

**North Pacific Fishery Management Council
Bering Sea and Aleutian Islands crab fisheries
Proposed program revisions**

At its April 2008 meeting, the Council adopted for analysis a set of alternatives to revise the crab rationalization program. Over the course of several subsequent meetings, the Council revised those alternatives to their current form. Although largely well-defined, the alternatives continue to contain some elements that could benefit from further definition prior to commencing a comprehensive analysis. This paper identifies those aspects of the alternatives that could require additional definition and suggests a possible process to provide that definition. The Council may choose to remove some of these elements without further analysis; however, any revision of the alternatives should be supported by a clearly articulated rationale.

Purpose and need statement:

The Council has identified the following draft purpose and need statement, which should be used to guide its selection of alternatives for analysis, as well as any selection of a preferred alternative:

The Bering Sea/Aleutian Islands (BSAI) Crab Rationalization Program is a comprehensive approach to rationalize an overcapitalized fishery in which serious safety and conservation concerns needed to be addressed. Conservation, safety, and efficiency goals have largely been met under the program.

Experience under the BSAI Crab Rationalization Program has made apparent the need to analyze alternatives to status quo to achieve: entry-level investment opportunities for active participants

This focused analysis on entry level investment opportunities for active participants will by definition include an analysis of the A/B split through potential share conversions.

Additional flexibility under the program is needed to address some inefficiencies created through the share matching system. For example, if a PQS holder opts not to apply for IPQ, the program should allow competitive markets to determine whether resources are harvested rather than redistribute the IPQ for share matching.

Processors and communities have received protections through processor quota shares under this program since the year of implementation. Higher TACs afford an opportunity to expand competition while maintaining protection for processor investments and recognizing community dependency under an IPQ threshold.

The Alternatives

This section presents the Council's alternatives in their current form and discusses aspects of those alternatives that present analytical and administrative challenges without further definition.

Alternative 1:

No action, status quo.

The status quo alternative is defined by the existing management program without change.

The second alternative would increase the C share QS pool by converting owner QS (and possibly PQS) to C share QS. The alternative specifically provides:

Alternative 2:

Increase investment opportunities for active participants by increasing the proportion of C share quota in all rationalized fisheries through a market-based reallocation.

Change the 3 percent C share allocation to:

- a) 6 percent
- b) 8 percent
- c) 10 percent

Suboption: Applicable only to b) and c) above (increase to 8 or 10 percent), redesignated C shares will be subject to:

- 1) the A share/B share split (including regionalization)
- 2) regionalization

Suboptions: Use the following mechanism to achieve the increase (i and iii can be combined):

- i) A pro-rata reduction in owner shares (distributed over a period not to exceed 5, 7, or 10 years) to create C shares available for active participants to purchase. Owner share holders who meet active participation requirements would be able to retain their converted C shares.
- ii) A percentage re-designation of owner shares to C shares at the time of each transfer. The purchasing owner is required to comply with the active participation definition or divest of the C shares.
- iii) A pro-rata reduction of PQS (distributed over a period not to exceed 5, 7, or 10 years) and conversion into C shares available for active participants to purchase through market transactions.

PQS/QS Conversion Rate

Each crab fishery may have a different conversion ratio. These ratios are based on rough estimates of the relative value of each PQS to CVO QS. This range could be expanded or modified based on further analysis.

- a) 1 PQS unit =- 0.5 CVO QS unit
 - b) 1 PQS unit =- 0.4 CVO QS unit
 - c) 1 PQS unit =- 0.3 CVO QS unit
 - d) 1 PQS unit =- 0.2 CVO QS unit
 - e) 1 PQS unit =- 0.1 CVO QS unit
 - f) 1 PQS unit =- 0.075 CVO QS unit
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Currently, the C share QS pool is approximately 3 percent of the total QS pool (see Table 1). Alternative 2 would modify QS allocations under the program by increasing the portion of that pool made up of crew (or C share) QS by redesignating owner QS or PQS as C share QS. Once shares are redesignated as C share QS, persons would be required to meet specific participation requirements to acquire and continue

to hold those C share QS.¹ The alternative clearly defines the change in the size of the C share pool from its current level of approximately 3 percent of the QS pool to 6 percent, 8 percent, or 10 percent of the QS pool. In addition, the alternative includes options that would apply the A share/B share split and regional landing requirements to the newly created C shares after the transition. Existing C shares would not be affected. Application of these landing requirements would be intended to protect processor and regional interests that might be jeopardized by changing the percentage of the quota issued as C shares, which currently are not subject to the IPQ or regional landing requirements.

Table 1. QS and PQS pools by fishery (2009).

Fishery	Crew QS				Owner QS			Total QS	PQS
	Catcher Processor	Catcher Vessel	Total	Percent of QS pool	Catcher Processor	Catcher Vessel	Total		
Bristol Bay red king crab	421,731	11,578,604	12,000,335	3.0	17,698,648	372,055,035	389,753,683	401,754,018	402,030,525
Bering Sea <i>C. opilio</i>	1,774,071	28,433,661	30,207,732	3.0	88,680,471	888,333,179	977,013,650	1,007,221,382	1,002,170,260
Eastern Aleutian Island golden king crab	0	299,583	299,583	3.0	469,136	9,231,020	9,700,156	9,999,739	10,122,984
Eastern Bering Sea <i>C. bairdi</i>	493,173	5,511,025	6,004,198	3.0	13,077,248	181,569,558	194,646,806	200,651,004	199,219,226
Pribilof red and blue king crab	0	899,993	899,993	3.0	151,568	28,997,449	29,149,017	30,049,010	30,000,002
Saint Matthew Island blue king crab	0	900,007	900,007	3.0	579,116	28,823,359	29,402,475	30,302,482	29,999,998
Western Aleutian Island golden king crab	510,107	689,951	1,200,058	3.0	17,935,173	20,864,827	38,800,000	40,000,058	40,021,116
Western Aleutian Island red king crab	245,011	1,555,034	1,800,045	3.0	22,713,377	35,488,037	58,201,414	60,001,459	60,031,674
Western Bering Sea <i>C. bairdi</i>	493,173	5,511,025	6,004,198	3.0	13,077,248	181,569,558	194,646,806	200,651,004	199,219,226

Source: NMFS Restricted Access Management (2009).

The alternative also defines three potential means of making the modification to the C share QS pool. Under the first, owner QS would be converted to C share QS on one or more specified times. **The motion provides for the transition to occur over 5 years, 7 years, or 10 years. Further definition of the transition would aid the analysis.** First, the motion should define not only the transition period, but the amount of shares that would be converted at any time. For example, the motion could provide that the transition occurs by converting equal amount of shares in each year of the transition period. Alternatively, the transition could occur in some subset of years (i.e., equal portions would be converted in the 1st, 3rd, and 5th years of a 5 year transition period). Limiting the number of years in which shares are converted could simplify administration of the transition. On the other hand, conversion of a large portion of the owner QS pool at one time may saturate the market, depressing the price of C share QS (including the price of the converted QS).

Under the second option, a portion of any owner QS that is transferred would be converted to C share QS at the time of transfer. A few aspects of this provision should be considered in advancing it for analysis. If the Council's intent is to apply the conversion to all owner QS equally, with the conversion only being effected at the time of transfer, it should be noted that the transition may take several years to complete. If the Council applies the conversion to any owner QS that are transferred, regardless of whether those shares had previously been transferred, the provision would disproportionately affect those persons who transfer their QS. In either case, any owner QS that is held by a corporation could be retained in that corporate name (despite underlying corporate ownership changes) to avoid redesignation. The Council could consider adoption of a rule to redesignate QS at the time of ownership changes, but any such measure would likely increase administrative complexity, as the specific QS to which the redesignation would need to be identified, and require participants to provide ownership data on a regular basis. **If the Council wishes to proceed with a provision for redesignation on transfer, it will need to further define the redesignation mechanics.**

¹ Under the current regulations, C share QS holders must be on board the vessel harvesting the IFQ, if the IFQ are allocated to an individual. If a person joins a cooperative, that requirement does not apply. NOAA Fisheries is in the process of implementing a Council action to modify C share QS active participation requirements. Once implemented, the new regulations will require all C share QS holders to meet a minimum participation requirement in the fisheries to receive annual allocations of IFQ (at least one landing every 3 years) and maintain C share QS holdings (at least one landing every 4 years).

Under the third option, a portion of the PQS pool would be converted to C share QS at one or more specified times, in a manner similar to the QS conversion under the first option. This alternative differs from the first, in that the pool of QS would be increased, while simultaneously decreasing the PQS pool. The rationale for converting PQS to C share QS is that C share IFQ are not currently subject to the IPQ landing requirements (i.e., the A share/B share split). Consequently, increasing the allocation of C share IFQ effectively reduces the percentage of the TAC that is subject to IPQ landing requirements. Conversion of PQS to C share QS would provide compensation to PQS holders for the loss of IPQ that arises from increasing the C share QS pool.

As written, the motion suggests that the increase in C share QS could come from either owner QS conversion or PQS conversion. The motion also includes an option that would mitigate impacts to owner QS holders and PQS holders by converting both share types to C share QS by combining the two options. The motion also suggests a range of PQS/owner QS conversion rates, which, when considered in conjunction with the change in the C share QS pool, would effectively define the level of compensation to PQS holders.

The motion is unclear concerning the affect of PQS conversion on the distribution of QS between the catcher vessel and catcher processor sectors. The Council should clarify the intended effect of that interaction. **If the Council wishes to proceed with a conversion to C shares QS that will not affect the distribution of shares between the sectors, it could include a provision stating that “For catcher processor QS, the creation of C share QS will be achieved strictly by the conversion of catcher processor owner QS to catcher processor C share QS.”** Assuming that the Council takes this approach, regional delivery requirements and A share/B share split would not apply, as those requirements do not apply to catcher processor shares. If the Council intends to change the distribution of shares between the sectors, it should more specifically identify the redistribution.

To understand the conversion, it is helpful to consider examples. Each of the following examples assumes that the Council intends to leave the catcher processor share of the fishery unchanged. Under the first option, the redesignation of owner QS as C share QS would be undertaken without compensation to PQS holders. To make a three percent increase in C share QS (to 6 percent total):

- 1) 3 percent of the total catcher processor QS pool would be converted from catcher processor owner QS to catcher processor crew QS,
- 2) 3 percent of the total catcher vessel QS pool would be converted from catcher vessel owner QS to catcher processor crew QS, and
- 3) Reduction in the PQS pool proportional to the reduction in catcher vessel owner QS (see Table 2).²

Table 2. Conversion of 3 percent of the owner QS pool to C share QS and proportional reduction in PQS (without compensation to PQS holders).

² **This modification is not necessary to achieve the IPQ allocation outcome sought, but is included to illustrate the change in IPQ allocations that would arise under this alternative.**

simple 3 percent increase in C shares from owner QS

Fishery	Catcher processor QS conversion			Catcher vessel QS conversion			PQS	
	Starting crew QS	Starting owner QS	Owner QS converted to crew QS	Starting crew QS	Starting owner QS	Owner QS converted to crew QS	Current pool	Reduction proportional to catcher vessel owner QS reduction
Bristol Bay red king crab	421,731	17,698,648	543,611	11,578,604	372,055,035	11,509,009	402,030,525	12,436,260
Bering Sea <i>C. opilio</i>	1,774,071	88,680,471	2,713,636	28,433,661	888,333,179	27,503,005	1,002,170,260	31,027,428
Eastern Aleutian Island golden king crab	0	469,136	14,074	299,583	9,231,020	285,918	10,122,984	313,545
Eastern Bering Sea <i>C. bairdi</i>	493,173	13,077,248	407,113	5,511,025	181,569,558	5,612,417	199,219,226	6,157,979
Pribilof red and blue king crab	0	151,568	4,547	899,993	28,997,449	896,923	30,000,002	927,933
Saint Matthew Island blue king crab	0	579,116	17,373	900,007	28,823,359	891,701	29,999,998	928,102
Western Aleutian Island golden king crab	510,107	17,935,173	553,358	689,951	20,864,827	646,643	40,021,116	1,240,336
Western Aleutian Island red king crab	245,011	22,713,377	688,752	1,555,034	35,488,037	1,111,292	60,031,674	1,879,865
Western Bering Sea <i>C. bairdi</i>	493,173	13,077,248	407,113	5,511,025	181,569,558	5,612,417	199,219,226	6,157,979

Note: Increases catcher processor C share QS and catcher vessel owner QS by 3 percent their respective pools and decreases PQS by 3 percent of the existing PQS pool. Changes would be proportionally distributed among share holders.
Source: NMFS RAM data

The conversion to C shares becomes slightly more complicated, if the Council includes PQS conversion to compensate processors for the loss of annual IPQ allocations (which do not currently apply to C share IFQ).³ As currently set out in the motion, various rates of conversion between PQS and catcher vessel owner QS would define the compensation. This method of defining compensation introduces a few complicating factors. First, the conversion rates would affect each fishery slightly differently, as the relative sizes of the catcher vessel QS, catcher processor QS, and PQS pools vary across fisheries. Second, the conversion defines a transition from PQS to owner QS (not C share QS). It is assumed that all of that owner QS would be converted to C share QS. If the Council intends to convert PQS to owner QS and then convert only a portion of that owner QS to C share QS, it should clarify its intent. Third, this conversion would increase the QS pool, which would require further adjustments to the other segments of the QS pool (i.e., catcher processor owner and crew QS and catcher vessel crew QS) to maintain current interests. In other words, all QS holders share holdings would need to be increased proportionally (and reissued) to maintain their existing share of the pool.

If the Council wishes to avoid the need to specifically determine PQS to catcher vessel QS conversion rates for the various fisheries and the additional administrative complications that arise under the existing options, it could simplify the motion by specifically defining the percentage of catcher vessel C share QS that would be created from each share type. For example, the motion could be modified to provide that:

The new catcher vessel C share QS would be created by converting catcher vessel owner QS and PQS to catcher vessel C share QS with:

- a) 100 percent created from catcher vessel owner QS and 0 percent created from PQS;
- b) 75 percent created from catcher vessel owner QS and 25 percent created from PQS;
- c) 50 percent created from catcher vessel owner QS and 50 percent created from PQS;
- d) 25 percent created from catcher vessel owner QS and 75 percent created from PQS; or
- e) 0 percent created from catcher vessel owner QS and 100 percent created from PQS.

³ It should be noted that the need to compensate processors only arises, if the Council chooses not to apply the A share/B share split to the converted IFQ allocations from the newly created C share QS. If the Council chooses the option to apply that split (and the accompanying landing requirements) to C shares, conversion of PQS would no longer be justified.

(While this example covers the full range identified by the current motion, the Council could revise the provision.)

Under this approach, catcher processor QS conversion would take place independent of the distribution of the conversion between catcher vessel owner QS and PQS. Catcher vessel owner QS would be decreased in the amount needed to create the desired crew QS pool. PQS would be decreased proportionally to the decrease in catcher vessel owner QS. The increase in catcher vessel crew QS would then be divided between catcher vessel owner QS holders and PQS holders, at the prescribe percentage, and then distributed within each sector in proportion to share holdings. This method allows the Council to transparently distribute the compensation between catcher vessel owner QS and PQS holders and leaves intact the interests of remaining share holders in the fisheries (i.e., catcher processor QS holders and catcher vessel crew QS holders). The Council need only specify the percentage of the QS pool that it wishes to be crew QS and the division of the distribution of the new catcher vessel crew QS between catcher vessel owner QS and PQS.

This slightly different approach allows for a more transparent estimation of the distribution of shares by: first, isolating the conversion of catcher processor QS from effects of the PQS conversion; and second, simplifying the conversion of catcher vessel owner QS and PQS to show the effects of those conversions on the different sectors. Two examples of this conversion showing only the effects on catcher vessel QS and PQS pools are shown (see Table 3 and Table 4). In both cases, the effects on the pool would be distributed within each sector (i.e., the catcher vessel owner QS holders and PQS holders) in proportion to share holdings.

Table 3. Conversion of owner QS and PQS to increase C share QS to 6 percent of the QS pool (with 75 percent from catcher vessel owner QS and 25 percent from PQS).

3 percent increase in C shares - 75 percent catcher vessel owner QS and 25 percent PQS

	Current CV crew QS pool	Current CV owner QS pool	CV owner QS removed	CV crew QS issued to CV owner QS holders	Remaining owner CV QS	Current PQS pool	PQS removed	CV crew QS issued to PQS holders	Remaining PQS
Bristol Bay red king crab	11,578,604	372,055,035	11,509,009	8,631,757	360,546,026	402,030,525	12,436,260	2,877,252	389,594,265
Bering Sea <i>C. opilio</i>	28,433,661	888,333,179	27,503,005	20,627,254	860,830,174	1,002,170,260	31,027,428	6,875,751	971,142,832
Eastern Aleutian Island golden king crab	299,583	9,231,020	285,918	214,439	8,945,102	10,122,984	313,545	71,480	9,809,439
Eastern Bering Sea <i>C. bairdi</i>	5,511,025	181,569,558	5,612,417	4,209,313	175,957,141	199,219,226	6,157,979	1,403,104	193,061,247
Pribilof red and blue king crab	899,993	28,997,449	896,923	672,692	28,100,526	30,000,002	927,933	224,231	29,072,069
Saint Matthew Island blue king crab	900,007	28,823,359	891,701	668,776	27,931,658	29,999,998	928,102	222,925	29,071,896
Western Aleutian Island golden king crab	689,951	20,864,827	646,643	484,983	20,218,184	40,021,116	1,240,336	161,661	38,780,780
Western Aleutian Island red king crab	1,555,034	35,488,037	1,111,292	833,469	34,376,745	60,031,674	1,879,865	277,823	58,151,809
Western Bering Sea <i>C. bairdi</i>	5,511,025	181,569,558	5,612,417	4,209,313	175,957,141	199,219,226	6,157,979	1,403,104	193,061,247

Source: NMFS RAM data

Table 4. Conversion of owner QS and PQS to increase C share QS to 8 percent of the QS pool (with 50 percent from catcher vessel owner QS and 50 percent from PQS).

5 percent increase in C shares - 50 percent catcher vessel owner QS and 50 percent PQS

	Current CV crew QS pool	Current CV owner QS pool	CV owner QS removed	CV crew QS issued to CV owner QS holders	Remaining owner CV QS	Current PQS pool	PQS removed	CV crew QS issued to PQS holders	Remaining PQS
Bristol Bay red king crab	11,578,604	372,055,035	19,181,682	9,590,841	352,873,353	402,030,525	20,727,099	9,590,841	381,303,426
Bering Sea <i>C. opilio</i>	28,433,661	888,333,179	45,838,342	22,919,171	842,494,837	1,002,170,260	51,712,380	22,919,171	950,457,880
Eastern Aleutian Island golden king crab	299,583	9,231,020	476,530	238,265	8,754,490	10,122,984	522,576	238,265	9,600,408
Eastern Bering Sea <i>C. bairdi</i>	5,511,025	181,569,558	9,354,029	4,677,015	172,215,529	199,219,226	10,263,298	4,677,015	188,955,928
Pribilof red and blue king crab	899,993	28,997,449	1,494,872	747,436	27,502,577	30,000,002	1,546,556	747,436	28,453,446
Saint Matthew Island blue king crab	900,007	28,823,359	1,486,168	743,084	27,337,191	29,999,998	1,546,837	743,084	28,453,161
Western Aleutian Island golden king crab	689,951	20,864,827	1,077,739	538,869	19,787,088	40,021,116	2,067,226	538,869	37,953,890
Western Aleutian Island red king crab	1,555,034	35,488,037	1,852,154	926,077	33,635,883	60,031,674	3,133,109	926,077	56,898,565
Western Bering Sea <i>C. bairdi</i>	5,511,025	181,569,558	9,354,029	4,677,015	172,215,529	199,219,226	10,263,298	4,677,015	188,955,928

Source: NMFS RAM data

An additional concern that should be addressed under these alternatives is whether share caps should be adjusted. Since share caps in regulations are currently a specific number of shares, a change in the number of shares in the QS pool will affect the percentage of the pool represented by the cap. For example, in a

fishery with a 10 percent share cap, if 5 percent of the owner shares are converted to C shares and the share cap is not adjusted the cap would effectively rise to approximately 10.5 percent. **The Council should indicate whether it intends to maintain the current share caps, as a percentage of the pool.**

The third alternative is intended to create a private finance program to increase investment opportunity in the fisheries for active participants in the fishery.

Alternative 3:

Increase investment opportunities for active participants by establishing a preferential purchase and finance program for all share types (but no share conversion).

- 1) The Crab Advisory Committee is directed to consider the potential for a private contractual proposal to increase investment opportunities for active participants. A response and recommendations will be made to the Council.
- 2) The proposed program should address the following:
 - a. Establishing goals for an aggregate amount of QS owner shares to be held by active participants at 5, 7, and 10 years.
 - b. Identify and address any potential impacts on industry efficiency or investment and on communities.
 - c. Identify any regulatory issues that may need to be addressed, such as use and ownership caps, and provide recommendations to address these issues.

When considered by the Crab Advisory Committee, at its January 2009 meeting, the committee failed to advance any specific proposal under this alternative, as members (including those supporting the program) suggested that such a loan may not have been feasible at that time, as loan terms were not favorable. The committee also suggested that individual share holders may be positioned to assist their crews with financing, avoiding the loss of autonomy and administrative costs that might be associated with a broader lending program. On receiving the committee's report at its February 2009 meeting, the Council took no action to remove or revise this alternative.

Should the Council wish to advance this alternative, it would need additional definition. First, the Council would need to determine whether it might have any role in this loan program. The Council's authority for the development of loan programs is defined by the Magnuson Stevens Act (MSA). Under the MSA, the Council has authority to submit a program that reserves up to 25 percent of the fees collected under cost recovery to develop a loan program for small vessel fishermen and first-time purchasers of shares. The Council has included such a loan program in the crab program. Given the Council's previous action to establish a federal loan program and the private nature of the loan program proposed by this alternative, the Council's authority for and role in the development of the loan program proposed under this alternative is not clear.⁴

The fourth alternative proposes a regional fishery association (RFA) for the benefit of crew. The alternative specifically provides:

Alternative 4:

C share Regional Fishery Association

⁴ Although the Council may have no role in development of this program, if successful, the program could be relevant to future Council decisionmaking in the fishery.

The committee is tasked to review proposals to form a regional fishery association (RFA) to hold and distribute C shares on behalf of RFA members.

If RFAs are established, the aggregate total of all C shares shall be:

- a) 6 percent
 - b) 8 percent
 - c) 10 percent.
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The MSA defines an RFA as an association formed for the mutual benefit of its members to meet social and economic needs in a region or subregion comprised of persons engaging in the harvest or processing fish or persons owning or operating businesses substantially dependent on a fishery. The MSA provides that RFAs are required to meet criteria developed by the Council, consist of QS holders, and develop and submit a regional fishery association plan for Council and Secretarial approval based on criteria developed by the Council. To this end, the MSA requires that participation criteria be developed by the Council. These criteria must consider traditional fishing or processing practices in, and dependence on, the fishery, the cultural and social framework of the fishery, economic barriers to access, the existence and severity of impacts of the rationalization program on harvesters, captains, crew, processors, and dependent businesses, the administrative and fiduciary soundness of the association, and the expected effectiveness, operational transparency, and equitability of the fishery association plan. If the Council wishes to proceed with this alternative, it will need to undertake the process of developing participation criteria for RFAs (including criteria for RFA plans). The Council could pursue development of these criteria either directly over the course of future Council meetings or through its advisory committee. In absence of further development, staff cannot advance the analysis of this alternative.

In addition to the specific alternatives, the Council motion includes two components for consideration. The first component would modify allocations of IFQ and IPQ in the event that a PQS holder fails to apply for IPQ. The component specifically provides:

Component 1 (IPQ accounting when PQS holder opts not to apply)

If a PQS holder opts not to apply for IPQ in a year, distribute harvesting quota that would have been the matching CVO IFQ A shares as open delivery B shares.

Under the current regulations, the IPQ pool is allocated to PQS holders who apply for IPQ in proportion to their PQS holdings. If a PQS holder elects (or fails) to apply for IPQ, the IPQ that would have been allocated to that PQS holder allocate to PQS holders who apply for IPQ, in proportion to their PQS holdings. Since the quantity of IPQ issued are not affected by the failure of a PQS holder to apply for an allocation, the allocation of IFQ are unaffected (maintaining the 90/10 A share/B share split for catcher vessel owner IFQ).

This component would modify the annual allocations when a PQS holder fails to apply for IPQ by withholding those IPQ and issuing a larger share of the catcher vessel owner IFQ as B shares, which are not subject to IPQ or regional landing requirements. As written, the component would eliminate both the IPQ and regional landing requirements from the portion of the IFQ allocation reclassified as B shares. No clarification of this component is necessary to proceed with its analysis.

The second component would modify the current IPQ thresholds that limit the amount of IPQ allocated in the Bering Sea *C. opilio* fishery and Bristol Bay red king crab fisheries in any year. The component specifically provides:

Component 2 (Establish IPQ thresholds)

The amount of IPQ (individual processing quota) issued in any year shall not exceed,

Option a) in the *C. opilio* fishery,

- i) 26 million pounds.
- ii) 45 million pounds.
- iii) 64 million pounds.
- iv) 80 million pounds.

Option b) in the Bristol Bay red king crab fishery,

- i) 12 million pounds.
- ii) 15 million pounds.
- iii) 18 million pounds (status quo).

Suboption: Any IFQ above the threshold will be auctioned by NMFS to the highest bidder.

Currently, regulations limit the annual allocations of IPQ to 157.5 million pounds in the Bering Sea *C. opilio* fishery and 18 million pounds in the Bristol Bay red king crab fishery. These allocations are reached when the overall TAC (including CDQ allocations) reaches approximately 226.8 million pounds and 21.6 million pounds, respectively. The options proposed under this component would reduce the threshold in the Bering Sea *C. opilio* fishery to between approximately one-half and one-sixth its current level. Options modifying the threshold in the Bristol Bay red king crab fishery would reduce the threshold in that fishery to between two-thirds and five-sixths of its current level. No clarification of the options is necessary to proceed with their analysis.

The component includes an option that would provide for the auction of any IFQ above the threshold. The Council should clarify the exact IFQ that would be subject to the auction provision. For example, the auctioned IFQ could be limited to:

- 1) owner IFQ (excluding crew IFQ),
- 2) catcher vessel owner IFQ (excluding crew IFQ and catcher processor IFQ), or
- 3) catcher vessel owner IFQ that would have been issued as A share IFQ in the absence of the threshold (excluding crew IFQ, catcher processor IFQ, and ten percent of the catcher vessel owner IFQ (that would be issued as B share IFQ in the absence of the threshold).

To provide for the analysis of this option, the IFQ subject to auction will need to be clearly identified.

Several aspects of this option will need further definition to proceed with the analysis. A variety of auction mechanisms could be used considered. For example, auctions can be open or sealed bid. Auctions can be ascending, with bids increasing, or descending, with the auctioneer announcing prices in descending order with the winner being the first to bid. The merits of these auctions differ depending on the nature of the item being auctioned and the bidders. If the Council wishes to proceed with this action,

staff could prepare a discussion paper describing a variety of auction types that could be considered and their relative merits.

In addition to the selecting an auction type, the Council will also need to consider the nature of the auction being proposed. TACs in these fisheries are typically announced within a week or two of the fishery opening. This timing may complicate administration of an auction after the TAC announcement. A few approaches to an auction could be explored. First, it is possible that auctions could be conducted prior to the TAC announcements with all purchases contingent on the TAC. In other words, bidders could place bids on amounts of IFQ at specific prices. Bids could be ranked, with IFQ awards contingent on the TAC level. IFQ would be awarded only to bidders that win on IFQ that are below the TAC. This method of auctioning could be problematic, as bids could be affected by the TAC size. While participants are likely to have some perspective on the TAC prior to its announcement, the exact TAC size would not be known until its announcement.

An alternative would be to schedule the auctions after the TAC announcement. Interested parties could be required to register to participate in the auction prior to the TAC announcement to simplify administration. The auction could be conducted within a day or two of the TAC announcement (possibly online). Auction winners could be announced immediately and IFQ issued. This approach might be preferable, as bidders would know the TAC at the time of bidding. A shortcoming of this method is that the auction would be conducted only a few days before fishing begins in the Bristol Bay red king crab fishery. If the amount of IFQ auctioned is large, winners may have little time to gear up for the upcoming season. Further discussion of the potential interaction of auction mechanisms and the timing of the auction could be provided in a discussion paper of this issue, should the Council elect to pursue this option.

In addition to the structure of the auction, several other aspects of the auction system would need to be considered. Payment mechanisms would need to be developed, as well as other administrative aspects of the auction and IFQ distribution. Further development of these issues could be provided in a subsequent discussion paper, if the Council elects to proceed with this option. Given the complexity of the development of an auction for IFQ, the Council should anticipate that fully developing this option will require discussion at a series of meeting. In addition, implementation by NOAA Fisheries would likely require an extended period.