Persons active in the crab fisheries who wish to acquire C shares may oppose this provision, as it provides a substantial opportunity for C share QS holders to maintain those interests after leaving positions in the crab fisheries.

Estimates of the number initial recipients of C share QS meeting the requirement of 30 days of crew activity in any State of Alaska fishery or Federal fishery off Alaska during the 3 years preceding an IFQ allocation are not possible with existing data. Estimates can be made of the number of initial recipients of C share QS active as permit holders in the three years preceding the allocation of IFQ for the 2007-2008 season (see Table 23). Using this measure, substantially fewer initial recipients of C share QS might be deemed inactive (and therefore ineligible for an annual IFQ allocation). Three aspects of this estimate should be borne in mind when considering it. First, only activity as a permit holder is counted. Most crewmembers do not participate as permit holders, so it is possible that some initial recipients of C share QS who have not participated as permit holders would qualify for under provision because of their activity as a crewmember. Second, any activity as a permit holder is counted as active, since a 30 day participation threshold could not be estimated with available data. Lastly, the estimate includes activity in the year prior to the implementation of the rationalization program (2004-2005). It should be noted that current C share holders who received an initial allocation may have been active in the year preceding implementation, but dropped out of fisheries positions altogether when the crab fleet contracted in the first year of the program. Some of the C share holders may not participate in fisheries other than the crab fishery. As a result, it is possible that some of the persons active in the 2004-2005 season have not been active in any fishery since and would be considered ineligible for an annual allocation of C share IFQ based on their participation since implementation of the rationalization program. Any of these factors could have a noticeable effect on estimates of C share holder activity.

²⁸ It should be noted that the provision applies to all QS held by an initial recipient of C share QS (including C share QS acquired outside of the initial allocation). Under this wording, the provision is consistent with the provision that provides recipients of an initial allocation with transitional eligibility for a period after implementation of the program.

Table 23. Number of initial recipients of C QS who continue to hold C share QS and are active as permit holders in any Alaska fishery in the 3 years preceding the allocation of IFQ for the 2007-2008 fisheries.
init rec - all fisheries

Fishery	Active (as a permit holder in any Alaska fishery)	Number of initial recipients of C share QS	Percent of initial recipients of C share QS	Percent of C share QS	Total C share holders in the fishery
Bristol Bay red king crab	Inactive	17	11.6	9.4	208
	Active	129	88.4	85.7	
Bering Sea <i>C. opilio</i>	Inactive	12	9.3	8.1	304
	Active	117	90.7	87.1	
Eastern Aleutian Islands golden king crab	Inactive	1	10.0	*	14
	Active	9	90.0	*	
Eastern Bering Sea <i>C. bairdi</i>	Inactive	25	16.9	13.4	190
	Active	123	83.1	83.8	
Pribilof red and blue king crab	Inactive	5	13.5	9.4	66
	Active	32	86.5	86.0	
St. Matthews Island blue king crab	Inactive	11	16.4	14.6	111
	Active	56	83.6	82.5	
Western Aleutian Island golden king crab	Inactive	2	22.2	*	17
	Active	7	77.8	*	
Western Aleutian Island red king crab	Inactive	1	25.0	*	5
	Active	3	75.0	*	
Western Bering Sea <i>C. bairdi</i>	Inactive	25	16.9	13.4	177
	Active	123	83.1	83.8	

Sources: ADFG fish tickets (2004-2007) and RAM QS holder data.

* Withheld for confidentiality.

Under alternative 2 (defining active participation requirements for C share QS holders to receive an IFQ allocation), a C share holder who is not active in the crab fisheries for three consecutive years would not receive an annual IFQ allocation. Data suggest that, based on current C share holder participation, it is possible that a substantial share of the C share QS pool would not be allocated IFQ in several of the fisheries, if these QS holders choose not to divest their shares to active crew. Broadening eligibility for IFQ for persons who received an initial allocation of C shares who maintain at least 30 days of activity in Alaska fisheries during the 3 years preceding the IFQ application will substantially increase the opportunity for those persons, but will have little long run effect, after initial recipients have left fishing.

Under the current rules, approximately 3 percent of the QS pool is allocated as C share QS. If these IFQ allocations are not made to C share QS holders who are not active, it is possible that the C share IFQ allocation could be reduced by as much as 50 percent (i.e., C share IFQ would total approximately 1.5 percent of the total IFQ pool, instead of 3 percent), if the Council chooses to disqualify C share holders who are not active in the crab fisheries from receiving C share IFQ. To ensure that C shares continue to be 3 percent of the IFQ pool, an option is proposed that would maintain the portion of the total IFQ pool annually allocated as C share IFQ at the level determined by the Council (currently 3 percent). If this provision is adopted, the agency would annually allocate 97 percent of the IFQ pool to vessel owners and 3 percent of the IFQ to holders of C shares. The 3 percent allocation to C share holders would be allocated only to C share QS holders that meet the active participation requirements based on their respective C share holdings. By separating the calculation of IFQ allocations to C share QS holders from allocations of IFQ to vessel owner QS holders, the allocation of IFQ to C share QS holders would be maintained at 3 percent of the total IFQ pool regardless of whether some C share QS holders do not receive IFQ allocations because of their failure to meet active participation requirements. This approach to allocations could be justified, if the Council believes that the 3 percent IFQ allocation to active captains and crew should be maintained, regardless of whether some C share QS holders fail to meet the requirements for an annual allocation. To the extent that IFQ are reallocated to C share QS holders who meet active participation requirements, those share holders will benefit from increased allocations. The increase for each active C share QS holder would be proportional to share holdings relative to other active C share holders.

This benefit is clearly a windfall to active C share holders. Yet, since C share IFQ are a relatively small part of the overall allocation of IFQ and C share caps are relatively low (see Table 2), the magnitude of the benefit from this reallocation is somewhat limited.

The withholding of annual IFQ allocations from C share QS holders not meeting active participation requirements could be complemented by alternative 3, which would revoke C share QS from any holder, if that C share QS holder has not participated in a delivery in a crab fishery for 4 or 5 consecutive seasons. The rationale for revoking C share QS from holders who are inactive in the fisheries for an extended period is that those share holders effectively withhold these shares from other active captains and crew, who might wish to develop or expand their C share holdings.²⁹ Failing to revoke shares from inactive C share holders, it is possible that some C share holders may maintain their holdings for an extended period. The incentive for inactive C share holders divesting their QS, absent a pending revocation, could be rather minor, especially for persons who received their C share QS in the initial allocation (see Table 13). For many of these persons, their relatively small annual IFQ allocations may draw little of their attention and the value of the underlying QS might be overlooked. For example, in the halibut and sablefish IFQ program, many small share holders have never fished their IFQ, yet have not chosen to divest of those shares. So, without a revocation provision, it is possible that a portion of the C share QS pool could remain latent for extended periods of time, reducing the size and activity in the C share QS market. Precise estimates of the number of C share QS holders and quantities of C share QS that could be affected by this action are speculative, since the program has only been in effect for 2 years. Estimates of the number of C share QS holders that would not receive annual IFQ allocations may also be viewed as preliminary estimates of the number of persons that could be affected by this provision (see Table 22).

In general, it is thought that most persons who would have their shares revoked under this provision would divest of their share holdings prior to the revocation. In some instances, it is possible that persons may have their shares revoked. In these cases, the pool of QS would contract with the benefit of that contraction being distributed to remaining QS holders, in proportion to their QS holdings. If the Council adopts a provision that maintains C share IFQ as at specific share of the annual IFQ allocation, this benefit would be distributed only to C share QS holders, in proportion to their C share QS holdings. In either case, the benefit is likely to be relatively small, since it will be distributed across a group of QS holders and most C share QS holders are likely to divest once they realize that their QS holdings will be revoked.

The Council motion also includes an option that would allow persons who received an initial allocation of C share QS to retain that QS (i.e., remain immune from the revocation) provided that they have at least 30 days of activity in State or Federal fisheries in or off Alaska in the preceding 4 or 5 years. Estimates of number of C share QS holders who qualify to retain C share QS under this provision are also preliminary, because of the newness of the program. Those estimates are the same as estimates of the number of C share QS holders who would be eligible to receive C share IFQ under the parallel provision (see Table 23).

This alternative also contains options that would extend the time prior to which it takes effect. Under this provision, no required divestitures would occur until between 5 and 10 years after implementation of the program, depending on the Council's choice. Delaying implementation of the provision could allow participants time to assess the transition of the fishery under the new management program and determine whether they will be active in the new fishery. Under the current timeline for implementation of this action, it is likely that the 5th year implementation option would provide between one and one and one-half years notice to C share holders who are inactive. Extending implementation beyond 5 years would provide additional time (up to approximately six and one-half years notice, if 10th year implementation is selected) for persons to decide whether to divest of their shares or become active. Any of the proposed implementation timelines should provide sufficient notice to C share holders to allow them to prepare for implementation of the provision. Although these share holders

²⁹ A rationale for requiring divestment could be to ensure 3 percent of the annual IFQ are allocated to active C share QS holders. A more direct and reliable method of ensuring that the 3 percent IFQ allocation could be through the suboption, assuming that option can be effectively implemented.

might be able to plan for implementation of the provision, the more compressed timeline (5 years after implementation) could have some ramifications for C share holders and those wishing to acquire C shares.

One fear of some current C share holders is that a revocation option could flood the market with C shares, substantially diminishing their value. Given the portion of the C share pool held by persons who appear to be inactive, it is possible that a revocation provision could increase the shares in the market from persons divesting prior to their shares being revoked. The potential of flood the market, however, is limited to some degree by 4 or 5 year inactivity threshold, which should provide participants with some notice of the future revocation. In addition, any extension of the timeline for implementing the provision would further mitigate this effect. Delay in imposition of the revocation provision will allow share holders a window of time during which shares can be divested (prior to the revocation occurring), which should disperse the flow of shares into the market. Yet, given the large number of C share holders that appear to be inactive, it is possible that a large portion of that pool could come into the market over a period of 2 or 3 years, even under the extended timeline. This effect will also be mitigated in part by the nature of the C share allocation and pool. Even if as much as 50 percent of the C share pool comes on to the market, it will be only 1.5 percent of the entire QS pool in a fishery. Under the most limited eligibility provision for acquisition of C shares, as many as 600 persons are currently qualified to acquire C shares. Given these factors, in most fisheries, divestment that occurs prior to revocation should not have a great effect on the market. It is possible that in the Aleutian Islands golden king crab fisheries, which have few participants, the market for C shares could be small enough to allow some interested buyers to take advantage of the divestment that might occur to avoid revocation. Whether this market power would result depends on whether participants in those fisheries are willing to compete for the C shares and whether participants in other fisheries (who would satisfy a general active participation requirement) would be interested in acquiring the shares.

Although the likelihood of the revocation provision alone reducing share prices substantially is small in most fisheries, it is possible that the revocation provision could interact with other actions under consideration by the Council, which could affect prices of C shares at the time the revocation provision takes effect. If the current Council actions considering revisions to the rationalization program are perceived to either increase or decrease C share holdings, it is possible that the C share market could be greatly affected. For example, if the Council appears to be creating a larger allocation of C shares, possibly redistributing shares from the vessel owner pool to persons eligible for a C share allocation based on their active participation, persons who are eligible to purchase C shares may be more or less active in the existing C share market. These persons might be more active, if they perceive the reallocation as providing a start in the C share market that they can build on with additional acquisitions. They could be less active, if they perceive the allocation as providing an adequate number of shares that they will not need to supplement with purchases from the market. In either case, any C share holders who divest to avoid revocation under this provision could be affected by the change in the market activity of others.

The overall effect of the C share IFQ eligibility and the C share QS revocation provisions is that over time C share QS will be held by persons meeting the minimum participation threshold specified by the applicable provisions. Persons who hold C share QS, but do not meet the applicable participation threshold, will either divest of their C share holdings (or, if the revocation provision is adopted and they fail to divest, have their shares revoked). These persons (including persons intended to benefit from the initial allocation) will have an opportunity to receive a benefit from their C share QS holdings through the sale of that QS to persons eligible to acquire those shares. Although the provisions governing eligibility to acquire C shares and the provisions limiting those who may receive C share IFQ and retain C share QS holdings will affect the pool of persons in the C share market as buyers, a substantial number of persons are likely to be eligible and interested in C share acquisition. As result, the C share QS prices are likely to be lower than owner QS prices, but a market for those shares will exist.

The Council has also included for consideration an option to exempt persons who received an initial allocation of C shares and who are over 60 years of age from any active participation requirements applicable to any C share QS received in the initial allocation. So, persons meeting these criteria would not be required to participate

in any fisheries as captain or crew to continue to receive C share IFQ from their initial allocation of C share QS or to retain C share QS holdings received in the initial allocation. Data are not available to determine the specific number of persons who would qualify for this exemption, but the number of persons who currently hold C share QS received in the initial allocation is an upper bound on potential eligibility (see Table 23 for counts of active and inactive initial recipients of C share QS by fishery). A large majority of the current C share QS holders in each fishery received initial allocations of C shares, but several may not qualify for the exemption based on their ages.

The Council's rationale for considering this exemption is not clear.³⁰ If adopted, it would appear that the Council would be interested in ensuring that older initial recipients of C share QS are able to retain that QS and derive annual allocations from it. The rationale for applying an age limit to the exemption is not apparent. Stock fluctuations would appear to make crab QS a relatively risky investment. Increasing the incentive for older people to retain risky interests would appear to run counter to investment norms. If the objective is to prevent inactive persons from losing annual allocations or being required to sell very soon after receiving the initial allocation, the length of the grace period during which application of revocation is suspended could be extended and a grace period could be applied to eligibility to receive IFQ. These grace periods could benefit initial recipients of C share QS by increasing the value of that QS, particularly if stock growth increases TACs or leads to opening of fisheries that have been closed in recent years. On the other hand, stock and TAC declines could pose a similar risk of loss to QS holders.

Effects on management

Implementation of either of the provisions revising active participation requirements for C share holders is likely to be challenging administratively and logistically. The first option would require a C share QS holder to be active in a crab fishery in the three seasons preceding issuance of IFQ. Effective implementation must include a process for submission of documentation of participation and an opportunity for appeal to the person whose IFQ are withheld. Until the finding that IFQ may be withheld is final, IFQ would need to be reserved to ensure shares are available in the event the C share QS holder prevails. Typically, NOAA Fisheries makes all allocations of IFQ at one time. To effectively withhold IFQ and redistribute that IFQ to others in the fishery requires that decisions concerning eligibility to receive IFQ be finalized prior to the allocation of any IFQ. A timeline to complete the processing of documentation of participation to finalize these findings is proposed below. That timeline would split the IFQ application into two stages: a statement of participation used to verify compliance with active participation requirements and the remainder of the IFQ application. Critical aspects of that timeline are:

- 1) submission of a statement of active participation annually;
- 2) submission of a statement of active participation as a condition (or portion) of the IFQ application;
- 3) submission of statement of active participation in advance of the remainder of the IFQ application; and
- 4) 30-45 day period for appealing findings of inactivity.

Although the requirement for participation is based on activity in a three season period, since IFQ allocations are made annually, the most effective way to document participation is annually. Annual documentation limits staleness of information and could benefit both applicants and the agency. Annual documentation will limit the potential for an applicant to have difficulty documenting participation because of dated records or unavailability of confirming evidence. Annual documentation will help in agency processing of the application, since participation each year can be recorded and used to make an annual determination of whether a person has met the three-year active participation requirement.

³⁰ **It should be noted that it is unclear how this provision addresses the current purpose and need statement. If the Council intends to adopt this provision, it should consider modifying the purpose and need statement to include the concern that will be addressed by this provision.**

To ensure that C share QS holders annually submit documentation of participation that submission (a ‘statement of participation’) could be made a part of the IFQ application process. In short, applications for C share IFQ would be considered incomplete in the absence of the statement of participation. To be complete, the statement of participation would require a person to submit either adequate evidence of participation (such as an affidavit from a vessel owner or other person on the vessel or a fish ticket evidencing a landing made as a permit holder) or a statement that the person did not participate during the year. Since the statement would be part of the annual application process, the application would be considered incomplete in the absence of the statement, and IFQ would be withheld.

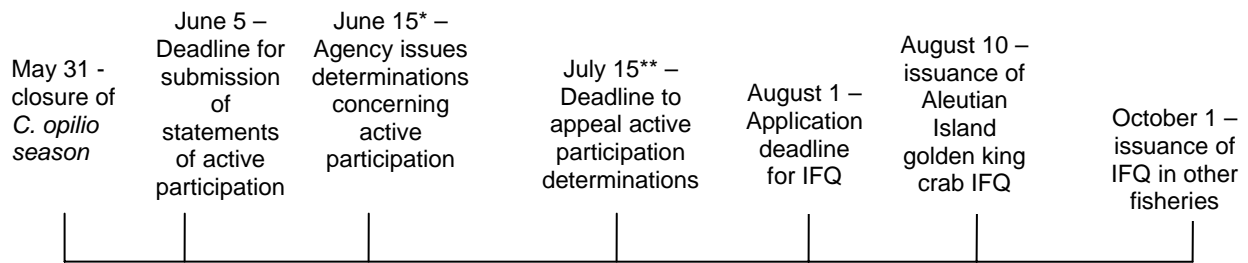
Under current regulations a person must apply for IFQ on August 1st. Since the Aleutian Islands golden king crab fisheries open on August 15th, little time is available for processing applications. To allow for timely processing of applications of C share holders (and, particularly, finalizing decisions with respect to active participation prior to IFQ issuance) will require the submission of statements of active participation in advance of the current application deadline. Ideally, the submission should allow time for the agency to inform persons not meeting minimum participation requirements that IFQ would not be issued.³¹ Once notified, a person would have a period of time in which to appeal that finding. If a person fails to appeal within that time period the ruling would be final. Moving the date for submission of statements of active participation up to June 5th (so that the time period for appealing a finding has expired prior to the due date for the remainder of the IFQ application) would allow the agency to finalize some findings of failure to meet the active participation requirement, particularly those who do not appeal that finding, prior to IFQ issuance.³²

Depending on the NOAA Fisheries Office of Administrative Appeals’ ability to process appeals, it is possible that appeals that fail to assert that the active participation requirement was met (i.e., making no claim to support a favorable finding) could be summarily dismissed prior to the scheduled issuance of IFQ. In addition, NOAA Fisheries Office of Administrative Appeals might be able to summarily dismiss cases involving late submissions that do not claim extraordinary circumstance beyond the appellant’s control. Creating a system that allows some decisions to be finalized prior to the issuance of IFQ will allow the provision for withholding IFQ to better serve its purpose, since IFQ would need to be reserved for any claims that are not finalized. Once findings are final, IFQ can be issued to all eligible persons. So, any determinations that are not finalized prior to scheduled issuance of IFQ may result in a portion of the IFQ pool not being allocated for the year, if the C share QS holder does not prevail in the appeal. Establishing a system that enables early finalization of eligibility decisions would minimize reserved, unissued IFQ.

For most NOAA Fisheries administrative findings, a person has 60 days to appeal the finding. For active participation determinations, a shorter timeline (e.g., 30 to 45 days) should be considered, to allow adequate time for active crew to submit applications after the crab fishing seasons, while still allow time for appeals to be initiated prior to the issuance of IFQ. Figure 1, below, shows a complete timeline with approximate dates for the submission of statements of participation, IFQ applications, and the issuance of IFQ.

³¹ Note that the denial notices would generally be issued only after three years without participation. Yet, a person could also be notified of failure to submit a statement of participation, which would also be grounds for not issuing IFQ based on an incomplete application. That denial would be issued only on the due date for the IFQ application in its entirety.

³² It should be noted that the June 5th deadline could be problematic for persons that are active late in the crab fisheries, which currently close on May 31st and persons active in other fisheries. These persons may need to submit statements of participation early on, to avoid a conflict with their fishing activities.



* June 15 would be the agency target for issuing decisions. The date of the decision could vary.

** July 15 is based on a decision on June 15. In actuality the deadline would be 30 days after the agency decision.

Figure 1. Draft timeline for submission of statement of active participation and IFQ issuance.

In considering the structure for resolving findings concerning active participation, it should be noted that any unresolved adjudications will have spillover effects, particularly if the Council adopts a mechanism to ensure that the IFQ pool allocated to active C share holders is a specific portion of the total IFQ pool. **Since a portion of the IFQ pool must be reserved to address the possible claims of initially disallowed C share QS holders, it is assumed that IFQ reserved against those claims would count toward the C share IFQ pool.** Depending on the level of active participation in the pool of C share QS holders, it is possible that a substantial portion of the C share QS pool could be made up of reserved, but unallocated IFQ, if decisions cannot be finalized for a substantial number of shares and the reserved shares are counted toward the C share IFQ allocation.³³

Administering the second option, which applies only to initial recipients of C share QS and requires 30 days of participation in one or more fisheries in Alaska in the 3 years preceding an IFQ allocation, to be eligible to receive C share IFQ, could use a similar timeline and structure, but the Council should be aware of some idiosyncrasies that are likely to arise. First, the application deadline is likely to create a somewhat arbitrary cut off for fishing activity. So, continuing with the suggested timeline above, any fishing that occurs after May 31st would not count towards a person meeting the active participation requirement. Several State and Federal fisheries in or off Alaska are open between May 31st and the August 1st application IFQ deadline. Applying this broader fishing activity toward a person's active participation requirement would complicate administration, requiring the agency to set aside more IFQ to allow for finalization of administrative findings. A second clarification is that the 30 day participation requirement is probably most simply interpreted as a 'sea time' requirement (similar to the sea time eligibility requirements for halibut and sablefish IFQ and crab IFQ acquisitions). Under these programs, persons are required to have meet threshold participation requirements by demonstrating sea time in commercial fisheries in a harvest capacity. To satisfy the proposed participation requirement, a person would need to demonstrate 30 days of sea time in a harvest capacity in fisheries in or off Alaska during the three year period preceding submission of the statement of active participation for the fishery.³⁴ Using the same timeline for active participation in fisheries in or off Alaska would allow managers to administer the provision finalizing as many active participation determinations prior to the issuance of IFQ as possible.

³³ This problem is exacerbated, if C shares are subject to the 90/10 A share/B share split. In that event, 90 percent of the reserved IFQ would be A share IFQ, which, if not issued, would create a mismatch of Class A IFQ and IPQ. This issue will not arise, if the Council's action to exempt C shares from the 90/10 IFQ Class A /Class B IFQ split is approved and implemented.

³⁴ The demonstration of active participation would rely on affidavits, similar to those required to demonstrate satisfaction of the active participation requirement in the crab fisheries. These affidavits could be required annually, with agency administrators tallying all activity in the preceding 3 years to determine whether a person has met the 30 day threshold.

The option to maintain C share IFQ as a specific portion of total IFQ pool would be implemented by identifying the pool of C share QS that will receive IFQ, and allocating that portion of the IFQ TAC to those C share IFQ. Under the current system, C share QS is approximately 3 percent of the total QS pool, with division of the annual IFQ allocations between C share IFQ and owner IFQ generally close to the QS pool split. If a substantial amount of the C share IFQ is not issued, because of failure of C share holders to meet active participation requirements, it is possible that C shares could be substantially less than 3 percent of the IFQ allocation. Finalizing determinations of active participation prior to IFQ issuance is critical to this provision having its intended effect. For any active participation determinations that are not final, IFQ must be set aside to cover the contingency of a successful challenge by the C share holder. Since IFQ would be set aside for a possible allocation to a C share holder, it is assumed that those IFQ would be characterized as C share IFQ for purposes of establishing 3 percent of the IFQ pool as C shares (whether or not those IFQ are ultimately issued). So, developing a system of administration that finalizes as many determinations of active participation as possible prior to the issuance of IFQ is critical to this provision achieving its intended purpose. The administrative timeline and process for resolving active participation determinations, proposed above, would likely best achieve the Council's objectives, if this option is selected.

The option to revoke C share QS from persons not meeting active participation requirements for a period of years could be implemented using the same process as used for implementing the requirements for IFQ allocations. The annual submissions of documentation of participation could be used to determine whether a person would have C share QS revoked, by considering activity in the requisite number of years preceding the submission of the most recent statement.

As a part of the revocation process it is important that persons who are in jeopardy of having C share QS revoked receive adequate notice of the revocation. Notice that allows these persons to divest of their holdings prior to the revocation would provide a few benefits. Share holders who transfer their shares to avoid the revocation would receive a benefit from the transfer; persons active in the fisheries are likely to benefit from the increase in C share QS on the market, which would not occur, if the shares are revoked; C share QS holders that remain in the fishery would not receive an unintended windfall that would occur by the contraction of the C share pool from the share revocation; and administrators would save on the costs associated with the share revocation procedure, which could include time consuming appeals. To ensure that C share QS holders have notice of a pending revocation, NOAA Fisheries is likely to remind persons not meeting the active participation requirements of a pending revocation several times. Although the specific notices will be determined by administrators, persons are likely to receive annual notices as a part of the IFQ application process and at least one additional notice during the year of the revocation. These notices should provide adequate time for a C share QS holder to find a buyer prior to the revocation.

2.4.3 Net benefits to the Nation

Although the changes this action will have distributional effects on persons holding or interested in holding C shares, it will not noticeably affect production from the fisheries. As a consequence, this action is likely to have little or no effect on net benefits to the Nation.

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.

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 statement defining its rationale for considering this action:

Owner on board requirements and leasing prohibitions on C shares are scheduled to go into effect after the third year of fishing under the program. Those rules may be overly burdensome to active captains and crew given the current fleet fishing patterns in which vessels may not be active in all fisheries some years. Also, under the current rules in the program, C share holders that are cooperative members are exempt from owner on board requirements and leasing prohibitions. Revisions to the current participation requirements are necessary to establish reasonable participation requirements for C share holders and to ensure that the all C share holders remain active in the fisheries.

The current requirement that a person have participated in the fishery during the 365 days preceding an acquisition of C shares has the effect of preventing some displaced long-time captains and crew from acquiring share holdings that would be useful for securing or maintaining position in the fisheries. A revision to the current requirements for active participation could address this problem by providing long-term participants with the opportunity to acquire shares.

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

This action has two parts which serve separate objectives. The first part of the action is intended to accommodate captains and crewmembers who were displaced by fleet consolidation that occurred at the time the crab rationalization program was implemented. Under the current rules, only active captains and crewmembers eligible to acquire C shares. The first part of the action is intended to allow persons displaced from captain and crew positions to acquire C shares for a transitional period of 5 to 10 years. The second part of the action is intended to ensure that persons who hold C share QS are active in the fisheries. The second part will require C share holders to meet minimum active participation requirements to continue to receive C share IFQ and to continue to hold C share QS.³⁵ These limitations will ensure that C share QS holders maintain some minimum participation level in the fisheries as captains and crew.

Under the current regulatory structure, Bering Sea/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

Estimates of the number of persons directly regulated by this action are complicated by limited information.

The first part of the action regulates persons who received an initial allocation of C share QS under the program who are no longer participating in the fisheries. Approximately 147 persons are believed to have received an initial allocation, but are no longer actively participating as captain or crew in the crab fisheries. In addition, the first part of the action directly regulates persons who were active in the crab fisheries as captain and crew prior to the rationalization program who are no longer active as captain or crew. Approximately 900 persons are believed to meet these criteria (including persons who received an initial allocation of C shares).

³⁵ The implementation of the active participation requirements for C share holders will be delayed slightly to ensure that persons who acquire C shares under the transitional eligibility provisions have an opportunity to reenter the fisheries as captains and crew prior to withholding C share IFQ or revoking C share QS.

The second part of the action regulates C share holders. A total of 213 persons are estimated to currently hold C share QS. The action also includes separate regulations that would apply only to persons who received C share QS. Of the 231 persons who received an initial allocation of C share QS, approximately 185 are estimated to continue to hold C share QS. This subset of C share QS holders would be subject to the specific regulation that applies only to initial recipients of C share QS.

Although all C shares are held by individuals that can be specifically identified, some C share holders have substantial interests in entities holding vessel owner shares, as well as interests in vessels participating in other fisheries. Since these entities frequently operate under different names, fully identifying the interests of C share holders is not possible. All of these individuals are believed to be small entities.

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 require some changes for certain fishery participants. Persons wishing to acquire C shares who are currently ineligible, because of they are not currently participating as captains or crew, but who will be eligible, because of past participation, will be required to submit evidence of past participation in the form of fish tickets or affidavits. While these requirements will impose some burden on applicants, the requirements are the minimum necessary to verify satisfaction of the participation standards.

Persons holding C share QS will also be required to submit verification of their compliance with participation standards necessary for the receiving C share IFQ and to maintain their C share QS holdings. Since C share QS holders must meet participation standards to receive annual IFQ allocations and retain C share QS, the reporting requirements are structured to determine compliance with those standards. Although participation requirements are based on the preceding 3 to 5 years of fishing activity, reporting is on an annual basis. The annual requirement serves two purposes. First, it aids both C share QS holders and administrators by preventing information from becoming stale and difficult to verify. If a C share QS holder is required to provide third party verification of participation from 5 years prior to a report being filed, it may be difficult to locate third parties able to verify that participation. Annual reporting requirements also aid both administrators and C share QS holders by providing administrators with information need to provide timely notices to these QS holders of possible consequences of their failure to meet the requirements. For example, if a C share QS holder has failed to meet active participation requirements for two consecutive years, the third year application can inform the C share QS holder that annual IFQ allocations will be withheld, if those requirements are not satisfied in the third year. In summary, the additional reporting requirements arising under this action are structured to ensure accurate determinations of compliance with rules and to provide reasonable notices and opportunity to persons who are in jeopardy of being affected by non-compliance.

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

[Add summary of alternatives and effects here](#)

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 change would be implemented without discrimination among participants and is intended to contribute to the fairness and equity of the program by ensuring that holders of C shares have requisite fishery participation. 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.

The action is intended to result in a more equitable distribution of interests in the fisheries and will not affect production efficiency in the fisheries.

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.

The management action will not duplicate other measures and will have minor (but unavoidable) effects on costs of management, which will be incurred in implementing these measures.

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 is anticipated to have no effects on communities. The action will not jeopardize sustained participation of any community in the fishery.

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 this action 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 rationalization program should reduce the incentives for crab fishermen to fish in inclement weather, or fish in a manner that compromises safety. The alternatives considered under this action do not affect any potential benefits arising out of those incentives.

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.

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