Public Testimony Sign-Up Sheet
Agenda Item C-2(b) C share 90/10 Exemption

	NAME (PLEASE PRINT)	AFFILIATION
1 ✓	TERRY HAINES	FISH HEADS
2 ✓	Steve Minor	NPCA
3 ✓	Arni Thomson	ACG
4 ✓	Tom Sauryan / Tim Hinkle / Kieth Cockburn	SEA / Deep Sea Fish Union
5 ✓	James Johnson	Crew Assoc.
6 ✓	Cheston Clark	Crew
7 ✓	Steve BRANSON	Crewmen's Association
8 ✓	Troy Huls	Crewmens Association C-2e
9 ✓	Co-op COALITION	
10 ✓	Lance Farr	owner C-2e
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NOTE to persons providing oral or written testimony to the Council: Section 307(1)(I) of the Magnuson-Stevens Fishery Conservation and Management Act prohibits any person " to knowingly and willfully submit to a Council, the Secretary, or the Governor of a State false information (including, but not limited to, false information regarding the capacity and extent to which a United State fish processor, on an annual basis, will process a portion of the optimum yield of a fishery that will be harvested by fishing vessels of the United States) regarding any matter that the Council, Secretary, or Governor is considering in the course of carrying out this Act.

AGENDA C-2(b)
DECEMBER 2007

MEMORANDUM

TO: Council, SSC and AP Members

FROM: Chris Oliver
Executive Director

DATE: November 26, 2007

SUBJECT: BSAI Crab Issues

ESTIMATED TIME
10 HOURS
(all C-2 items)

ACTION REQUIRED

Final action on BSAI Crab 'C' share 90/10 exemption.

BACKGROUND

(b) C share 90/10 exemption.

The crab rationalization 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), the allocation of processing shares corresponding to a portion of the harvest share pool, and the designation of certain harvest shares for landing in a specific region. At the time it adopted the rationalization program, the Council exempted C shares from the regional and processing share landing requirements for the first three years of the program. This exemption is scheduled to expire at the beginning of the 2008-2009 fishing season. When the Council adopted the rationalization program, it also tasked staff to provide a review of landing patterns of C shares to assess whether the exemption should be extended indefinitely. At its March/April 2007 meeting, staff delivered that review to the Council and the Council tasked staff to prepare an analysis of an action to extend the exemption of C shares from regional and processor share landing requirements indefinitely. After considering that review, the Council adopted a draft purpose and need statement and an alternative to indefinitely exempt C shares from the 90/10 A share/B share split. It reviewed an analysis of that alternative and the status quo at its October 2007 meeting, releasing the analysis for public review and final action at this meeting. An executive summary of the analysis follows.

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 "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), the allocation of processing shares corresponding to a portion of the harvest share pool, and the designation of certain harvest shares for landing in a specific region. Under the program, 90 percent of the annual catcher vessel owner harvest share allocation is issued as "Class A" individual fishing quota (IFQ), which must be delivered in a designated region and may only be delivered to a processor holding unused individual processing quota (IPQ). Under the rationalization program, the Council exempted catcher vessel C shares from the regional and processing share landing requirements for the first three years of the program. This exemption is scheduled to expire at the beginning of the 2008-2009 fishing season. When the Council adopted the

rationalization program, it also tasked staff to provide a review of landing patterns of C shares to assess whether the exemption should be extended indefinitely. At its March/April 2007 meeting, staff delivered that review to the Council and the Council elected to task staff to prepare an analysis of an action to extend the exemption of C shares from regional and processor share landing requirements indefinitely.

Purpose and need statement

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

> *In the crab rationalization program, the Council created a C share pool (comprised of three percent of the total harvest share pool) intended to benefit captains and crew active in the fishery. To provide stability to processors and regions that support crab processing, the Council also created processor share and regional landing requirements applicable catch landed using harvest shares under the program. For the first three years of the program, the Council elected to exempt C shares from any processor share or regional landing requirements to allow time for C share holders to adapt to the new management. The Council also stated its intent to review the application of processor share and regional landing requirements to C shares after 18 months of fishing under the program to determine whether application of those landing requirements to 90 percent of the C share allocation would be appropriate. The application of processor share and regional landing restrictions could greatly complicate use of C shares and could severely diminish the value of these shares to their holders. The value of C shares could also be diminished by their inclusion in the arbitration program, which is necessitated by the application of processor share landing requirements. To allow C share holders to receive maximum benefit of those shares, the exemption of those shares from processor share and regional landing requirements should be considered.*

Alternatives

Alternative 1: Status quo – After 3 years of fishing under the rationalization program, C shares would be subject to the 90/10 A share/B share split, with A shares subject to regional and processing share landing requirements.

Alternative 2: C shares are indefinitely exempt from the 90/10 A share/B share split, with all C shares exempt from regional and processing share landing requirements.

Effects of alternative 1 (the status quo)

In general, the application of A share/B share split to C shares will logistically complicate use of those shares. In the first two years of the program, many harvesters have asserted that logistical demands in the fisheries are greatly increased by the complications of coordinating landings of A shares under the processor share and regional landing requirements. Under the status quo, any individual C share IFQ holders (who are not cooperative members) would be forced to compete for landing positions with holders of catch vessel owner shares, who are likely in a much better negotiating position with respect to processors because of their relatively large share holdings (i.e., vessel owner shares are allocated for 97 percent of the harvest share pool). While individual C share IFQ holders are likely to be disadvantaged in the Class A IFQ/IPQ share matching process, most C share holders have elected to join cooperatives pooling their C share holdings with holders of shares in the larger vessel owner pool, with whom their negotiations and harvesting activities are coordinated. Since approximately 90 percent of the annual IFQ allocation to C share holders would be Class A IFQ, holders of C shares will be required to join an arbitration organization and participate in certain aspects of the arbitration program. In addition to the administrative aspects of the arbitration system, C share holders may also have costs related to their participation in the adversarial aspects of the system. These costs can be incurred either individually or through collective action with other Class A IFQ holders.

Since C shares are a relatively small portion of the overall harvest allocations, the effects of this action on processors and communities would be relatively small. The application of landing restrictions to 90 percent of the annual C share IFQ allocation under this alternative will have competing effects on the processing sector.

Processors that wish to compete for additional landings of shares unrestricted by IPQ and regional landing limitations will have fewer landings to compete for. On the other hand, IPQ holding processors will each have a marginally larger amount of constrained landings available due to the application of the A share landing limitations to 90 percent of the 3 percent C share allocation. The overall market advantage of this small amount of landings (less than 3 percent of the catcher vessel pool) is likely to be relatively minor. Based on the most recent TACs, relatively few additional pounds of IPQ issued to correspond to the additional A share issuance would be constrained by the rights of first refusal of communities. The largest amount of pounds that would be subject to the right of first refusal limitations for a single community in a fishery would be approximately 300,000 pounds of Bering Sea *C. opilio* (or slightly less than one one-hundredth of the total allocation in the fishery), which would be subject to IPQ landing requirements and the associated right of first refusal in St. Paul.

Application of the 90/10 A share/B share split to C shares will add IPQ and regional landing requirements to a portion of each of the C share IFQ allocation. Although tracking compliance with these landing requirements may seem to complicate management, the overall effect will be rather minor, since C shares are a small portion of the total IFQ allocation in the fisheries and a large portion of all IFQ require tracking regardless of this action.

Effects of Alternative 2(exempt C share from the A share/B share split)

The exemption of C shares from the processor share and regional landing requirements applicable to Class A IFQ will ease the limitations on the use of these shares substantially. C share holders will be exempt from the share matching process that begins just before the season opening. Exemption from this process will particularly benefit individual C share holders, who face potential pressures from competition with catcher vessel owner Class A IFQ for share matches. The use of C shares is likely to closely resemble the use of vessel B shares, if the 90/10 Class A IFQ/Class B IFQ split is not applied to C share holdings. Ex vessel prices and royalties for these shares are also likely to be similar to those prices and royalties for vessel owner B shares. To the extent that C shares are used by cooperatives and vessels fishing catcher vessel A share allocations to relieve coordination burdens arising under the A share/IPQ system, the benefit of C shares to their holders is likely to be diminished. This coordination burden is likely to be relatively similar to the burden on B shares arising from the same circumstances. Most C share holders are likely to continue to join cooperatives, as the benefits of cooperative coordination of share harvests (including the ease of movement of shares within the cooperative) are likely to outweigh the costs of membership. Costs of arbitration, including both costs of arbitration organizations and costs of participation in the adversarial aspects of arbitration, will be avoided for C share holdings, which should increase the value of these shares to their holders.

The effects of this alternative on the processing sector and communities are likely to be limited by the small magnitude of the C share allocation. Removing of IPQ landing requirements from C shares should increase the pool of shares available in the competitive market to both non-IPQ holders and IPQ holders that wish to compete for those deliveries. Although some C share landings are likely to go to the highest paying markets, if free from landing constraints, the overall effect of this alternative on communities is likely to be relatively weak for two reasons. First, several factors (in addition to price) affect landing patterns. In the first two years of the program, participants have chosen to distribute landings of B and C shares to achieve operational efficiencies and coordination in matching A shares to IPQ. These factors will likely continue to affect landing patterns in the future. Second, C shares are a small portion of the allocation in the fisheries, limiting any affect on the distribution of landings that arises from removing landing limitations on communities.

The effect of exemption C shares from the 90/10 A share/B share split on management and enforcement will be very minor. Although this alternative will reduce the number of shares subject to landings constraints, the management and enforcement burden is likely to be unchanged.

Net benefits to the Nation

This action is likely to have little or no effect on net benefits to the Nation. Although the allocation of unrestricted shares to C share QS holders will allow some additional IFQ to be used for any purpose identified by their holders, the shares are unlikely to result in any change in production by either harvesters or processors.

Effects on small entities

Application of the landing restrictions under the status quo alternative will reduce the value of C shares to small entities holding those shares. The loss to small entities under this alternative is likely to be limited by the tendency of C share holders to use their share allocations in cooperative, which overcomes much of the coordination problem. Small entities holding C shares are likely to benefit from the indefinite exemption of their C share allocations from the IPQ and regional landing requirements by Alternative 2. Removal of these limitations will allow C share holders to receive greater value from their shares in the market.

The status quo alternative will have minor, competing effects on small processors that holder processor shares. These entities will receive a slight benefit from the slightly larger allocations of IPQ under this alternative, increasing the portion of the harvest share pool that must be delivered to their plants. To the extent that these entities wish to compete for a larger share of landings by competing for deliveries made with unconstrained shares, these small entities will have a smaller pool of landings from the unconstrained shares to compete for. For small entities with very small amounts of IPQ, the application of the landing constraints under the status quo alternative could be detrimental overall because of the relatively small allocation of IPQ is more than offset by the cost of being unable to compete for a larger pool of unconstrained shares.

AGENDA C-2(b)
DECEMBER 2007
Supplemental

November 28, 2007

North Pacific Fishery Management Council

Subject: Review BSAI Crab "C" share

Dear Council:

My name is Dennis Scates. I have been a commercial fisherman in the Bering Sea for 10 years. I am a deckhand that has purchased C shares.

I am writing in support of keeping the C shares as open access; meaning not to tie them to the processors or regionalization. It seems like an unnecessory burden for a deckhand like me to match up my shares with the processors. The C shares need to be mobile, so that deckhands like me can move from boat to boat taking our shares with us. If tied to a processor the choice of boats is limited and the value of the shares will decrease. This is why the exemption from the 90/10 split is needed.

Sincerely,

Dennis Scates

Eric Olson, Chairman
North Pacific Fisheries Management Council
605 W 4th Avenue Suite 306
Anchorage, AK 99501-2252

November 28th. 2007

Subject: Final Action BSAI 'C' share

Dear Mr. Olson:

My name is Jay Bowlden. I have been a commercial fisherman since 1981. I have mostly participated in the crab fisheries of the BSAI but also participated in the SE salmon seining and longline halibut fisheries. I am a C share owner and boat share owner. I would like to voice my opinions on the subject of C shares.

1st off I would like to push for the Council to go forward with 90/10 exemption for C shares. To tie up the C shares to processors would adversely impact their value. It would assure that they would all be delivered to the big processors and there would be no incentive to give a fair price for the crab. Also Captains are not going to be able to afford the costs of arbitration, which would be the only avenue available to assure them of a fair price. The Captains need the ability to consolidate their shares at times and deliver them to the processor of their choice. In the big scheme of things it is a small percentage of the crab but to a lot of the captains it is everything they have for putting in some instances as much as 30-40 yrs of their life into this fishery. This is my reasoning for an exemption from the 90/10 split.

Next I would I would like to voice my opinion on the recency stipulation that is coming up for final action in February. In my opinion I think that it isn't fair to take this away from original allocations just because the captain is not active. As I said earlier, a lot of these captains put their life into these fisheries and not only that, they helped to create the quotas given to the vessels. Many of them have been forced into other livelihoods or early retirement and as a boat quotashare owner I don't feel the need to take away something they have truly earned. For this reason I think they should be exempted from the recency stipulation. If nothing else I believe there should at least be another 3 year extension to let the captains exit the fishery gracefully and receive the fairest price for their shares.

I want to thank the Council for giving me a chance to express my concerns.

Sincerely,

Jay Bowlden

Deep Sea Fishermen's Union
Of the Pacific
5215 Ballard Avenue N.W.
Seattle Washington 98107
(206) 783-2922

November 27, 2007

Eric Olson, Chairman
North Pacific Fisheries Management Council
605 W 4th Avenue Suite 306
Anchorage, AK 99501-2252

Subject: BSAI Crab Fishery Management

Final Action on BSAI Crab 'C' Share 90/10 exemption

Dear Mr. Olson:

My name is Tim Henkel. I'm writing you today on behalf of our Crab Fishing members. We feel that C shares should be exempt from processor share and regional landing requirements. If status quo were to remain, the decline in flexibility and use and value would limit the benefit of C shares to their holders. The C shares are generally in smaller amounts and that would create burdensome logistical problems and inefficiencies. Relieving these coordination pressures could also aid in freeing shares to serve market development purposes.

Respectfully,

Tim A Henkel

Tim Henkel
President

Oystein Lone
14510 33rd Drive SE
Mill Creek, WA 98012
206-769-8008

November 28, 2007

Eric Olson, Chairman
North Pacific Fisheries Management Council
605 W 4th Avenue Suite 306
Anchorage, AK 99501-2252

Subject: Final decision on BSAI Crab "C" share 90/10

My name is Oystein Lone and I am a commercial fishermen that was allocated original BSAI "C" shares. I have been a commercial fisherman in Alaska for 23 years now. Fishing crab, cod, salmon, halibut, sablefish and a few other species; just about anything you can haul onboard I have fished it in some capacity.

I am writing to urge the council to choose **Alternative 2:** on the Regulatory Impact Review. C shares are indefinitely exempt from the 90/10 A share/B share split, with all C shares exempt from regional and processing share landing requirements.

Being an active member in the crab fishery, these are my reasons for supporting Alternative 2:

C shares are a relative small portion of the allocation in the fishery. By tying them with processor shares, this could greatly complicate use of C shares and would diminish their value to their holders.

The value of C shares could also be diminished by their inclusion in the arbitration program which is necessary by the application of processor share landing requirements.

The cost associated with joining an arbitration organization will not be cost effective for a C share holder due to the small amounts allocated.

I urge the council to give serious considerations to exempting C share holders from the 90/10 split.

Sincerely,

Oystein Lone

Oystein Lone

North Pacific Fishery Management Council
Fax: (907) 271-2817

November 27, 2007

Dear Council Members,

My name is Mikal Mathisen and I have been a participant in the Bering Sea Crab Fishery since 1990. I am the hired captain for the F/V Karin Lynn and also a holder of "C" shares in the Bering Sea Red King, Tanner and Opilio fisheries and also the St Matthew Blue King Crab fishery. Some of this quota I was granted in the initial allocation and some of it I have purchased. To date I have fished my own shares and not joined any of the co-ops.

I urge the council to adopt Alternative 2 and keep the "C" shares exempt from the 90/10 and regionalization splits. My primary purpose is to keep things simple. We are talking about 150 persons holding three percent of the quota that would then be required to share match with a processor and also enroll in the arbitration program. It seems like an unnecessary burden that will have little effect on the overall fishery other than more paperwork and the possible diminishing in value of the "C" shares.

I would also urge the council to leave the active participation requirement alone. Although I am fairly secure in my job, I do not own the boat and it could go away at some point down the road. This past King Crab season saw at least ten less vessels than the 2006 season and further consolidation is certainly possible. I fear that there may be a time down the road when I am left standing on the sidelines and my shares will go unfished if I am not able to lease them.

The post delivery transfer is something I am also in favor of. It would help greatly in taking the stress out of trying to count crab and being so precise in deliveries. As long as some uncaught crab remains in the fishery a vessel should be able to transfer to cover any overage in his delivery. Nobody is trying to deliver extra crab, but it can happen. In the King Crab fishery it is not too difficult to count crab but without knowing exactly what the crab weigh it is very difficult to come in at a precise target weight. In the Opilio fishery it is much more difficult to count crab and can be even harder to hit a target weight.

Thank you,

Mikal Mathisen
11753 Sunrise Dr NE
Bainbridge Island, WA 98110
206-842-5154
edared@msn.com

Deep Sea Fishermen's Union
of the Pacific

November 27, 2007

Eric Olson, Chairman
North Pacific Fisheries Management Council
605 West 4th Ave.
Anchorage. Alaska, 99501-2252

BSAI Crab Management
"Active Participation for C – Shares"

Dear Mr. Olson:

I'm writing you in support of the Councils June 2007 Purpose and Need Statement concerning "Active Participation Requirements for C Shares" which reads as follows;

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 insure that all C share holders remain active in the fisheries.

Bill Tweit moved to add the following to the end of the purpose and need statement:

"This requirement has the effect of preventing some displaced long-term 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.

The motion was seconded and carried without objection.

Our Crewmen's Union also supports the elements and options regarding "Active Participation" as stated in the June 2007 Council minutes although we believe that further clarification is perhaps needed.

Our Union is looking forward to contributing our energy to this on going process. Thank you for your time and consideration in this matter.

Respectfully,

Tim Henkel, President

November 28, 2007

Eric Olson, Chairman
North Pacific Fisheries Management Council
605 W 4th Avenue Suite 307
Anchorage, AK 99501-2252

Subject: Final Action BSAI "C" Shares 90/10

Dear Mr. Olson:

My name is Gunnar Kristjansson. I have been a commercial fisherman since 1982, primarily in the BSAI crab fishery. Other participation commerically has been in Cod and Salmon. I lost my Crab Captain job along with many of my colleagues due to Crab Rationalization. I received "C" shares which is why I am writing you with great concern.

I please urge the council to adopt the Alternative 2: on the Regulatory Impact Review to exempt "C" shares from the 90/10 split. I feel to tie up the "C" shares to processors would be a burden to the holders not only complicating their use but their value. As "C" share holders allocations are in small amounts adding more costs (joining an arbitration organization) again takes more away from the bottom line for those individuals who put years into this industry.

As I am writing I would like to address the recency stipulation that is coming up for final action in February. I feel that it is truly unfair to those who spent many years establishing the history; giving way to quota for the vessels, that they should have to actively participate to keep their "C" shares. Implementing this further adds complications for the "C" share holders: vessels to participate on (down from 250 to 70)/loss of time from new employment/travel costs/etc. This will not be cost effective for "C" share holders, as stated above, due to small allocation amounts.

Thank-you for your consideration on these matters.

Sincerely,

GUNNAR KRISTJANSSON

Gunnar Kristjansson

Public Review Draft

REGULATORY IMPACT REVIEW

and

INITIAL REGULATORY FLEXIBILITY ANALYSIS

OF A PROVISION
EXEMPTING C SHARES
FROM PROCESSOR SHARE AND REGIONAL
LANDING REQUIREMENTS

For a proposed Regulatory Amendment to
Implement Amendment 26 to the Fishery Management Plan for
Bering Sea and Aleutian Islands King and Tanner Crabs

December 2007

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 "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), the allocation of processing shares corresponding to a portion of the harvest share pool, and the designation of certain harvest shares for landing in a specific region. Under the program, 90 percent of the annual catcher vessel owner harvest share allocation is issued as "Class A" individual fishing quota (IFQ), which must be delivered in a designated region and may only be delivered to a processor holding unused individual processing quota (IPQ). Under the rationalization program, the Council exempted catcher vessel C shares from the regional and processing share landing requirements for the first three years of the program. This exemption is scheduled to expire at the beginning of the 2008-2009 fishing season. When the Council adopted the rationalization program, it also tasked staff to provide a review of landing patterns of C shares to assess whether the exemption should be extended indefinitely. At its March/April 2007 meeting, staff delivered that review to the Council and the Council elected to task staff to prepare an analysis of an action to extend the exemption of C shares from regional and processor share landing requirements indefinitely.

Purpose and Need Statement

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

> *In the crab rationalization program, the Council created a C share pool (comprised of three percent of the total harvest share pool) intended to benefit captains and crew active in the fishery. To provide stability to processors and regions that support crab processing, the Council also created processor share and regional landing requirements applicable catch landed using harvest shares under the program. For the first three years of the program, the Council elected to exempt C shares from any processor share or regional landing requirements to allow time for C share holders to adapt to the new management. The Council also stated its intent to review the application of processor share and regional landing requirements to C shares after 18 months of fishing under the program to determine whether application of those landing requirements to 90 percent of the C share allocation would be appropriate. The application of processor share and regional landing restrictions could greatly complicate use of C shares and could severely diminish the value of these shares to their holders. The value of C shares could also be diminished by their inclusion in the arbitration program, which is necessitated by the application of processor share landing requirements. To allow C share holders to receive maximum benefit of those shares, the exemption of those shares from processor share and regional landing requirements should be considered.*

Alternatives

Alternative 1: Status quo – After 3 years of fishing under the rationalization program, C shares would be subject to the 90/10 A share/B share split, with A shares subject to regional and processing share landing requirements.

Alternative 2: C shares are indefinitely exempt from the 90/10 A share/B share split, with all C shares exempt from regional and processing share landing requirements.

Effects of Alternative 1 (the status quo)

In general, the application of A share/B share split to C shares will logistically complicate use of those shares. In the first two years of the program, many harvesters have asserted that logistical demands in the fisheries are greatly increased by the complications of coordinating landings of A shares under the processor share and regional landing requirements. Under the status quo, any individual C share IFQ holders (who are not cooperative members) would be forced to compete for landing positions with

holders of catch vessel owner shares, who are likely in a much better negotiating position with respect to processors because of their relatively large share holdings (i.e., vessel owner shares are allocated for 97 percent of the harvest share pool). While individual C share IFQ holders are likely to be disadvantaged in the Class A IFQ/IPQ share matching process, most C share holders have elected to join cooperatives pooling their C share holdings with holders of shares in the larger vessel owner pool, with whom their negotiations and harvesting activities are coordinated. Since approximately 90 percent of the annual IFQ allocation to C share holders would be Class A IFQ, holders of C shares will be required to join an arbitration organization and participate in certain aspects of the arbitration program. In addition to the administrative aspects of the arbitration system, C share holders may also have costs related to their participation in the adversarial aspects of the system. These costs can be incurred either individually or through collective action with other Class A IFQ holders.

Since C shares are a relatively small portion of the overall harvest allocations, the effects of this action on processors and communities would be relatively small. The application of landing restrictions to 90 percent of the annual C share IFQ allocation under this alternative will have competing effects on the processing sector. Processors that wish to compete for additional landings of shares unrestricted by IPQ and regional landing limitations will have fewer landings to compete for. On the other hand, IPQ holding processors will each have a marginally larger amount of constrained landings available due to the application of the A share landing limitations to 90 percent of the 3 percent C share allocation. The overall market advantage of this small amount of landings (less than 3 percent of the catcher vessel pool) is likely to be relatively minor. Based on the most recent TACs, relatively few additional pounds of IPQ issued to correspond to the additional A share issuance would be constrained by the rights of first refusal of communities. The largest amount of pounds that would be subject to the right of first refusal limitations for a single community in a fishery would be approximately 300,000 pounds of Bering Sea *C. opilio* (or slightly less than one one-hundredth of the total allocation in the fishery), which would be subject to IPQ landing requirements and the associated right of first refusal in St. Paul.

Application of the 90/10 A share/B share split to C shares will add IPQ and regional landing requirements to a portion of each of the C share IFQ allocation. Although tracking compliance with these landing requirements may seem to complicate management, the overall effect will be rather minor, since C shares are a small portion of the total IFQ allocation in the fisheries and a large portion of all IFQ require tracking regardless of this action.

Effects of Alternative 2(exempt C share from the A share/B share split)

The exemption of C shares from the processor share and regional landing requirements applicable to Class A IFQ will ease the limitations on the use of these shares substantially. C share holders will be exempt from the share matching process that begins just before the season opening. Exemption from this process will particularly benefit individual C share holders, who face potential pressures from competition with catcher vessel owner Class A IFQ for share matches. The use of C shares is likely to closely resemble the use of vessel B shares, if the 90/10 Class A IFQ/Class B IFQ split is not applied to C share holdings. Ex vessel prices and royalties for these shares are also likely to be similar to those prices and royalties for vessel owner B shares. To the extent that C shares are used by cooperatives and vessels fishing catcher vessel A share allocations to relieve coordination burdens arising under the A share/IPQ system, the benefit of C shares to their holders is likely to be diminished. This coordination burden is likely to be relatively similar to the burden on B shares arising from the same circumstances. Most C share holders are likely to continue to join cooperatives, as the benefits of cooperative coordination of share harvests (including the ease of movement of shares within the cooperative) are likely to outweigh the costs of membership. Costs of arbitration, including both costs of arbitration organizations and costs of participation in the adversarial aspects of arbitration, will be avoided for C share holdings, which should increase the value of these shares to their holders.

The effects of this alternative on the processing sector and communities are likely to be limited by the small magnitude of the C share allocation. Removing of IPQ landing requirements from C shares should increase the pool of shares available in the competitive market to both non-IPQ holders and IPQ holders that wish to compete for those deliveries. Although some C share landings are likely to go to the highest paying markets, if free from landing constraints, the overall effect of this alternative on communities is likely to be relatively weak for two reasons. First, several factors (in addition to price) affect landing patterns. In the first two years of the program, participants have chosen to distribute landings of B and C shares to achieve operational efficiencies and coordination in matching A shares to IPQ. These factors will likely continue to affect landing patterns in the future. Second, C shares are a small portion of the allocation in the fisheries, limiting any affect on the distribution of landings that arises from removing landing limitations on communities.

The effect of exemption C shares from the 90/10 A share/B share split on management and enforcement will be very minor. Although this alternative will reduce the number of shares subject to landings constraints, the management and enforcement burden is likely to be unchanged.

Net Benefits to the Nation

This action is likely to have little or no effect on net benefits to the Nation. Although the allocation of unrestricted shares to C share QS holders will allow some additional IFQ to be used for any purpose identified by their holders, the shares are unlikely to result in any change in production by either harvesters or processors.

Effects on Small Entities

Application of the landing restrictions under the status quo alternative will reduce the value of C shares to small entities holding those shares. The loss to small entities under this alternative is likely to be limited by the tendency of C share holders to use their share allocations in cooperative, which overcomes much of the coordination problem. Small entities holding C shares are likely to benefit from the indefinite exemption of their C share allocations from the IPQ and regional landing requirements by Alternative 2. Removal of these limitations will allow C share holders to receive greater value from their shares in the market.

The status quo alternative will have minor, competing effects on small processors that holder processor shares. These entities will receive a slight benefit from the slightly larger allocations of IPQ under this alternative, increasing the portion of the harvest share pool that must be delivered to their plants. To the extent that these entities wish to compete for a larger share of landings by competing for deliveries made with unconstrained shares, these small entities will have a smaller pool of landings from the unconstrained shares to compete for. For small entities with very small amounts of IPQ, the application of the landing constraints under the status quo alternative could be detrimental overall because of the relatively small allocation of IPQ is more than offset by the cost of being unable to compete for a larger pool of unconstrained shares.

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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), the allocation of processing shares corresponding to a portion of the harvest share pool, and the designation of certain harvest shares for landing in a specific region. Under the program, 90 percent of the annual catcher vessel harvest share allocation is issued as "Class A" individual fishing quota (IFQ), which must be delivered in a designated region and may only be delivered to a processor holding unused individual processing quota (IPQ). Under the rationalization program, the Council exempted catcher vessel C shares from the regional and processing share landing requirements for the first three years of the program. This exemption is scheduled to expire at the beginning of the 2008-2009 fishing season. When the Council adopted the rationalization program, it also tasked staff to provide a review of landing patterns of C shares to assess whether the exemption should be extended indefinitely. At its March/April 2007 meeting, staff delivered that review to the Council and the Council elected to task staff to prepare an analysis of an action to extend the exemption of C shares from regional and processor share landing requirements indefinitely.

This document contains a Regulatory Impact Review (Section 2) and an Initial Regulatory Flexibility Analysis (Section 3) of the alternative to exempt C shares from regional and processor share landing requirements. Section 4 contains a discussion of the Magnuson Stevens Act National Standards and a fishery impact statement.[1]

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

2 REGULATORY IMPACT REVIEW

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

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

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

[1] The proposed action is a minor change to a previously analyzed and approved action and the proposed change has no effect individually or cumulatively on the human environment (as defined in NAO 216-6). The only effects of the action are economic effects on the distribution of benefits of share allocation between holders of C shares and holders of PQS. As such, it is categorically excluded from the need to prepare an Environmental Assessment.

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
- 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:

> *In the crab rationalization program, the Council created a C share pool (comprised of three percent of the total harvest share pool) intended to benefit captains and crew active in the fishery. To provide stability to processors and regions that support crab processing, the Council also created processor share and regional landing requirements applicable catch landed using harvest shares under the program. For the first three years of the program, the Council elected to exempt C shares from any processor share or regional landing requirements to allow time for C share holders to adapt to the new management. The Council also stated its intent to review the application of processor share and regional landing requirements to C shares after 18 months of fishing under the program to determine whether application of those landing requirements to 90 percent of the C share allocation would be appropriate. The application of processor share and regional landing restrictions could greatly complicate use of C shares and could severely diminish the value of these shares to their holders. The value of C shares could also be diminished by their inclusion in the arbitration program, which is necessitated by the application of processor share landing requirements. To allow C share holders to receive maximum benefit of those shares, the exemption of those shares from processor share and regional landing requirements should be considered.*

2.2 Description of Alternatives

The Council has identified the following two alternatives for this action:

Alternative 1: Status quo – After 3 years of fishing under the rationalization program, C shares would be subject to the 90/10 A share/B share split, with A shares subject to regional and processing share landing requirements.

Alternative 2: C shares are indefinitely exempt from the 90/10 A share/B share split, with all C shares exempt from regional and processing share landing requirements.

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).[2] The remaining 10 percent of these annual IFQ are issued as "B shares" or "Class B IFQ," which may be delivered to any processor.[3] 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.[4]

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 – undesignated and West of 174°W longitude
Eastern Aleutian Islands golden king crab – South of 56°20'N latitude
Western Aleutian Islands golden king crab – South of 56°20'N latitude

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

[3] The terms "A share" and "Class A IFQ" are used interchangeably in this paper, as are the terms "B share" and "Class B IFQ".

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

The A share/B share allocation structure has the effect of limiting market choices of participants, since only the 10 percent allocation of B shares are free to be sold to any buyer. Under this structure, the 90 percent A share allocation (with corresponding IPQ) is intended primarily to add stability to the processing sector and provide a means for compensated removal of processing capacity from the fisheries. The 10 percent B share allocation is intended to provide negotiating leverage to harvesters, an opportunity for entry to the processing sector, and a check on the processing market (by providing a negotiated market price)[5]. 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. A more complete description of the arbitration system is set out in Appendix A.

Under the rationalization program, 97 percent of the initial allocation of QS was allocated to vessel owners. The remaining three percent of the initial allocation of QS was issued to captains as "C shares", based on their harvest histories as captains. The Council motion establishing the rationalization program applied an owner-on-board provision and leasing prohibition to these shares, 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 facilitate fleet coordination, 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)).[6] 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.

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. The leasing prohibition and owner-on-board requirements apply 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)). As part of a separate amendment package, the Council is currently considering an action that would revise the on-board requirements to ensure that holders of C shares remain active on vessels in the crab fisheries. The effects of amendments under consideration are discussed where relevant in this analysis.

2.3.2 The harvest sector

Under the rationalization program, QS are allocated in two types. Vessel 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

[5] 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.

[6] 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.

led to the initial allocation. Catcher vessel QS carry regional designations, which apply to annual allocations of Class A IFQ. The distribution of catcher vessel QS holdings varies substantially across fisheries (see Table 1 and Table 2). The regional distribution of shares differs with 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. 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. Catcher vessel owner quota share holdings as a percent of the catcher vessel owner share pool.

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

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

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

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

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

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)[7] 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

[7] 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.

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 on maintenance, insurance, crew, fuel, and other variable input costs. Examining data from the first two years of the program and the years immediately proceeding implementation shows a drastic reduction in the fleet under the program (see Table 3). 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.

Table 3. 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 *C. opilio*	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	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 *C. bairdi*	2006-2007	1,267,106	*	*	33	3	36
Western Bering Sea *C. bairdi*	2005 - 2006	791,025	*	*	42	2	43
	2006-2007	633,910	*	*	34	2	36
Eastern Aleutian Islands golden king crab	2001 - 2002	3,128,409	100.0	0.0	19		19
	2002 - 2003	2,765,436	100.0	0.0	19		19
	2003 - 2004	2,900,247	100.0	0.0	18		18
	2004 - 2005	2,846,273	100.0	0.0	20		20
	2005-2006	2,569,209	*	*	6	1	7
	2006-2007	2,692,009	*	*	5	1	6
Western Aleutian Islands golden king crab	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

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.

Annual harvest allocations are also issued in various classes (see Table 4), which limit the operation type and define share holder type and applicable landing restrictions. Most harvesters (including C share

holders) have elected to join cooperatives, so most annual allocations are made to cooperatives (see Table 5). The holders of approximately 75 percent to 95 percent of the C shares by fishery are cooperative members. As cooperative shares, these shares may be more easily consolidated.

Table 4. 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 *C. opilio*	26,121,324	2,902,364	929,338	2,898,453	57,982	32,909,461
Eastern Bering Sea *C. bairdi*	1,374,311	152,697	46,358	109,989	4,146	1,687,501
Western Bering Sea *C. bairdi*	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.

Table 5. Catcher vessel C share IFQ held by cooperatives (2006-2007).

Fishery	Catcher vessel captain and crew IFQ		Percent of vessel captain and crew IFQ held by cooperatives
	held by cooperatives	in total	
Bristol Bay red king crab	350,720	402,768	87.1
Bering Sea *C. opilio*	817,980	929,338	88.0
Eastern Bering Sea *C. bairdi*	35,133	46,358	75.8
Western Bering Sea *C. bairdi*	20,496	27,047	75.8
Eastern Aleutian Islands golden king crab	76,855	80,075	96.0
Western Aleutian Islands golden king crab	38,303	41,914	91.4

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

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 substantially 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	A shares	B shares	C shares
Bristol Bay red king crab	99.9	99.5	94.8
Bering Sea *C. opilio*	99.5	99.1	93.6
Western Bering Sea *C. bairdi*	58.3	40.9	27.7
Eastern Aleutian Islands golden king crab	95.1	92.6	95.9

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

Fishery	Class A	Class B	Class C
Bristol Bay red king crab	99.5	98.6	94.6
Bering Sea *C. opilio*	99.3	97.9	96.4
Eastern Bering Sea *C. bairdi*	79.0	67.8	54.2
Western Bering Sea *C. bairdi*	68.3	55.2	48.2
Eastern Aleutian Islands golden king crab	100.0	100.0	*

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.

The distribution of harvests across vessels varies slightly across 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).

	Bristol Bay red king crab			Bering Sea *C. opilio*			Western Bering Sea *C. bairdi*			Eastern Aleutian Island golden king crab		
	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).

	Bristol Bay red king crab			Bering Sea *C. opilio*			Eastern Bering Sea *C. bairdi*			Western Bering Sea *C. bairdi*			Eastern Aleutian Island golden king crab		
	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.

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 10). 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 shares held by vessel owners.

Table 10. C share landings by catcher vessels (2005-2006 and 2006-2007 seasons).

	Bristol Bay red king crab		Bering Sea C. opilio		Eastern Bering Sea C. bairdi		Western Bering Sea C. bairdi		Eastern Aleutian Island golden king crab	
Season	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 share use

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 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 catcher vessel owner shares are compensated. In most cases, the compensation is a percentage of the ex vessel price paid at the time of 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 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 it 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.

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). Currently, annual allocations arising from C share QS are subject to the same competition that exists for Class B IFQ. In the absence of Council action to the contrary, annual C share allocations will be divided in a manner similar to the Class A/Class B IFQ division of catcher vessel owner shares after the third year of fishing under the program. Processing QS holdings are substantially more concentrated than either catcher vessel owner or catch vessel crew QS holdings (see Table 11).

Table 11. 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 *C. opilio*	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 *C. bairdi*	Undesignated	23	4.35	0.83	24.26	23	4.35	0.83	24.26
Western Bering Sea *C. bairdi*	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, most processor quota shares are subject to a "cooling off" provision, which required IPQ to be used in the "community of origin" (or community of the processing history that led to the initial allocation of the underlying processing quota shares) subject to minor exceptions.[8] 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.[9] 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 of shares across communities.[10] 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

[8] Movement of the lesser of 10 percent of and 500,000 pounds of the IPQ in a community of origin may be moved annually during the cooling off period.

[9] 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.

[10] 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.

geographic distribution of processing. Changes in the distribution of processing are likely to vary with conditions in the fisheries and cannot be predicted.

Table 12. PQS regional and right of first refusal designations (2006-2007).

Fishery	Region	Community of Right of First Refusal	Number of PQS holders	Percent of PQS pool
Bristol Bay red king crab	North	St. Paul	2	2.6
	South	Akutan	1	19.9
		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 *C. opilio*	North	None	3	1.0
		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		67.5
	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	9	78.3
	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.

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.[11] Under these circumstances, the B and C share harvests received by the processor have typically come from the same fleet delivering A share harvests. In some cases, B and C share deliveries are reported to have brought lower prices than A share deliveries. This conclusion would appear to be supported by the average reported price 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 serving their purpose as competitive market shares. In the first two years of the program, crab markets have been at some of their lowest levels in recent years. In such a market, it is possible that the difference between a competitive price and the price arrived at through the arbitration standard is relatively small. Even in better markets, it is possible that the standard, under which the historic division of revenues is a primary consideration, would result in a price similar to the competitive price. Those historic prices were determined in a competitive market, but one under a different management structure that may have affected the distribution. In addition, some harvesters are reported to have used B and C shares to realize efficiencies in harvesting. B and C share harvests have supplemented a partial delivery of A shares to limit the need for an additional trip to harvest (and independently market) the B and C share catch. Also, when making A share harvests, some harvesters avoid underages that would require an additional trip, knowing that B and C shares can be used to cover any A share harvest overage. These uses of B and C shares clearly benefit harvesters, but detract from the use of B and C shares to pursue competitive markets.

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 substantially. In the second year, a drop in Russian production and a more aggressive Japanese market buoyed prices of red king crab. That recovery in prices has continued to date and is expected to continue (Sackton, 2007a).

[11] 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.

Like red king crab prices, prices for *C. opilio* (snow crab) are greatly influenced by Japanese demand and U.S. demand. In the *C. opilio* market, however, the primary competition in production is the east coast of Canada. In the first year of the program prices for *C. opilio* reached extremely low levels due to poor demand in both the Japanese and U.S. markets. In the second year, the price recovered, approaching all time highs stimulated in part by demand from buyers drawn to the snow crab market by the low prices in the preceding year. In the coming year, it is possible that prices could decline significantly particularly from build up of Canadian inventories or if sellers of crab appear 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 for red and golden king crab show a notable decline in 2005, the first year of the rationalization program (Table 13). The price drop is not evident in for *C. opilio*, likely because that fishery is prosecuted early in the year, so these data reflect prices for production from the January 2005 fishery.

Table 13. First wholesale prices of crab species by product type (2001-2005).

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

Source: ADFG COAR data.

*Prices with fewer than 4 observations are confidential.

2.3.7 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 location. In the years preceding implementation of the rationalization program, only data from the Bristol Bay red king crab and the Bering Sea *C. opilio* fisheries can be released (see Table 14). In addition, activity on floating processors may be associated with a particular community, but is not attributed to community in these records. Dutch Harbor processors received slightly less than a majority of the landings in both major fisheries. Discerning the landings of any other community in isolation is difficult because of aggregations required by confidentiality rules.

Table 14. 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 *C. opilio*	2001	Akutan, King Cove, Kodiak	3	1,889,513	8.2
		Dutch Harbor	5	7,916,618	34.5
		Catcher processors	7	3,099,567	13.5
		St. Paul, Floaters	8	10,034,268	43.7
	2002	Dutch Harbor, King Cove, Kodiak	9	13,646,381	46.1
		Catcher processors	8	1,671,036	5.6
		St. Paul, Floaters	8	14,292,205	48.3
	2003	Akutan, King Cove, Kodiak	3	2,162,245	8.5
		Dutch Harbor	6	10,308,648	40.6
		Catcher processors	5	803,452	3.2
		St. Paul, Floaters	8	12,135,777	47.8
	2004	Akutan, King Cove, Kodiak	4	2,287,481	10.4
		Dutch Harbor	6	8,714,351	39.7
		Catcher processors	6	664,660	3.0
		St. Paul, Floaters	8	10,273,001	46.8
	2005	Akutan, King Cove, Kodiak	3	2,206,008	9.7
		Dutch Harbor	6	9,759,358	43.1
		Catcher processors	6	648,967	2.9
		St. Paul, Floaters	5	10,041,444	44.3

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

Rights of first refusal are granted to all communities with crab processing in recent history (see Table 12). The distribution of these rights is a general starting point for the distribution of landings in communities in the various fisheries.

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

Commercial fishing and seafood processing play a significant role in the economic success of Unalaska. The community is home to the greatest concentration of processing and catcher vessel activity than any other Alaska community (EDAW, 2005). Pollock accounts for nearly 70 percent of the total wholesale value processed in Dutch Harbor in 2005. The second largest contributor to total wholesale value processed in Dutch Harbor is crab at nearly 20 percent. Of the crab species, red king crab provided the largest contribution at $51 million in the 2005 followed by snow crab at $33 million. Dutch Harbor based processors received a substantial share of the processor share allocations in most crab fisheries under the rationalization program. These shares are subject to rights of first refusal of the Dutch Harbor community entity. These shares are unlikely to migrate out of the community because crab processing at most facilities plays an important part in an integrated operation that serves several fisheries.

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

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

Although the economy of Kodiak is more diversified compared to King Cove and Akutan, fishing is a significant player in the community. Excluding the USCG, four of the top ten employers in Kodiak in 2003 were fish processors. Salmon and herring account for 42 percent of the total wholesale value during 2005. Halibut, sablefish, and other groundfish contributed 22 percent of the total wholesale value, while Tanner crab contributed less than 5 percent of the total wholesale value. Unlike Unalaska, King Cove, and Akutan, Kodiak is home to an extensive resident fishing fleet. The total number of vessels is less than 600, with less than 300 that actively fished in 2002. Total estimated gross revenue of Kodiak permit holders was $111 million for 2002. Kodiak is also home to numerous shore based processors. Species that typically contribute more than 10 percent of the total value are Pacific cod, pollock, and salmon. The processors located in Kodiak provide a large amount of diversity in size, volume, and species processed. The products produced by the shore plants range from large quantity canning of salmon to fresh and fresh-frozen products. The rapid fleet contraction under the crab rationalization program is also thought to have affected Kodiak. Kodiak crew are estimated to have lost 125 positions in the Bristol Bay red king crab and approximately 60 positions in the Bering Sea snow crab fishery in the first year of the program. A study of the effects of the rationalization program on Kodiak during the program's first year found anecdotal evidence suggesting declines in spending at some businesses, but evidence of a broad decline in total local spending could not be identified. The study cautioned that effects may lag, so these findings should be viewed as preliminary (Knapp, 2006).

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

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

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

2.4 Analysis of alternatives

Through this action, the Council will determine whether to apply the 90/10 Class A IFQ/Class B IFQ split to C shares. In analyzing the alternatives in this action, the Council should consider the interaction with the processor share and regional landing requirements applicable to Class A IFQ with other aspects of the program. Specifically, C shares are currently subject to certain use requirements, which could affect the extent of constraints imposed by the landing requirements. Under the current regulations, after the third year of fishing under the program individual C shares IFQ holders will be prohibited from leasing their shares requiring the C share QS holder to be on board the vessel harvesting IFQ yielded by those shares. Cooperative members who hold C share QS will be permitted to lease shares and not be required to comply with this on board requirement and would not be subject to any active participation requirements. The Council is currently considering an amendment to that provision that would require active participation by a C share QS holder to receive annual IFQ allocations. Under the proposed options, to receive an annual allocation a C share QS holder would need to be on board a vessel making landings in the crab fisheries during the 365 days preceding the application for IFQ. Since these differences in on board requirements could interact with the processor share and regional landing requirements, in the analysis of each alternative, the interactive effects of these different rules are discussed.

In the most recent fishing season, a large majority of C share holders have elected to join cooperatives. This cooperative membership effectively removes any leasing prohibition and owner-on-board requirements. The analysis of the alternatives relies on this current condition as the status quo. After examination of the alternatives under the status quo, the analysis examines the effect of a provision that would require active participation to receive annual IFQ allocations, as is currently under consideration.

2.4.1 Effects on C share holders

Alternative 1 – apply the 90/10 split to C shares

Under the status quo alternative, after the third year of fishing under the rationalization program, 90 percent of the annual IFQ allocation of C shares would be as Class A IFQ, subject to processor share and regional landing requirements; the remaining 10 percent of the annual allocation would be as Class B IFQ, free of any processor share or landing requirements. The effect of the application of these rules on C share holder benefits requires consideration of the current harvest practices.

In general, the application of A share/B share split to C shares will logistically complicate use of those shares. In the first two years of the program, many harvesters have asserted that logistical demands in the fisheries are greatly increased by the complications of coordinating landings of A shares under the processor share and regional landing requirements. The use of A shares is complicated by the need to match A shares with IPQ that are issued with a one-to-one relationship with A shares. Under this system, any individual C share IFQ holders (who are not cooperative members)[12] would be forced to compete for landing positions with holders of catch vessel owner shares, who are likely in a much better negotiating position with respect to processors because of their relatively large share holdings (i.e., vessel owner shares are allocated for 97 percent of the harvest share pool). The share matching system defined by the arbitration compresses most of the A share/processor share coordination into a 15 day period that begins prior to the season. This compressed timeframe could further marginalize individual C share IFQ holders as they attempt to match their shares against processor shares.

While individual C share IFQ holders are likely to be disadvantaged in the Class A IFQ/IPQ share matching process, most C share holders have elected to join cooperatives pooling their C share holdings with holders of shares in the larger vessel owner pool. This cooperative membership has several effects on their future use of C shares. In the context of Class A IFQ/IPQ share matching, C share holdings can be coordinated with the larger allocations of cooperative members who hold vessel owner shares. So, cooperative membership would help C share holders to overcome a portion of the relatively poor position in share matching that arises from their relatively small share holdings. Whether individual C share holders could effectively participate in the share matching process is not known. Their participation would not only pose challenges to these share holders, but could complicate efforts of others to coordinate matching in the system that operates under an extremely tight time frame.

Share matching is the less formidable of the two logistical complications arising out of a 90 percent A share allocation to C share holders. Once shares are matched, their harvest and delivery must be coordinated. Since few C share holders also hold catcher vessel owner shares, they do not control vessel operations. As a consequence, few C share holders will be in a position to independently negotiate or determine delivery terms (most importantly timing and location) for their allocations. Instead C share holders must coordinate their negotiations with at least one vessel owner to ensure that the commitment of deliveries to one or more IPQ holders is fulfilled. An individual C share holder would be compelled to work closely with the owner of the vessel that he or she works on to ensure that A share landing commitments can be met. The logistical demands on these individual C share holders will be worsened by the leasing prohibition that will come into effect simultaneously with the application of the A share/B

[12] Throughout this paper, 'individual C share holders' refers to C share holders that have elected not to join a cooperative.

share split (after three years of fishing under the program). Since the holder would be required to be on board the vessel harvesting the shares, any potential to coordinate harvests with other vessels would be complicated by the share holder needing secure a position on that vessel. Given this circumstance, a C share holder that secures a position on a vessel that is not fishing for a cooperative would have an incentive to pool his or her shares in a cooperative to avoid the potential complications arising out of the owner on board requirement and leasing prohibition (which do not apply to cooperatives).

Given the high level of cooperative membership among all share holders (including C share holders), it is likely that most C share allocations will continue to be pooled with vessel owner shares in a cooperative's holdings. As a result, the challenges facing C share holders would likely be comparable to those facing catcher vessel owner share holders. Most C share landings coordination would be dealt with as part of a pool of shares, the harvest of which would be coordinated within a cooperative (along with the harvest of catcher vessel owner shares in the cooperative).[13] In the long run, under the 90/10 A share/B share split the logistical demands related to the use of C shares are likely to be similar to those faced by holders of catcher vessel shares.

Coordination of landings is an even greater challenge when unexpected circumstances arise. In the first year of the program, unanticipated ice conditions slowed fishing in the Bering Sea *C. opilio* fishery requiring rescheduling of deliveries for a portion of the fleet. In the second year, a fire that disabled one processing platform intended to operate in the North region caused substantial rescheduling of landings. Difficulties redistributing deliveries are compounded by the rigidity of the regionalized Class A IFQ/IPQ matching requirements and the application of those limitations to such a large portion of the harvest share pool. Given the share matching structure, movement of a landing requires the share holders (the Class A IFQ holder and the IPQ holder) to find both available Class A IFQ and available IPQ with consistent regional designations or the harvester to use Class B IFQ. Given that the system requires full share matching in the preseason to accommodate the arbitration structure, redistributing deliveries using Class A IFQ must involve both holder of the substituting Class A IFQ and the holder of the substituting IPQ. In some instances, Class B IFQ have been used to resolve these delivery coordination conflicts. The use of these Class B IFQ for resolving delivery conflicts could displace the use of Class A IFQ issued to C share holders. In the case of individual C share holders, mid-season rescheduling could prevent the use of C share allocations, if the Class A IFQ were unable to be rescheduled on a vessel that the C share holder does not crew on. C shares held by cooperative members would still need to be rescheduled, but owner on board and leasing prohibitions would not limit the mobility of those shares within the fleet fishing cooperative allocations.[14]

Changes in the leasing limitations and on board requirements applicable to C shares would have minor effects on the logistical demands facing C share holders in using their shares. C share holders who worked for a vessel owner that was not a cooperative member will continue to have an incentive to join a cooperative to the extent that cooperative membership increases the probability that their shares will be fully harvested. These harvesters would be undeterred by owner-on-board requirements or leasing prohibitions that would constrain their share use since those constraints do not apply to harvest of cooperative IFQ.[15] In any case, the benefits of cooperative membership are likely to continue to drive most C share holders to become cooperative members.

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[13] Currently, coordination of harvesting within a cooperative varies across cooperatives. Some cooperatives have made efforts to centralize the coordination of harvest activities, with the co-op manager assigning allocations to vessels to achieve efficiencies. Other cooperatives have allowed shares to pass through to the vessel of the contributing share holder. Centralized coordination of harvesting increased from the first to the second year of the program and is likely to continue to increase as participants are enlightened to the benefits of centralization.

[14] Under the current rule, cooperative held IFQ can be transferred only to other cooperatives in the fishery.

[15] As a part of the action relating to C share use limitations, the Council should clarify whether the change in active participation requirements would also allow leasing of C shares held by an individual. Under the current regulations,

Although cooperative membership is the norm for C share holders, if the Class A IFQ/Class B IFQ split is applied to C shares, holders of C shares are likely to have no alternative but to join a cooperative to manage the logistical complications of share matching and landing coordination. Though cooperative membership costs are not public, they are generally said to be imposed based on share holdings. C share holders are likely to continue to bear these costs in the future under any circumstance, but application of the A share B share split to these shares will likely ensure that all C share holders need to be cooperative members to coordinate harvest of their allocations.

Since approximately 90 percent of the annual IFQ allocation to C share holders would be Class A IFQ, holders of C shares will be required to join an arbitration organization and participate in certain aspects of the arbitration program. The annual costs of the arbitration organizations and arbitration administration are unavoidable. Arbitration organization fees are borne by members of the organization. The arbitration organization for harvesters that have no processor affiliation (i.e., independent harvesters) charges each member $500.[16] Whether a discounted rate would be offered to C share holders because of their relatively small share holdings is not known. In addition, the costs could be but could decline over time as the administrative aspects of the arbitration system become more established. By regulation, arbitration administrative expenses are split evenly between the harvester sector and the processing sector. Processors advance the costs, recouping the harvesters' half of the expenses through an assessment on landings. In the first year of the program, participants in the harvest sector were assessed a penny per pound on each delivered pound to cover the one-half of the estimated arbitration administration expenses (estimated at approximately $235,000). This assessment collected approximately $450,500 in the first year. These collections substantially exceeded one-half of the actual arbitration administration costs (approximately $162,000). The remainder is being applied to the second year's arbitration administration costs. A mid-year report projects that the arbitration administrative costs for the second year will be fully covered by the excess funds collected in the first year of the program. As a result, harvesters paid no additional fee for arbitration organization expenses in the second year. Considering the first two years' experience, it is likely that administrative costs of the arbitration program will remain less than one-half cent per pound in the future.

In addition to the administrative aspects of the arbitration system, C share holders may also have costs related to their participation in the adversarial aspects of the system. These costs can be incurred either individually or through collective action with other Class A IFQ holders. Individual participation by C share holders would be costly and likely would be ineffective because of the administrative complexity and substantive challenges of participation in that system. Collective participation would allow pooling of resources and information, reducing the individual burden of participation in the system. Currently, holders of approximately 70 percent of the unaffiliated catcher vessel owner harvest shares in each fishery belong to the Inter-Cooperative Exchange, a bargaining cooperative formed under the Fishermen's Collective Marketing Act. Several cooperatives have joined this association, effectively bringing in all of their members who have contributed Class A IFQ to the cooperative. C share holders whose cooperatives have joined the Inter-Cooperative Exchange would likely be brought in to that organization's membership. The future cost of that membership to C share holders is not known and has likely not been established by the organization. Many harvesters view participation in the Inter-Cooperative Exchange, which has represented harvesters in the arbitration process, as necessary and beneficial. Membership in the Inter-Cooperative Exchange is reported to be stimulated by both the complexity of the arbitration system and the relatively large portion of the harvest allocation (90 percent) that is subject to the IPQ landing requirements and arbitration. Many fishermen believe that professional representation is

leasing of shares by individuals is generally prohibited after the fifth year of the program, to create an incentive for cooperative membership.

[16] Because of the different information needs of non-affiliated harvesters and the need to limit flow of that information to affiliated harvesters, separate arbitration organizations are mandated by regulation.

necessary to guide negotiations due to the complexity of the system and the expense of gathering market information needed for effective negotiation. The structure of the Inter-Cooperative Exchange has helped distribute these costs, through general membership dues charged based on share holdings. Persons are charged these dues regardless of whether the person's shares are subject to specific negotiation disputes or arbitration.[17] The exact level of these charges is confidential to the group; however, one can assess the potential funding by considering the penny-a-pound landing fee that funds the arbitration system's administration. Currently, most members reasonable believe that membership is well worth the cost. Whether C share holders would be charged at a rate equal to that of holders of vessel owner shares (or at a discounted rate) is not known.

Alternative 2 – exempt C shares from the 90/10 split

The exemption of C shares from the processor share and regional landing requirements applicable to Class A IFQ will ease the limitations on the use of these shares substantially. C share holders will be exempt from the share matching process that begins just before the season opening. Exemption from this process will particularly benefit individual C share holders, who face potential pressures from competition with catcher vessel owner Class A IFQ for share matches. Instead, C shares will remain free of the share matching burden and will be permitted to be landed with any processor in any location.

The removal of the more constraining burden applicable to A share IFQ, the need to coordinate deliveries of catch to an IPQ holder, is likely to be more important to facilitating the use of C shares. Individual C share holders (if any remain) will receive the greatest benefit from removal of this burden as landings must be coordinated with the vessel on which the shares are fished. Under the current rule, which requires an individual share holder to be on board the vessel fishing the shares and prohibits leasing, the processor share and regional landing requirements leave little flexibility for an individual C share holder to move shares to a different vessel to address unexpected circumstances. Since cooperative members are not (and will not) be subject to the owner on board requirement or leasing prohibition, the logistical challenges of coordinating their deliveries to IPQ holders is likely comparable to the challenge facing catcher vessel owner shares. The benefits of removing this burden will be substantial to the majority of C share holders, who do not also have substantial vessel owner share holdings.

The use of C shares are likely to closely resemble the use of B shares, if the 90/10 Class A IFQ/Class B IFQ split is not applied to C share holdings. Ex vessel prices and royalties for these shares are also likely to be similar to those prices and royalties for vessel owner B shares. To the extent that C shares are used to relieve coordination burdens arising from address contingencies that complicate matching A shares and IPQ, the benefit of C shares to their holders is likely to be diminished. This coordination burden is likely to be relatively similar to the burden on the B shares arising from the same circumstances. Most C share holders are likely to continue to join cooperatives, as the benefits of cooperative coordination of share harvests (including the ease of movement of shares within the cooperative) are likely to outweigh the costs of membership. Costs of arbitration, including both costs of arbitration organizations and costs of participation in the adversarial aspects of arbitration, will be avoided for C share holdings, which should increase the value of these shares to their holders.

The effects of this alternative on C share holders and the use of C shares is likely to be much the same, whether the Council modifies the current owner-on-board requirements and leasing prohibitions applicable to C shares. Adoption of active participation requirements for C share holders is unlikely to affect the benefits realized by C share holders from the removal of the limitations of IPQ and regional landing requirements under this alternative.

[17] Given the potential for one processor's offer to induce other processors to match the price, this distribution of charges is generally perceived as fair and beneficial by Inter-Cooperative Exchange members.

2.4.2 Effects on the harvest sector

Alternative 1 – apply the 90/10 split to C shares

Since C shares are a relatively small part of the overall allocation to the harvest sector, the effect of either alternative on the harvest sector as a whole is likely to be relatively small. Under this alternative, C shares would be subject to the 90/10 A share/B share split (and the accompanying IPQ and regional landing requirements on A shares) after the third year of the program. So, 10 percent of the catcher vessel IFQ allocation each year would free of the IPQ and regional landing limitations. To the extent that C shares have relieved logistical pressures on harvester landings that arise from the application of those landing limits to catcher vessel owner shares to date that advantage would be lost under this alternative.

In the development of the program, B shares were intended to serve three purposes. First, the allocation provides some degree of competition, which might otherwise be lacking under a system in which harvesters are compelled to land catch with processors holding IPQ. Second, by allowing B shares to flow to their most valuable use, the allocation was thought to provide a check on the market, in the event that IPQ holders were not aggressively pursuing market opportunities for their products. A third use of B shares could be to facilitate processor entry (NPFMC/NMFS, 2004a).

In the first two years of the program, IFQ holders have asserted that B shares (which are free of any IPQ and regional landing requirements) need to be reserved for logistical purposes. In the Bering Sea *C. opilio* fishery, ice and a processor fire complicated North deliveries for portions of the first two seasons. Regional and processor share delivery requirements on A shares limit the ability of harvester to respond to midseason contingencies that disrupt delivery patterns. For example, harvesters fishing a portion of their allocation that would be used for a North A share delivery will need commensurate South A share holdings to shift the deliveries to the South. Reserving B shares can relieve these logistical pressures.

Since C shares have been free of IPQ and regional delivery constraints during the first three years, these shares increase the portion of the harvest share pool that can address logistical complications and increasing the pool of shares that can be used to meet the market development purposes intended by the Council. Applying the 90/10 split to C shares will remove the benefit to the harvest sector that has arisen from C shares being available to address logistical complications (when needed for that purpose) or market development purposes, when they are available for that use.

Alternative 2 – exempt C shares from the 90/10 split

As under the first alternative, the effects of the alternatives on the harvest sector in general are likely to be limited by the small magnitude of the C share allocation. Yet, the removal of IPQ and regional landing requirements from C shares (effectively making the entire C share allocation Class B IFQ) would effectively increase the allocation of unrestricted shares to the catcher vessel sector by almost one-third. This relatively larger pool of shares free of landings limitations would relieve some of the logistical pressures confronting cooperatives that need to address logistical issues in season. Relieving these coordination pressures should aid in freeing catcher vessel shares (including both vessel owner B IFQ and C IFQ) to serve market development purposes.

2.4.3 Effects on the processing sector

Alternative 1 – apply the 90/10 split to C shares

The effects of both alternatives on processors are minor, because of the small magnitude of the C share allocation. The application of landing restrictions to 90 percent of the annual C share IFQ allocation under this alternative will have competing effects on the processing sector. Clearly, processors that do not hold IPQ will have a smaller portion of annual harvests available for purchase in the competitive market. Likewise, processors that hold IPQ that wish to compete for additional landings of shares unrestricted by IPQ and regional landing limitations will have fewer landings to compete for. On the other hand, IPQ holding processors will each have a marginally larger amount of constrained landings available due to the

application of the A share landing limitations to 90 percent of the 3 percent C share allocation.[18] The market advantage of this small amount of landings (less than 3 percent of the catcher vessel pool) is likely to be relatively minor.

Depending on the circumstances, the logistical complications arising from in season contingencies could impose transaction costs on IPQ holding processors, who might need to engage in share transfers or change share matches and A share delivery schedules to address those complications. Imposing landing restrictions on 90 percent of the annual C share IFQ allocation will reduce the amount of shares available to address these contingencies, which could complicate logistics for IPQ holders. Whether the benefits of the additional IPQ landings under this alternative exceed the periodic transaction costs that could be avoided, if C shares are available for unconstrained deliveries, likely depends on the circumstances (including both the contingency being addressed and the market conditions at the time) and is not known.

Alternative 2 – exempt C shares from the 90/10 split

As under the first alternative, the effects of the alternatives on the processing sector in general are likely to be limited by the small magnitude of the C share allocation. Removing of IPQ landing requirements from C shares should increase the pool of shares available in the competitive market to both non-IPQ holders and IPQ holders that wish to compete for those deliveries. In addition, it is possible that some IPQ holders could benefit from the removal of landing requirements from all C shares to the extent that those shares are used to address delivery contingencies.

2.4.4 Effects on communities

Alternative 1 – apply the 90/10 split to C shares

As noted earlier, the community link of IPQ allocations is relatively weak because of the lapsing of the 'cooling off' provision and the exceptions to the right of first refusal. Since the 'cooling off' period limitations constrained landings in the first two years of the program and lapse in the next season, past landing patterns are not indicative of future patterns. Rights of first refusal on transfers of processor shares for use outside the community have several exceptions and lapse under certain circumstances, limiting their utility for predicting landing patterns. Despite these weaknesses, the effects of this action on communities are likely best discerned through examining the distribution of rights of first refusal among communities.

Since C shares are a relatively small portion of the overall harvest allocations, the effects of this action on communities would be relatively small (see Table 15). Based on the most recent TACs, relatively few additional pounds of IPQ issued to correspond to the additional A share issuance would be constrained by the rights of first refusal of communities. The largest amount of pounds that would be subject to the right of first refusal limitations for a single community in a fishery would be approximately 300,000 pounds of Bering Sea *C. opilio* (or slightly less than one one-hundredth of the total allocation in the fishery), which would be subject to IPQ landing requirements and the associated right of first refusal in St. Paul.[19] In considering the effects of these allocations on the communities, it is also important to note that regional delivery limitations would apply to these allocations as well. In the case of St. Paul and St. George, the regional limitations may be more important than the specific community limitation of the rights of first refusal, since those are the only two communities with processors operating in the North region. Specifically, in the Bering Sea *C. opilio* fishery, depending on the ex vessel price of crab in the North region, it is possible that most of the C shares that would be destined for landings in the North region

[18] The allocation of C shares is not exactly 3 percent of the catcher vessel share pool, since the 3 percent C share pool is divided between catcher vessel and catcher processor sectors based on slightly different eligibility and qualification criteria than the catcher vessel owner share pool.

[19] In considering this effect, it is important to note, that no specific C share IFQ would be associated with any community, but that the IPQ that is required to be matched with the C share IFQ would be allocated subject to rights of first refusal in the amounts reflected in the table, based on the most recent TACs.

under this alternative, would be delivered to a processor in the South, in the event that the IPQ and regional landing requirements are not applied. In some instances, this redistribution could be offset by harvesters making deliveries of crab harvested with IFQ not subject to landings limitations in the North region to meet other objectives, such as operational efficiencies.

Table 15. Estimate of C share IFQ pounds subject to the right of first refusal by community (based on the 2006–2007 IFQ allocations).

Community	Bristol Bay red king crab	Bering Sea *C. opilio*	Eastern Aleutian Island golden king crab	St. Matthews blue king crab*	Pribilof red and blue king crab*
Akutan	72,049	81,305	743	2,116	336
False Pass	13,566				
King Cove	46,267	52,473		1,016	1,053
Kodiak	13,712	1,173		33	799
Port Moller	12,662				
St. George		80,778			
St. Paul	9,267	303,745		10,668	18,664
Unalaska	185,093	293,115	70,669	13,608	6,816

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

* Estimate based on C share allocation of 3 percent of the 1998 total catch.

Note: The right of first refusal does not apply to the Eastern Bering Sea *C. bairdi,* Western Bering Sea *C. bairdi*, Western Aleutian Islands golden king crab, Western Aleutian Islands red king crab fisheries.

Alternative 2 – exempt C shares from the 90/10 split

Under this alternative, C share IFQ would be indefinitely exempted from the A share IPQ and regional landing requirements. Since these shares were exempt from those landing requirements in the first two years of the program, examining the use of C share IFQ in the first two years provides an indication of the distribution of landings of these shares in the future. To the extent that data can be revealed from the first two years of the program, the distribution of landings across communities appears to be similar across all share types (see Table 16 and Table 17[20]). Despite these similarities, the distribution of landings with C shares closely tracked the distribution of landings for B shares. The distribution suggests that, when not subject to IPQ and regional landing requirements, C shares will be used in a manner very similar to the unconstrained B shares. So, if B shares begin to be used freely for marketing purposes, those C share landings will likely be distributed to the strongest markets. In the past, participants have suggested that markets in the North region have, at times, brought the lowest prices in the fishery and markets in Kodiak have, at times, brought the highest prices. If this distribution of prices continues, C shares are likely to be landed primarily in communities in the South region, with Kodiak being a prime market for these landings. These observations suggest that removal of the A share/B share split will result in more landings being made in Kodiak and fewer landings being made in the North region (i.e., St. Paul and St. George). Despite these tendencies, the overall effect of this alternative on communities is likely to be relatively weak for two reasons. First, several factors (in addition to price) affect landing patterns. In the first two years of the program, participants have chosen to distribute landings of B and C shares to achieve operational efficiencies and coordination in matching A shares to IPQ. These factors will likely continue to affect landing patterns in the future. Second, C shares are a small portion of the allocation in the fisheries, limiting any affect on the distribution of landings that arises from removing landing limitations on communities.

[20] In considering these tables, it should be noted that approximately 16 percent of the PQS issued in the fishery were subject to a designation of either Aleutians East Borough or Kodiak that requires processing in the designated community during first two years of the program. Only 6 percent of the PQS were issued to a King Cove or Kodiak based processors suggesting that (in the absence of substantial IPQ transfers to the communities) a considerably greater percentage of B and C shares were landed in these communities than the percentage of A shares.

Table 16. Landings by community by share type in the Bristol Bay red king crab fishery (2005–2006).

Bristol Bay red king crab	Landings by share type								
	A shares			B shares			C shares		
Community	pounds	percentage of share type	percentage of catcher vessel shares	pounds	percentage of share type	percentage of catcher vessel shares	pounds	percentage of share type	percentage of catcher vessel shares
Dutch Harbor/Akutan/St Paul/Sitka/Floater	10,463,192	76.4	66.9	1,098,354	73.4	7.0	339,211	74.7	2.2
King Cove/Kodiak	3,226,043	23.6	20.6	398,094	26.6	2.5	115,055	25.3	0.7

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

Table 17. Landings by community by share type in the Bering Sea *C. opilio* fishery (2005–2006).

Bering Sea *C. opilio*	Landings by share type								
	A shares			B shares			C shares		
Community	pounds	percentage of share type	percentage of catcher vessel shares	pounds	percentage of share type	percentage of catcher vessel shares	pounds	percentage of share type	percentage of catcher vessel shares
Dutch Harbor/Akutan	12,148,049	46.5	40.6	1,990,961	68.8	6.7	684,132	76.3	2.3
St. Paul	7,191,425	27.5	24.0	*	*	*	71,829	8.0	0.2
King Cove/Kodiak	*	*	*	349,472	12.1	1.2	114,502	12.8	0.4

* withheld for confidentiality

Note: Landings by floating processors are omitted.

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

2.4.5 Effects on management and enforcement

Alternative 1 – apply the 90/10 split to C shares

Application of the 90/10 A share/B share split to C shares will add IPQ and regional landing requirements to a portion of each of the C share IFQ allocation. Although tracking compliance with these landing requirements may seem to complicate management, the overall effect will be rather minor. Since C share QS allocations currently carry regional designations, no additional management costs will arise in establishing share identifiers on QS. The additional management burden tracking the use of Class A IFQ arising from C share QS will also be minor. Under the system of landings accounting, IFQ and IPQ usage is determined at the time of the landing by permit holders committing shares to the landing. The additional burden arising from subjecting slightly less than 3 percent of the IFQ pool to the regional and IPQ landing requirements applicable to Class A IFQ will be minimal. In addition, most C share IFQ are currently fished by cooperatives. By coordinating shares held by a number of persons in a single cooperative account management and oversight is simplified. Membership of C share holders in cooperatives is likely to continue at its current level regardless of whether the A share/B share split is applied to C share IFQ. The additional management accounting burden of additional A share allocations to cooperatives would be very minor (and likely unnoticeable).

Alternative 2 – exempt C shares from the 90/10 split

The effect of exemption C shares from the 90/10 A share/B share split on management and enforcement will be very minor. Exemption of all C shares from the regional and IPQ landing requirements will marginally decrease the number of class A IFQ for which IPQ and regional landing requirements must be monitored. Yet, the additional burden arising from that tracking is minimal. Although this alternative will reduce the number of shares subject to landings constraints, the management and enforcement burden is likely to be unchanged.

2.4.6 Net benefits to the Nation

This action is likely to have little or no effect on net benefits to the Nation. Although the allocation of unrestricted shares to C share QS holders will allow some additional IFQ to be used for any purpose identified by their holders, the shares are unlikely to result in any change in production by either

harvesters or processors.

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:

> *In the crab rationalization program, the Council created a C share pool (comprised of three percent of the total harvest share pool) intended to benefit captains and crew active in the fishery. To provide stability to processors and regions that support crab processing, the Council also created processor share and regional landing requirements applicable catch landed using harvest shares under the program. For the first three years of the program, the Council elected to exempt C shares from any processor share or regional landing requirements to allow time for C share holders to adapt to the new management. The Council also stated its intent to review the application of processor share and regional landing requirements to C shares after 18 months of fishing under the program to determine whether application of those landing requirements to 90 percent of the C share allocation would be appropriate. The application of processor share and regional landing restrictions could greatly complicate use of C shares and could severely diminish the value of these shares to their holders. The value of C shares could also be diminished by their inclusion in the arbitration program, which is necessitated by the application of processor share landing requirements. To allow C share holders to receive maximum benefit of those shares, the exemption of those shares from processor share and regional landing requirements should be considered.*

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

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 small C share holders under the program are complicated by limited share holder information. 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. A total of 216 persons hold C shares. Conservatively, all of these individuals are believed to be small entities.

Currently, 29 entities hold PQS. Estimates of large entities were made based on available records of employment (Fried, 2005) and analysts' knowledge of foreign ownership of processing companies. Of these entities, fourteen are estimated to be large entities, leaving fifteen 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 not change. As such, this action requires no additional reporting, record keeping, or other compliance requirements.

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

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

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

The following two alternatives are being considered:

Alternative 1: Status quo – After 3 years of fishing under the rationalization program, C shares would be subject to the 90/10 A share/B share split, with A shares subject to regional and processing share landing requirements.

Alternative 2: C shares are indefinitely exempt from the 90/10 A share/B share split, with all C shares exempt from regional and processing share landing requirements.

Application of the landing restrictions under the status quo alternative will reduce the value of C shares to small entities holding those shares. The loss to small entities under this alternative is likely to be limited by the tendency of C share holders to use their share allocations in cooperatives, which overcomes much of the coordination problem that would likely be insurmountable were C share holders excluded from the cooperative program. With cooperative membership, C shares are effectively treated as any other shares in the program, so the effect of the alternative would simply be a diminution in value of C shares.

Small entities holding C shares are likely to benefit from the indefinite exemption of their C share allocations from the IPQ and regional landing requirements by Alternative 2. Removal of these limitations will allow C share holders to receive greater value from their shares in the market. C share

holders are unlikely to gain any notable leverage in negotiations with either vessels employing them in the fishery or with processors to which the shares are delivered because of the relatively small magnitude of the allocation. C shares, however, should bring slightly higher royalties to their holders and should be worth slightly more in the market under this alternative.

Under the status quo alternative, which will apply IPQ and regional landing restrictions to approximately 90 percent of the C share pool, will have minor, competing effects on small processors that hold processor shares. These entities will receive a slight benefit from the slightly larger allocations of IPQ under this alternative, increasing the portion of the harvest share pool that must be delivered to their plants. To the extent that these entities wish to compete for a larger share of landings by competing for deliveries made with unconstrained shares, these small entities will have a smaller pool of landings from the unconstrained shares to compete for. For small entities with very small amounts of IPQ, the application of the landing constraints under the status quo alternative could be detrimental overall because of the relatively small allocation of IPQ may be more that offset by the cost of being unable to compete for a larger pool of unconstrained shares.

The removal of the landings limitations from C shares indefinitely will have a minor negative effect on small entities that hold PQS by decreasing their annual allocation of IPQs. For small entities that wish to compete in the market for shares unconstrained by delivery limitations, this negative effect will be offset to some extent by the increase in the pool of unconstrained shares by 3 percent of the total pool. Depending on the ability of small processing entities to compete in that market, it is possible that some could benefit from the removal of the delivery constraints. The loss of IPQ is likely to be quite small since it is approximately 3 percent of each processors allocation of IPQ.

4 NATIONAL STANDARDS & 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 allowing holders of C shares more flexible use of the relatively small allocations of shares. 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 will allow holders of C shares to make more efficient use of their allocations. These allocations are part of the larger system of allocations under the program intended to limit harvests to the TAC to maintain integrity of crab stocks.

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 reduce costs to C share holders and will not duplicated other 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 only minor effects on communities, none of which will jeopardize sustained participation of any community in the fishery. By retaining regional and processor share landing requirements on catcher vessel owner shares, which are approximately 97 percent of the catcher vessel share pool, any adverse effect will be greatly mitigated.

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.

5 REFERENCES

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

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APPENDIX A. Description of the Arbitration System

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

The arbitration process begins with the two sectors (harvesters and processors) jointly selecting a "market analyst" who produces a market report, a "formula arbitrator," who develops a price formula specifying an ex vessel price as a portion of the first wholesale price, and a pool of "contract arbitrators," who preside over any binding arbitration proceedings. The market report and formula price are required to be released at least 50 days prior to the season opening. The market analyst and formula arbitrator (who may be the same person) generate the market report and formula price, respectively, based on any relevant information, which may include information received from IFQ holders and IPQ holders. Neither the market report nor the formula price has any binding effect. Instead, they are intended to provide baseline information concerning the market and a signal of a reasonable price.

An IFQ holder that is not able to resolve all terms of delivery with a processor to whom it has committed deliveries may unilaterally initiate an arbitration proceeding. The window for initiating arbitration is 10 days long, beginning 5 days after the allocation of IFQ and IPQ.[21] The starting point for initiating arbitration coincides with the start of the period during which harvesters may unilaterally commit IFQ to a processor. Once initiated, any holder of IFQ that has committed shares to the IPQ holder may join the arbitration proceeding. This ability to join is critical because the system limits each processor to a single arbitration proceeding. A last opportunity to make use of arbitration is available for harvesters that choose not to join a proceeding. After arbitration is completed, any holder of uncommitted IFQ can bind the IPQ holder to the terms of the proceeding by committing deliveries to the IPQ holder. Binding arbitration proceedings are conducted on a "last best offer" basis. Under this system, each party to the proceeding submits a "last best offer". The role of the arbiter is to select one offer from each of the two competing offers. Since several harvesters may be involved in a single proceeding, in binding arbitration involving two or more harvesters, each harvester may either submit an independent offer or join a collective offer (as part of an Fishery Collective Marketing Act cooperative). The processor submits a single offer. For each harvester offer, the arbiter's role is to select either that harvester's offer or the processor's offer (which applies to all harvesters).

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

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

proceeding. Agreements to use the length season approach to arbitration must be entered prior to the opening of a fishery.

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

The arbitration program is administered through a series of contracts among share holders and arbitration organizations, which are formed by share holders in the fisheries. These organizations are responsible for establishing the administrative aspects of the arbitration system, including selecting arbitrators, coordinating the dissemination of information concerning uncommitted shares among the participants, ensuring confidentiality of sensitive information, and collecting payments to disburse program costs. All share holders from both sectors are required to join an arbitration organization.[22] Separate organizations are required for harvest share holders and processing share holders. Holders of harvest shares that are affiliated with holders of processing shares are required to join an arbitration organization for purposes of facilitating share matching and administration. Due to antitrust concerns, these "affiliated harvesters" are not permitted to join an organization that includes unaffiliated harvesters and are not permitted to use a binding arbitration proceeding to settle terms of delivery.

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

Perhaps the most important factor for determining price and delivery terms is the arbitration standard. The specific standard is set out twice in the regulations, once for the formula arbitrator (who develops the pre-season, non-binding price formula) and once for contract arbitrators (who decide specific cases, binding participating IFQ and IPQ holders to terms of delivery). The specific standards applicable to the two different arbitrators follow (with substantive differences bolded)[23]:

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(2) **The contract with the Formula Arbitrator must specify that:**
- **(i) The Formula Arbitrator will conduct a single annual fleet-wide analysis of the markets for crab to establish a Non-Binding Price Formula under which a fraction of the weighted average first wholesale prices for crab products from the fishery may be used to set an ex-vessel price; and**
- (ii) The Non-Binding Price Formula shall:
  - (A) Be based on the historical distribution of first wholesale revenues between fishermen and processors in the aggregate based on arm's length first wholesale prices and ex-vessel prices, taking into consideration the size of the harvest in each year; and
  - (B) Establish a price that preserves the historical division of revenues in the fishery while considering the following:
    - (1) Current ex-vessel prices, including ex-vessel prices received for crab harvested under Class A, Class B, and CVC IFQ permits;
    - (2) Consumer and wholesale product prices for the processing sector and the participants in arbitrations (recognizing the impact of sales to affiliates on wholesale pricing);

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[22] Holders of catcher processor shares are exempt from the requirement of arbitration organization membership, since they are not subject to the processor landing requirements. In addition, C share holders are exempt from the requirement for the first three years of the program, when the processor landing requirements to not apply to C shares.

[23] Note that in the regulation, "Arbitration IFQ" refers to Class A IFQ held by harvesters that are not affiliated with a PQS holder. These "Arbitration IFQ" are the only IFQ for which delivery terms may be arbitrated.

(3) Innovations and developments of the harvesting and processing sectors and the participants in arbitrations (including new product forms);
(4) Efficiency and productivity of the harvesting and processing sectors (recognizing the limitations on efficiency and productivity arising out of the management program structure);
(5) Quality (including quality standards of markets served by the fishery and recognizing the influence of harvest strategies on the quality of landings);
(6) The interest of maintaining financially healthy and stable harvesting and processing sectors;
(7) Safety and expenditures for ensuring adequate safety;
(8) Timing and location of deliveries; and
(9) The cost of harvesting and processing less than the full IFQ or IPQ allocation (underages) to avoid penalties for overharvesting IFQ and a mechanism for reasonably accounting for deadloss.

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

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

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(4) Basis for the Arbitration Decision.

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

(i) The Contract Arbitrator's decision shall:

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

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

(1) Current ex-vessel prices, including ex-vessel prices received for crab harvested under Class A IFQ, Class B IFQ, and CVC IFQ permits;
(2) Consumer and wholesale product prices for the processing sector and the participants in the arbitration (recognizing the impact of sales to affiliates on wholesale pricing);
(3) Innovations and developments of the harvesting and processing sectors and the participants in the arbitration (including new product forms);
(4) Efficiency and productivity of the harvesting and processing sectors (recognizing the limitations on efficiency and productivity arising out of the management program structure);
(5) Quality (including quality standards of markets served by the fishery and recognizing the influence of harvest strategies on the quality of landings);
(6) The interest of maintaining financially healthy and stable harvesting and processing sectors;
(7) Safety and expenditures for ensuring adequate safety;
(8) Timing and location of deliveries; and
(9) The cost of harvesting and processing less than the full IFQ or IPQ allocation (underages) to avoid penalties for overharvesting IFQ and a mechanism for reasonably accounting for deadloss.

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

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

The differences between the standards applicable to the formula arbitrator's non-binding formula and the contract arbitrator's last best offer finding are not extensive and do not appear to substantively change the

general approach to be applied. The formula arbitrator is also required to identify relevant factors, including product form, delivery time, and location. The inclusion of this direction suggests that the arbitrator has the latitude to distinguish among product forms, delivery locations, and delivery times in the pricing formula, if appropriate. The Formula Arbitrator is also directed to consider the "highest arbitrated price" from the previous season. To ensure that the price is a generally applicable price, the price must apply to at least 7 percent of the IPQ in the fishery. The Contract Arbitrator is required to consider the non-binding price formula produced by the Formula Arbitrator in deciding a contract in a last best offer proceeding. These two provisions seem to create a feedback between the non-binding arbitration of the Formula Arbitrator and the binding arbitration of the Contract Arbitrator. The nature of that feedback is explored later in this paper.

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