

## **FINAL**

### **Regulatory Impact Review for Proposed Amendment 47 to the Fishery Management Plan for Bering Sea/Aleutian Islands King and Tanner Crabs**

# **EXEMPT CUSTOM PROCESSING FROM THE *Chionoecetes bairdi* TANNER CRAB INDIVIDUAL PROCESSING QUOTA USE CAPS**

**October 2016**

For further information contact: Jon McCracken  
North Pacific Fishery Management Council  
605 W 4<sup>th</sup> Ave, Suite 306, Anchorage, AK 99501  
(907) 271-2809

Keeley Kent  
National Marine Fisheries Service  
P.O. Box 21668  
Juneau, AK 99802-1668  
(907) 586-7228

**Abstract:** This Regulatory Impact Review analyzes a proposal to add Bering Sea *C. bairdi* Tanner crab to the list of species targeted by crab fisheries in the Fishery Management Plan for Bering Sea/Aleutian Islands King and Tanner Crabs for which custom processing arrangements do not accrue to a facility's individual processing quota (IPQ) use. The action would modify Federal regulations to permit custom processing arrangements for *C. bairdi* Tanner crab deliveries that are not counted against the plant operator's IPQ use caps. Due to the consolidation of processors, the few processors available in the Bering Sea region are constrained by IPQ use caps, resulting in more *C. bairdi* Tanner crab being available for harvest than can be legally processed. This could result in a substantial amount of *C. bairdi* crab remaining unharvested. Harvesters, shoreside processors, and communities that participate in these fisheries have limited alternatives to mitigate the resulting negative economic effects. The custom processing exemption would enable fishermen to harvest and deliver *C. bairdi* Tanner crab to any processor able to process that crab.

## List of Acronyms and Abbreviations

4	Feet
ADF&G	Alaska Department of Fish and Game
AKFIN	Alaska Fisheries Information Network
APICDA	Aleutian Pribilof Island Community Development Association
BSAI	Bering Sea and Aleutian Islands
CDQ	Community development quota
CFR	Code of Federal Regulations
COAR	Commercial Operators Annual Report
Council	North Pacific Fishery Management Council
CR Program	Crab Rationalization Program
CVC	Catcher vessel crew
CVO	Catcher vessel owner
E.O.	Executive Order
EBT	Eastern Bering Sea Tanner crab
EEZ	Exclusive Economic Zone
EIS	Environmental Impact Statement
FMP	Fishery Management Plan for Bering Sea/Aleutian Islands King and Tanner Crabs
FR	<i>Federal Register</i>
IFQ	Individual fishing quota
IPQ	Individual processing quota
lb(s)	Pound(s)

LLP	License limitation program
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation and Management Act
NMFS	National Marine Fisheries Service
NPFMC	North Pacific Fishery Management Council
PQS	Processor quota share
QS	Quota share
RAM	Restricted Access Management
RCR	Registered crab receiver
RIR	Regulatory Impact Review
ROFR	Right of first refusal
Secretary	Secretary of Commerce
TAC	Total allowable catch
U.S.	United States
W	West
WBT	Western Bering Sea Tanner crab

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## Executive Summary

This document analyzes a proposed action that would add Bering Sea (BS) *C. bairdi* Tanner crab to the list of crab fisheries in the Fishery Management Plan for Bering Sea/Aleutian Islands King and Tanner Crabs (FMP) and revise Federal regulations to permit custom processing arrangements for *C. bairdi* crab deliveries that are not counted against the plant operator's IPQ use caps. There are currently only three companies (the Maruha-Nichiro Corporation, Trident Seafoods, and UniSea Seafoods) that operate BS processing facilities that are available for *bairdi* crab deliveries, and due to the use cap limitation, each may only process 30 percent of the IPQ for *bairdi*; leaving 10 percent of the *bairdi* crab Class A IFQ that may not be delivered to and processed by these companies.

### **Purpose and Need**

*C. bairdi* Tanner crab processing facilities have consolidated to the extent that the IPQ use caps are constraining the ability of the remaining processing sector to process the entire allocation of Tanner crab under the caps. This prevents the portion of the *C. bairdi* Tanner crab allocation in excess of the caps (i.e., 10 percent) from being harvested, because insufficient processing capacity, relative to the use caps, is available. In the 2015/2016 Tanner crab season, the gross ex-vessel value for 10 percent of the Class A individual fishing quota (IFQ) for eastern *C. bairdi* Tanner (EBT) and Western *C. bairdi* Tanner (WBT) crab was estimated at \$3.4 million. Without relief from the restriction, harvesters, processors, and communities could lose the potential benefits from the foregone portion of this crab catch. Management objectives would include providing relief from the processing use caps, so that the full *C. bairdi* crab allocation can be harvested, processed, and delivered to consumer markets, worldwide.

### **Alternatives**

**Alternative 1.** No Action. Existing FMP provisions and regulations would continue to apply to EBT and WBT crab that is custom processed under the IPQ use caps.

**Alternative 2 (Council Preferred Alternative).** Add BS *C. bairdi* Tanner crab to the list of crab fisheries in FMP Chapter 11, section *Clarifications and Expressions of Council Intent*, and § 680.42(b)(7) for which custom processing arrangements do not count against the IPQ use cap.

**Suboption 1:** This custom processing exemption would expire at the end of the [3<sup>rd</sup>, 4<sup>th</sup>, or 5<sup>th</sup>] crab fishing year after the effective date of the regulation. *The new suboption was added to provide the North Pacific Fishery Management Council (Council) the ability to temporarily exempt C. bairdi crab IPQ use caps for custom processing, while also allowing time for a holistic examination of the Bering Sea and Aleutian Island (BSAI) crab processing consolidation to determine the long range impacts of the proposed exemption (see Section 2.9.2.1).*

## Regulatory Impact Review

### **Alternative 1, No Action**

Under Alternative 1, custom processing arrangements for *C. bairdi* Tanner crab landings would continue to count against the 30 percent IPQ use cap. IPQ use caps limit the amount of the crab harvest a given processor is permitted to process in a season. The Council's original intent for the caps was to prevent consolidation of processing activity.

## Harvesters

Deliveries to alternative processing facilities could impose a substantial burden and cost on Class A IFQ holders, even though Class A IFQ holders are not responsible for ensuring compliance with IPQ use caps. Transporting EBT or WBT crab to processors outside of the fishing area, such as to Kodiak or Adak, would result in longer trips that would impose increased fuel and operating costs and loss of fishing time. It would also increase the potential for deadloss (waste) of crab, which becomes increasingly likely the longer that the crab are held in storage tanks and transported, and which is inconsistent with the Council's conservation objectives for this fishery.

Based on current and past experience with deliveries of *C. bairdi* Tanner crab and other crab species, stakeholders estimate deadloss to be approximately 5 times greater for catches made in the Bering Sea and delivered to Kodiak, than it would be for these same catches delivered to processors in the Bering Sea. This is based on the higher deadloss rates for delivering Bristol Bay red king crab to Kodiak (approximately 3 times greater) and then taking into account the greater vulnerability of *C. bairdi* crab to extended transit (J. Sullivan, Intercooperative Exchange, personal communication on May 10, 2016).

Stakeholders estimate an additional 6 to 10 days (round trip) transit time associated with delivering to Kodiak; this includes an added daily fuel expense of approximately \$2,750 (1,100 gallons per day at \$2.50 per gallon), and a daily insurance expense of approximately \$350 (\$50 per crewmember per day, times seven crewmembers).

As previously noted, the 2015/2016 Tanner crab season gross ex-vessel revenue for 10 percent of the Class A IFQ for EBT and WBT crab was estimated at \$3.4 million, using the 2014 ex-vessel value. Foregone net revenues to the harvesters would be less than this total amount, because costs associated with harvesting the IFQ would be avoided. Harvesters would have limited alternatives to mitigate this lost ex-vessel gross revenue.

## Processors

Under Alternative 1, EBT and WBT IPQ holders who are operating facilities where Tanner crab is currently processed would be expected to lose the potential profit from selling products from the 10 percent Class A IPQ Tanner crab catch. IPQ holders are subject to the use cap and are the parties responsible for ensuring processing operations do not cause IPQ use caps to be exceeded, in accordance with applicable regulations. The anticipated lost gross first wholesale revenue from the 2015/2016 forgone harvest is estimated to be approximately \$4.95 million, using the 2014 first wholesale value and accounting for the ex-vessel value paid to harvesters. Forgone net revenues to the processors would be less than this total amount, because variable costs associated with crab processing would be avoided.

New processors could receive the Class A IFQ that would be in excess of the existing IPQ caps for the current processors. Entry of new processors capable of processing BS Tanner crab is possible, but barriers to entry exist. Both prior to and since implementation of the Crab Rationalization Program (CR Program), entry to the processing sector to operate only as a crab processor is very challenging.

There are two potential processing facilities not affiliated with the Maruha-Nichiro Corporation, Trident Seafoods, and UniSea Seafoods that take other BSAI crab, but do not already take Tanner crab. These facilities are assumed to be the facilities that could most easily transition into taking Tanner crab. However, both processors are located some distance from the EBT and WBT grounds, in

Kodiak and Adak. The distance of these facilities from the fishing grounds could have several adverse effects (e.g., deadloss, lost fishing time, increased variable operating costs).

One potential avenue for development of new crab processing capacity in the region may be to diversify, (e.g., also process finfish). Processors that process a range of species are able to keep plants operating for a greater period, spreading capital costs across larger scale production. Consequently, entry to the processing sector is affected by a processor's ability to attract deliveries from non-crab fisheries. These could include salmon, Pacific halibut, herring, and especially groundfish fisheries. However, with groundfish processing fully capitalized, and the limited size and seasonality of the other fisheries, diversified entry opportunities in the BSAI processing sector are limited.

### **Communities**

Under Alternative 1, no communities would gain additional economic activity and tax revenue from having the 10 percent of Class A IFQ EBT and WBT crab processed in their community. Under Alternative 1, processors could not further consolidate the processing of Tanner crab due to the use caps.

### **Alternative 2: (Preferred Alternative) Custom Processing Use Cap Exemption**

Under Alternative 2, custom processing arrangements for BS *C. bairdi* crab would not count against the IPQ use cap. Therefore, with a custom processing arrangement exemption, the processors currently processing EBT and WBT would be able to process all EBT and WBT Class A IPQ crab. This would impact harvesters, shoreside processors, and communities that participate in the Tanner crab fisheries.

### **Harvesters**

Under Alternative 2, the custom processing exemption to the IPQ use caps would provide a benefit to IFQ holders, crew, and vessel owners who would otherwise be unable to complete the harvest of EBT and WBT Class A IFQ. Alternative 2 would provide processing opportunities for all Class A IFQ, thus allowing for harvest of all of the EBT and WBT Class A IFQ. Under Alternative 2, all EBT and WBT IPQ crab received under custom processing arrangements at the processing facilities owned by the Maruha-Nichiro Corporation, Trident Seafoods, or UniSea Seafoods would not be counted against the IPQ use cap of the facility or the facility owners. This proposed action is expected to avoid the adverse economic impacts to harvesters created by the lack of adequate processing capacity that would otherwise result if the EBT and WBT crab fisheries could not be fully harvested.

Alternative 2 could allow the consolidation of all *C. bairdi* crab processing to a single company or at a single facility. Consolidation in the processing sector could have effects on the harvesters, such as reduced negotiation leverage in price setting agreements. Additionally, reduction in the number of facilities that take *C. bairdi* deliveries could lead to more competition between harvesters to obtain favorable delivery windows due to all harvesters delivering to fewer facilities.

### **Processors**

The extent to which the exemption of custom processing from use caps allows further consolidation in the processing sector depends on whether processors choose to enter custom processing arrangements. The choice to enter those arrangements will depend largely on the benefit to the shareholder arising

from using the shares at its own facility or custom processing at a plant unaffiliated with the shareholder. Additionally, the extent of further consolidation of processing activity likely depends on the business decisions that participants make with regard to their participation in other fisheries, such as in Bristol Bay red king crab and Bering Sea *C. opilio*.

Under Alternative 2, there is the potential for further consolidation among the processing facilities. With the proposed exemption, processing companies could further consolidate processing facilities for *bairdi* crab. Since EBT and WBT crab are not subject to regionalization or right-of-first-refusal, all of the EBT and WBT IPQ crab could be processed by one company at one facility.

The ability for further consolidation in the *bairdi* crab processing sector may increase processor production efficiency. Processors are unlikely to increase their use of custom processing under the proposed custom processing exemption, unless they can achieve gains through that consolidation. Further consolidation could also have distributional impacts within the sector.

The likelihood of further consolidation in the *bairdi* crab fishery processing sector under Alternative 2 is influenced by participants' processing activity in other crab fisheries. None of the current *C. bairdi* crab processors only process *bairdi* crab; all companies and facilities that are active in *C. bairdi* crab also process Bristol Bay red king crab and Bering Sea *C. opilio*. The Bristol Bay red king crab and Bering Sea *C. opilio* fisheries have also seen consolidation in the processing sector. Crab processing tends to be labor intensive, requiring relatively large crews. The cost of transporting, housing, and provisioning crews to run crab processing lines at a plant can be substantial. Processors that are active in other BSAI crab fisheries may be more likely to maintain their presence in the *bairdi* crab fisheries to help maintain throughput for the facility.

However, there are factors, other than processing efficiency, that could influence the extent to which processing would be consolidated under the exemption. Processors must be able to reach an agreement on price of custom processing. In some instances, competition within the sector could diminish the likelihood of consolidation, if a processor perceives a benefit from keeping its processing independent. Some processors may wish to attempt to develop new products, which might not be possible (or as advantageous) under custom processing arrangements.

## **Communities**

The effects of Alternative 2 on communities and community sustainability are anticipated to be relatively small, if minimal further consolidation occurs. Alternative 2 would result in the ability for all BS *C. bairdi* Class A IFQ crab to be delivered to facilities owned by the Maruha-Nichiro Corporation, Trident Seafoods, or UniSea Seafoods in BSAI communities. This would increase economic activity, income generated, and tax revenues in any community that is the recipient of increased processing activity in comparison to Alternative 1, no action. Therefore, the effects of Alternative 2 are anticipated to be beneficial to communities with processors with EBT and WBT IPQ. However, if facilities further consolidated under this action, companies may suspend crab processing at facilities in particular communities, causing adverse economic impacts. If the effects of Alternative 2 include further consolidation of the *bairdi* crab processing sector, this would cause negative impacts on communities that lose *bairdi* crab processing activity.

The effect of this action on communities will depend on the extent IPQ moves to, away from, or among communities. The potential for the action to result in the movement to or away from communities depends on many factors. This movement among communities would advantage the receiving community by increasing economic activity, but would be offset by an equivalent detriment



to the community losing the processing activity. Whether this additional activity is a net increase in total *bairdi* processing activity or associated with transference of *bairdi* processing from another community will determine if an economic benefit accrues to the fishery as a whole. Consolidation in communities would only take place to the extent that processing companies can achieve benefits through consolidation.

It is difficult to predict the likelihood of consolidation of *bairdi* crab processing away from any community in particular, because the existing facilities that process *bairdi* crab also participate in other BSAI crab fisheries, such as Bristol Bay red king and Bering Sea *C. opilio*, which are large volume fisheries. There are no processing facilities that solely engage in *C. bairdi* crab. Therefore, the effect of a company's decision to suspend *bairdi* crab processing at a facility depends in part on the extent of other, especially crab, processing going on in that facility.

### **Limited Duration Option**

One option the Council considered in conjunction with the proposed action was to limit the duration of the proposed action. Since the implementation of the CR Program in 2005, there has been consolidation among the crab processing companies, thus reducing the number of processing facilities that are unaffiliated with one another.

The known conditions in the *C. bairdi* Tanner crab fishery indicate that it is unlikely that a new unaffiliated processor will enter the fishery in the foreseeable future. Other sections of this analysis indicate that it is unlikely that delivering *bairdi* crab to other unaffiliated processors in Kodiak or Adak would be economically or operationally viable under current and anticipated conditions in the fishery (Section 2.9.1). The *bairdi* crab fishery has been historically fished concurrently with Bristol Bay red king crab and Bering Sea *opilio* fisheries. The delivery patterns and subsequently the processing of *bairdi* crab are likely related to the Bristol Bay red king crab and Bering Sea *opilio* fisheries. The analysts assume that processors with processor quota share (PQS) would continue to receive IPQ crab at the facilities they own, to maximize throughput and maintain the economic viability of processing operations (e.g., Trident Seafoods would receive crab in Akutan or Saint Paul, and UniSea would receive IPQ crab at its Unalaska/Dutch Harbor facilities). Therefore, it is reasonable to assume that *C. bairdi* crab would continue to be received and processed at multiple facilities in multiple communities.

Nevertheless, the Council could choose to limit the potential risk of additional consolidation by limiting the duration of a *bairdi* crab custom processing exemption, reviewing processing data prior to the expiration of the exemption, and deciding to maintain, modify, or remove a custom processing exemption at some predetermined future date. A limited duration option would address the immediate need of an exemption for custom processing of *bairdi* crab IPQ to prevent the risk of foregone quota, while also providing an opportunity for the Council to examine more holistically the impacts of an exemption on custom processing of *bairdi* crab IPQ use caps. Providing a temporary exemption of *bairdi* crab IPQ use caps for custom processing, while also allowing time for a holistic examination of the concerns surrounding BSAI crab processor consolidation, could be useful in determining the long range impacts of a *C. bairdi* crab IPQ use cap exemption for custom processing on the fisheries.

A limited duration exemption of 3 to 5 crab fishing years from the date of implementation is likely the minimum required to observe and assess processing patterns in the fishery, and prepare and develop an analysis and rulemaking necessary to revise, maintain, or remove a custom processing exemption. The analysis suggests that the timeframe be based on a "crab fishing" year, which straddles calendar years, so that regulations are effective throughout an entire "crab year's" fishery. For example, if a custom processing exemption were effective on February 1, 2017, and the Council

selected a 5-year duration, the regulation would remain in effect until July 1, 2022—the end of the 2021/2022 crab fishing year.

### **Management and Enforcement Considerations**

The effects of Alternative 2 on management and enforcement burdens could increase when compared to Alternative 1, no action. One aspect of exempting custom processing from the *C. bairdi* Tanner crab IPQ use caps is overseeing these limitations. Exemptions can pose several challenges to managers and enforcement personnel. Correctly applying limits on PQS and IPQ ownership and use requires full knowledge of all indirect holdings of those shares. Ownership of interests in the crab fisheries is often indirect, with many persons holding overlapping interests in a variety of different fisheries. These overlapping indirect interests create a complex web that must be fully assessed to ensure compliance with limits on shareholdings. Exempting custom processing from IPQ use caps requires tracking of production at the plant level and knowledge of indirect ownership of both shares and plants. That is, these interests in shareholdings and use, which includes ownership of the resulting processed products and processing plants, require a multifaceted approach to monitoring use caps in the processing sector. Monitoring of activities and shareholdings in a relatively static environment is extremely challenging; adding the dynamic dimension of periodic changes in owner identity, composition, and interests further confounds the task of maintaining currency in the monitoring of accounts; thus, requiring greater time, data collection and analysis, and staffing investments. Therefore, monitoring and enforcement costs associated with the custom processing exemption to IPQ use caps would likely increase management and enforcement complexity associated with the crab fisheries.

# 1 Introduction

This document analyzes the economic impacts of a proposed action resulting in the addition of Bering Sea *Chionoectes bairdi* Tanner crab to the list of crab fisheries in the Fishery Management Plan for Bering Sea/Aleutian Islands King and Tanner Crabs (FMP) and Federal regulations for which custom processing arrangements are not counted against the recipient facility's individual processing quota (IPQ) use caps.

This document is a Regulatory Impact Review Analysis (RIR). An RIR evaluates the economic benefits and costs of the action alternatives, as well as their distribution (the RIR). This RIR addresses the statutory requirements of the Magnuson Stevens Fishery Conservation and Management Act, and the Presidential Executive Order 12866. An RIR is a standard document produced by the North Pacific Fishery Management Council (Council) and National Marine Fisheries Service (NMFS) Alaska Region to provide the analytical background for decision-making.

In August 2005, fishing in the Bering Sea and Aleutian Islands (BSAI) crab fisheries began under the Crab Rationalization Program (CR Program). The CR Program allocates processor quota share (PQS) corresponding to a portion of the harvest quota share (QS) pool. Under the CR 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 to a processor holding unused IPQ.

When the Council recommended the CR Program, it expressed concern about the potential for excessive consolidation of quota share. This concern related to the underlying revocable privilege that allows the holder access to a specific percentage of the total allowable catch (TAC): QS and PQS, as well as the temporary consolidation of the resulting annual pounds of IFQ and IPQ. Excessive consolidation could have adverse effects on crab markets, price setting negotiations between harvesters and processors, employment opportunities for harvesting and processing crew, tax revenue to communities in which crab are landed, and other factors. To address this concern, the CR Program limits the amount of QS that a person can hold, the amount of IFQ that a person can use, and the amount of IFQ that can be used on board a vessel. Similarly, the CR Program limits the amount of PQS that a person can hold, the amount of IPQ that a person can use in one season, and the amount of IPQ that can be processed at a given facility in one season. These limits are commonly referred to as "use caps." The IPQ use caps are set at 30 percent, unless an entity was initially issued more than 30 percent of the PQS pool at the time of implementation, in which case the entity was "grandfathered" in above the caps.

At its December 2015 meeting, the Council determined that the unforeseen and recent exit of one processor from *C. bairdi* crab processing resulted in less than the minimum number of processors needed to process all of the Tanner crab IPQ without exceeding the IPQ use caps. As a result of this consolidation in processing operations, the processors currently operating in the Bering Sea region are constrained by IPQ use caps in the Bering Sea (BS) *C. bairdi* Tanner crab fisheries. The fisheries included are the eastern *C. bairdi* Tanner (EBT) and the Western *C. bairdi* Tanner (WBT). Based on these conditions, the Council voted to request that NMFS promulgate an emergency rule to temporarily allow a custom processing exemption to the IPQ use caps for the 2015/2016 crab fishing year in the EBT and WBT crab fisheries.

According to the petition for emergency action submitted to the Council by one of the crab harvesting cooperatives (Inter-Cooperative Exchange), harvesters had already "share matched" with processors holding available IPQ, as required by the regulations, and, thus, those harvesters reasonably concluded that they would be able to deliver their Class A *C. bairdi* crab IFQ under the

matched shares. It was only made clear to harvesters after this process was completed that Icicle Seafoods stopped its *bairdi* crab processing operations, and that the only BS processing facilities available for *bairdi* crab deliveries were constrained by the IPQ use cap. The result is that without the emergency action, it would have been likely that 10 percent of the *bairdi* crab Class A IFQ would have gone unharvested because no other processing facility was available. In recommending the emergency rule, the Council recognized that the processor consolidation that had occurred in the *bairdi* crab fisheries would likely continue to constrain processors operating in the *bairdi* crab fisheries after the emergency rule expires. To address this situation, the Council initiated an amendment to the FMP and Federal regulations to add BS *bairdi* crab to the list of species for which custom processing arrangements do not count against the IPQ use cap.

The Council scheduled initial review for its June 2016 meeting. During the April 2016 meeting, NMFS advised the Council that its current schedule of final action in October or December 2016 would not provide sufficient time for NMFS to complete proposed and final rulemaking to permanently exempt the *bairdi* crab fisheries from the IPQ use caps for the 2016/2017 Tanner crab fishing season before it ends on March 31, 2017. As a result, at the April 2016 meeting, the Council voted to schedule both initial review and final action on permanently exempting the *C. bairdi* Tanner crab fisheries from IPQ use caps for the June 2016 meeting. This schedule may provide an opportunity for, but does not guarantee that, NMFS can complete rulemaking in time to relieve the restriction for the 2016/2017 *bairdi* crab fishing season, if Amendment 47 is approved.

At its June 2016 meeting, the Council took final action to exempt custom processing arrangements for BS *bairdi* Tanner crab from processing quota use caps. The Council's preferred alternative is directly responsive to the situation in the *bairdi* crab fishery that occurred during the 2015/2016 crab season and that the Council determined is likely to persist for the foreseeable future. The Council's preferred alternative complements and follows the management approach the Council recommended and NMFS implemented under an emergency rule (81 FR 4206, January 26, 2016) that was effective for the 2015/2016 crab fishing year. The Council noted that the analysis details the limited processing capacity now available in the Tanner crab fishery, and crab fisheries in general. The foregone revenue to harvesters, processors, and communities that occurs is examined in the analysis of Alternative 1, no action.

The Council did not include suboption 1 in its preferred option. Nothing precludes the Council from modifying this preferred action at a future date, if it chooses to do so. The Council does not need a sunset date to initiate an action that would modify the CR Program. In addition, the Council determined that it is unlikely that the number of unique processors is likely to change in the near future. Finally, the suboption would look to the *bairdi* Tanner crab fisheries to provide a holistic review of the percentage at which IPQ use caps are set. The Council noted that such a change would be more appropriate as a separate and distinct action.

## 2 Regulatory Impact Review

The preparation of an RIR<sup>1</sup> is required under Presidential Executive Order (E.O.) 12866 (58 FR 51735: October 4, 1993). The requirements for all regulatory actions specified in E.O. 12866 are summarized in the following Statement from the E.O.:

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

E.O. 12866 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 Statutory Authority

Under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) (16 U.S.C. 1801, *et seq.*), the United States has exclusive fishery management authority over all marine fishery resources found within the exclusive economic zone (EEZ). The management of these marine resources is vested in the Secretary of Commerce (Secretary) and in the regional fishery management councils. In the Alaska Region, the Council has the responsibility for preparing fishery management plans and fishery management plan amendments for the marine fisheries that require conservation and management, and for submitting its recommendations to the Secretary. Upon approval by the Secretary, NMFS is charged with carrying out the Federal mandates of the Department of Commerce with regard to marine and anadromous fish.

The BS *C. bairdi* crab fishery in the EEZ off Alaska is managed under the FMP. The proposed action under consideration would amend this FMP and Federal regulations at 50 CFR 680. Actions taken to amend fishery management plans or implement other regulations governing these fisheries must meet the requirements of Federal law and regulations.

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<sup>1</sup> NMFS determined that the proposed action has no potential to effect individually or cumulatively on the human environment. The main effects of the action are socioeconomic, as analyzed in this RIR. As such, it is categorically excluded from the need to prepare an Environmental Assessment

## 2.2 Purpose and Need

*C. bairdi* Tanner crab processing facilities have consolidated to the extent that the IPQ use caps adopted under the CR Program are constraining on the ability of the remaining processing sector to process the entire allocation of *bairdi* crab without exceeding the use caps. This results in a portion of the *bairdi* crab allocation, in excess of the caps, being unharvested, because sufficient processing facilities relative to the use caps do not exist. In the 2015/2016 season, the gross ex-vessel revenue for this foregone Class A IFQ for EBT and WBT crab fisheries was estimated at \$3.4 million. Without relief from the restriction, harvesters, processors, and fishery dependent communities would lose the potential benefits from this portion of crab quota. Management objectives for the preferred alternative would include providing relief from the processing use caps, so that the full *bairdi* crab allocation could be harvested and processed.

## 2.3 Description of Alternatives

**Alternative 1.** No Action. Existing FMP provisions and regulations would remain and continue to apply EBT and WBT crab that is custom processed to the IPQ use caps.

**Alternative 2 (Preferred Alternative).** Add BS *C. bairdi* Tanner crab to the list of crab fisheries in FMP Chapter 11, section *Clarifications and Expressions of Council Intent*, and § 680.42(b)(7) for which custom processing arrangements do not count against the IPQ use cap.

**Suboption 1:** This custom processing exemption would expire at the end of the [3<sup>rd</sup>, 4<sup>th</sup>, or 5<sup>th</sup>] crab fishing year after the effective date of the regulation. *The new suboption was added to provide the Council the ability to temporarily exempt C. bairdi crab IPQ use caps for custom processing, while also allowing time for a holistic examination of the BSAI crab processing consolidation to determine the long range impacts of the proposed exemption (see Section 2.9.2.1).*

Alternative 2 would modify the FMP and Federal regulations by adding the BS *bairdi* crab fishery to the list of crab fisheries already exempt from IPQ caps for custom processing arrangements. Amendment 27 to the FMP and § 680.42(b)(7) already exempt IPQ crab that are processed under a custom processing arrangement from an entity's IPQ use cap for six crab fisheries. In these six crab fisheries, NMFS does not apply any IPQ used at a facility through a custom processing arrangement against the IPQ use cap of the owners of that facility, if there is no affiliation between the person whose IPQ crab is processed at that facility and the IPQ holders who own the facility. Affiliation is defined in § 680.2 and generally uses a 10 percent ownership or control benchmark. The existing 30 percent processor use cap for affiliated processors holding IPQ that is processed at their own facility would remain in effect.

Under this alternative, FMP Chapter 11, section *Clarifications and Expressions of Council Intent*, would be amended. Proposed FMP revisions (**in bold**) are as follows—

### 2. Ownership/use cap distinction

\* \* \*

#### Custom Processing Cap Exemption

Fisheries and Regions:

Custom processing will be exempt from use caps in the following regions and fisheries:

North region of the Bering Sea *C. opilio* fishery;

Western Aleutian Islands golden king crab fishery West designated or Undesignated shares processed in the West region;

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

If the Council selected the suboption under Alternative 2, including choosing the duration interval, the FMP would specify the date that this exemption would expire corresponding to the end of the applicable crab fishing year, after the regulation was implemented (e.g., June 30, 2019).

Under this alternative, Federal regulations would be amended to add EBT and WBT IPQ *bairdi* crab to the existing § 680.42(b)(7). Proposed regulatory revisions (**in bold**) are as follows—

§ 680.42(b)(7) Any IPQ crab that is received by an RCR will not be considered use of IPQ by an IPQ holder who has a 10 percent or greater direct or indirect ownership interest in the shoreside crab processor or stationary floating crab processor where that IPQ crab is processed under § 680.7(a)(7) or paragraph (a)(8) of this section if:

(i) That RCR is not affiliated with an IPQ holder who has a 10 percent or greater direct or indirect ownership interest in the shoreside crab processor or stationary floating crab processor where that IPQ crab is processed; and

(ii) The following conditions apply:

(A) The IPQ crab is:

(1) BSS IPQ crab with a North region designation;

(2) EAG IPQ crab;

**(3) EBT IPQ crab;**

**(4) PIK IPQ crab;**

**(5) SMB IPQ crab;**

**(6) WAG IPQ crab provided that IPQ crab is processed west of 174 degrees west longitude; or**

**(7) WAI IPQ crab; ~~and~~ or**

**(8) WBT IPQ crab.**

\* \* \* \* \*

If the Council selected the suboption, the regulations would specify the date that this exemption would expire corresponding to the end of the applicable crab fishing year after the regulation was implemented (e.g., June 30, 2019).

### **2.3.1 Other alternatives considered but not included**

At its December 2015 meeting, the Council considered alternative ways to provide relief from the IPQ use caps. The suite of potential approaches considered by the Council during the emergency rule review, have been reviewed by the analysts. The issues identified and reasons for not including these alternative approaches continue to be applicable to this purpose and need. Alternative approaches considered included having NMFS convert *bairdi* crab Class A IFQ into *bairdi* crab Class B IFQ. Class B IFQ does not accrue to the IPQ use caps when processed and can be delivered to any crab processor without the need for matching IPQ. While this alternative would have provided relief from the IPQ use caps for the 2015/2016 crab fishing year under the emergency rule, harvesters expressed concerns over the impacts this conversion would have on the price harvesters would be paid for delivering *bairdi* crab Class B IFQ. Class B IFQ is not subject to the CR Program's specific price negotiation provisions under the arbitration system, and therefore harvesters could potentially not

receive the same price for the crab harvested with Class B IFQ as they would have received for Class A IFQ. Adjusting the arbitration system regulations to accommodate Class B IFQ would increase the level of complexity in the proposed action and could require a significant amount of time to amend the regulations given the complex nature of the price negotiations and relationships developed under the current regulations. For these reasons, the Council did not include converting *bairdi* crab Class A IFQ into Class B IFQ for further consideration.

In addition, some members of the public have advocated that NMFS adjust the IPQ use caps in the *C. bairdi* crab fishery so that the caps are set at a high enough amount (e.g., 35 percent) so that all of the crab could be processed in existing facilities. As described later in the analysis, the IPQ use caps are explicitly tied to the PQS ownership caps; adjusting the use caps would require changes to or, at the very least, examination of how that affects the ownership caps. Because the Council directed this action to be an extension of the emergency rule approach and due to the need to address the problem in a manner that could be adequately analyzed as quickly as possible, analysts determined that this alternative was outside the scope of the action.

## 2.4 Methodology for analysis of impacts

This analysis is designed to meet the requirements of E.O. 12866 to evaluate the costs and benefits of the alternatives, and to include both quantifiable and qualitative considerations. Additionally, the analysis should provide information for decision makers “to 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.” The costs and benefits of this action with respect to these attributes are described in the sections that follow, comparing Alternative 1, no action, with Alternative 2, the action alternative.

This analysis was prepared using data primarily from—

- **eLandings**, the Interagency Electronic Reporting System for reporting commercial fishery landings in Alaska. eLandings is used to report landings and/or production data for groundfish, IFQ/Community Development Quota (CDQ) halibut and sablefish, IFQ/CDQ crab, and Community of Adak golden king crab. This system is a collaborative effort of the Alaska Department of Fish and Game (ADF&G), the International Pacific Halibut Commission, and NMFS.
- **NMFS official record for PQS holdings and, IPQ issuance, and IPQ use caps.** Reports from the NMFS official record are available on the NMFS Alaska Region web page at [https://alaskafisheries.noaa.gov/permits-licenses?field\\_fishery\\_pm\\_value=BSAI+Crab](https://alaskafisheries.noaa.gov/permits-licenses?field_fishery_pm_value=BSAI+Crab).
- **Commercial Operators Annual Reports (COARs)** that collect harvest and production information broken out by specific criteria such as gear type, area, delivery and product type, and pounds and value. COARs are annually filed by any person or company that received a Fisheries Business License from the Alaska Department of Revenue and an ADF&G Intent to Operate Permit, domestic motherships or catcher/processors with a current Federal permit issued from NMFS, and any first purchaser or processor of a fishery resource harvested in Alaska state waters or the surrounding Federal waters. COAR information is used to calculate gross ex-vessel values and first wholesale values.

Information from these sources represents the best available information for describing the *C. bairdi* crab fishery and participants.



## 2.5 Description of Fisheries

This section describes the relevant existing conditions in the BS *C. bairdi* Tanner crab fisheries. The section begins with a brief description of the management of the fisheries under the CR Program, with a focus on the IPQ use caps and custom processing, followed by description of the harvesting and processing sectors in the fishery, and information on communities that are currently involved in the crab fisheries that could be affected by this action.

### 2.5.1 Management of the Crab Fisheries

Nine BSAI crab fisheries are managed under the CR Program, which was implemented on March 2, 2005 (70 FR 10174). Under the CR Program, holders of License Limitation Program (LLP) licenses endorsed for a crab fishery were issued QS, which are long term shares, based on their qualifying harvest histories in that crab fishery. As part of the CR Program, NMFS issued four types of QS: catcher vessel owner (CVO) QS, assigned to holders of LLP licenses who delivered their catch onshore or to stationary floating crab processors; catcher/processor vessel owner QS, assigned to LLP holders that harvested and processed their catch at sea; captains and crew on board catcher/processor vessels, issued catcher/processor crew QS; and captains and crew on board catcher vessels, issued catcher vessel crew (CVC) QS. Each year, the holder of QS may receive an exclusive harvest privilege for a portion of the annual TAC, called IFQ. The size of each annual IFQ allocation is based on the amount of QS held in relation to the QS pool in the fishery. For example, a person holding 1 percent of the QS pool would receive IFQ to harvest 1 percent of the annual TAC in the fishery.

NMFS also issued PQS under the CR Program. PQS are long term shares issued to processors. Each year, PQS yields annual IPQ, which represent a privilege to receive a certain amount of crab harvested with Class A IFQ. Only a portion of the QS issued yields IFQ that is required to be delivered to a processor with IPQ. QS derived from deliveries made by catcher vessel owners (i.e., CVO QS) is subject to designation as either Class A IFQ or Class B IFQ. Ninety percent of the IFQ derived from CVO QS is designated as Class A IFQ, and the remaining 10 percent of the IFQ is designated as Class B IFQ. Class A IFQ must be matched and delivered to a processor with IPQ. Class B IFQ is not required to be delivered to a specific processor with IPQ. Each year there is a one-to-one match of the total pounds of Class A IFQ with the total pounds of IPQ issued in each crab fishery.

By necessity, the CR Program is very complex and contains many novel provisions to address issues unique to the BSAI crab fisheries. For this proposed action, the important unique provisions are PQS/IPQ, custom processing arrangements, and the arbitration system (including “share matching”). These provisions were implemented because of the costs and logistical issues associated with processing crab in remote communities in the BS region, and the need to maintain regional processing capacity balanced with economic viability for harvesters and processors. These novel provisions and the challenges with harvesting and processing crab in the BSAI that they were designed to address, are detailed in the Environmental Impact Statement (EIS, NMFS 2004) prepared for the CR Program. The Council and NMFS have also modified these provisions over time through various FMP amendments. Additional information on the CR Program and links to the EIS and all subsequent analyses prepared for the CR Program are available on the NMFS Alaska Region Web site.<sup>2</sup>

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<sup>2</sup> <https://alaskafisheries.noaa.gov/fisheries/bsai-crab-rationalization>

## 2.5.2 General Background on IPQ Use Caps and Custom Processing

When the Council recommended the CR Program, it expressed concern about the potential for excessive consolidation of PQS, and the resulting annual IPQ. In the RIR developed for the CR Program, it was noted that, contrary to the intent of the PQS provisions, custom processing could create an opportunity for persons to buy crab processing rights without having a plant to actually process crab (i.e., non-participatory ownership of PQS). These processing share owners could then “lease” the rights to process crab to processors with the physical capacity through a custom processing arrangement. To address this concern, the CR Program limits the amount of PQS that a person can hold, the amount of IPQ that a person can use, and the amount of IPQ that can be processed at a given facility.

The CR Program is designed to minimize the potential that PQS and IPQ use caps could be evaded through the use of corporate affiliations or other legal relationships that would effectively allow a single person to use PQS or IPQ, even if they are not the majority owner of that PQS or IPQ. In most of the nine BSAI crab fisheries under the CR Program including EBT and WBT, a person is limited to holding no more than 30 percent of the PQS initially issued in the fishery and using no more than the amount of IPQ resulting from 30 percent of the initially issued PQS in a given fishery, with a limited exemption for persons receiving more than 30 percent of the initially issued PQS. However, no person in the EBT or WBT crab fisheries initially received more than 30 percent of the issued PQS in these fisheries. Therefore, the limited exemption to exceed 30 percent of the IPQ use cap does not apply to the EBT and WBT crab fisheries in this proposed action.

The CR Program calculates a person’s IPQ use cap by summing the total amount of IPQ that is 1) held by that person; 2) held by other persons who are affiliated with that person through common ownership or control; and 3) any IPQ crab that is custom processed at a facility an IPQ holder owns, with exemptions for specific crab fisheries (see § 680.42(b)(7)). The CR Program calculates the amount of IPQ used at a facility by adding all of the IPQ used by any person, whether custom processed or not, at a facility. The term “affiliation” is defined in regulations at § 680.2, as a relationship between two or more entities in which one directly or indirectly owns or controls a 10 percent or greater interest in, or otherwise controls, the other entities. An entity may be an individual, corporation, association, partnership, joint-stock company, trust, or other type of legal entity.

The amount of IPQ that a person can use may include IPQ crab that are processed under a “custom processing” arrangement. A custom processing arrangement exists 1) when one IPQ holder has a contract with the owners of a processing facility to have crab processed at that facility, 2) when that IPQ holder does not have an ownership interest in the processing facility, and 3) when that IPQ holder is not otherwise affiliated with the owners of that crab processing facility. In custom processing arrangements, the IPQ holder contracts with a facility operator to have the IPQ crab processed according to IPQ holder’s specifications. Custom processing arrangements typically occur when an IPQ holder does not own an onshore processing facility or cannot economically operate a stationary floating crab processor.

### 2.5.2.1 Exemptions from the IPQ use caps

Shortly after implementation of the CR Program, the Council submitted and the Secretary approved Amendment 27 to the FMP (74 FR 25449, May 28, 2009; NMFS 2008). The 2006 reauthorization of the Magnuson-Stevens Act included a provision to exempt custom processing in the North region of the Bering Sea *C. opilio* fishery from processing use caps established under the CR Program. Amendment 27 implemented the exemption for *C. opilio* and extended the exemption to a few other fisheries in addition to *C. opilio* in the North region. Amendment 27 was designed to improve

operational efficiencies in crab fisheries with historically low total allowable catches or that occur in more remote regions, by exempting certain IPQ crab processed under a custom processing arrangement from applying against the IPQ use cap of the owner of the facility at which IPQ crab are custom processed. Under regulations that implemented Amendment 27 to the FMP, § 680.42(b)(7) exempts IPQ crab processed under a custom processing arrangement from applying to a person's IPQ use cap in six specific BSAI crab fisheries.

Section 680.42(b)(7)(ii)(A) lists the six BSAI crab fisheries for which the custom processing exemption applies:

- North region of the BS *C. opilio*
- Western AI golden king crab processed west of 174 degrees W. longitude
- Western AI red king crab
- Eastern AI golden king crab
- St. Matthew Island blue king crab, and
- Pribilof Islands red and blue king crab.

The six fisheries were given the exemption because during development of Amendment 27, participants in some of the crab fisheries expressed concerns about the economic viability of their fishing operations and proposed IPQ use cap exemptions for custom processing arrangement similar to those congressionally mandated for the north region BS *C. opilio* fishery. The specific exemptions implemented under Amendment 27 do not apply to IPQ crab processed under custom processing arrangements in the EBT and WBT *C. bairdi* Tanner crab fisheries.

As explained in the proposed rule for Amendment 27, the Council did not recommend exempting IPQ crab processed under a custom processing arrangement from applying against the IPQ use cap of a facility owner for all crab fisheries. Specifically, IPQ crab that are custom processed at a facility would continue to apply to the use cap of IPQ holders who have a 10 percent or greater direct or indirect ownership interest in the facility when those crab are custom processed in the Bristol Bay red king crab fishery, Bering Sea *C. opilio* crab fishery with a South Region designation, Eastern Bering Sea *C. bairdi* Tanner crab fishery, Western Bering Sea *C. bairdi* Tanner crab fishery, and Western Aleutian Islands golden king crab fishery, if those IPQ crab were processed east of 174° W. longitude.

The Council's rationale for not providing a custom processing exemption from the IPQ use caps for these fisheries was as follows. First, Bristol Bay red king crab is assigned a relatively large TAC; 97.3 percent of the IPQ is designated for the South Region, and the Council did not judge that additional opportunities for consolidation were needed to facilitate economically efficient operations among the multiple processors in the South Region. Due to the limited TAC assigned in the North Region, processors could easily consolidate processing operations at a single facility within IPQ caps. Second, Bering Sea *C. opilio* crab with a South Region designation also is assigned a relatively large TAC, and the ability to deliver to multiple processors in the South Region reduces the need to exempt custom processing arrangements from the use cap calculation. The Council did not judge that it needed to encourage additional consolidation in the processing operations for this fishery to encourage economically efficient processing. Third, Bering Sea *C. bairdi* Tanner crab are not subject to regionalization and, therefore, the need to exempt custom processing arrangements from the IPQ use cap did not appear necessary because these crab can be effectively delivered to any processor with matching IPQ in any location. Fourth, as explained above, exempting Western Aleutian Island golden king crab custom processed east of 174° W. longitude is not necessary, given the multiple

delivery locations available to harvesters delivering east of 174° W. longitude. Section 2.6.1 provides more details on why Amendment 27 did not apply to the EBT and WBT crab fisheries.

For the six BSAI crab fisheries noted above, the IPQ crab processed under a custom processing arrangement are not included in the calculation for determining the amount of IPQ crab that is used by an IPQ holder or processed at a facility, if the person whose IPQ crab is processed does not have a 10 percent or greater ownership interest in the processing facility. The exemption effectively removes the IPQ use cap so that more than 30 percent of the IPQ could be processed at a facility, if there is no affiliation between the person whose IPQ crab is being processed at that facility and the IPQ holders who owns the facility. A person who holds IPQ and who owns a processing facility is credited only with the amount of IPQ crab used by that person, or any affiliates of that person, when calculating IPQ use caps. In sum, Amendment 27 allows processing facility owners who also hold IPQ to be able to use their facility to establish custom processing arrangements with other IPQ holders to process more crab at their facilities than would otherwise be allowed under the IPQ use caps, thereby improving throughput and providing a more economically viable processing sector.

Section 680.42(b)(7)(ii)(B) exempts IPQ crab under custom processing arrangements in the six BSAI crab fisheries described above, provided that the facility at which the IPQ crab are custom processed meets specific location requirements. For these six BSAI crab fisheries, IPQ crab that are custom processed do not count against the IPQ use cap of persons owning the facility, if the facility is in a home rule, first class, or second class city in the State of Alaska in existence on the effective date of regulations implementing Amendment 27 (June 27, 2009) and is either a 1) shoreside crab processor, or 2) a stationary floating crab processor that is moored within a harbor at a dock, docking facility, or other permanent mooring buoy, with specific provisions applicable to the City of Atka. Additional information on the custom processing exemption requirements is found in the preamble to the final rule implementing Amendment 27 (74 FR 25449, May 28, 2009).

Regulations implementing Amendment 27 also provided specific exemptions that modify IPQ use cap calculations for IPQ crab subject to right-of-first-refusal (ROFR) requirements. The ROFR provisions provide certain communities with an option to purchase PQS or IPQ that would otherwise be used outside of the community holding the ROFR.

Amendment 27 established a custom processing exemption at § 680.42(b)(7)(ii)(C) for crab PQS/IPQ that is, or was, subject to ROFR so long as the PQS is transferred from the initial recipient and the IPQ then custom processed in the community to which the current or former ROFR applies by a registered crab receiver (RCR) that was not the initial recipient of the PQS. This exemption applies to any fishery with PQS that is subject to ROFR and allows any IPQ that is or was subject to ROFR and that is custom processed to not contribute to the IPQ cap of the company so long as the IPQ is processed in the ROFR community-of-origin. The ROFR provisions of the CR Program were modified with Amendment 44 to the FMP (81 FR 1557, January 13, 2016), which was effective on February 12, 2016.

PQS issued for the *C. bairdi* crab fishery is not subject to ROFR, so *bairdi* crab IPQ is not eligible for exemption from the IPQ use caps under § 680.42(b)(7)(ii)(C). However, this exemption is available for Bristol Bay red king crab and Bering Sea *C. opilio*, the only fisheries besides *bairdi* that are not eligible from an exemption from IPQ use caps under § 680.42(b)(7)(ii)(A).

An additional exemption to the IPQ use caps was created in 2013 with Amendment 41 to the FMP at § 680.4(p) (78 FR 28523, May 15, 2013). Amendment 41 created a process through which fishery participants can apply for an exemption from the regional delivery requirements. If granted, any IPQ

exempted from the regional delivery requirements is also not applied to a company's IPQ use cap. NMFS has not approved any exemptions under § 680.4(p) since Amendment 41 was implemented.

The combination of use cap exemptions has allowed consolidation across the BSAI crab processing sector under the CR Program.

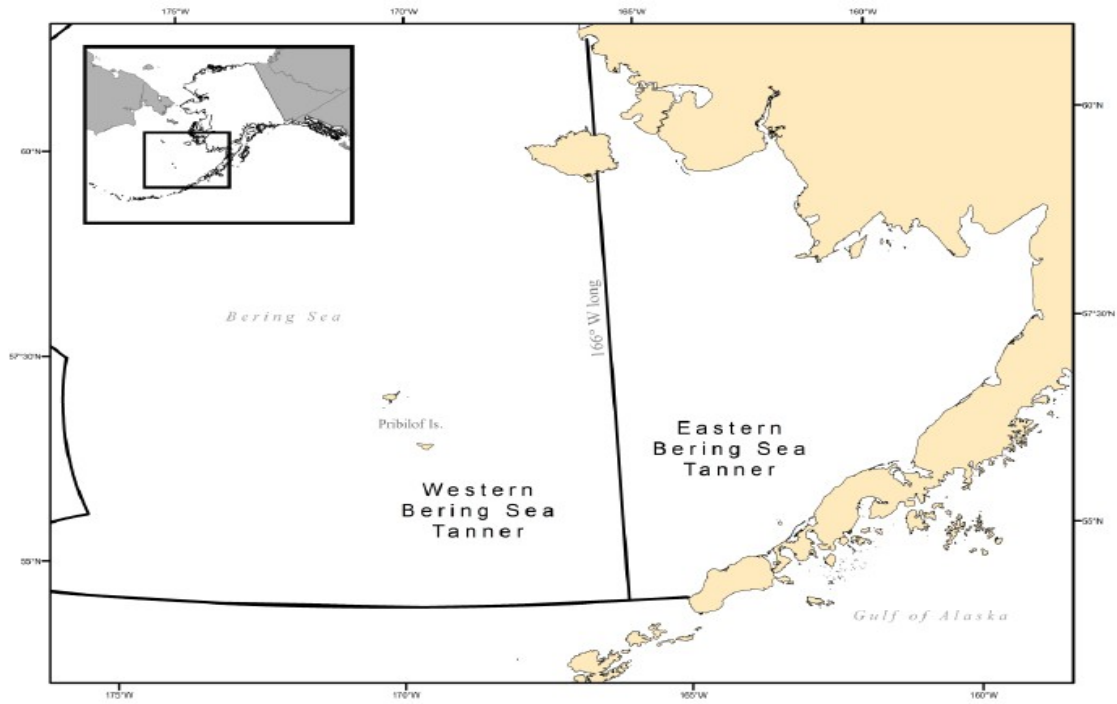
## **2.6 C. *bairdi* Tanner Crab Fisheries**

*C. bairdi* Tanner crab are managed as two separate fisheries, east and west of 166° W long, and the State of Alaska sets a separate TAC for each area (Figure 2-1). The domestic *bairdi* crab fishery was closed between 1996/1997 and 2004/2005, as a result of conservation concerns regarding depressed stock status (NPFMC 2015). The fishery reopened in 2005/2006 and the fishery harvested on average 70 percent of the EBT IFQ from 2005/2006 through the 2009/2010 seasons, and 32 percent of the WBT between 2005/2006 and 2008/2009 (Table 2-1). The number of participating vessels averaged 24 for EBT and 30 for WBT during this period. For the 2010/2011 through 2012/2013 seasons, the State of Alaska closed directed commercial fishing for *bairdi* crab, due to estimated female stock abundance being below thresholds adopted in the state harvest strategy (NMFS 2015). However, these thresholds were met in the fall of 2013 and the directed fishery was opened in 2013/2014 (NMFS 2015). Between the 2013/2014 fishing season and the end of the 2015/2016 season, the fisheries harvested on average 100 percent of the EBT IFQ and 84 percent of the WBT IFQ. During that same period, the number of vessels that participated averaged 40 in the EBT and 57 in the WBT.

NMFS has issued QS and PQS for the EBT and WBT crab fisheries. Unlike the QS and PQS issued for most other crab fisheries, the QS and PQS issued for the EBT and WBT fisheries are not subject to regional delivery requirements, commonly known as regionalization. Therefore, the Class A IFQ that results from EBT and WBT QS, and the IPQ that results from EBT and WBT PQS are not restricted for delivery and can be delivered to any RCR. RCRs include shoreside processors, catcher/processors, entities holding PQS with custom processing agreements with other shoreside processors, and community development quota groups holding PQS. In addition, the PQS and resulting IPQ issued for the EBT and WBT crab fisheries are not subject to a ROFR provision.

Because the EBT and WBT crab fisheries are not subject to regionalization or ROFR provisions, crab harvested under a Class A IFQ permit in these fisheries can be delivered to a range of processors in a broad geographic area more easily than in crab fisheries subject to regionalization and ROFR provisions. As noted in the RIR for the CR Program, the rationale for exempting the EBT and WBT crab fisheries from regionalization and ROFR provisions was because these fisheries had been and would likely continue to be conducted primarily as a concurrent fishery with the regionalized Bristol Bay red king crab and BS snow crab (*C. opilio*) fisheries, making the regional designation of *C. bairdi* crab landings unnecessary.

**Figure 2-1 Eastern Bering Sea District Tanner crab fishery management boundary for eastern and western TAC.**



**Table 2-1 Eastern BS and Western BS *C. bairdi* Tanner IFQ, CDQ, TAC, catch, vessel numbers, and season from 2005/2006 season through the 2015/2016 season**

Fishery	Season	IFQ (lbs)	CDQ (lbs)	TAC (lbs)	Total IFQ harvest (lbs)	% of IFQ harvested	Vessels	Season
Eastern BS Tanner crab	2005 - 2006	closed	closed	closed	closed	closed	closed	closed
	2006 - 2007	1,687,500	187,500	1,875,000	1,267,106	75	37	Oct 15, 2006 - Mar 31, 2007
	2007 - 2008	3,100,500	344,500	3,445,000	1,439,435	46	20	Oct 15, 2007 - Mar 31, 2008
	2008 - 2009	2,486,700	276,300	2,763,000	1,553,584	62	21	Oct 15, 2008 - Mar 31, 2009
	2009 - 2010	1,215,000	135,000	1,350,000	1,189,573	98	17	Oct 15, 2009 - Mar 31, 2010
	2010 - 2011	closed	closed	closed	closed	closed	closed	closed
	2011 - 2012	closed	closed	closed	closed	closed	closed	closed
	2012 - 2013	closed	closed	closed	closed	closed	closed	closed
	2013 - 2014	1,316,700	146,300	1,463,000	1,310,068	99	30	Oct 15, 2013 - Mar 31, 2014
	2014 - 2015	7,632,000	848,000	8,480,000	7,602,659	100	41	Oct 15, 2014 - Mar 31, 2015
2015 - 2016	10,144,800	1,127,200	11,272,000	10,085,983	99	49	Oct 15, 2015 - Mar 31, 2016	
Western BS Tanner crab	2005 - 2006	1,458,000	162,000	1,620,000	952,887	65	43	Oct 15, 2005 - Mar 31, 2006
	2006 - 2007	984,600	109,400	1,094,000	633,910	64	36	Oct 15, 2006 - Mar 31, 2007
	2007 - 2008	1,958,400	217,600	2,176,000	467,136	24	27	Oct 15, 2007 - Mar 31, 2008
	2008 - 2009	1,383,300	153,700	1,537,000	108,368	8	27	Oct 15, 2008 - Mar 31, 2009
	2009 - 2010	closed	closed	closed	closed	closed	closed	closed
	2010 - 2011	closed	closed	closed	closed	closed	closed	closed
	2011 - 2012	closed	closed	closed	closed	closed	closed	closed
	2012 - 2013	closed	closed	closed	closed	closed	closed	closed
	2013 - 2014	1,480,500	164,500	1,645,000	1,202,887	81	58	Oct 15, 2013 - Mar 31, 2014
	2014 - 2015	5,962,500	662,500	6,625,000	4,638,718	78	56	Oct 15, 2014 - Mar 31, 2015
2015 - 2016	7,556,400	839,600	8,396,000	7,040,375	93	56	Oct 15, 2015 - Mar 31, 2016	

Source: NMFS and EBT\_WBT\_VES(03-23)

As noted in Table 2-2, there has been some consolidation in the number of shareholders since implementation of the CR Program in 2005. In 2006, there were 249 QS holders for the CVO category, 162 QS holders for CVC, and 24 processor QS holders. In 2015, there were 237 QS holders for CVO, 133 QS holders for CVC, and 15 processor QS holders.

**Table 2-2 Number of CVO, CVC, and PQS holders for EBT and WBT *C. bairdi* crab from 2006 through 2015**

Fishery	Season	Catcher vessel owner QS holders	Catcher vessel crew QS holders	Processor QS holders
Eastern BS Tanner crab	2006 - 2007	249	162	24
	2007 - 2008	238	150	24
	2008 - 2009	232	148	27
	2009 - 2010	234	143	22
	2010 - 2011	Closed	Closed	Closed
	2011 - 2012	Closed	Closed	Closed
	2012 - 2013	Closed	Closed	Closed
	2013 - 2014	239	141	22
	2014 - 2015	233	133	19
	2015 - 2016	236	133	17
Western BS Tanner crab	2006 - 2007	249	162	25
	2007 - 2008	238	149	24
	2008 - 2009	233	148	29
	2009 - 2010	Closed	Closed	Closed
	2010 - 2011	Closed	Closed	Closed
	2011 - 2012	Closed	Closed	Closed
	2012 - 2013	Closed	Closed	Closed
	2013 - 2014	240	140	26
	2014 - 2015	234	132	21
	2015 - 2016	237	133	15

Source: QS\_Holders(03-28)

### 2.6.1 IPQ Use Caps and Custom Processing for the BS *C. bairdi* Tanner Crab Fisheries

Under the CR Program, crab harvested with Class A IFQ, which make up 90 percent of the CVO share allocation, must be delivered to the holder of IPQ. The remaining 10 percent of harvest made with CVO shares (harvest made with Class B IFQ) are open to competition among all processors (including those who do not hold IPQ). Annual allocations arising from C share QS are subject to the same competition that exists for Class B IFQ. Processing QS holdings are substantially more concentrated than either CVO or CVC QS holdings (Table 2-2). Table 2-3 shows the 2015/2016 PQS holders for *C. bairdi* Tanner crab and the number of units held. The majority of the PQS is held by entities that operate the facilities that process *bairdi* crab.

As noted earlier, EBT and WBT IPQ crab that are processed under a custom processing arrangement will still apply against a person's IPQ use cap if that person owns the facility at which those IPQ crab are processed. Effectively, this means that a minimum of at least four persons who are not affiliated with each other must receive EBT or WBT IPQ crab to ensure that no person uses more than the amount of IPQ resulting from 30 percent of the initially issued EBT or WBT PQS. Similarly, at least four facilities that are not affiliated through common ownership (i.e., a 10 percent or greater ownership interest) must be used to receive and process EBT and WBT IPQ crab to ensure that no facility receives more than the amount of IPQ resulting from 30 percent of the initially issued EBT or WBT PQS.



**Table 2-3 PQS Holders for *C. bairdi* Tanner crab (EBT and WBT) and their PQS units held for 2015/2016.**

<b>PQS Holder</b>	<b>PQS units</b>	<b>Percentage</b>
57 Degrees North, LLC	29,689,974	14.90%
Alyeska Seafoods, Inc.	11,129,843	5.59%
APICDA Joint Ventures, Inc.	7,276,863	3.65%
Peter Pan Seafoods, Inc.	29,575,672	14.85%
RAS II, LLC	18,596,734	9.33%
Trident Seafoods Corporation	51,982,936	25.99%
UniSea, Inc.	24,112,517	12.10%
Westward Seafoods, Inc.	19,294,485	9.69%
Other PQS holders*	7,560,202	3.78%
<b>Total</b>	<b>200,000,000</b>	

\*PQS holders that individually held less than 3 percent of the total PQS pool for EBT and WBT were combined.

Table 2-4 displays the custom processing arrangements in the *C. bairdi* Tanner crab fisheries. Table 2-5 provides a list of *C. bairdi* crab processing companies, processing facilities, and location of the processing facilities for the 2015/2016 season.

**Table 2-4 Custom processing arrangements in the EBT and WBT fisheries for 2015.**

<b>Fishery</b>	<b>IPQ Owner</b>	<b>Processing Facility</b>	<b>Community</b>	<b>Processing Facility Ownership</b>
EBT	Alyeska Seafoods, Inc.	Alyeska Seafoods	Dutch/Unalaska	Maruha Nichiro Group
	Aleutia, Inc.	Peter Pan Seafoods	King Cove	
	Peter Pan Seafoods, Inc.			
	Alyeska Seafoods, Inc.	Westward Seafoods	Dutch/Unalaska	
	Western Seafoods, Inc.			
	57 Degrees North, LLC	Unisea, Inc.	Dutch/Unalaska	Nissui Global
	Icicle Seafoods, Inc.			
	Royal Aleutian Seafoods, Inc.			
	APICDA Joint Ventures, Inc.	Trident Seafoods Inc.	Akutan	Trident Seafoods Inc.
	Norquest Seafoods, Inc.			
Trident Seafoods Corporation				
Trident Seafoods Corporation	St. Paul			
WBT	Alyeska Seafoods, Inc.	Alyeska Seafoods	Dutch/Unalaska	Maruha Nichiro Group
	Aleutia, Inc.	Peter Pan Seafoods	King Cove	
	Peter Pan Seafoods, Inc.			
	Alyeska Seafoods, Inc.	Westward Seafoods	Dutch/Unalaska	
	Western Seafoods, Inc.			
	57 Degrees North, LLC	Unisea, Inc.	Dutch/Unalaska	Nissui Global
	Icicle Seafoods, Inc.			
	Royal Aleutian Seafoods, Inc.			
	APICDA Joint Ventures, Inc.	Trident Seafoods Inc.	Akutan	Trident Seafoods Inc.
	Trident Seafoods Corporation			
Norquest Seafoods, Inc.				
Trident Seafoods Corporation	St. Paul			

Source: NMFS Restricted Access Management (RAM) Division

When the Council recommended and NMFS implemented Amendment 27 to the FMP, IPQ crab processed under custom processing arrangements for the EBT and WBT crab fisheries were not included in the exemption from calculation against IPQ use caps. The preamble to the proposed rule implementing Amendment 27 explains that the Council did not recommend exempting EBT and WBT IPQ crab processed under a custom processing arrangement from IPQ use caps because “Bering Sea *C. bairdi* crab are not subject to regionalization and therefore the need to exempt custom processing arrangements from the IPQ use cap does not appear necessary because crab can be effectively delivered to any processor with matching IPQ in any location” (73 FR 54351, September 19, 2008).

Since the implementation of Amendment 27, there has been additional consolidation in the BSAI crab processing sector. In the 2006/2007 crab fishing year, there were five unique unaffiliated entities (processors) that received EBT crab and four that received WBT crab (Table 2-5). During the 2014/2015 crab fishing year, there were only three unique unaffiliated processors who received EBT crab, and there were four unique unaffiliated processors who received WBT IPQ crab at their facilities. During the 2015/2016 crab fishing year, there were only three unique unaffiliated processors who received EBT and WBT IPQ crab at their facilities. These three processors are the

Maruha-Nichiro Corporation, which operates processing facilities under the names of Alyeska Seafoods, Peter Pan Seafoods, and Westward Seafoods; Trident Seafoods; and UniSea Seafoods.

The net effect of this processor consolidation is that there are not at least four unique and unaffiliated processors active in the EBT and WBT crab fisheries in the BS region. Therefore, only 90 percent of the Class A IFQ can be delivered to, and only 90 percent of the IPQ may be used at, facilities owned and operated by Maruha-Nichiro Corporation, Trident Seafoods, and UniSea Seafoods without causing the IPQ use caps to be exceeded. At least 10 percent of the EBT Class A IFQ/IPQ and 10 percent of the WBT Class A IFQ/IPQ must be delivered to processing facilities that are not affiliated with Maruha- Nichiro Corporation, Trident Seafoods, or UniSea Seafoods.

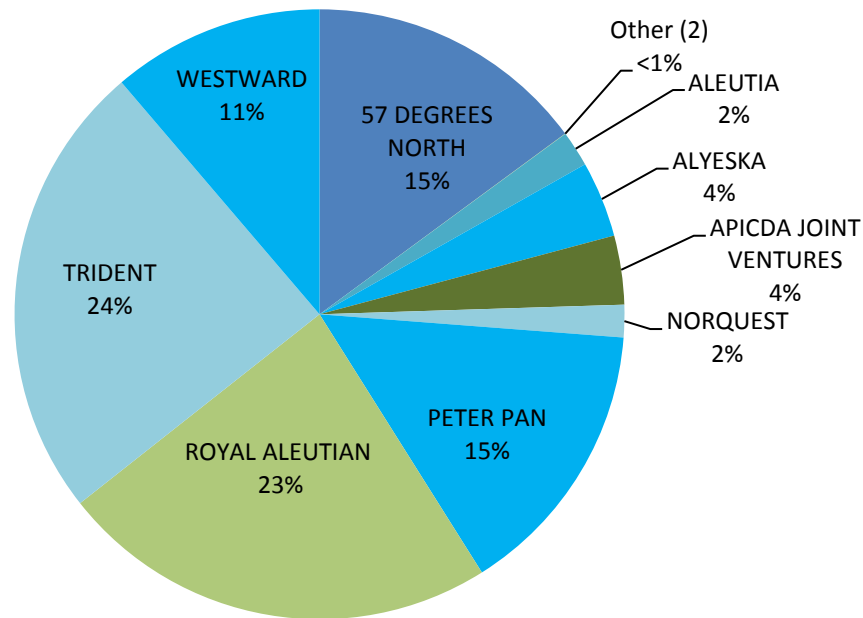
Processor consolidation is not unique to the EBT and WBT crab fisheries. The difficulties with processing crab and the barriers to entry are described in the RIR for Amendment 27 (NMFS 2008). Facilities owned by Maruha-Nichiro Corporation, Trident Seafoods, and UniSea Seafoods processed 99 percent of the BSAI crab in 2015. For the other processing facilities that process one percent of the BSAI crab, general information indicates that these processors may focus on supplying live red king crab and golden king crab to specialized markets.

**Table 2-5 C. bairdi Tanner crab processing companies, processing facilities, and communities in 2006/2007 and 2015/2016.**

Crab Fishery	Year	Company Name	Facility	Community
Eastern <i>Bairdi</i> Tanner Crab (EBT)	2006/2007	Maruha	Alyeska Seafoods	Dutch/Unalaska
			Westward Seafoods	Dutch/Unalaska
		Nichiro	Peter Pan Seafoods	King Cove
		Nissui Global	UniSea, Inc.	Dutch/Unalaska
		Trident Seafoods Inc.	Trident Seafoods Inc.	Akutan
	Icicle Seafoods	Arctic Star	Processing Vessel	
	2015/2016	Maruha Nichiro Group	Alyeska Seafoods	Dutch/Unalaska
			Peter Pan Seafoods	King Cove
			Westward Seafoods	Dutch/Unalaska
		Nissui Global	UniSea, Inc.	Dutch/Unalaska
Trident Seafoods Inc.		Trident Seafoods Inc.	Akutan St. Paul	
Western <i>Bairdi</i> Tanner Crab (WBT)	2006/2007	Maruha	Alyeska Seafoods	Dutch/Unalaska
			Westward Seafoods	Dutch/Unalaska
		Nichiro	Peter Pan Seafoods	King Cove
		Nissui Global	UniSea, Inc.	Dutch/Unalaska
		Trident Seafoods Inc.	Trident Seafoods Inc.	Akutan
	2015/2016	Maruha Nichiro Group	Alyeska Seafoods	Dutch/Unalaska
			Peter Pan Seafoods	King Cove
			Westward Seafoods	Dutch/Unalaska
		Nissui Global	UniSea, Inc.	Dutch/Unalaska
		Trident Seafoods Inc.	Trident Seafoods Inc.	Akutan St. Paul

Source: NMFS Restricted Access Management (RAM) Division

**Figure 2-2 Percent of *C. bairdi* Tanner crab (EBT and WBT) IPQ held by Registered Crab Receivers in 2015/2016.**



Source: NMFS RAM Division

## 2.7 Ex-vessel and first wholesale pricing of the BS *C. bairdi* Tanner crab fisheries

Assessing ex-vessel prices under the CR Program is complicated by several factors. The two different CVO IFQ types (A shares and B shares) may bring different prices because of the different limitations on use of those shares and the effects of the arbitration program (see Table 9-10 in the 10-year Crab Program Review [NPFMC 2016]). The two different types of IFQ that are unrestricted by limits and landing (CVO Class B IFQ and C share IFQ) could bring different prices, because of the difference in negotiating leverage of their holders.

Table 2-6 and Table 2-7 briefly summarize the *C. bairdi* Tanner crab fishery economic status from 2009 through 2014, from the 2014 crab economic status report (Garber-Yonts and Lee 2015). This represents the most recent and best available data on the *C. bairdi* crab fisheries. This type of information is available through the Economic Data Report collection, submitted to NMFS annually by participants in the fishery. These data depict the economic character of different crab fisheries, by calendar year. For example, Table 2-6 demonstrates a significant change in gross ex-vessel and gross first wholesale value of the fishery in 2014 corresponding to a rise in TAC. Total gross ex-vessel EBT and WBT crab revenue has risen from \$4.91 million in 2009, to \$19 million in 2014. An increase in the labor required to cover the increasing catch limits, both in the harvesting and processing sectors, is demonstrated in Table 2-7. The reader is referred to the crab economic status report for more detailed information on the economic status of crab fisheries.

This discussion of market conditions draws on the annual *Market Analyst Report on Opilio and Bairdi*, prepared by John Sackton of Seafood Datasearch (Sackton 2015). The key to increasing *bairdi* Tanner crab’s acceptance as a unique product, as it was in the 1990s, is to continue to produce enough *bairdi* crab for customers to generate retail sales programs. Both retailers and some large food service chains have been interested in *bairdi* crab. Sackton (2015) reports that *bairdi* Tanner crab was able to differentiate as a unique product in the U.S. crab market, because supply in 2014/2015 finally reached its potential, with 12.2 million pounds landed. *Bairdi* Tanner crab has now achieved a distinct market status, meaning that customers ask specifically for *bairdi* crab, and sellers realize a price differential between *bairdi* crab and large *opilio* (a.k.a., snow crab). In September 2015, wholesale prices were reported around \$5.90 to \$6.00 per pound for *C. bairdi* Tanner crab. There is also a market for large *bairdi* crab in Japan, which command a premium price.

**Table 2-6** *C. bairdi* Tanner crab harvest and processing sector out-put—production volume, gross revenue, average price, 2009 through 2014

Year <sup>1</sup>	Harvester Sector: Ex-vessel Statistics				Processing Sector: First Wholesale Statistics		
	Vessels	Landed volume million lbs	Gross revenue \$million	Average price \$/lbs	Finished volume million lbs	Gross revenue \$million	Average price \$/lb
2009	18	2.14	\$4.91	\$2.30	1.39	\$6.19	\$4.46
2010	4	0.37	--	--	--	--	--
2011- 2012	CLOSED						
2013	22	1.19	\$3	\$2.66	0.82	\$6	\$6.82
2014	38	8	\$19	\$2.39	5.47	\$32	\$5.82

Source: Garber-Yonts and Lee 2015. Note: See Garber-Yonts and Lee 2015 for details on these data.

<sup>1</sup>Information from Economic Data Reports is compiled by calendar year.

**Table 2-7** *C. bairdi* Tanner crab fisheries crew and processing sector employment and earnings, 2010 through 2014

Year <sup>1</sup>	Crew Employment Earnings			Processing Employment and Earnings	
	Crew positions	Crew share payment, total \$million	Captain share payment Total, \$million	Processing labor hours, total 1000 hrs.	Processing labor payment, total \$million
2010	--		--	6.43	\$0.07
2011-2012	CLOSED				
2013	156	\$0.48	\$0.22	16.58	\$0.18
2014	262	\$3.01	\$1.40	122.27	\$1.23

Source: Garber-Yonts and Lee 2015. Note: See Garber-Yonts and Lee 2015 for details on these data.

<sup>1</sup>Information from Economic Data Reports is compiled by calendar year.

## 2.8 Communities Profiles

Several communities have historically been home to processors that have taken delivery of crab from the BSAI crab fisheries. Four communities had processors that took delivery of *bairdi* Tanner crab in 2015/2016: Akutan, Dutch Harbor/Unalaska, King Cove, and St. Paul (see Table 2-5). However, due to the limited number of processors that participated in the BS *bairdi* crab fishery in any one location, data concerning the geographic distribution of processing in the crab fisheries cannot be released.

## **Unalaska**

The City of Unalaska and the port of Dutch Harbor are about 766 miles southwest of Anchorage, located on the Islands of Unalaska and Amaknak. The communities are connected by a bridge and are handled as a single community for this profile because of their socioeconomic interdependences. The City of Unalaska became incorporated in 1942 and it encompasses 111.0 square miles of land and 101.3 square miles of water, and had an estimated resident population of 4,768 in 2012. After World War II, the community evolved into the busy and prosperous commercial fishing and seafood processing port, and today it yields the nation's largest volume of landings. The city owns six marine facilities, but fishing vessels are mainly moored at the Robert Storrs and Carl E. Moses boat harbors, or at Spit Dock. The Carl E. Moses and Robert Storrs facilities consist of 52 and 71 slips, respectively, whereas the Spit Dock has 2,400 linear feet of dock, along with multiple berths for long and short term moorage.

Commercial fishing and seafood processing play a significant role in the economic success of Unalaska. Major varieties of fish processed in Unalaska include king crab, Tanner crab, pollock, Pacific cod, salmon, herring, halibut, sablefish, turbot, Atka mackerel, and rockfish. As a result, commercial fishing and seafood processing provide a significant number of jobs and income to the community. For example, three of the largest employers in Unalaska are UniSea, Inc., Westward Seafoods, and Alyeska Seafoods, Inc. (EDAW, 2005).

Dutch Harbor based processors received a substantial share of the PQS allocation in most crab fisheries under the CR 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.

Residents own 11 federally permitted fishing vessels that were active in 2014. All of these commercial fishing vessels operated exclusively as catcher vessels, delivering to shoreside processors or motherships; 10 of these vessels were less than 60 feet in length; all utilized fixed gear (i.e., pots, hook and line). Pacific cod, followed by halibut, were the main revenue drivers for the fleet. Due to confidentiality constraints, the specific activity of the Dutch Harbor/Unalaska fleet is withheld, as is shoreside processing. There were a substantial number of crew permits (160) and commercial fishing permits issued (60).

Unlike many of the crab ports in the region, Unalaska also has extensive support services for the BS fisheries. The support services in Unalaska can support all range of services for any vessel class in the pollock, crab, and other groundfish fisheries. As a result, the support services are heavily dependent upon the success of the groundfish and crab fisheries. To some extent, the fleet services also contribute to the diversification of the Unalaska economy, which helps insulate the community from negative changes in individual fisheries.

## **King Cove**

King Cove is located on the south side of the Alaska Peninsula and is about 605 miles southwest of Anchorage. The city was established in 1911, when Pacific American Fisheries constructed a salmon cannery. The city was incorporated in 1947, and encompasses 25.3 square miles of land and 4.5 square miles of water. In 2012, the resident population was estimated at 963. The community lies on a sand spit, separated by King Cove Lagoon and King Cove, and is surrounded by rugged mountains. The city's economy is solely dependent on commercial fishing and the seafood processing industry. There are two harbors that have moorage for 96 vessels with a maximum length 165, as well as a deep water pier for the state ferry, cruise ships, and cargo vessels. The community is home port 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; king, *bairdi*, and *opilio* crab; halibut; and groundfish. Although the plant operates year-round, its peak seasons are in the winter and summer, when it employs up to 500 people (Himes-Cornell et al. 2013).

In 2014, King Cove residents owned 17 active federally permitted fishing vessels. All of these commercial fishing vessels operated exclusively as catcher vessels, delivering to shoreside processors or motherships. These catcher vessels were less than 60 feet in length and deployed fixed gear or trawl gear (two boats used both). The pot fleet of King Cove has 11 vessels, followed by halibut (5 vessels), and trawl (3 vessels). Due to confidentiality the activity of shoreside processing is withheld. King Cove had 114 crewmember licenses issued to 112 permanent Alaska residents. In 2014, 102 commercial fishing permits were issued to King Cove residents and 68 were actively fished, with salmon permits representing the largest number at 39, followed by 18 miscellaneous saltwater finfish permits.

### **Akutan**

The Native Alaska village of Akutan is a member of the CDQ group Aleutian Pribilof Island Community Development Association (APICDA), which benefits from the allocation of BSAI groundfish and crab TAC to the CDQ Program. APICDA, which represents the community of Akutan and five other communities, has participated in the crab fishery through purchasing partial ownership in two crab harvesting vessels, the *Golden Dawn* and the *Farwest Leader* (EDAW 2005). In addition, APICDA has significant investments in both harvesting and processing sectors of other BSAI fisheries.

Akutan Island is one of the Krenitzin Islands of the Fox Island group. Approximately one quarter mile removed from the Native village of Akutan is the site of the largest seafood processing shoreplant in North America, Trident Seafoods. The expansive Trident complex is geographically, demographically, socially, and historically distinct from the village. This “duality” of structure has had consequences for the relationship of Akutan to the Bering Sea commercial fisheries, including long delays in determining and formally establishing the village of Akutan’s status as a CDQ community. Initially (in 1992), the village was deemed not eligible for participation in the CDQ Program (along with Aleutian East Borough communities, King Cove and Sand Point, as well as nearby Unalaska), since these communities were identified as home to “previously developed harvesting or processing capability sufficient to support substantial groundfish participation in the BSAI...”, though they met other qualifying criteria (NPRB/NPFMC 2005).

The Akutan Traditional Council initiated action to show that the community of Akutan was separate and distinct from the seafood processing plant, some distance away from, and virtually independent of the residential concentration of the community site. They sought to show that interaction between the community and the plant was limited, and that the plant was not incorporated into the community in a way that created opportunity for Akutan residents to meaningfully participate in BSAI fisheries. It was argued that the plant was essentially an industrial enclave or worksite separate and distinct from the traditional community of Akutan, and that few, if any, Akutan residents worked at the plant. With the support of APICDA and others, Akutan was successful in a subsequent attempt to become a CDQ community, and obtained that status in 1996, joining APICDA (NPRB/NPFMC 2005). This description highlights that, while deriving economic benefits from the presence of a large shoreplant near the community proper, the community has not integrated this large-scale commercial activity with village daily life (NPRB/NPFMC 2005).

The vast majority of catch landed at the Trident Akutan plant comes from vessels based outside of the community. Most of those vessels focus primarily on pollock, Pacific cod, and crab. The shorebased processor is a multi-species plant. Given that the plant is an American Fisheries Act 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, which 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 CR Program.

Akutan residents own four federally permitted fishing vessels that were active in 2014. All of these commercial fishing vessels operated exclusively as catcher vessels, delivering to shoreside processors or motherships, were less than 60 feet in length, and utilized fixed gear (i.e., longline). These vessels exclusively targeted halibut. Due to confidentiality constraints the shoreside processing activity is withheld. There were a small number of crew permits (8) and commercial fishing permits issued (14).

### **St. Paul**

Saint Paul is the major settlement on Saint Paul Island, and is approximately 755 miles southwest of Anchorage. Saint Paul Island is part of the Pribilof Islands, a group of islands located in the Bering Sea. Saint Paul covers 40.3 square miles of land. In 2012, the population of Saint Paul was estimated to be 491 individuals.

Unlike King Cove, Akutan, or Unalaska, Saint Paul is primarily dependent upon the processing of *C. opilio* snow crab, harvested in the North Pacific. The community of St. Paul also participates in the Western Alaska CDQ Program, under the Central Bering Sea Fishermen's Association, and receives an allocation of crab under that program.

Trident Seafoods was founded in 1973, and by the year 2000, was employing 4,000 people annually throughout Alaska and the Pacific Northwest. Trident's Saint Paul operation, which began in 1995, is the largest crab production facility in the world (Himes-Cornell et al., 2013). A number of floating processors have also frequented the area. Icicle, Norquest, Trident, and Stellar Seafoods own floaters that have processed crab in the Pribilof Islands. Other processors also have used floaters to process crab in and around St. Paul over the years. Further description of the processing activity in the Pribilof Islands area cannot be included in the profile, due to data confidentiality restrictions.

Saint Paul residents own 14 federally permitted fishing vessels that were active in 2014. Of those, 13 were active in the halibut fishery in the Bering Sea and one vessel operated in the jig fishery in the Bering Sea. Halibut was the main stream of revenue for this local fleet. All of these commercial fishing vessels operated exclusively as catcher vessels delivering to shoreside processors or motherships, were less than 60 feet in length, and utilized fixed gear (i.e., longline, jig). Due to confidentiality constraints the activity of the fleet is withheld, as are shoreside processing data. There were a small number of crew permits (42) and commercial fishing permits issued (25) to community residents.

Saint Paul is a primary beneficiary of the North/South regional distribution of shares in the CR 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.

## **2.9 Analysis of Impacts**



This section presents a discussion of the economic and distributional effects that might be expected to occur as a result of exempting custom processing of EBT and WBT crab from the processor IPQ use cap. The impetus for the proposed action originated with the Council recognizing the unforeseen exit of one processor from crab processing that resulted in a consolidation of processor capacity. The remaining processors, readily available in the BS region, were constrained by *C. bairdi* IPQ use caps. The analysts have made a number of assumptions in analyzing the effects of the alternatives. In general, the analysts assume that effects arise from the actions of individual participants in the fisheries, under the incentives created by the alternatives. Predicting these individual actions and their effects is constrained by incomplete information concerning specific business operations, and economic considerations made by harvesters and processors in the fisheries. Well-tested models that predict behavior under different market and stock conditions do not currently exist. In addition, exogenous factors, such as stock fluctuations, market dynamics, and macroeconomic conditions (e.g., the global economy), will influence the response of participants, under each of the alternatives.

The effects of the alternatives on the *C. bairdi* Tanner crab fisheries are also linked to the dynamics of the other CR Program fisheries. The processing companies and plants that participate in the *bairdi* crab fisheries also participate in the Bristol Bay red king crab and Bering Sea *opilio* fisheries. The business decisions the participants may make with regard to the *bairdi* crab fisheries are influenced by their involvement and participation in these other large fisheries.

### 2.9.1 Alternative 1, No Action

Under Alternative 1, custom processing arrangements for BS *C. bairdi* Tanner crab would continue to count against the 30 percent IPQ use cap. IPQ use caps limit the aggregate amount of crab a processor can process in a season, with the intent to prevent the excessive consolidation of processing activity. The unforeseen exit of one processor from crab processing in the BS region has, nonetheless, resulted in a consolidation of processors to the extent that the few processors readily available are constrained by IPQ use caps (see Section 2.6 for more detail). This resulted in the remaining processors being constrained by the IPQ use caps to the extent that more IFQ is available for harvest than can be processed by the remaining processors in the BS region.

With the remaining BS processors constrained by the IPQ use caps, more crab is available to be harvested with IFQ than can be processed with IPQ. This would result in fishermen not being able to fully harvest and deliver all of their *bairdi* crab allocation to readily available processors. Without a custom processing exemption to the IPQ use cap, as much as 10 percent of the Class A IFQ could not be processed by the remaining three unaffiliated processors in the Bering Sea region. For the 2015/2016 *C. bairdi* Tanner crab fishing season, 10 percent of the Class A IFQ represented 1,441,810 pounds (see Table 2-8). Harvesters, shoreside processors, and communities that participate in the *bairdi* crab fisheries have limited options to mitigate the resulting negative economic effects.

**Table 2-8 A and B shares for Eastern and Western BS *C. bairdi* Tanner crab and 10 percent of A shares unharvested under Alternative 1 for the 2015/16 season**

Class	EBT (lbs)	WBT (lbs)	Total (lbs)
A Shares	8,263,207	6,154,896	14,418,103
B Shares	918,134	683,872	1,602,006
10% A Shares unharvested under Alt 1	826,321	615,490	1,441,810

Source: NMFS

To process the remaining 10 percent of *bairdi* Class A IFQ, a unique, unaffiliated processor would be necessary. There are very few unaffiliated processors that have the capacity to custom process EBT and WBT. There are two potential processing facilities, not affiliated with the Maruha-Nichiro Corporation, Trident Seafoods, and UniSea Seafoods, that could, in theory, process EBT and WBT crab based on current processors that take other BSAI crab. But neither presently process *bairdi* crab. Furthermore, both processors are located some distance from the EBT and WBT grounds, in Kodiak and Adak.

## Harvesters

Deliveries to alternative processing facilities could impose a substantial burden and cost on Class A IFQ holders, even though Class A IFQ holders are not responsible for ensuring compliance with IPQ use caps. Transporting EBT or WBT crab to processors outside of the fishing area, such as in Kodiak or Adak, would result in longer trips that would impose increased fuel and operating costs, and loss of fishing time. It would also increase the potential for significant crab deadloss (waste), which becomes increasingly likely the longer that the crab are held in storage tanks and transported, and which is inconsistent with the Council's conservation objectives for this fishery.

Based on current and past experience with deliveries of Tanner crab and other crab species, stakeholders estimate deadloss to be approximately five times greater for delivering in Kodiak than it would be for delivering in the Bering Sea. This is based on the higher deadloss rates for delivering Bristol bay red king crab to Kodiak (approximately three times greater) and the greater vulnerability of Tanner crab to extended transit (J. Sullivan, Intercooperative Exchange, personal communication on May 10, 2016).

Additionally, stakeholders estimate an additional 6 to 10 days of transit time (roundtrip) associated with delivering to Kodiak; this includes an added daily fuel expense of approximately \$2,750 (1,100 gallons per day at \$2.50 per gallon) and a daily insurance expense of approximately \$350 (\$50 per crewmember per day at seven crewmembers).

In the 2015/2016 *C. bairdi* Tanner crab season, the gross ex-vessel revenue for this 10 percent of the Class A IFQ for EBT and WBT crab represented an estimated at \$3.4 million, using the 2014 ex-vessel value shown in Table 2-6. Foregone net revenues to the harvesters would be less than this total amount because variable costs associated with harvesting the IFQ would be avoided. Harvesters would have limited alternatives with which to mitigate this lost ex-vessel revenue. Harvesters would experience this loss, even though they are not subject to the IPQ use caps and, thus, are not responsible for ensuring processing operations do not exceed IPQ use caps in accordance with applicable regulations.

It is not possible to predict which specific harvesters (Class A IFQ holders) would be unable to fully harvest their EBT or WBT crab IFQ under Alternative 1. As noted earlier, Class A IFQ holders share match with IPQ holders, and deliver their crab according to fishing plans that accommodate both the harvester's and the processor's operational needs in a variety of ongoing crab and groundfish (e.g., Pacific cod) fisheries. It is possible that some Class A IFQ holders would be able to fully harvest their EBT and WBT crab allocations under Alternative 1, whereas other Class A IFQ holders may not be able to harvest a majority of their allocations, based on established fishing plans with share matched IPQ holders. Given the inability to quantify specific impacts on specific harvesters, economic impacts on specific Class A IFQ holders are likely to differ, and not all Class A IFQ holders will be affected equally. Not all Class A IFQ holders will lose the opportunity to harvest 10 percent of their Class A IFQ. Some harvesters may not lose any harvesting opportunity. It is possible

that one or more harvesters could be precluded from delivering any of their Class A IFQ depending on whether their shares are matched with IPQ that is unable to be custom processed.

## Processors

Under the Alternative 1, if there are no unaffiliated processors that are willing to process the remaining 10 percent of Class A IFQ for EBT and WBT crab, processors would be expected to lose the gross ex-vessel and first wholesale revenue associated with this 10 percent Class A IFQ. In the 2015/2016 *bairdi* crab season, the gross ex-vessel revenue for this 10 percent of the Class A IFQ for EBT and WBT crab was estimated at \$3.4 million, using the 2014 ex-vessel value shown in Table 2-6.

EBT and WBT IPQ holders are subject to the IPQ use cap, and IPQ holders are the parties responsible for ensuring processing operations do not cause IPQ use caps to be exceeded in accordance with applicable regulations. The anticipated lost gross first wholesale revenue from the 2015/2016 forgone harvest is estimated to be approximately \$4.95 million, using the 2014 first wholesale value in Table 2-6 and accounting for the ex-vessel value paid to harvesters. Forgone net revenues to the processors would be less than this total amount, because variable costs associated with crab processing would be avoided.

New processors could receive the Class A IFQ that would be in excess of the existing IPQ caps for the current processors. Entry of new processors capable of processing BS crab is possible, but barriers to entry exist. Both prior to and since implementation of the CR Program, entry to the processing sector to operate only as a crab processor is very challenging. A new processing facility would need to become equipped with crab lines for crab processing (cleaning, cooking, glazing, and freezing), cold storage, and be able to economically accommodate the relatively small amount of the crab that would be processed. As explained in the RIR for Amendment 27, crab processing tends to be labor intensive. The cost of transporting, housing, and provisioning crew is asserted by IPQ holders to substantially drive up the cost of processing (NMFS 2008).

The economic viability of a new *C. bairdi* crab processor is uncertain. The analysts assume that new processors would have limited ability to attract *bairdi* Tanner crab processing beyond the 10 percent that cannot be delivered to the existing companies given the fact that existing processors who operate processing plants already hold the majority of Tanner crab PQS (approximately 68 percent according to Table 2-3) that can be processed. The three major crab processors (i.e., Trident, Nissui, Maruha-Nichiro) own a majority of the PQS in other CR Program fisheries. Therefore, the analysts assume that there are limited opportunities for new processors outside of those currently operating to initiate processing on the relatively small portion of *C. bairdi* crab, or other IPQ crab, not associated with the three major processors.

There are two potential processing facilities not affiliated with the Maruha-Nichiro Corporation, Trident Seafoods, and UniSea Seafoods, that take other BSAI crab, but do not currently process *C. bairdi* crab. These facilities are assumed to be the facilities that could most easily transition into this fishery. However, both processors are located some distance from the EBT and WBT grounds, in Kodiak and Adak. The distance of these facilities from the fishing grounds could present barriers (e.g., increased deadloss). Additionally, the facility in Adak has not in the recent past taken crab for traditional processing. Instead, this facility has focused on supplying the live crab market, which requires a different operational set-up than traditional cooking and freezing of crab sections. The facility in Kodiak takes a small amount of Bristol Bay red king crab every year.

One potential avenue for development of new crab processor capacity is for the entrant to also process groundfish. Processors that also process groundfish are able to keep plants operating for a greater period, spreading capital costs across larger scale production. Consequently, entry to the processing sector is affected by a processor's potential to participate in groundfish fisheries and secure a portion of that production. However, with groundfish processing fully capitalized, joint entry opportunities in the processing sector are limited. In addition, to the extent that other management programs (such as the American Fisheries Act, BSAI Pacific cod sector allocations, and the Amendment 80 program) directly or indirectly limit the ability of processors to enter those fisheries, this means of entry into the crab fisheries is more constrained. Overall, it appears unlikely that existing processors would have access to significant amounts of crab that would provide for a viable crab processing operation, under the Alternative 1.

## **Communities**

Finally, under Alternative 1, there would be no gain for processing communities from additional economic activity and tax revenue to be had from the 10 percent of Class A IFQ EBT and WBT crab. Under Alternative 1, processors could not further consolidate the processing of *C. bairdi* crab, due to the use caps. However, this does not necessarily protect communities from the loss of processing activity. A processing company may leave the *C. bairdi* crab fishery, and the economic activity associated with the IPQ it had been processing in that community would be foregone. Additionally, *C. bairdi* crab IPQ is not subject to ROFR provisions; therefore there is no regulatory requirement assuring an opportunity for a ROFR community-of-origin to purchase PQS and make arrangements for the processing of that IPQ.

### **2.9.2 Alternative 2: Custom Processing Use Cap Exemption (Preferred Alternative)**

Under Alternative 2, custom processing arrangements for BS *C. bairdi* Tanner crab would not count against the IPQ use cap. Therefore, with a custom processing arrangement exemption, the processors currently processing EBT and WBT crab would be able to process all EBT and WBT Class A IFQ crab without exceeding IPQ use caps. This would impact harvesters, shoreside processors, and communities that participate in crab fisheries.

## **Harvesters**

Under Alternative 2, the custom processing exemption to the IPQ use caps would provide a benefit to IFQ holders, crew, and vessel owners that would otherwise be unable to complete the harvest of EBT and WBT Class A IFQ. Alternative 2 would provide processing opportunities for all Class A IFQ, thus allowing for harvest of all of the EBT and WBT Class A IFQ. Under Alternative 2, all EBT and WBT IPQ crab received under custom processing arrangements at the processing facilities owned by the Maruha-Nichiro Corporation, Trident Seafoods, or UniSea Seafoods would not be counted against the IPQ use cap of the facility or the facility owners. This proposed action is expected to avoid the adverse economic impacts to harvesters created by the lack of adequate processing capacity that would otherwise result if the EBT and WBT crab fisheries could not be fully harvested.

It should be noted that circumstances that are not mitigated by this action may prevent harvesters from fully harvesting the TAC. These include factors such as icing conditions that limit access to the fishing grounds, or poor catch per unit effort in the fisheries that make it uneconomic to fully harvest the crab. Given past fishery performance, it is possible that the full *C. bairdi* crab TAC may not be taken, even with the proposed amendment.

Alternative 2 could allow the consolidation of processing down to a single company or facility. In some cases, harvester operational efficiency could be impacted. Predicting the nature of these impacts, should such extreme consolidation occur, would be highly speculative. For example, if processing is consolidated in a location that is relatively distant from preferred fishing grounds, harvester operational efficiency could suffer. Alternatively, if processing consolidated to a location in proximity to primary grounds, the opposite outcome could emerge.

## Processors

Under Alternative 2, the custom processing exemption to the IPQ use caps is expected to provide a benefit to processors that have custom processing arrangements with unaffiliated PQS/IPQ holders. By exempting custom processing for BS *bairdi* Tanner crab IPQ, the action is expected to avoid the adverse economic impacts to processors created by the 30 percent IPQ use cap for BS *bairdi* Tanner crab. This alternative would also benefit those IPQ holders that do not have processing facilities since their IPQ could be custom processed by an existing facility and that custom processing arrangement would not count against the 30 percent IPQ processing facility use cap. As shown in Table 2-3, while just under 70 percent of the PQS in the *bairdi* fisheries is held by the entities that operate the facilities that process *bairdi*, the remaining 30 percent is held by entities that do not own or are not otherwise affiliated with a processing facility. Alternative 2 would allow these entities to have their full IPQ allocation custom processed.

The extent to which the exemption of custom processing from use caps allows further consolidation in the processing sector depends on whether processors choose to enter custom processing arrangements. The choice to enter those arrangements will depend largely on the perceived benefit to the shareholder arising from using the shares at its own facility or custom processing at a plant unaffiliated with the shareholder.

Additionally, the extent of further consolidation of processing activity likely depends on the business decisions that participants make with regard to their participation in other fisheries, such as in Bristol Bay red king crab and Bering Sea *C. opilio* Tanner crab fishery.

One of the possible risks of the proposed action is the potential for further consolidation among the processing facilities. With the proposed exemption, processing companies could further consolidate processing facilities for many crab species. Since EBT and WBT crab are not subject to regionalization or ROFR, all of the EBT and WBT IPQ crab could be processed by one company at one facility. Processor consolidation is not unique to the EBT and WBT crab fisheries. Facilities owned by Maruha-Nichiro Corporation, Trident Seafoods, and UniSea Seafoods processed 99 percent of the BSAI crab in 2015. The remaining one percent of BSAI crab was processed by other unaffiliated processing facilities. These facilities were, as previously noted, located in Kodiak and Adak. General information indicates that these processors tend to focus on king crab and supplying live red king crab and golden king crab to specialized markets.

The ability for further consolidation in the crab processing sector, by the proposed exemption, may allow increased production efficiencies. Processors are unlikely to increase their use of custom processing under the proposed custom processing exemption, unless they can achieve gains through consolidation.

The likelihood of further consolidation in the *C. bairdi* Tanner crab fishery processing sector under Alternative 2 is influenced by participants' processing activity in other crab fisheries. None of the current *C. bairdi* crab processors only process *C. bairdi*; all companies and facilities that are active in *C. bairdi* Tanner crab also process Bristol Bay red king crab and Bering Sea *opilio* Tanner crab. The

Bristol Bay red king crab and Bering Sea *opilio* fisheries have also seen consolidation in the processing sector. Processors that are active in other BSAI crab fisheries may be more likely to maintain their presence in the Tanner crab fisheries to help maintain throughput for the facility.

However, there are factors, other than processing efficiency, that could influence the extent to which processing would be consolidated under the exemption. Processors must be able to reach an agreement on price of custom processing. In some instances, competition within the sector could diminish consolidation, if a processor perceives a benefit from keeping its processing independent. Some processors may wish to attempt to develop new products, which might not be possible (or as advantageous) under custom processing arrangements. Processors may still maintain facilities near harvesting grounds. Maintaining processing facilities near the harvesting grounds may help prevent excessive deadloss associated with an increase transit time between harvesting grounds and offload.

## Communities

The effects of Alternative 2 on communities and community sustainability are relatively small, assuming minimal further consolidation occurs. Alternative 2 would result in the ability for all BS *bairdi* crab Class A IFQ to be delivered to processors at facilities owned by the Maruha-Nichiro Corporation, Trident Seafoods, or UniSea Seafoods in BSAI communities. This would increase economic activity, income generated, and tax revenues in any community that is the recipient of increased processing activity under custom processing contracts in comparison to Alternative 1, no action. Therefore, the effects of Alternative 2 are anticipated to be beneficial to communities with processors with EBT and WBT IPQ. However, if facilities further consolidated under this action, companies may suspend crab processing at facilities in particular communities, causing adverse economic impacts. If the effects of Alternative 2 include further consolidation of the crab processing sector, this will cause negative impacts on communities that lose crab processing activity.

The effect of this action on communities will depend on the extent to which IPQ moves to, away from, or among communities. It is difficult to predict the likelihood of consolidation of crab processing in response to the proposed action, or movement of processing activity away from any community in particular, because the existing facilities that process *C. bairdi* Tanner crab also participate in other BSAI crab fisheries, such as Bristol Bay red king and Bering Sea *C. opilio*, which are large volume fisheries. However, due to the factors described above in the “Processors” section, further consolidation is not expected to occur under Alternative 2.

### 2.9.2.1 Limited Duration Option

One option before the Council in conjunction with Alternative 2 is to limit the duration of the exemption. As noted in Section 2.6, since the implementation of the CR Program in 2005, there has been consolidation among the crab processing companies, thus reducing the number of processing facilities that are unaffiliated with one another.

The known conditions in the BSAI crab processing sector indicate that it is unlikely that a new unaffiliated processor will enter the fishery in the foreseeable future. Other sections of the analysis indicate that it is unlikely that delivering *bairdi* crab to other unaffiliated processors in Kodiak or Adak would be economically or operationally viable under current and anticipated conditions in the fishery (Section 2.9.1). The *C. bairdi* Tanner crab fishery has been historically fished concurrently with Bristol Bay red king crab and Bering Sea *C. opilio* fisheries. The delivery patterns and subsequently the processing of *bairdi* crab are likely related to the Bristol Bay red king crab and Bering Sea *opilio* fisheries. The analysts assume that processors with PQS would continue to receive IPQ crab at the facilities they own, to maximize the throughput of crab and maintain the economic

viability of processing operations (e.g., Trident Seafoods would receive crab in Akutan or Saint Paul, and UniSea would receive IPQ crab at its Unalaska/Dutch Harbor facilities). Therefore, it is reasonable to assume that *bairdi* crab would continue to be received and processed at multiple facilities in multiple communities.

Nevertheless, the Council could choose to limit the potential risk of additional consolidation, by limiting the duration of a *C. bairdi* Tanner crab custom processing exemption, reviewing processing data prior to the expiration of the exemption, and deciding to maintain, modify, or remove a custom processing exemption at some predetermined future date. A limited duration option would address the immediate need of an exemption for custom processing of surplus *C. bairdi* crab IFQ to prevent the quota going unharvested, while also providing an opportunity for the Council to examine more holistically the continuing need for, usefulness of, and means to, manage processing sector consolidation in the future. Providing a temporary exemption of EBT and WBT crab IPQ use caps for custom processing, while also allowing time for a holistic examination of BSAI crab processor consolidation, could be useful in determining the long range impacts of the crab IPQ use cap exemption for all crab custom processing.

The analysts recommend a minimum of 3 to 5 crab fishing years from the date of implementation for a limited duration exemption. This time frame is likely the minimum amount of time required to observe and assess processing patterns in the fishery, and prepare and develop any analysis and rulemaking necessary to revise, maintain, or remove a custom processing exemption. The analysis suggests that a timeframe would be most effective if based on a “crab fishing year” rather than a calendar year, so that regulations are effective throughout an entire crab fishing year and do not expire mid-year. For example, if a custom processing exemption were effective on February 1, 2017, and the Council selected a 5-year duration, the regulation would remain in effect until July 1, 2022—the end of the 2021/2022 crab fishing year.

### **2.9.3 Management and Enforcement Considerations**

The effects of Alternative 2 on management and enforcement burdens could increase when compared to Alternative 1, no action. One aspect of exempting custom processing from the *C. bairdi* Tanner crab IPQ use caps is overseeing these limitations. Exemptions can pose several challenges to managers and enforcement personnel. Correctly applying limits on PQS and IPQ ownership and use requires full knowledge of all associated holdings of those shares. Ownership of interests in the crab fisheries is often indirect, with many persons holding overlapping interests in a variety of different fisheries. These overlapping indirect interests create a complex web that must be fully assessed to ensure compliance with limits on shareholdings. Exempting custom processing from IPQ use caps requires tracking production at the facility level, and knowledge of indirect ownership of both shares and plants. These interests in shareholdings, use (which include ownership of processed products), and processing plants require a multifaceted approach to monitoring the processing sector. Monitoring activities and shareholdings in a relatively static environment is extremely challenging; periodic changes in interests of persons adds to the task of monitoring accounts, thus, requiring greater time and staffing investments by the Agency. Therefore, monitoring and enforcement costs associated with the custom processing exemption to IPQ use caps would likely increase, but would not change in a material way management and enforcement associated with the crab fisheries.

### **2.9.4 Net Benefit to the Nation**

Alternative 2 has the potential to have a small positive net benefit for the Nation as compared to Alternative 1, with regard to allowing the full harvest and processing of the *C. bairdi* Tanner crab TAC. The circumstances that originally justified the EBT/WBT IPQ use caps in the CR Program

appear to have changed. The IPQ use caps are having unintended adverse consequences due to unforeseen consolidation in processing facility ownership. The constraint was originally justified on economic welfare and distributional grounds, and not on the basis of market failure considerations. Therefore, creating a custom processing exemption should relieve a burden on the region's economic activity, and facilitate the overall harvest in this fishery, and, thus, increase the value the Nation receives from the *C. bairdi* Tanner crab resource.



## 3 Magnuson-Stevens Act and FMP Considerations

### 3.1 Magnuson-Stevens Act National Standards

Below are the 10 National Standards as contained in the Magnuson-Stevens Fishery and Conservation Act (Magnuson-Stevens Act), and a brief discussion of how Alternative 1, the preferred alternative, is consistent with the National Standards, where applicable. In recommending a preferred alternative, the Council must consider how to balance the national standards.

**National Standard 1** — Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery

Neither of the alternatives would undermine the current management system that prevents overfishing. Alternative 2 would provide an exemption to a regulatory constraint and aid participants in the fishery in achieving optimum yield from the fishery by facilitating the harvesting and processing of the entire *C. bairdi* Tanner crab TAC.

**National Standard 2** — Conservation and management measures shall be based upon the best scientific information available.

This analysis draws on the best scientific information that is available concerning the *C. bairdi* Tanner crab fisheries. The most up-to-date information that is available has been provided by the managers of these fisheries and 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.

Both alternatives continue the management of individual crab stocks as a unit or interrelated stocks as a unit or in close coordination and are consistent with National Standard 3.

**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 alternatives would treat all participants the same, regardless of their residence. Alternative 2 is intended to contribute to the fairness and equity of the program by allowing participants to harvest and process their allocations of the TAC. Alternative 2 does not change the ownership caps under the CR Program and while it provides an exemption to the processing use caps for *C. bairdi*, further consolidation is not likely to occur for reasons explained in the analysis.

**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.

Alternative 2 would improve efficiency of the fishery as compared to Alternative 1 by allowing deliveries of Class A IFQ to processors with the capacity to process *C. bairdi* Tanner crab. The

primary purpose of this action is to ensure that existing allocations are fully utilized. Tanner crab was allocated under the CR Program for a number of reasons including resource conservation and socioeconomic benefits to the harvesters, processors, and communities involved in the BSAI crab fisheries.

**National Standard 6** — Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.

Alternative 2 will not change the availability of BSAI crab resources. Any such changes would be addressed through the annual TAC setting process, which is not affected by the alternatives.

**National Standard 7** — Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.

Alternative 2 will minimize costs by providing an exemption to IPQ use caps that prevent harvesters and current processors from realizing the full value of their IFQ and IPQ, respectively. Alternative 2 will not duplicate other actions.

**National Standard 8** — Conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities.

Alternative 2 accounts for the importance of fishery resources to fishing communities by providing the opportunity for the full allocation of the Tanner crab Class A IFQ to be processed in regional communities. Further consolidation of crab processing could occur under Alternative 2, which, in general, could represent a loss of economic activity to one or more communities. However, further consolidation is not anticipated as examined in this analysis. Under Alternative 1, as much as 10 percent of the *C. bairdi* crab IFQ could remain unharvested and unprocessed. As such, the loss of economic revenue, employment, local commercial activity, community stability and welfare could be adversely impacted. The proposed action provides a means to avoid or significantly diminish such effects.

**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.

Allowing the full harvest of the *C. bairdi* Tanner crab Class A IFQ under Alternative 2 would result in some additional bycatch as compared to Alternative 1. However, this fishery is subject to monitoring by crab fishery observers, and managers consider bycatch in setting the TAC for this fishery.

**National Standard 10** — Conservation and management measures shall, to the extent practicable, promote the safety of human life at sea.

Alternative 2 has no direct effect on safety of participants in the fishery. IFQ and IPQ are share matched prior to the season opening, so the proposed action should have no effect on the prosecution of the fishery and, therefore, the safety of the fishery.

### **3.2 Section 303(a)(9) Fisheries Impact Statement**

Section 303(a)(9) of the Magnuson-Stevens Act requires that a fishery impact statement be prepared for each fishery management plan amendment. A fishery impact statement is required to assess, specify, and analyze the likely effects, if any, including the cumulative conservation, economic, and social impacts, of the conservation and management measures on, and possible mitigation measures for (a) participants in the fisheries and fishing communities affected by the plan amendment; (b) participants in the fisheries conducted in adjacent areas under the authority of another Council; and (c) the safety of human life at sea, including whether and to what extent such measures may affect the safety of participants in the fishery.

The RIR prepared for this plan amendment constitutes the fishery impact statement. The likely effects of the proposed action are analyzed and described throughout the RIR. The effects on participants in the fisheries and fishing communities are analyzed in Section 2 and Section 3. The effects of the proposed action on safety of human life at sea are evaluated under National Standard 10, in Section 3.1. Based on the information reported in this section, there is no need to update the Fishery Impact Statement included in the FMP.

The proposed action affects the crab fisheries in the EEZ off Alaska, which are under the jurisdiction of the North Pacific Fishery Management Council. Impacts on participants in fisheries conducted in adjacent areas under the jurisdiction of other regional fishery management councils are not anticipated as a result of this action.

## **4 Preparers and Persons Consulted**

### **Preparers**

Jon McCracken NPFMC  
Keeley Kent, NMFS  
Gretchen Harrington, NMFS  
Michael Fey, AKFIN  
Lewis E. Queirolo, Ph.D., NMFS

### **Contributors**

Glenn Merrill, NMFS  
Rachel Baker, NMFS  
Sarah Marrinan, NPFMC  
Karla Bush, ADF&G  
Tamara Bledsoe, NMFS  
Tracy Buck, NMFS

### **Persons Consulted**

Joe Sullivan  
Anne Vanderhoeven  
John Iani  
Frank Kelty  
Sinclair Wilt  
Nicole Kimball

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