Discussion Paper

Review of Proposed Program Framework for Gulf of Alaska Trawl Bycatch Management

North Pacific Fishery Management Council
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Contents

1 Introduction

1.1 History of this Action

In recent years, the Council has advanced a number of actions that reduce prohibited species catch (PSC) limits in Gulf of Alaska (GOA) fisheries. In 2012, GOA Groundfish FMP Amendment 93 established separate Chinook salmon PSC limits for the Western and Central GOA directed pollock fisheries. In June 2013, the Council recommended a GOA Chinook salmon PSC cap for the non-pollock trawl fisheries.[1] At its June 2012 meeting, the Council took final action to reduce halibut PSC limits in the GOA trawl and hook-and-line groundfish fisheries. Halibut PSC limits will be established in Federal regulations and would remain in effect until changed by a subsequent Council action to amend those regulations. Amendment 95 reduces the GOA halibut PSC limit for the groundfish trawl gear sector by 15 percent, phasing in the reduction over three years from 2014 to 2016.

In the course of deliberations on reducing GOA PSC limits, the Council has acknowledged that revising management measures could aid the trawl fleets in achieving PSC reduction goals. The Council initiated the consideration of restructuring trawl management at its October 2012 meeting. During that meeting the Council adopted a Purpose and Need statement, identifying goals and objectives for an action that provides flexible and effectual PSC management tools. At that time, the Council limited the action to the Central GOA groundfish trawl fishery. The Council's problem statement was expanded to include the Western GOA trawl fishery at the February 2013 meeting. Council staff has provided four discussion papers outlining various issues to inform the Council on options that could meet its objectives. Most of the issues addressed relate to quota-based – or catch share – management. The first paper[2] notes that the Magnuson-Stevens Act (MSA) prescribes certain aspects of how catch share programs may be developed. For instance the Council must **consider** excessive share caps (the percentage of the limited access privileges that may be held by any person), must **consider** current and historical harvests when making share allocations, and must **consider** "measures to assist, when necessary and appropriate, entry-level and small vessel owner-operators, captains, crew, and fishing communities through set-asides of harvesting allocations". These requirements do not dictate that the Council include (or exclude) specific provisions, but instead require that the Council examine various factors before determining a program element. If, after due consideration, the Council determines that an element is not appropriate for the program, the Council need not include the provision or an alternative in the program, provided that through its deliberations the Council has **provided a reasonable explanation** for its exclusion from the program.

The February 2013 discussion paper focused on the need to create a management environment in which harvesters are better able to avoid PSC, while more efficiently utilizing available PSC. This focus suggests that any catch share program would allocate PSC species to enable better management of such catch by participating vessels. The Council is also considering effects on target, non-target, and secondary species fisheries. In considering managed species that could be allocated under the program, the Council

[1] These regulations would not apply to the West Yakutat district, and no Chinook salmon PSC limit is set for that area. The pollock fishery occurring in that area is not currently subject to closures resulting from attainment of a Chinook PSC limit.
[2] http://www.npfmc.org/wp-content/PDFdocuments/catch_shares/CGOATrawlCatchShare213.pdf

continues to examine the effect of including (or excluding) a species on the pace of the fishery, and whether allocation would enhance cooperative or strategic fishing behavior.

The Council intends for the program contribute to the stability of volume and timing of landings to allow better planning by processors. The allocation of PSC would create an individual incentive for each participant to obtain the greatest possible value from the use of available PSC. When allowable catch of target species is not a limiting factor on the fishery, PSC quotas may allow participants to respond to constraining PSC limits by managing their own usage. Without PSC limits, an individual vessel's PSC affects everyone fishing under that PSC limit. However, if target species catch limits are a constraint, PSC quotas alone (without target species allocations or other program elements that could slow the fishery) are unlikely to result in a slower or more coordinated fishing behavior. When target species are limiting – i.e., when total allowable catch (TAC) is fully harvested in a typical year – a participant with PSC quota will face a choice when determining his or her investment in PSC avoidance. The participant must decide whether more rapidly harvesting the target species (using relatively more PSC quota in the process) would sufficiently increase the participant's share of the available target catch to justify forgoing future fishing in the event that PSC limits close the fishery early. Target allocations would allow vessels to privately determine when to fish within a season or year in order to achieve the greatest return from available PSC. Secure target species allocations would allow a quota share holder to decide when and where to fish based on a variety of factors without the risk of other participants depleting the availability of the target species in the interim. Those factors include: target species catch rates, availability of marketable incidental species, PSC rates, market conditions, and weather, among others.

Secondary species may be retained up to a maximum retainable amount (MRA); retention of secondary species is limited to a percentage of the retained target species for that trip. In the current limited access derby fisheries, using MRAs to manage harvests of valuable secondary species that are not open for directed fishing has proven effective. Sablefish and some rockfish species are among the more valuable secondary species for which this approach has been applied. Vessels balance their directed harvests with harvests of MRA-limited species. In a derby fishery, participants must trade time targeting directed species for time targeting MRA species. In a catch share fishery, participants who do not experience time pressures could harvest up to the MRA for all MRA-limited species. A race may result if participants value MRA species more highly than the allocated directed species. In such a race, participants seek to retain MRA catch before NMFS shifts the secondary species to non-retention status.

The February 2013 discussion paper briefly described processor provisions, eligibility to hold quota shares, Alaska state waters issues, and described other comparable programs that have considered and applied the limited access privilege program (LAPP) provisions in the Magnuson Stevens Act (MSA) to meet similar objectives.

The June 2013 paper[3] focused on four primary topics; it also included a draft "roadmap" of specific decisions that might be necessary to implement a catch share program. The first topic was a presentation of historical participation data in the Central and Western GOA trawl fisheries. Data presented included information about the issued groundfish LLPs that had a GOA trawl endorsement, the number of vessels that reported catch in the GOA trawl fishery (by area), the number of metric tons of groundfish harvested

[3] http://www.npfmc.org/wp-content/PDFdocuments/catch_shares/GOAtrawl/GOATrawlDiscPaper513l.pdf

by those vessels when using trawl gear, and trawl gear PSC mortality attributed to those vessels. The second issue was State of Alaska waters management and its potential interaction with a catch share program. Some of the discussions in that paper included the interrelationship between Guideline Harvest Level (GHL), parallel, and Federal fisheries management programs; a description of the historical GOA trawl pollock and Pacific cod fisheries; the potential for establishing restrictions on Federal permits being held by persons fishing in State waters; and Alaska State Constitution's limitations on granting exclusive rights or special privileges to persons fishing in the natural waters of the State. The third issue was a discussion of the benefits and detriments of limited duration quota allocations. The fourth issue was a discussion of potential community protection measures. The measures discussed included community fishing associations (CFA), port of landing requirements, and regionalization of landings.

The October 2013 discussion paper[4] presented a review of eight industry proposals that the Council received at its June 2013 meeting. The Council did not intend for staff to rank those proposals or to select options based on those proposals. A review of recent scientific literature that was requested by the SSC was also presented. State waters issues were discussed in terms actions that could be taken from a Federal fisheries management perspective to help ensure the program would function as intended. Additional work is ongoing to determine the best method of addressing interactions between State and Federal fisheries; that work is not specifically addressed in this discussion paper. Finally, the paper included a discussion of CFAs as a tool for community protections. The conclusion at that time was that until the Council defines the type of CFA it is considering, it is difficult to determine all of the issues that must be addressed. A CFA workshop was held in conjunction with the February 2014 meeting. The purpose of the workshop was to gain perspective from other U.S. regions on community protection measures that have developed within or alongside allocative quota-based management programs. The Council further explored what action might be required to include CFAs in a GOA trawl program, and highlighted specific issues on which the Council's early development of explicit objectives could smooth the program implementation process. A summary of the workshop is available on the Council's website[5].

Finally, the most recent discussion paper[6] was presented at the Council's April 2014 meeting. Sections of that paper focused on observer coverage levels, gear conversion, which gear types are covered, sector allocations, community stability issues, a summary of bycatch reductions in other programs, and background data summaries that may aid the Council decision process.

1.2 Objectives of this Paper

The Council requested that this discussion paper review the expanded program structure defined at the April meeting. The Council's main motion on program elements in included as an appendix in this document. Staff is asked to: 1) discuss how the fishery would operate under the proposed design; 2) discuss how well it may meet the Council's stated objectives; and 3) identify which decision points are necessary to transform the program structure into alternatives for analysis.

[4] http://www.npfmc.org/wp-content/PDFdocuments/bycatch/GOATrawlDiscPaper913.pdf
[5] http://legistar2.granicus.com/npfmc/meetings/2014/4/892_A_North_Pacific_Council_14-04-07_Meeting_Agenda.pdf
[6] May be found at the same link as footnote 4.

1.3 Council's Most Current Purpose and Need Statement

The Council first adopted the following Purpose and Need statement in October 2012, and modified it in February 2013 to include both the Western and the Central GOA.

Management of Gulf of Alaska (GOA) groundfish trawl fisheries has grown increasingly complicated in recent years due to the implementation of measures to protect Steller sea lions and reduced Pacific halibut and Chinook salmon Prohibited Species Catch (PSC) limits under variable annual total allowable catch (TACs) limits for target groundfish species. These changes complicate effective management of target and non-target resources, and can have significant adverse social and economic impacts on harvesters, processors, and fishery-dependent GOA coastal communities.

The current management tools in the GOA Groundfish Fishery Management Plan (FMP) do not provide the GOA trawl fleet with the ability to effectively address these challenges, especially with regard to the fleet's ability to best reduce and utilize PSC. As such, the Council has determined that consideration of a new management regime for the GOA trawl fisheries is warranted.

The purpose of the proposed action is to create a new management structure which allocates allowable harvest to individuals, cooperatives, or other entities, which will mitigate the impacts of a derby-style race for fish. It is expected to improve stock conservation by creating vessel-level and/or cooperative-level incentives to eliminate wasteful fishing practices, provide mechanisms to control and reduce bycatch, and create accountability measures when utilizing PSC, target, and secondary species. It will also have the added benefit of reducing the incentive to fish during unsafe conditions and improving operational efficiencies.

The Council recognizes that GOA harvesters, processors, and communities all have a stake in the groundfish trawl fisheries. The new program shall be designed to provide tools for the effective management and reduction of PSC and bycatch, and promote increased utilization of both target and secondary species harvested in the GOA. The program is also expected to increase the flexibility and economic efficiency of the GOA groundfish trawl fisheries and support the continued direct and indirect participation of the coastal communities that are dependent upon those fisheries. These management measures could apply to those species, or groups of species, harvested by trawl gear in the GOA, as well as to PSC. This program will not modify the overall management of other sectors in the GOA, or the Central GOA rockfish program, which already operates under a catch share system.

1.4 Council's Operating Goals and Objectives

The Council adopted the following Goals and Objectives in October 2012.

1. *Balance the requirements of the National Standards in the Magnuson Stevens Act*
2. *Increase the ability of the groundfish trawl sector to avoid PSC species and utilize available amounts of PSC more efficiently by allowing groundfish trawl vessels to fish more slowly, strategically, and cooperatively, both amongst the vessels themselves and with shore-based processors*
3. *Reduce bycatch and regulatory discards by groundfish trawl vessels*

4. *Authorize fair and equitable access privileges that take into consideration the value of assets and investments in the fishery and dependency on the fishery for harvesters, processors, and communities*
5. *Balance interests of all sectors and provide equitable distribution of benefits and similar opportunities for increased value*
6. *Promote community stability and minimize adverse economic impacts by limiting consolidation, providing employment and entry opportunities, and increasing the economic viability of the groundfish harvesters, processors, and support industries*
7. *Improve the ability of the groundfish trawl sector to achieve Optimum Yield, including increased product retention, utilization, landings, and value by allowing vessels to choose the time and location of fishing to optimize returns and generate higher yields*
8. *Increase stability relative to the volume and timing of groundfish trawl landings, allowing processors to better plan operational needs as well as identify and exploit new products and markets*
9. *Increase safety by allowing trawl vessels to prosecute groundfish fisheries at slower speeds and in better conditions*
10. *Include measures for improved monitoring and reporting*
11. *Increase the trawl sector's ability to adapt to applicable Federal law (i.e., Endangered Species Act)*
12. *Include methods to measure the success and impacts of all program elements*
13. *Minimize adverse impacts on sectors and areas not included in the program*
14. *Promote active participation by owners of harvest vessels and fishing privileges*

1.5 List of Elements Yet To Be Defined

1.5.1 Active Participation

Active participation has not been defined for the proposed GOA trawl LAPP, but has been considered by the Council as part of other programs that have allocated QS to an LLP holder. The Council noted in April that active participation criteria are important to members of the public, but stakeholders have yet to provide input on how active participation should be defined in the context of this action. Active participation may be defined differently depending on the policy objective that is being addressed. Further stakeholder input may be provided at the October Council meeting. Staff was requested to review how existing North Pacific programs address this issue, and to provide a summary of whether those types of program elements could be effective in addressing the Council's objectives.

The following subsections consider both potential requirements for persons who hold quota, and requirements for those who may wish to enter the fishery through quota acquisition. As the Council develops this requirement, it could limit the class of persons who may be a future participant in the program.

1.5.1.1 Purchasing Harvest Privileges

There are two categories of persons who may purchase GOA trawl harvest privileges under the proposed program. The first category is persons who already hold a groundfish license with a GOA trawl

endorsement and receive an initial allocation. To hold a license, a person must have met the U.S. ownership requirements defined under the LLP program. Each initial recipient is considered an active participant, prior to any divestiture of harvest privileges through the selling of licenses. These persons are eligible to purchase additional harvest privileges, so long as they remain under the groundfish LLP ownership cap of 10 groundfish licenses and any quota control provisions established as part of the considered action. The second category is persons who do not receive an initial allocation. They may become an active participant through the purchase of a license with catch history, or through the purchase of QS attached to another license if they already hold a groundfish license and the final preferred alternative states that catch history is severable from a license.

Additionally, if a person holds a trawl-endorsed GOA groundfish license that did not qualify for an initial allocation, he or she would be allowed to join a cooperative and harvest some of the quota that other members brought into the cooperative. This means that a license that is not issued an initial allocation may become active through enrolling in a cooperative.

The remainder of this section describes the requirements that must be met in order to purchase quota in three existing LAPPs. The requirements vary by program. The Central GOA Rockfish Program most closely resembles the proposed structure of the GOA trawl program in that it links catch history to a license which can then be assigned to a cooperative.

Halibut and Sablefish IFQ

NMFS publishes an annual report on the Halibut and Sablefish IFQ program[7]. The 2012 report states that a central policy of the IFQ Program is to promote an owner-on-board fleet. This policy applies to CV QS/IFQ in categories B, C, and D, but not to category A ("freezer vessel"). Category A QS/IFQ may be leased without restriction. Except in a few specific leasing situations, the IFQ Program is designed so that eventually all catcher vessel IFQ will be fished by the QS/IFQ holders themselves.

Eligibility to receive catcher vessel QS by transfer is generally restricted to those persons who received QS at initial issuance, and to those individuals who can demonstrate that they have served as a harvesting crew member in a U.S. fishery for no fewer than 150 days. One exception to these eligibility criteria is for eligible non-profits representing GOA communities approved under community protection measures in the IFQ Program (Community Quota Entities, or CQEs). Non-initial recipients that meet the 150 day sea-time requirement are designated as "IFQ Crewmembers" who, upon approval by NMFS/RAM, can be issued a Transfer Eligibility Certificate (TEC).

As individuals leave the fishery and as corporations and partnerships dissolve or change over time, the new entrants who take their place will be those who were onboard when the fish were caught. With such regulatory requirements, it is inevitable that, over time, there will be an increasing number of individual QS holders who are not authorized to hire "Skippers" to fish their IFQ. By consolidation and by regulation, eventually all CV QS/IFQ will be held by persons who must be onboard during the harvest of their IFQ.

[7] http://alaskafisheries.noaa.gov/ram/ifq/rtf12.pdf

The IFQ Program provides that initial recipients of IFQ may (and non-individuals must) designate an "IFQ Hired Master" (referred to as a "Hired Skipper" or "Skipper") to harvest their annual IFQ. Under regulations established in 1998, an IFQ permit holder may not hire a Skipper unless the IFQ permit holder holds an ownership interest of at least 20 percent of the vessel upon which the IFQ is to be fished (an exception to this rule results in a small number of permit holders being allowed to hold less than 20 percent).

Since June 2004, the IFQ CQE program has allowed 45 GOA communities to participate in IFQ fisheries for the benefit of their own economic welfare and that of individual community residents. Eligible communities are essentially considered to be active participants in the fishery and may form non-profit organizations that acquire QS on the open market and lease it to community residents. CQE participants, like individuals, are limited in their quota holdings. To date, quota acquisition by CQEs has been of a small scale. At year-end 2013, 21 communities were represented by 20 CQEs, but only two CQEs had acquired QS and leased IFQ. These two communities are Old Harbor and Ouzinkie.

BSAI Crab Program

Access to Bering Sea and Aleutian Island crab fisheries is regulated through the allocation of harvest share privileges. These QS are transferable to any individual who met a minimum sea time requirement in any U.S. fishery (150 days), an owner of 20 percent or more of an entity with 150 days sea time in a U.S. fishery, or a community entity holding the right of first refusal (ROFR). After the transfer of QS, the buyers of those shares were, at first, allowed to maintain those holdings without any further or continuing qualification. The Council reconsidered this approach after reviewing the first 5 years of fishing under the crab management program. At that time the Council directed staff to analyze alternatives that could have established active participation requirements for the acquisition of owner shares and retention of newly acquired owner shares. The Council's purpose and need statement for that action recognized that absentee ownership of crab harvest shares supported long-term investment by persons or corporations with little or no involvement in the prosecution of the fisheries. Those holding limited the amount of quota available for "active" participants. The Council's ensuing action was intended to ensure that ownership of quota would flow to persons who are actively involved in the prosecution of the fisheries. After initial review of a draft EA/RIR[8], the Council voted during its February 2013 meeting not to take further action. During the review, the Council considered the following eligibility criteria for the permanent transfer and holding of CV or CP QS. The QS holder, or an individual that is at least a 10%, 20%, or 33% (options considered) share holder when the QS is held by a partnership or corporation, must meet one of the following requirements: (a) hold 5%, 10%, or 20% (options) ownership of a vessel with participation in a rationalized BSAI crab fishery in any of the previous 2 to 4 seasons, or (b) provide documentation of participation as a captain or crew in a rationalized crab fishery (verified by a signature on a fish ticket or a crew member's affidavit) for at least 1, 2, or 4 (options) fishing trips in a rationalized BSAI crab fishery in any of the 3 or 4 (options) previous seasons.

[8] http://www.npfmc.org/wp-content/PDFdocuments/catch_shares/Crab/CrabOwnerParticipation213.pdf

Central GOA Rockfish Program

The Central GOA Rockfish Program assigns catch history to a groundfish license. That license and the associated catch history may be transferred to a person if they are a U.S. Citizen or U.S. corporation, partnership, association or other non-individual entity (as defined at USC Chapter 121, Title 46). Additional participation requirements are not defined for the transfer of groundfish licenses and the associated catch history. Only Rockfish Program QS assigned to a groundfish license that exceeds a use cap (specified at § 679.82 (a)(2)) may be sold separately from the license to which it was originally assigned. No other Rockfish Program QS is severable from the license to which it was initially allocated, and all QS transfers with the license.

1.5.1.2 Inactive Licenses

The Council may wish to define whether a license that does not receive an initial allocation under the proposed LAPP is allowed to retain its GOA trawl endorsement or its GOA area endorsements in general. The assumption is that this program is not intended to eliminate LLP licenses, *a la* a recency action. Any person that holds a GOA groundfish license with a trawl endorsement in an area could use that license if they are able to access groundfish quota and a portion of the PSC limits needed to harvest that groundfish. The holder of a GOA trawl-endorsed license that does not receive an initial allocation may still fish for unallocated groundfish species, or may fish in the limited access fishery (described in Section 2.4 of this paper) if that fishery is opened by NMFS.

The Council may also wish to state whether licenses whose trawl endorsements were eliminated through past recency actions would receive catch history if the selected qualifying years include years during which these LLPs trawled. Recall that in April 2008 the Council voted[9] to remove the subarea endorsements (BS, AI, Western GOA, and/or Central GOA) on trawl licenses unless the license met a minimum landing threshold in the specified subarea. Barring exceptions[10], the Council required that a license was used to make at least two groundfish landings with trawl gear during the 2000 through 2006 time period. As part of that action, groundfish harvest history was credited to each license stacked on a single vessel at the time of the landing. Licenses used in the Central GOA Rockfish Pilot Program were exempt from Central GOA landings thresholds.

Unless directed otherwise by the Council, it is assumed that any license that had a trawl endorsement extinguished in a subarea, through the recency action, would not qualify for trawl QS in that subarea under this program. The catch history of that license would, however, be used to determine the sector splits (CV/CP) of species that are allocated, but that catch would not be considered when allocating catch history to licenses from that sector. If the Council does not agree with this method, it could determine that the history should be ignored completely or divided based on other criteria.

Additional information regarding qualification years and license participation can be found in Section 4.2 of this paper (Qualifying Years). The reader is referred to that section for a more detailed discussion of

[9] Implemented by the Secretary of Commerce (SOC) in August 2009.
[10] Noted in Section 2.5. Among those, a person was allowed to retain GOA subarea endorsements if 20 or more landings had been made in the Western or Central GOA management areas.

the licenses that are impacted by such a Council decision. However, recency is only an issue if the Council selects qualifying years that include 2003 through 2006 (Option 3 under Qualifying Years).

1.5.2 Catcher/Processor Eligibility

When considering the proposed GOA trawl LAPP, it should be noted that six Amendment 80 vessels hold licenses that do not have a Central GOA or Western GOA trawl endorsement. Because these vessels are currently not allowed to fish in the GOA, it is assumed that they would not be eligible to fish quota allocated to GOA trawl cooperatives. The basic assumption is that this action does not expand the areas in which a license can be used to fish with trawl gear.

The Council should also note that three CP licenses with GOA trawl endorsements are not assigned to a vessel on list of Amendment 80 vessels (Table 31 to Part 679 in regulation, as specified in the April motion). The fishing activity of these licenses is discussed in Section 2.2.1. The Council may wish to state whether these three CP LLPs could be awarded offshore quota under the LAPP, and whether that quota could be fished in a cooperative by a vessel that is not an eligible Amendment 80 vessel.

1.5.3 Duration of Shares

The Council considered performance-based reallocations of quota at its April 2014 meeting. Industry stakeholders expressed concern that reallocating PSC quota contingent upon individual performance would reduce the incentive to share information, thus diminishing fleet-wide PSC performance. The Council did not move any such options forward due to the concern about reduced cooperation. In addition, the Council was concerned about the associated administrative costs, and the ability of NMFS to provide timely mechanisms for appeals that may result from quota sanctions. Some Council members noted the importance of continuing to seek options for enhanced incentives to limit PSC and to improve groundfish bycatch performance. Those options must be defined if they are to be considered in future analyses.

1.5.4 Allocations

The Council's motion states that sector allocations of target and secondary species will be based on each sector's **harvest share** during the qualifying period selected. **Harvest** is defined in regulation (§679.2) as the catching and retaining of any fish. Staff assumes that, as written, this means that at-sea discards will not count towards the percentage of a species that was harvested in each of the two sectors (CP and CV). CV deliveries that are discarded by the processing plant (or turned into fish meal) could be counted towards the sector allocation, as those harvests were retained by the catcher vessel. The selected methodology would be utilized when allocations are made within a sector and when history is attached to a groundfish license. For example, discard rates (by LLP) could be considered as a potential adjustment to catch history.

Sector allocations could be based on the percentage of actual annual harvest, or on the percentage of the TAC that was caught. The latter would leave some unallocated target species catch, which could provide an incentive to better utilize available cooperative PSC quota. However, depending on the species left unallocated and whether PSC limits constrain the harvest of those species, leaving a percentage of the

TAC available for any trawl vessel to harvest might retain some elements of a limited access "race" fishery.

The Council could consider allocating some species to licenses based on the percentage of actual harvest, while allocating others according to the percent of TAC caught. The "percentage of actual harvest" approach could be utilized for species that are fully harvested (pollock, Pacific cod, sablefish, and other fully-utilized species). The "percentage of TAC caught" allocation method could be applied to species where some TAC has historically been left unharvested, if the Council wants a percentage of the TAC to remain unallocated. The percentage of TAC that is allocated does not need to be equal to the historic average harvest. Rather, it could be based on a percentage selected by the Council; for example, it could be based upon the maximum percentage of the TAC that was harvested during any qualifying year.

Groundfish species that might be allocated are defined in Part 5 of the Council's April motion. Table 1 provides a summary of the GOA species/species groups that have a TAC defined in the annual specifications. The shaded cells indicate that the fishery was closed to directed fishing using trawl gear for the entire year, as reported in the GOA Groundfish Specification's Final Rule. Under the CV and C/P the letters indicate the April motions potential allocation designation. Species/species groups that are not assigned a letter are not currently included in the list of species the Council is proposing to allocate. However, to allocate PSC, as Council intent is currently envisioned by staff, the Council will need to assign all species/species groups catch history to a license to determine the amount of PSC assigned to that license. Alternatively the Council could consider only allocating PSC based on groundfish species/species groups that are allocated, but that would not give licenses any PSC for fisheries like shallow-water flatfish. Staff assumed that was not the Council's intent.

Based on staff assumptions regarding the proposed allocation process, a percent of the GOA halibut PSC limit must be assigned to each fishery as shown in the following flow chart (Figure 1). The PSC allocation to fisheries that were not prosecuted during the qualifying period will be zero. For example, a TAC is set for sculpin and NMFS does not close the directed fishery on January 20. Recall that the fishery categories for the trawl halibut PSC limits are (1) a deep-water complex fishery, composed of sablefish, rockfish, deep water flatfish, rex sole, and arrowtooth flounder; and (2) a shallow-water complex fishery, composed of pollock, Pacific cod, shallow water flatfish, flathead sole, Atka mackerel, skates, and ''other species'' (sculpins, sharks, squids, and octopuses) (§ 679.21(d)(3)(iii)). The analysts have approached allocation at the species level rather than at the complex level (deep-water and shallow-water) for two reasons: (1) PSC rates vary by target within each complex, and (2) rollovers to the fifth halibut PSC season (from the Central GOA Rockfish Program and from other halibut PSC not used in the previous seasons) – which is *not* divided between the deep and shallow-water complexes – would need to be assigned to some target fishery. A species-by-species approach makes the allocation of PSC limits more straight forward.

Table 1 GOA species with a trawl gear TAC in 2014 harvest specifications – open/closed to directed fishing

Species	Area	CV	C/P
Pollock (Closed to all offshore)	Shumagin (610)	C	
	Chirikof (620)	C	
	Kodiak (630)	C	
	WYK (640)	C	
Pacific cod (Closed Western/CP/Trawl)	W	C	
	C	C	C
	E		
Sablefish (Closed to Trawl)	W	C	C
	C	C	C
	WYK	C	C
Shallow-water Flatfish	W	R	R
	C		
	WYK		
Deep-water Flatfish	W	R	R
	C	C	C
	WYK		
Rex Sole	W	R	R
	C	C	C
	WYK		
Arrowtooth Flounder	W	R	R
	C	C	C
	WYK		
Flathead Sole	W	R	R
	C		
	WYK		
Pacific Ocean Perch	W	C	C
	C		
	WYK	C	C
Northern Rockfish	W	C	C
	C		
	E		
Shortraker Rockfish ((closed except CG Rockfish Cooperatives))	W		C
	C		
	E		
Dusky Rockfish (pelagic shelf rockfish)	W	C	C
	C		
	WYK	R	R
Rougheye and Blackspotted Rockfish (closed except CG Rockfish Cooperatives)	W		R
	C		
	E		
Thornyheads (Closed)	W	R	C
	C		
	E		
Other Rockfish (Closed)	W	C	C
	C		
	WYK		
Atka Mackerel (Closed)	GW		
Big Skates (Closed)	W		
	C	N	N
	E		
Longnose Skates (Closed)	W		
	C	N	N
	E		
Other Skates (Closed)	GW		
Sculpins	GW		
Sharks (Closed)	GW		
Squids (Closed)	GW		
Octopus (Closed)	GW		

Note: Directed fishing was not opened for sector/areas shaded in grey; "GW" denotes Gulf-wide; "C" indicates the Council's motion *proposes allocating* that species and NMFS agrees; "R" means the NMFS Region proposes *allocating* that species; "N" means the Council is *considering allocating that secondary* species, but NMFS recommends not allocating that species.

The following flow chart (Figure 1) does not attempt to map how Rockfish Program PSC rollovers will be treated. Treatment of the Rockfish Program and its PSC limits' interaction with the proposed GOA management program are still in the formative stages. Additional discussion of how to treat the Rockfish Program in general is provided in Sections 3.1 and 4.4 of this paper.

The amount of halibut PSC assigned to a license is equal to the PSC limit in that fishery (the terminal shaded cells in Figure 1) multiplied by the percentage of its sector's allowance for that fishery. Because the pollock Chinook salmon PSC limit is only set for one species, the shaded cells in the left-most branch of that tree are the end of the necessary calculations. For all other shaded boxes in the chart, the PSC limit assigned to that fishery must still be multiplied by the percent of that species' qualifying historical catch that is assigned to the license. Directed species fisheries that are considered in this analysis are presented in Table 2.

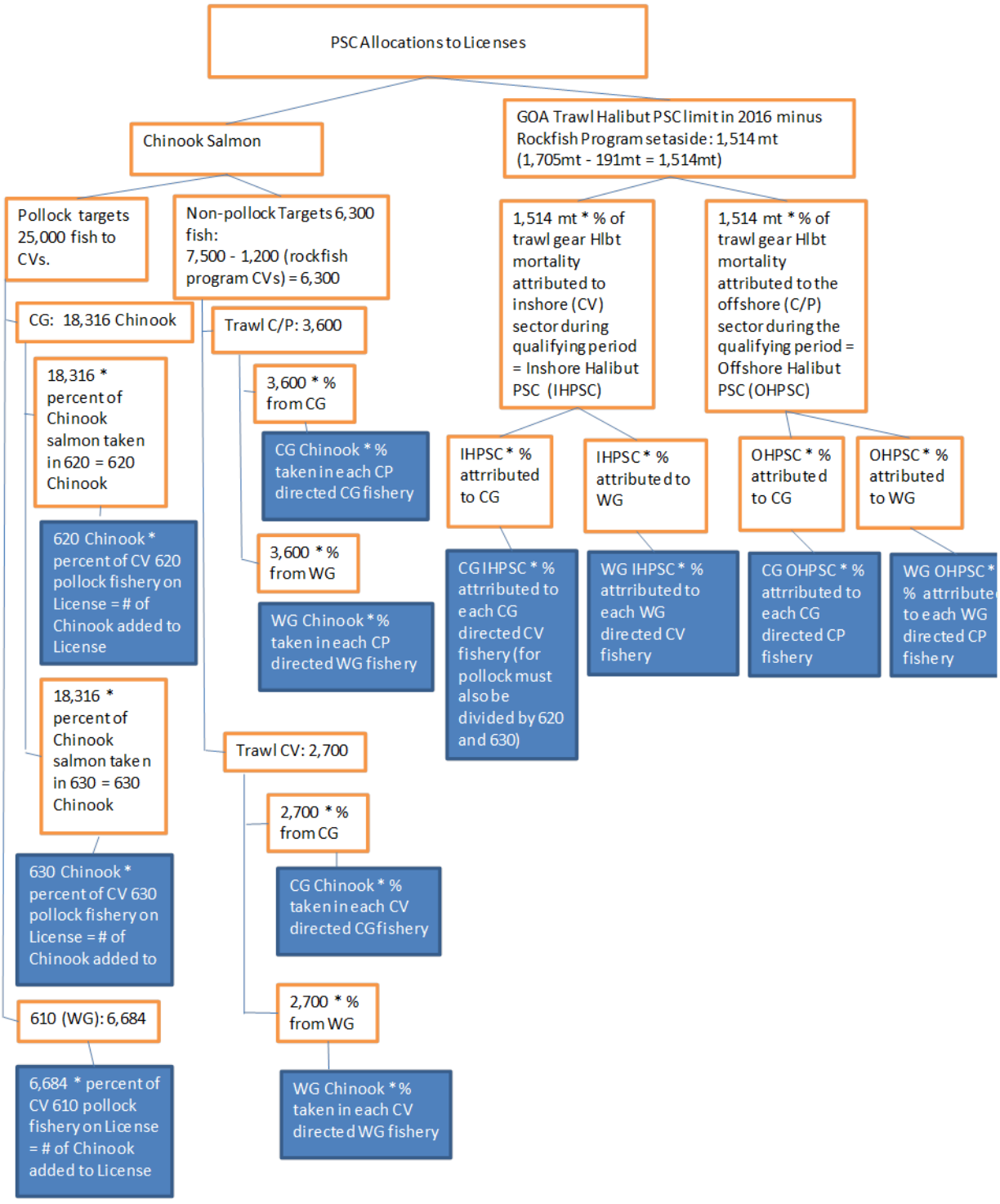
The amount of halibut PSC quota assigned to each license is equal to the sum of all PSC quota for directed fisheries. The Council must still define how that halibut PSC can be used in the various directed fisheries and at different times throughout the year. Section 3.2.4 of this paper discusses the Council decision point of whether or not the current halibut PSC structure should be maintained under a LAPP.

Table 2 GOA directed fisheries for which catch history would be attached to LLP licenses

CP	CV
Pacific cod (excluding WG)	Pollock
Shallow-water Flatfish	Pacific cod
Deep-water Flatfish	Shallow-water Flatfish
Rex Sole	Deep-water Flatfish
Arrowtooth Flounder	Rex Sole
Flathead Sole	Arrowtooth Flounder
Pacific Ocean Perch	Flathead Sole
Northern Rockfish	Pacific Ocean Perch
Dusky Rockfish (pelagic shelf)	Northern Rockfish
Sculpins	Dusky Rockfish (pelagic shelf)
	Sculpins

Source: 2014 GOA groundfish specifications Final Rule

Figure 1 Flow chart showing calculations for proposed PSC limits assigned to LLPs



1.5.5 Overage/Underage Provisions

In April, the Council clarified that rollover of unused quota from one year to the next would not be permitted under the proposed program. Therefore, the overage/underage provisions as defined for the Halibut/Sablefish IFQ program would apply. The need for inseason rollovers will depend on the how seasons are structured under this program. It is assumed that inseason rollovers of allowable target harvest would continue to be allowed. Section 4.4 describes the current structure for harvest and PSC rollovers in more detail. If certain quotas are allocated to cooperatives on a seasonal basis, it could increase NMFS's responsibilities for monitoring cooperative allocations.

1.5.6 Licenses with CV and CP Catch History

LLP regulations allow a vessel operator to use a CP license on a CV, but CV licenses cannot be used on CPs. Two licenses with CP endorsements have been used for CV operation during the selected qualifying years (2003 through 2012). This was considered a downgrade provision during the consideration of the LLP program. It is assumed that a LLP license must be in either a CV or CP cooperative, and not both. Therefore, it is assumed that the license holder would be either required to make a one-time decision as to which sector all the catch history on that license should apply, or the Council could place the license in the sector corresponding to the majority of its qualifying harvest.

1.6 Summary of Management Trade-offs

Changing the structure of the GOA trawl fishery may have management implications on various existing regulations. As stakeholders consider how the proposed LAPP will address issues associated with inter- and intra-sector conflicts, they may wish to consider the necessity of all current management measures. Several of these regulations are discussed in Section 3.2. A primary consideration for maintaining several of the regulations is their potential for mitigation of negative impacts on Steller sea lions. The proposed cooperative structure could, itself, serve as a tool to spread out groundfish harvests over time and space. These issues are raised in this document, but a decision on which regulations are unnecessary, if any, is premature.

Because participation the proposed cooperative program is voluntary, an option for license holders to participate in a Limited Access fishery is required. The Limited Access fishery would be funded by the unallocated groundfish and *pro rata* PSC quota that is assigned to licenses that the holders choose not to enroll in a cooperative. If license holders choose to participate in the Limited Access fishery, stakeholders may consider the impacts of removing regulations on that fishery. Though not directly addressed in this paper, regulations could be implemented to help protect the functionality of the Limited Access fishery. For example, the Council could ensure some level of PSC is available to those fisheries. However, the Limited Access fishery is anticipated to have higher PSC rates because of the race to harvest the available groundfish and the relative lack of information sharing. This result is contrary to the Council's stated objectives for this action. Even if the Council does not ensure a certain amount of PSC is available for the Limited Access fishery, it could still explore options that apportion the Limited Access share of PSC (as determined by the licenses not enrolled in cooperatives) to various periods throughout the calendar year. Alternatively, participation in the Limited Access fishery could be made less appealing by minimizing protections for that fishery.

Allocations are discussed in Section 4. Deciding whether or not to allocate a particular species under this program could impact the rate of fishing, the strength of the incentive to fish in a cooperative manner, the value of fishing privileges, and the stability in volume and timing of landings to allow better planning by processors. The Council has indicated its intent to allocate trawl PSC limits for halibut and Chinook salmon.

Target allocations allow license holders to determine when to fish within a season or a year in order to achieve the greatest return from available PSC. Secure target allocations of species that are (or are expected to be) constrained by the TAC allow a share holder to decide when and where to fish based on a variety of factors (e.g. target species catch rates, availability of incidental species TAC, PSC rates, market conditions, and weather) without concern for others depleting the availability of the target species. Fully allocating low value targets that are not fully utilized could reduce the harvest of those species relative to a program that leaves those species unallocated, particularly if quota share markets are not fluid. Individuals holding quota for those lower-value species may choose to use their available PSC limit in more valuable target fisheries. Fully allocating species might result in less PSC savings. For example, if deep water flatfish are fully allocated, participants who are interested in targeting that fishery could attempt to save PSC in other targets to ensure that they have PSC remaining to support harvest of their deep water flatfish allocation. Quota for species that are historically less utilized, like deep water flatfish, would carry less *pro rata* PSC allocations to permit holders based on catch history. Saving PSC in one target fishery for use in an expanding target fishery (here, deep water flatfish) would ultimately mean that the overall PSC limit is likely to be fully taken. However, the limit would be supporting more overall groundfish harvest, assuming that the less-utilized fisheries can be made profitable.

The Council's motion proposes allocating the GOA groundfish species that have relatively high market value. These are the species that are historically limited by TAC, rather than PSC. Lower value species that have not been fully utilized and are unlikely to be fully utilized in the near future, either because of PSC limitations or markets, would not be allocated. The value of those lower value species is primarily captured in the PSC quota that would be attached to a license and usable in the cooperative. Therefore, allocating species that are not constrained by the TAC would have a relatively small impact on the value of the quota attached to a license. That value would primarily be captured by the halibut PSC limit, and, as stated above, target fisheries with historically low utilization would receive a correspondingly small share of the total available PSC.

Allocating the entire TAC of species that are not fully utilized would reduce access by persons in the Limited Access fishery. The alternative would be to allocate only the portion of the TAC that has been historically harvested, and leave the rest available to both Limited Access participants and to cooperative members who have PSC quota available. Depending on the Council's objectives, this could be viewed as a good or bad outcome. In either case, PSC is likely to be the constraint in lower value Limited Access target fisheries where the TAC has not been historically harvested.

1.7 How the Proposed Program Addresses Council Purpose and Need, Goals and Objectives

In its April 2014 motion, the Council directed staff to evaluate whether and how the elements of the proposed program design address the objectives in the purpose and need statement (Section 1.3). Staff assumes that the requested evaluation should also consider how the proposal is responsive to the Council's listed goals and objectives (Section 1.4). These issues are addressed throughout the current discussion paper and a summary is provided in this section.

Purpose and Need Statement

The first issue addressed in the Council's purpose and need statement is the complicated structure of the GOA groundfish fisheries that have been developed over the years to address a variety of management objectives. Based on the Council's program proposal, the authors of this paper have identified several management measures (including sideboard limitations) that may be unnecessary if this program is implemented. Section 3.2 of this paper identifies current regulations that may be unnecessary in the future, if the proposed program controls harvest such that Steller sea lion populations are not jeopardized. These issues include removal of trip limits, tendering limitations, seasonal allocations of PSC and groundfish, fishing seasons, and stand-downs when moving to different fishing areas. Many of these regulations would no longer be necessary to limit competition between fishery participants if GOA trawl fisheries are allocated. To the extent that those regulations are intended to address other issues (intensified fishing effort in a given time and space), the cooperatives could be required to implement internal rules to mitigate those concerns.

Section 8 of this paper addresses the need to maintain sideboard limits that have been developed in the Amendment 80, AFA, Non-AFA, BSAI Crab, and Rockfish Programs. Sideboard limitations are recommended to be eliminated for all of the LAPP programs in the GOA, except the Pacific cod pot gear sideboard associated with the Non-AFA BSAI crab fleet. The recommendation to remove the Rockfish Program sideboards is predicated on the recommendation to combine the GOA Trawl LAPP and the Rockfish Program to make management of the two programs less complex (discussed in Sections 2.6.1 and 3.1). This paper recognizes concerns that various industry sectors have with linking the two programs, and the impact it could have on their businesses.

In general, the proposed cooperative program's structure should allow removal of many of the regulations discussed above without causing harm to the fishermen, processors, and communities that the regulations were implemented to protect. However, further analysis of each issue will be needed after the Council develops it list of program elements and options.

The purpose and need statement raised several issues relative to creating incentives for the fleet to avoid PSC and bycatch to the extent practicable when directed fishing for GOA groundfish with trawl gear. Section 2.1 indicates that the program would create an environment that incentivizes fishing in a strategic, cooperative manner, where real-time information sharing is mutually beneficial to cooperative participants. That sharing of information should help mitigate PSC encounters and promote efficient utilization of the allowable limits. These positive outcomes may be even more likely when cooperatives include both harvesters and processors, as recommended by the Council. Including processors will help

facilitate the timely sharing of information necessary to reduce PSC and unwanted bycatch. However, the overall success of the program is dependent upon investments in effective cooperative management and the willingness of cooperative members to change their individual fishing practices.

The program should provide both cooperative-level and vessel-level incentives to reduce wasteful fishing practices. However, leaving valuable secondary species like sablefish unallocated could lead to a race for retainable bycatch of those fish early in the year, causing regulatory discards later in the year if they are placed on PSC status. The assumption is that valuable secondary species would be allocated to eliminate the potential for that behavior. Allocating those species may reduce the incentive to top-off on those species up to the MRA, since distribution of those fishing opportunities will be controlled through a cooperative agreement. Allocating those species may also reduce the overall amount that can be retained in the trawl sector under MRAs, which would also impact the amount that is available for harvest by vessels in the Limited Access fishery.

Annual cooperative reports should require information on PSC and discards, to the extent that confidentiality standards allow its inclusion. Alternatively, PSC and discards could be monitored by NMFS, but the agency may not be allowed to publicly release the data at the vessel/cooperative level. Increased observer coverage may create opportunities to refine halibut discard mortality estimates, which could incentivize better treatment of PSC and could reduce impacts to halibut stocks. It is assumed that all vessels participating in either the LAPP or the Limited Access fishery would be subject to full observer coverage levels.

The program may also increase utilization of target and secondary species and result in the TAC being more fully harvested. The discussion paper notes that if all species are allocated, and if cooperative vessels use their PSC on more valuable species first, then the less valuable allocated species could remain underutilized. The anticipated improvements in PSC rates should either allow these fisheries to be more fully harvested, or result in lower levels of PSC.

The program should create greater accountability when utilizing PSC, target, and secondary species. NMFS provided a preliminary discussion of additional monitoring measures that would be necessary to implement the program (see Section 2.6). That section suggests that cooperative reports should increase accountability, and make suballocations more transparent. Providing a group of harvesters, who may be jointly and severally liable, with the privilege to catch a defined amount of the TAC should be accompanied by much higher accountability *within* the cooperatives.

The program should reduce economic incentives to fish during unsafe conditions, as the cooperatives fishing season will likely be expanded. This benefit could be limited by the fact that some seasonal allocations of target species may be retained under the proposed structure. Vessel operators will still need to harvest the cooperative's allocations during the periods that allow the associated processor to operate efficiently. For example, shoreside processors will still devote much of their summer capacity to directed salmon fisheries.

Operational efficiency, flexibility, and economic efficiency should be improved for harvesters and likely for the associated cooperative processors. Participants will be allowed to scale the fishing and processing

effort to match their allocation. This may result in the reduction of fishing and processing capacity during historically peak fishing times. However, any evaluation of true economic efficiency should also include social values, which could be harmed if the program does not include safeguards for local participation, quota ownership opportunities, and geographically distributional impacts. The Council is considering various components of the program that should address these issues. Including a Kodiak port of landing requirement should protect that community in terms of maintaining historical landings. Information presented in this document shows that over 80% of each Central GOA groundfish species would be required to be delivered to Kodiak. Regional delivery requirements for the allocated Western GOA groundfish species would provide the greatest protection if they were limited to the Western GOA communities that are most dependent on these fisheries (King Cove and Sand Point). Confidentiality limitations prevent the analysts from providing data that is specific to those two communities.

Processor participation (and associated employment) is fairly well protected *for plants that are cooperative members at the outset of the program*. However, setting processor use caps (Section 5.2.3) at an aggregate groundfish level might allow a processor to corner a market share of high-volume or high-value species deliveries, and yet remain under the overall cap. The effectiveness of consolidation limits depends on whether caps are set at the species level or in aggregate, with species level caps being the most effective.

Active participation requirements are discussed in the section on elements yet to be defined (Section 1.5.1). Direct participation by LLP license holders who are not issued an initial allocation, via qualifying catch history, might become more difficult as financial barriers to entry increase (LLP value and quota price). Owner-onboard rules may not be applicable to a trawl fishery in which many vessels are company owned, and the owners of those vessels may have never been active on the vessel.

Finally, in reviewing the Council's purpose and need statement, the analysts noted that the existing language describes one purpose of the program as the allocation of harvest to individuals, cooperatives, or other entities (paraphrased from the first sentence in the third paragraph of the statement). The Council may wish to revise this language, as it is not currently considering allocation of harvest privileges to any entity other than a cooperative.

Goals and Objectives

The Council listed 14 goals and objectives for this program. Each of the goals and objectives are addressed if they were not already discussed above.

Goal #1 How does the proposed program balance the requirements of the 10 National Standards in the MSA?

NS 1. Prevent overfishing and achieve OY

Overfishing is addressed because TACs are maintained and monitoring/accountability measures would be increased. More accountability would be placed on the cooperative members, at a cost to industry. That accountability requires cooperative members to limit their harvest to their allocation, or else they must obtain quota from another cooperative to cover their overages. This paper describes how NMFS would manage unallocated species (or ICAs) conservatively to ensure that

TACs are not exceeded. Conservative management of ICAs can affect OY by causing fishing to be closed before the available catch limit is taken. Combining the GOA Trawl program with the Rockfish Program may allow the fisheries to be prosecuted closer to OY, as it would eliminate the need for some conservative ICAs. By a similar logic, NMFS also recommended allocating WY dusky rockfish since unallocated dusky rockfish would draw effort and incidental catch of Pacific ocean perch.

Allocating all species may be a threat to achieving OY because vessels will choose to use available PSC on higher-value species. The alternative is to leave lower value species unallocated, or partially allocated. Better use of PSC could allow expanded use of underharvested TACs, again likely constrained by the amount of available PSC.

NS 2. Conservation and management shall be based on the best scientific information available

The proposed program will continue to base conservation and management on the best scientific information available

NS 3. Individual stocks will be managed as a unit

The GOA fisheries will continue to be managed in the units for which TACs are currently set.

NS 4. Allocations should –

a) *Be fair and equitable*:

The fourth goal stated by the council is that access privileges should be fair and equitable, considering value of assets, investment in fishery, and dependency for harvesters, processors, and communities. Fair and equitable often differs depending on a person's perspective. However, the Council proposes allocating catch shares based on a harvester's participation during the qualifying years. That quota would be linked to the processor that took the majority of their deliveries during a selected period. Quota could be regionalized to protect communities that have been actively involved in these fisheries. Each of those components was proposed to create a fair and equitable distribution of benefits from the program. If the Council is concerned that these measures do not provide a stakeholder group sufficient protections, additional measures may be added to the list of elements and options to be considered. For example, the west coast Groundfish Trawl LAPP set aside 10% of non-whiting quota to address unintended consequences. However, stakeholders in that fishery differ in their opinions as to whether that set-aside has been an effective tool. Some of the dissatisfaction with that west coast set-aside stems from how the measure was framed – since the program's implementation, the set-aside has been "passed through" to the trawl quota holders until such time as the PFMC identifies a need to use it in response to a specific adverse impact caused by the program. This case is discussed in greater detail in a separate discussion paper that is included under the C-7 Agenda Item at this October 2014 Council meeting. Other options that would "anchor" quota to a community could be considered, pending additional clarification on Council authority to implement those designs.

b) *Be calculated to promote conservation*:
The Council's proposed program would allocate PSC based on the target history assigned to a license. This allocation method was selected to avoid directly rewarding persons who had relatively high PSC during the qualifying years. Because PSC will likely constrain some fisheries in the future, this calculation method will promote conservation and wise use of PSC.

c) *Not create excessive shares*:
Part 9.a of the Council's motion and Section 5.2 of this paper address this issue through the consideration of consolidation limits. The Council will need to define excessive shares in this fishery, but the structure to implement those limits has been effective in other catch share programs developed by the Council.

NS 5. *Consider efficiency*
The program is anticipated to increase efficiency of participants in the fishery as described in the review of the Council's purpose and need statement, above.

NS 6. *Conservation and management shall take into account variations in fisheries*
The Council is considering different methods of management depending on whether a given species is allocated.

NS 7. *Minimize costs were practicable*
This program will increase cost to participants (enhanced monitoring, additional data collection, cooperative management, cost recovery, and purchase of quota). It is assumed that if the program moves forward these costs will be analyzed (both qualitatively and quantitatively, to the extent possible). The Council and stakeholders will ultimately determine whether the benefits of implementing the program outweigh the estimated costs.

NS 8. Minimize impacts on communities
The Council has taken steps to provide community protections. Section 0 of the paper addresses consolidation limits, regionalization, and port of landings requirements. These measures will help define the number of harvesting positions that will be available in communities, as well as the locations to which fish will be delivered. Kodiak will be protected, in terms of fish deliveries, if the port of landing requirement is implemented. Communities in the WG and other ports in the CG will have less protection. Regionalization of landings could flow anywhere within a region after the first two years of the program. However, as long as the resident fleets in Sand Point and King Cove do not sell out of the fishery and leave the community, it is anticipated that they will continue to deliver to their home-town processor. Still, some unanswered questions will provide further definition to these issues. For example:

- Will regionalization be port-specific?
- What level of fleet consolidation (crew jobs) would occur with and without the selected consolidation limits (vessel use caps)?
- Will LLP licenses/quota cost raise even more barriers for new entry into an already capital-intensive fishery?

- Will there be extensive lease fees? Does the Council have the authority to influence or limit them?
- Will harvesters get lower ex-vessel prices because they only have one market to sell to for the first two years?
- How costly will it be for a CV to leave their initial Inshore cooperative?
- Will a slower fishery leave capital investments by processors and communities underutilized?

NS 9. Minimize bycatch

This is the main objective that initiated this potential action. The proposed cooperative structure has proved to be an effective tool to minimize bycatch in other Alaska and West Coast fisheries. It is anticipated that the increased sharing of information and freedom to better plan when and where to fish will allow harvesters to avoid PSC to the extent practicable, and to minimize unintended bycatch

NS 10. Safety at sea

The individual allocations should reduce the need to fish during bad weather or fish until fatigue causes lapses in judgment. It is also anticipated that the program could increase the value of the fishery to fishermen (at least the first generation) and increased profits could be result in vessels that are maintained better. Therefore, negative safety issues are not anticipated and it is expected that safety could improve.

Goal #2 Mutually beneficial relationships that are built within a properly defined cooperative structure promote a stronger working relationship between vessels and shore-based processors. It is important that both partners benefit from the sharing of information that leads to increased PSC avoidance, reduced bycatch, and delivery of more and higher quality groundfish. Including shoreside processors as members in Inshore cooperatives makes them a partner in potential economic benefits, and should enhance their willingness to invest (or maintain existing investments) in value-added capacity.

Goal #3 Increased observer coverage and incentives for avoiding PSC should reduce wasteful fishing practices. Flexibility to choose the best time and location of fishing could also allow harvesters to optimize their catch composition.

Goal #4 Whether access privileges are fair and equitable, considering value of assets, investment in fishery, and dependency for harvesters, processors, and communities, will require additional analysis when the full-suite of options is developed. However, the elements provided in the Council's April motion appear to provide a broad suite of options for achieving an outcome that is acceptable to most stakeholders. It is unlikely that any program could be developed that would be supported by every stakeholder.

Goal #5 All sectors may receive an equitable share of potential benefits/opportunities that result from increased groundfish value.

- Increased value (per unit of catch) might be limited for CPs since they mostly do lower value-added product forms. The monitoring and management costs of CPs will probably increase less

than those of the Inshore sector, since the CPs (except the F/V GOLDEN FLEECE) are already in cooperatives that have the monitoring requirements suggested for this program.

- Western GOA CPs might have an advantage, relative to Western GOA CVs, because they will get receive more halibut PSC based on historical use.

Goal #6 The proposed program limits consolidation, provides entry opportunities through the sale of license and quota, maintains employment opportunities associated with consolidation limits, and increases economic viability of businesses by providing a cooperative structure that could result in stable or higher groundfish harvests levels under reduced PSC limits. While there are still opportunities to enter the fishery, the introduction of the catch share program will increase the cost of doing so.

Goals #7 – #9 are covered above under issues highlighted in the purpose and need statement

Goal #10 The program includes measures for improved monitoring and reporting. NMFS has provided a review of possible increased monitoring measures (Section 2.6). These measures would be necessary to track the PSC limits and groundfish quotas that are issued to cooperatives and to the limited access fishery (in aggregate). In addition, the Council has proposed requiring cooperative reports to inform stakeholders of how well the program functioned during the fishing year.

Goal #11 The program could help the trawl sector adapt to other Federal Laws. The program could spread out catch as required by existing Steller sea lion protection measures. However, the incentive to increase profits could result in localized concentration of effort, if other control measures are not in place.

Goal #12 The motion includes methods to measure the program's impact. This paper describes the 5-year review process and additional reviews that must be undertaken at a minimum of every 7-year thereafter (Section 0). The Council has also approved a GOA Trawl EDR and has supported a voluntary AFSC (Science Center) social survey to develop a baseline of data to better understand the impacts of this program. Prior to implementation, the Council could also define measurable benchmark goals on metrics such as PSC rates, TAC utilization, employment, and the concentration of quota share. Goals could be set at specific levels, or could be set as acceptable deviation from an appropriately established baseline.

Goal #13 The program minimizes impacts on other sectors and areas. This paper considered the need to maintain or develop new sideboards. However, this paper suggests that many of these limitations are unnecessary if LAPP participants are limited by their allocations. If additional protection is needed, it could be in the form of requiring trawl LLP holders to purchase additional licenses that allow them to expand their effort into fixed gear fisheries. The likelihood of trawl license holders' expansion of effort would need to be gauged through additional stakeholder input. The analysis shows that there are not many trawl licenses that have the endorsements to fish hook-and-line or pot gear in the CG. In the WG, several trawl licenses also have pot endorsements, but those vessels have already been actively fishing for Pacific cod with pot gear (aside from the Trawl A Season).

Goal #14 How the program might address active participation is discussed in Section 1.5.1. The term active participant has yet to be fully defined.

2 Review of Proposed Program Structure

This section is structured similarly to Section 2 of the discussion paper provided to the Council for the April 2014 meeting. Some of the cooperative elements outlined in the Council's April motion are carried over from what was covered in that previous paper. For example, initial Inshore cooperative formation is still based upon the shoreside processor to which a LLP license holder delivered the majority of his or her landings during the selected qualifying period. The previous paper walked through the approximate number of Inshore cooperatives that would be formed, and how many vessels might be enrolled in each cooperative. Exercises like that are not repeated here. Instead, this section attempts to highlight parts of the motion where clarification is needed, identifies elements on which NOAA GC plans to provide legal guidance, discusses the limited access fishery (which was further defined in the April motion), and incorporates early-stage input from NMFS Sustainable Fisheries on modifications to catch monitoring and catch accounting programs that might be necessary to implement a program like the one outlined in the motion. NMFS's input is not meant to be prescriptive; rather, it is provided so that the Council has a chance to provide feedback on issues that Agency staff have flagged as likely to require a large work-load later in the process.

Parts 7 and 8 of the Council's April motion lay out the general cooperative structure, as envisioned at this point. Some of those elements are addressed in this section, but elements that require extended discussion are covered in separate sections of this paper. Section 4 discusses qualifying years and the allocation of target, secondary, and PSC species; Section 6 discusses transferability of catch history (underlying long-term harvest privileges) and quota share (short-term harvest privileges).

2.1 Bycatch Management Relative to Council's Purpose and Need Statement

This subsection is carried over from the previous discussion paper, revised to reflect the elements included in the latest Council motion. It broadly outlines the rationale behind the Council's decision to approach trawl bycatch and PSC management through allocations of groundfish and PSC to cooperatives.

Both the Purpose and Need statement and the Goals and Objectives for this action focus on the creation of a management environment in which harvesters are better able to avoid PSC and more efficiently use available PSC. The Council has articulated that an allocative cooperative management structure is the best and most readily available way to provide trawl fishery participants with "tools" to manage PSC, which is critical to the viability of the fishery as it responds to reduced PSC caps. The Council expects that fishing in a strategic, cooperative manner where real-time information sharing is mutually beneficial will mitigate PSC encounters and promote efficient utilization of the allowable limits. A quota-based (catch share) program would likely alter the pace of fishing, though target stock movements and maintained seasonal TAC apportionments mean that the slowing of the fishery is not unbounded. Cooperative quota management could also produce social and economic benefits for participants and fishing community residents, as the volume and timing of landings becomes stabilized yet somewhat flexible. These positive outcomes may be even more likely when cooperatives include both harvesters and processors.

The allocation of PSC would create an individual incentive for each participant to obtain the greatest value from the PSC that he or she uses. The Council's April motion proposes allocating halibut PSC and Chinook salmon PSC. Crab species are also considered PSC in the GOA trawl fisheries, but there is no established crab PSC limit to allocate. PSC allocations would be based upon the groundfish species catch history that is assigned to each LLP license, because provided PSC allowances based on past bycatch would reward those who did less to avoid it. Moreover, PSC quota is attached to target species quota in a *pro rata* manner; this ensures that PSC is not a tradable commodity in and of itself. Allocations would be made to the cooperative in which the LLP is enrolled, and never to an individual. Those cooperatives would then possess an exclusive and limiting share of the available PSC limit, which could be used to support the cooperative's groundfish harvest in the manner (when, where, and targeting what) that provides the greatest value of catch subject to the PSC constraint. Each vessel would need to balance the value of using their PSC for the target fisheries that are allocated versus saving quota to expand into unallocated and historically underutilized fisheries. Cooperative vessels may distribute their effort away from target fisheries where PSC rates are expected to be relatively high. By allocating secure harvest privileges, vessels also possess the ability to change the timing of their effort to reduce expected PSC if harvesting that target species is more valuable than the available alternatives.

At its April 2014 meeting, the Council discussed the distinction between *minimizing* and *reducing* PSC. A reduction suggests that PSC limits or the amount of PSC mortality will decrease relative to the status quo. Minimization suggests that PSC levels will be reduced to the extent that a reduction is practicable, considering all of the Council's other responsibilities such as promoting stability in fishery dependent communities, achieving optimum yield from the resource, and providing fair access to the natural resources managed by the Region and the State. The Council noted that it should be mindful of this distinction in language going forward. The Council has not yet indicated whether the considered action might include further off-the-top reductions in allowable PSC levels. At this time, the primary objective is to help the trawl fisheries continue to function within the recently implemented – and reduced, in the case of halibut – cap levels. A successful program would provide the trawl fishery the ability to operate under the current PSC limit reductions and make the trawl fishery resilient in the face of any further PSC limit reductions that are deemed necessary.

2.2 Cooperative Management

The Council has identified voluntary cooperatives as the structure under which trawl harvesters can best achieve bycatch performance goals, and by which harvesters, processors, and communities can be resilient to present and future reductions in allowable PSC limits. The key mechanisms for PSC and bycatch management are real-time information sharing, privately negotiated incentive plans, and individual vessel accountability within cooperatives. Cooperatives may also function as risk-pools, in which an individual can look to other cooperative members for short term transfers of PSC or harvest quota in the event of an unpredictable catch event. Transfers within and between cooperatives may mitigate the otherwise negative consequences of a vessel-level overage, but a market response is likely to come at a cost (e.g. a lease fee) that is outside of the Council's direct control.

Ideally, cooperative members will be incentivized to cooperate and freely share information, which should raise the performance of all vessels. Nevertheless, at least initially, it is likely that cooperatives

will assign an amount of groundfish and PSC quota to a vessel in rough proportion to the amount of catch history (and *pro rata* PSC) that was attached to their license. Vessels that catch their allotment of groundfish with less than their share – as determined by the cooperative's fishing plan – may have the opportunity to either lease PSC to other vessels within the cooperative or to expand into traditionally underutilized fisheries, which could be allocated or unallocated. Either course provides a revenue opportunity, so vessels may still have an incentive to compete with one another on relative PSC performance. At its April 2014 meeting, the Council did not advance a measure that would limit the duration of quota share and make future reallocations contingent upon performance metrics. While performance-based reallocations would spur individual efforts to minimize PSC, it would also likely reduce cooperation and coordination among the fleet. As part of that deliberation, the Council noted that it should continue to seek mechanisms that promote cooperation at both the intra- and inter-cooperative levels. Incentive schemes that evaluate, and possible reward, cooperatives as a whole would likely promote coordination within cooperatives, but might also erode information sharing between groups.

Cooperative management could provide members with benefits such as expanded harvest opportunities through lower PSC rates, and larger TACs relative to ABCs. TACs might be increased if the program reduces management uncertainty about effort levels and expected catch rates of target and secondary species. In addition, TACs for targets with high incidental catch of other fully utilized species are sometimes set well below ABC as a bycatch control measure, which may be unnecessary if the bycatch species is allocated. However, these benefits would come at a cost. NMFS describes additional monitoring and accounting measures that may be necessary to implement a cooperative quota program in Section 2.6. These measures would likely increase costs for both harvesters and processors. Furthermore, the real-time information sharing and allocation management required for a successful cooperative can necessitate hiring full-time staff or paying for private third-party data collection and management services. For cooperative members to be financially better off under the program, harvesters may need to find ways to reduce costs while processors may need to develop product forms with higher value added. Input provided to staff by processing stakeholders reflects that the processors understand the potential for increased monitoring and management costs, but believe that the additional responsibility brings with it the potential for net benefits to the industry.

Parts 7.i and 8.g of the April motion propose that cooperative members would be jointly and severally responsible the ability of other members to fish within their limits of allocated species and PSC. NOAA General Counsel (GC) has indicated that it will develop a legal comment on whether this level of legal accountability is necessary and desirable, given that it could affect the application and timeliness of actions taken by NOAA Office of Law Enforcement (OLE). It may be possible that the same level of cooperative accountability could be achieved with language that does not have such a strict legal definition.

The motion frames cooperatives as voluntary associations, so it is necessary to provide a structure for eligible license holders who opt not to join a cooperative. The Council has outlined a limited access fishery, which is described in Section 2.4.

2.2.1 Sector Eligibility

Part 4 of the Council's April 2014 motion defines two sectors for the proposed GOA Trawl LAPP – Inshore and Offshore. Aside from harvesters, the motion defines the Inshore sector to include "shoreside processors" which are defined in regulation at §679.2 to include both shore-based plants and stationary floating processors; CPs and motherships are excluded from this definition.[11] The discussion paper presented in April noted that two stationary floating processors could qualify as processor members of an initial cooperative because they received the majority of at least one CV's trawl deliveries during a set of qualifying years. The motion states that Inshore allocations will be made on the basis of trawl landings during the selected qualifying years that accrued to either CV trawl LLPs or a CP trawl LLP that did not process catch onboard. The latter is a specific reference to two vessels that possessed a CP trawl LLP but delivered only to shoreside processors throughout the considered qualifying years.

The trawl Offshore sector would be comprised of Amendment 80 vessels (and their replacement vessels) as defined in regulation at Table 31 to CFR Part 679[12], and the LLPs on which those vessels are currently named. The LLP on one of these eligible Amendment 80 vessels was used on a CP from 2003 through 2007, but was then used on a GOA CV in 2008 and has since been inactive in GOA groundfish trawling. That LLP is now used on a different vessel that operates as a CV in the BSAI. The analysts' interpretation of the April motion is that the original LLP and any vessel to which it is assigned remains eligible for the GOA Trawl LAPP by virtue of the legal landings made during the qualifying period. It is less clear how to treat the 2003 to 2007 CP and the 2008 CV catch history that accrued to the LLP. Staff presumes that the historical GOA CP and CV catch would be used for sector-level allocation of flatfish and halibut PSC (as described in Part 6 of the motion) but, since the proposal would make allocations to LLPs, the vessel owner would only receive the quota associated with its historical GOA catch if the owner's vessel reacquired the same license. This opens the broader question of what do to if a LLP has both CP and CV catch history. Two eligible Offshore vessels made a small number of deliveries, relative to their total historical GOA catch, while operating as a CV. Though not specified in the April motion, it could be that both types of catch history are valid as long as they occurred during the selected qualifying years, but if the LLP is enrolled in an Offshore cooperative, and not permitted to also join an Inshore cooperative, then the quota shares derived from CV catch could not be fished and could only be transferred to an Inshore cooperative (and vice versa if the LLP is enrolled in an Inshore cooperative). Alternatively, the Council may determine that if both the CP and the CV catch history occurred on the same Offshore-eligible vessel then the quota derived from both modes of operation should be usable in an Offshore cooperative. It might have been the case that the CP made a shoreside delivery due to an operational or mechanical issue that temporarily closed the vessel's processing plant, and depriving the vessel's LLP of the catch history it was unable to process onboard could be viewed as an arbitrary penalty.

Assuming that the Council does not intend to create a closed class of processors that are eligible to receive GOA trawl groundfish deliveries, regulations may need to specify that any Federal Processing Permit (FPP) holder may receive and process groundfish. While not all FPP holders will qualify as a

[11] Note that this would be different from the definition of the Inshore component in regulation at §679.2 which does not include stationary floating processors as shoreside processors.
[12] Available at: http://alaskafisheries.noaa.gov/rr/tables/tabl31.pdf.

cooperative's processing member (MDP)[13] during the first two years of the program (see Section 2.2.2.1), any permitted processor could receive deliveries from vessels fishing in the limited access fishery described in Section 2.4 or fishing for unallocated groundfish species. Fish ticket data for the CV fleet show that three vessels made deliveries to the mothership processing sector, all between 2004 and 2008. Preliminary analysis indicates that no mothership would be an MDP upon program implementation, but it is worth noting that motherships are still eligible to receive groundfish trawl deliveries under the GOA Trawl LAPP.

Since 2003, 132 unique LLPs have been used to land GOA groundfish with trawl gear – 112 LLPs have been used to make CV landings to shoreside processors and 23 LLPs have been used on CPs.[14] Seventeen LLPs with GOA trawl endorsements on the license, as of 2014, have not been used to make trawl landings during the considered historical period. These licenses would be considered "latent" under even the most inclusive set of historical qualifying years in the framework proposal (2003 through 2012). The proposal does not create a recency action that would eliminate these licenses or their trawl endorsements, thus they would remain eligible to participate in the program but would not receive an initial allocation under any of the proposed definitions. The number of valid 2014 licenses with GOA trawl endorsements, by sector, is provided at Table 8 in the section of this paper on latent trawl licenses (Section 2.5).

Table 3 shows the number of LLP licenses on which GOA groundfish trawl landings were recorded in each year covered by the three options for qualifying periods, as well as 2013 (the most recent year of complete data). The value listed as the "total" is the number of unique LLPs that were active in a sector during a given year. Summing the number of LLPs that were active in each management area typically gives a higher number because a portion of the trawl fleet is endorsed to trawl in more than one area.

Table 3 Number of LLPs recording GOA groundfish landings with trawl gear, by year, operational type sector, and area

	Catcher Vessels				Catcher/Processors			
Year	**WG**	**CG**	**WY**	**Total**	**WG**	**CG**	**WY**	**Total**
2003	41	60	9	**89**	16	15	1	**21**
2004	35	56	7	**78**	15	11	1	**16**
2005	37	52	17	**78**	13	12	1	**16**
2006	38	48	7	**78**	11	12	1	**16**
2007	37	41	5	**72**	13	9	2	**15**
2008	29	46	5	**73**	11	10	1	**14**
2009	31	40	9	**71**	14	12	3	**18**
2010	29	43	19	**67**	13	10	2	**17**
2011	26	51	18	**68**	14	8	2	**17**
2012	32	62	15	**70**	15	8	1	**17**
2013	30	58	18	**69**	10	8	1	**14**

Note: The LLPs on two vessels that hold CP endorsements but have delivered to shore-based plants throughout the analyzed period are counted as CVs.

[13] Referred to as a "majority of delivery processor" (MDP) in the April discussion paper.
[14] Summing the number of LLPs used in each sector yields 135, which is greater than the number of unique LLPs that have recorded trawl landings because three LLPs were used in both sectors at some point during the 2003 to 2013 period.

Table 4 through Table 7 show the endorsements found on GOA trawl-endorsed LLPs. They do not necessarily describe *all* activities that would be permitted on the vessels that currently hold these LLPs. For example, a vessel that holds an LLP covered in the tables could also hold a separate LLP that is not GOA trawl-endorsed, and any other endorsements on that second LLP would not be included. The analysts selected this approach in order to illustrate how the eligible – potentially transferrable – LLPs can be used. Including non-trawl licenses that are stacked on vessels holding program eligible LLPs would overstate the range of participation opportunities found on *transferrable* licenses. Having looked at a vessel-based endorsement matrix (not shown in this paper), the analysts determined that the difference is small and consists of several stacked non-GOA Trawl LLPs that would add CV trawl endorsements for the Aleutian Islands. Vessels assigned to an LLP with a Central GOA trawl endorsement are able to trawl in the West Yakutat district.

Table 4 summarizes the range of endorsements found on the eligible CV trawl LLPs. The set of licenses in these tables includes the LLPs that have not recorded GOA groundfish trawl landings in recent years, but would nonetheless be eligible for the proposed program. In all, 125 CV LLPs would be eligible for the program (Table 4); the two LLPs that would be reclassified as CV licenses are included in the CV table. Fifty-two of these licenses are able to deploy trawl gear in both the Western and Central GOA. Roughly one-third of the eligible CV licenses can also trawl in the Bering Sea, but only nine hold a trawl endorsement for the Aleutian Islands. Thirty-one LLPs are endorsed for Pacific cod pot fishing in the Western GOA, while only seven are endorsed for pot cod in the Central GOA. All but one of the Western GOA pot LLPs can also trawl in that area, and all but one of the Central GOA pot LLPs can trawl in the Central GOA. The zeroes in the highlighted diagonal of cells indicate gear endorsements that are not found on CV LLPs that are eligible under the program.

Table 4 **Endorsements on all Catcher Vessels licenses that are endorsed for trawling in GOA as of 2014, inclusive of LLPs that have not recorded GOA groundfish trawl catch**

Endorsements	AI Trawl	BS Trawl	CGOA Trawl	WGOA Trawl	AI CV PCod (HAL)	AI CV PCod (Pot)	BS CV PCod (HAL)	BS CV PCod (Pot)	CG CV PCod (HAL)	CG CV PCod (Pot)	CG CV PCod (Jig)	WG CV PCod (HAL)	WG CV PCod (Pot)	WG CV PCod (Jig)
AI Trawl	9	8	5	6	1	0	0	0	1	0	0	0	0	0
BS Trawl		48	38	32	0	0	0	0	0	1	0	0	2	0
CGOA Trawl			98	52	0	0	0	0	0	6	0	0	17	0
WGOA Trawl				79	1	0	0	1	2	3	0	0	30	1
AI CV PCod (HAL)					1	0	0	0	1	0	0	0	0	0
AI CV PCod (Pot)						0	0	0	0	0	0	0	0	0
BS CV PCod (HAL)							0	0	0	0	0	0	0	0
BS CV PCod (Pot)								1	0	0	0	0	1	0
CG CV PCod (HAL)									2	0	0	0	1	0
CG CV PCod (Pot)										7	0	0	1	0
CG CV PCod (Jig)											0	0	0	0
WG CV PCod (HAL)												0	0	0
WG CV PCod (Pot)													31	1
WG CV PCod (Jig)														1

Note: HAL = Hook-and-Line

Table 5 covers only the LLPs that have actually made groundfish landings with trawl gear since 2007. Table 5 includes 93 unique CV LLPs, 47 of which are endorsed to trawl in all areas covered by this action (WGOA, CGOA, WY). Note that there were 31 eligible CV licenses that were endorsed for Pacific cod pot fishing in the Western GOA, but only 19 of them have been active in GOA trawling during recent years. This would imply that 12 of the latent licenses are likely engaged in pot fishing.

Table 5 Endorsements on Catcher Vessel licenses that have recorded GOA groundfish trawl catch since 2007

Endorsements	AI Trawl	Bering Sea Trawl	CGOA Trawl	WGOA Trawl	AI CV PCod (HAL)	AI CV PCod (Pot)	BS CV PCod (HAL)	BS CV PCod (Pot)	CG CV PCod (HAL)	CG CV PCod (Pot)	CG CV Pcod (Jig)	WG CV PCod (HAL)	WG CV PCod (Pot)	WG CV Pcod (Jig)
AI Trawl	5	4	3	4	1	0	0	0	1	0	0	0	0	0
Bering Sea Trawl		40	34	27	0	0	0	0	0	1	0	0	2	0
CGOA Trawl			80	47	0	0	0	0	0	4	0	0	13	0
WGOA Trawl				60	1	0	0	0	1	2	0	0	19	0
AI CV PCod (HAL)					1	0	0	0	1	0	0	0	0	0
AI CV PCod (Pot)						0	0	0	0	0	0	0	0	0
BS CV PCod (HAL)							0	0	0	0	0	0	0	0
BS CV PCod (Pot)								0	0	0	0	0	0	0
CG CV PCod (HAL)									1	0	0	0	0	0
CG CV PCod (Pot)										4	0	0	0	0
CG CV Pcod (Jig)											0	0	0	0
WG CV PCod (HAL)												0	0	0
WG CV PCod (Pot)													19	0
WG CV Pcod (Jig)														0

Note: HAL = Hook-and-Line

As state above, the April motion defines eligible CP LLPs as those currently assigned to Amendment 80 vessels and their replacements. Table 31 to Part 679 of the regulations lists 28 Amendment 80 vessels. A review of LLP endorsements found that six of the LLPs assigned to Amendment 80 vessels, as per Table 31 in regulation, do not hold a Central or Western GOA trawl endorsement. Three of those six LLPs are not *currently* assigned to an Amendment 80 vessel.[15] As written, the LLPs on the other three Amendment 80 vessels that lack a GOA trawl endorsement would be eligible for the LAPP, but would be considered "latent", meaning that they are eligible to join a cooperative but would not receive an initial quota allocation.[16] If the Council intends that Amendment 80 vessels without a GOA trawl endorsed LLP can participate in the program (i.e. join a cooperative) only by acquiring an eligible license, then the language in Part 4 of the April motion could be revised by inserting "GOA trawl" in the following manner:

[15] Of those three unassigned LLPs, only one holds a GOA trawl endorsement (Western GOA).
[16] All three of these active LLPs are endorsed to trawl in the Bering Sea, and two are endorsed to trawl in the Aleutian Islands.

4. Sector Eligibility –

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*Offshore sector: Am 80 vessels, and their replacement vessels, defined in Table 31 CFR Part 679, and their current **GOA trawl** LLP. Allocations are based on trawl landings during the qualifying years with a CP trawl LLP that processed catch onboard.*

Conversely, three CP LLPs that do hold an endorsement to trawl in one of the program areas are not currently assigned to an Amendment 80 vessel or replacement vessel. The proposed framework suggests that the three GOA trawl-endorsed CP LLPs that are not currently assigned to an Amendment 80 vessel could be awarded quota under the LAPP, but the quota could not be fished in a cooperative unless the LLP is transferred to an eligible (Amendment 80) vessel. The Council should determine whether the quota could be severed from the LLP on which GOA catch history was earned, and transferred to the LLP of an eligible Amendment 80 vessel that has a GOA trawl endorsement. The Council should also determine whether any historical catch attributed to the three non-Amendment 80 CP LLPs with GOA trawl endorsements would be included in the historical catch data by which non-pollock/non-Pacific cod and halibut PSC are apportioned between the CP and CV sectors.

Table 6 covers 25 CP LLPs that are endorsed to trawl in the GOA. Three of these LLPs are not listed in regulations at Table 31 to Part 679 as an LLP held on an Amendment 80 vessel, and thus do not meet the sector eligibility criteria defined in Part 4 of the April motion. All 25 LLPs are endorsed to trawl in the Bering Sea, and 20 are endorsed for Aleutian Islands trawling. One GOA trawl-endorsed CP LLP also holds a fixed gear (pot) endorsement for the Western GOA. Table 7 shows the endorsements on the 20 CP LLPs that have recorded GOA groundfish trawl landings since 2007. Note that the LLP endorsed for Western GOA pot cod fishing is not among the CP LLPs that have been recently active in the GOA.

Table 6 **Endorsements on all Catcher/Processor licenses that are endorsed for trawling in GOA as of 2014, inclusive of LLPs that have not recorded GOA groundfish trawl catch**

Endorsements	AI Trawl	BS Trawl	CGOA Trawl	WGOA Trawl	WG CP PCod (Pot)
AI Trawl	20	20	14	16	1
BS Trawl		25	19	18	1
CGOA Trawl			19	12	1
WGOA Trawl				18	0
WG CP PCod (Pot)					1

Note: The two LLPs that have CP endorsements but have been used for CV operation – and would be reclassified as CV LLPs under the GOA Trawl LAPP – are excluded from this table and from Table 7.

Table 7 Endorsements on Catcher/Processor licenses that have recorded GOA groundfish trawl catch since 2007

Area Endorsements	AI Trawl	Bering Sea Trawl	CGOA Trawl	WGOA Trawl
AI Trawl	16	16	11	14
Bering Sea Trawl		20	15	16
CGOA Trawl			15	11
WGOA Trawl				16

2.2.2 Inshore Cooperatives

This subsection provides a requested fleet profile of GOA CV and shoreside processing activity. The following subsections focus on how Inshore cooperatives would be formed at the outset of the program, with specific discussion of an option to place a portion of annual PSC allowances under control of the cooperative processor.

The broadest historical period considered under the Council's April motion ranges from 2003 through 2012. This section pulls in the 2013 fishing year in order to consider the most recent available data. Inshore participation patterns do not vary drastically depending on whether or not 2013 is included (see Table 9 in 2.5). From 2003 through 2013, 121 unique CV LLP licenses made a GOA groundfish landing; 116 CV LLPs made a landing from 2007 through 2013. Over either of those two periods, groundfish activity (across all Alaska management areas) accounted for 83% of the gross revenues attributed to those licenses. Table 18 through Table 20 (in Section 4.2) breaks down the percentage those licenses' revenues that were generated in GOA groundfish trawl fisheries relative to other areas and gear types. Over half of the relevant active licenses derived 90% or more of their total gross revenue from groundfish fishing; of those, roughly one-third generated the majority of their groundfish revenue from the Western or Central GOA as opposed to the BSAI areas. Groundfish accounted for less than half of total gross revenues for only 29 of the LLPs active during the considered period.

Taken in aggregate, the CV LLPs that were active over the broadest considered period (2003 through 2013) generated around 45% of total gross revenues in the BSAI trawl fisheries, around 35% in the Central GOA trawl fisheries, around 9% in the Western GOA trawl fisheries, around 5% in State fisheries, and around 1% to 2% in the BSAI, Western GOA or Central GOA fixed gear fisheries. These numbers, however, are skewed by the heavy reliance of some GOA trawl vessels on BSAI fisheries (see again Table 18 through Table 20).

Licenses with trawl activity that generated over half of their groundfish revenue from Western GOA pot gear fishing tended to rely on groundfish for only 30% to 60% of total revenue. Those licenses tended to rely heavily upon state managed fisheries – primarily for salmon. Only one LLP that was active in trawling generated only half of its groundfish trawling from Central GOA pot fisheries.

Twenty-nine LLP licenses that made GOA groundfish trawl landings generated the majority of their total gross revenues from trawling in the BSAI areas. Those LLPs displayed minimal activity in non-trawl fisheries.

2.2.2.1 Initial formation and membership limitations

Part 7.d of the April motion describes the initial formation of Inshore cooperatives. The Council has proposed options that would base initial cooperative membership on objective measures of recent participation so that (1) delivery distribution and transfer markets for licenses and quota are stable in the period immediately following implementation, and (2) a subset of shoreside processors and their community stakeholders are not harmed by a sudden exodus of CV deliveries. Holding membership constant for two years could provide harvesters and their cooperative processing partners the time necessary to work out details and respond to challenges in their fishing and PSC-minimization plans, and to develop a productive relationship.

As described in the April 2014 discussion paper, a CV would be placed in a cooperative with the processor to which the majority of the legal catch associated with the license was delivered over a pre-determined historical period.[17] The previous paper refers to that processor as the "majority of delivery" processor, or MDP. The April motion suggests two options for defining the relevant historical period:

Option 1: The same qualifying years that are used for determining target (and secondary) species allocations;

Option 2: 2011 and 2012, *or* the two most recent qualifying years in which the license was credited with GOA trawl groundfish catch.

The Council added Option 2 in response to data analysis showing that strict reliance on the majority of deliveries over the catch history qualifying period could pair CVs with processors to which they had not made deliveries since 2010 or earlier. Given the importance to the program's aims for the harvester/processor relationship and the contract developed between the two parties, the Council did not wish to force together parties that had already made a private business decision to end their relationship. Option 2 would base initial cooperative membership on either the two most recent years prior to the established control dates (2011 and 2012), or the two most recent years in which the license was used on an active vessel. The latter approach should capture a better picture of relevant activity for vessels that are eligible for the program but may have temporarily suspended trawling in the GOA for one reason or another.

The motion includes a suboption that would add flexibility to the duration of the initial cooperative linkage between harvesters and processors. The Council noted that strictly defining the minimum initial cooperative term as the two years *immediately* following implementation might entice a license holder to remain in the limited access fishery (described in Section 2.4). A license holder who does not wish to join a cooperative with his or her MDP could defer joining a cooperative until the two year period expires, then join the cooperative of his or her choice. The suboption would link a license holder to the MDP for the first two years in which the license is enrolled in a cooperative, regardless of how many years after implementation that occurs. Using this approach, license holders could not get around their initial

[17] Qualifying catch does not include harvest under the Central GOA Rockfish Program.

partnership obligation by "holding out" in limited access, thus fewer vessels would be expected to join the limited access fishery where there are fewer tools available to achieve the program's bycatch, PSC, and efficiency goals. Though it was not included in the motion, the Council discussed whether or not there should be a time-limitation on this suboption, if selected. For example, if a license holder chooses to fish in limited access for eight years and *then* joins a cooperative, the license could be enrolled in any cooperative. The rationale for this provision is similar to the rationale for basing the initial linkage on only the most recent qualifying years (Option 2, above) – that forcing a partnership between entities that have historically chosen not to work together may complicate or undermine the intent of the cooperative program.

Prior to the April 2014 discussion paper, NOAA GC advised the Council that it cannot *obligate* a CV to deliver to a particular shoreside processor for a period of time. Such a delivery obligation has been determined to have the effect of allocating a processing privilege, which is not authorized under MSA. It may be the case, however, that harvesters and processors choose to include such a delivery requirement in their cooperative contract. In general, the Council is limited to directing cooperatives to do only the things that the Council itself has the authority to do under MSA. NOAA GC has indicated that it might provide further legal comment on whether a vessel and a processor can be linked, via a cooperative, on the basis of historical deliveries.

Casting processors as members in a cooperative is likely to align the incentives CVs and shoreside plants. As a partner, rather than a buyer with reduced bargaining power, processors are more likely to explore investments in the physical capital necessary to produce higher value product forms. With no harvester/processor linkage, negotiating power would flow to the entity with the secure harvest privilege (this effect might be less strong in situations where geography limits the realistically available number of processors, as in the Western GOA). The Final EIS for the PFMC's west coast groundfish trawl LAPP noted that linking entities in a cooperative program makes the impact on ex-vessel prices unclear (page 502). Avoiding a situation where one party is conferred an advantage is in line with the Council's stated objectives, and with MSA.

The proposal's initial formation scheme would essentially turn shoreplants that are not MDPs into "new entrants" in regards to GOA trawl groundfish. Groundfish opportunities for these plants, or any new plant that is built, would *likely* be limited to deliveries from limited access participants and fixed gear vessels (assuming that cooperative contracts have some sort of private delivery expectation). Even unallocated trawl groundfish would likely be delivered by a CV to its cooperative processor, since any PSC taken during that trip would be debited from the cooperative's allocation. Non-MDP plants could form new cooperatives and compete for membership after the initial two year membership, though they would be entering that competition from a disadvantaged position. The motion does not specify a minimum number of CVs required to form a cooperative, but if such a minimum is part of the final program then that would be an additional hurdle in the formation of a new cooperative.

The motion implies that there should be only one processor member in each cooperative. Allowing multiple cooperative members in a cooperative would likely raise anti-trust issues in regards to price setting. Though it has not developed a full legal opinion on the matter, NOAA GC suggested that the Council might need to consider whether a single processor could be in more than one cooperative. If a

processor is limited to one cooperative, then all eligible CVs whose licenses have that plant as their MDP could choose only between that cooperative and limited access. This could force together CV license holders (harvesters) who would prefer not to be associated – jointly and severally liable, even – with one another. The Council could still choose to limit processors to forming on cooperative, but it would eventually need to state *why* that is the best way to accomplish the overall goals of the program. At present, the language in the motion that implies a harvester can form only one cooperative is found in Part 7.e. The requirement that the cooperative contract be approved by at least 51% of license holders eligible for that cooperative (i.e. eligible for the program and having the same MDP) precludes a second cooperative from forming, since 51% (or more) cannot sign two different cooperative contracts.

The Council should also consider whether a CV LLP holder (harvester) could be in multiple cooperatives. By definition, each license can have only one MDP. However, a person or entity may own more than one license. If those licenses are stacked on the same vessel, it might be possible for one vessel to fish for two cooperatives so long as each license has a different MDP. The two most likely scenarios for a person to have two licenses with different MDPs are: (1) if the current holder recently purchased one of his licenses from an individual whose vessel worked with a different processor, or (2) if each license was endorsed for a different GOA area. Since the proposed program is LLP-based, it seems reasonable that a person could enroll different licenses in different cooperatives, even if they are in the same area. However, if both licenses are stacked on the same vessel, NMFS would need to be able to actively track catch by the LLP (instead of the vessel) in order to debit the proper cooperative's quota account.

The Council may wish to consider the implications of including a quota "regionalization" measure if a single license cannot be enrolled in more than one cooperative. Regionalization (further discussed in Section 5.3) means that quota-based harvest would have to be delivered in the region to which the underlying catch history had been delivered. If a portion of the catch history on a license with a Central GOA MDP is regionalized for the Western GOA, then the vessel using that license will have to deliver some of its catch to a processor outside of its cooperative. This is not necessarily a bad thing, and is not prohibited by the Council's motion (nor could it be). Nevertheless, this required behavior might weaken the operational relationship between the harvesting vessel and its cooperative processor, which is key to the improved management goals of the program. A license that has a relatively large percentage of catch history that is regionalized "away" from its cooperative processor may be less attractive to the cooperative. It is assumed that a cooperative cannot refuse to admit an eligible license holder, but after the initial two-year period this license holder may have fewer enticements to get an improved deal with another cooperative in the same region where some of its quota was not deliverable.

2.2.2.2 Contract elements

Parts 7.e, f, and g of the motion broadly outline what must be included in each cooperative's annual contract. The motion states that the contract would be filed with NMFS, but does not explicitly state that NMFS or the Council must *approve* the contract. The Council should state what level of contract approval, if any, is required. In addition to the harvesting and processing members of the cooperative, the motion includes an option that would require a signatory representing the community in which the processor is located. The Council has not yet defined whom this signatory should be, but has stated that it should be someone who is "broadly representative" of non-fishing stakeholders. The Council expects

community members to provide input as to what sort of active role they wish to play in the contract development process.

Part 7.f states what the contract *must* include. The Council can only require the cooperatives to privately negotiate on matters which the Council itself could influence if it chose to do so. At this time, the Council's approach is to give the cooperatives latitude to find their own solutions that best suit their unique circumstance and constituency. These mandatory items include bylaws, an annual fishing plan, a plan to monitor and minimize PSC *with individual vessel-level accountability*, provisions for dissolving the contract after the initial two-year cooling off period has expired, and a prohibition on engaging in price-setting with "processor affiliated" harvesters in violation of general anti-trust law. NOAA GC has indicated that it might provide comment on the requirement of vessel-level PSC accountability, and the requirement to publish contract exit provisions. The contract would have to be signed by at least (options) 51% to 80% of eligible license holders before the cooperative could receive annual quota shares. NOAA GC might also provide comment on this requirement.

The contract elements listed in Part 7.g are not strictly defined. They include measures to promote bycatch management, active participation, mechanisms to facilitate entry, and community protections. These elements are not required, as the ones listed above, but are arguably the most important for the overall program to meet the Council's goals. Again, the Council wishes to give the cooperatives latitude in defining measures that suit their constituencies. Most of these issues are addressed elsewhere in the Council's motion in some manner, but by including them here the Council is acknowledging that cooperatives ultimately have greater management precision and responsiveness than do the regulating agencies. NOAA GC will not be able to comment or provide guidance on these contract elements until they are at least broadly defined.

Option: Processor control over a portion of PSC

Part 7.b of the motion includes an option that would give each cooperative processor control over a portion of the cooperative's PSC allocation. Terms of access for those allowances would be negotiated as part of the cooperative contract. The processor would go through NMFS to incrementally activate those PSC allowances for harvester cooperative members. This PSC could not be used on vessels owned by the processor.

There are two main motivations for this option. First, placing some amount of available PSC under processor control could jump-start negotiations over how an intra-cooperative PSC reduction incentive program should be formulated. The fact that processor-owned vessels could not benefit from that additional PSC may put them at a relative disadvantage. In fact, unless the percentage of processor-held PSC comes "off the top" of only the incentive-eligible vessels' LLP allocations, the incremental PSC pool would constitute a *de facto* transfer of available PSC from some cooperative vessels to others. Any negative distributional impacts on processor-owned vessels (and their crews) could be somewhat mitigated by the fact that better PSC management might allow for expanded fishing opportunities for all cooperative members. Second, allowing the processor to control implicitly valuable PSC allowances could aid processors in their private ex-vessel price negotiations. Allocative actions inevitably affect bargaining dynamics in the raw fish market. This measure would give processors additional control over the cooperative's harvest plan, understanding that they would not receive any harvest quota under the

current proposal. Processing stakeholders have communicated to staff that this measure could indeed address their sector's concern over the need to protect existing financial investments.[18]

This option would depend on NMFS ability to reliable track vessel ownership. Assuming that is possible, staff will have to analyze whether any of the initially formed cooperatives consist solely of processor-owned vessels. If such a cooperative does exist, it may need to be exempted from this provision.

NOAA GC has indicated that it might provide a legal comment on this option.

The Council may consider requiring cooperatives to include information in their annual reports on how this PSC was allocated. Annual reporting requirements are further discussed in Section 2.3.

2.2.3 Catcher/Processor Cooperatives

Part 8.d of the motion states explicitly that CP cooperatives would exist only to coordinate harvest activities in accordance with the bycatch and PSC objectives of the proposed program. CP cooperatives are *not* intended to play a marketing or supply-side management role.

Around 90% of the total gross revenues for CPs that recorded GOA groundfish trawl landings in the relevant historical period were generated from BSAI trawling. This figure holds for activity dating back to 2003, or when looking at only more recent years (2007 or 2008 through 2012 or 2013). Over the entire 2003 through 2013 period, 28 CP LLPs endorsed for groundfish trawling were active. Twenty-six of those were named on vessels that made GOA trawl landings. One of the two CP LLPs that did not trawl in the GOA did make pot landings in the Western GOA. Twenty-three CP LLPs made GOA trawl landings from 2008 through 2013. All but one of the CP LLPs that were active since 2003 generated over 98% of total gross revenues from groundfish activity. Aggregated over all CP licenses, CG trawl activity accounted for around 6% of total gross revenue and WG activity accounted for around 3%. Two LLPs, however, generated nearly all of their revenue from trawling in the Central GOA.

2.2.3.1 Initial formation and membership limitations

Part 8.c of the motion lists two options for minimum requirements to form a CP cooperative.

Option 1: At least 2 separate entities (using the 10% individual and collective rule)[19];
Option 2: At least [Suboptions] 2 – 4 eligible LLP licenses.

Eventually the Council will have to articulate why the range of options that it is considering constitutes the "reasonable" range. In other words, the Council should state why a cooperative could not be formed by only one entity (realizing that under option 2 a single CP with stacked LLP licenses would meet the minimum requirement). The likely rationale is that the benefits of cooperative management increase with the number of entities involved – at least up to the point where the number of entities becomes too large to be manageable, or the point where the cooperative's quota share would constitute excessive shares. By

[18] This opinion reflects communication with individual stakeholders, and is not derived from a census of processing interests.
[19] The individual and collective rule is explained and illustrated with an example in Section 5.2.1.

comparison, the Central GOA Rockfish Program does not have a minimum number of LLP licenses required to form a cooperative.[20]

2.2.3.2 Contract elements

Required and suggested contract elements for the CP cooperatives are outlined in Parts 8.d and e of the motion. Aside from elements that relate to the harvester/processor relationship, the same comments and areas for future NOAA GC comment apply here as they did in Section 2.2.2.2.

2.3 Annual Cooperative Reporting

Parts 7.j and 8.h of the Council's April motion specify that both Inshore and CP cooperatives would be required to submit a written annual report to the Council and NMFS. The Council should be aware, however, that requesting to see the report will mean that it cannot *require* the cooperatives to include information that is protected under confidentiality rules. This would preclude reporting on vessel-level catch, and bycatch[21]. Cooperatives could choose to include that information voluntarily, at their own discretion.

Cooperatives in the Central GOA Rockfish Program currently submit an annual report to NMFS by December 15. That report includes a summary of quota and sideboard harvest, retained and discarded catch, a description of the cooperative's monitoring methodology, and a description of any action that the cooperative took against vessels that exceeded their allowed catch. Vessel-by-vessel reporting is included on a voluntary basis. Amendment 80 cooperatives submit a similar report that is submitted to NMFS by March 1. Cooperatives from these two programs make annual voluntary oral presentations to the Council at the April meeting.

AFA cooperatives provide annual reports to the Council by April 1 of each year. They include similar information about pollock and sideboard allocations, as well as vessel-by-vessel suballocations. They also include information on retained and discarded catch, monitoring methodology, actions taken against members that exceed catch or bycatch limits, and the number of salmon taken (by species and by season). The Non-Chinook Intercooperative Agreement (ICA) Annual Report includes estimates of non-Chinook salmon avoidance through the movement of fishing activity away from the Chum salmon Savings Areas. The Chinook salmon Incentive Plan Agreement (IPA) Annual Report includes a description of salmon avoidance incentive measures used, how those measures affected individual vessels, how they affected salmon savings, the number of Chinook and pollock caught, and a summary of inseason transfers of Chinook PSC within and between cooperatives.

[20] There was a minimum of two CPs in each cooperative under the Rockfish Pilot Program, but this requirement was removed by Amendment 86. Staff will further explore the rationale for that decision in subsequent iterations of this document.

[21] It is uncertain whether the Council could require vessel-level reporting on PSC use. Reporting on fewer than three entities is normally restricted by confidentiality rules. However, NMFS does report vessel-level PSC on its website for some programs. The Agency and NOAA GC may need to provide comments on the Council's options regarding the publication of individual vessel PSC.

The submission deadline for any cooperative report required under the GOA trawl LAPP would need to be in the early part of the calendar year, since post-delivery quota and PSC transfers can occur as late as December 31, and because flatfish seasons can remain open until December 31. If the Council and the industry feel that it is feasible, scheduling voluntary oral reports to the Council for the April meeting would be consistent with other Alaska cooperative programs.

2.4 Limited Access Fishery

Part 12 of the Council's April 2014 motion defines GOA groundfish limited access fisheries for the CV and CP trawl sectors. As long as participation in the Inshore and CP cooperatives established under the GOA Trawl LAPP is voluntary, the Council must provide an opportunity to fish outside of a cooperative. The amount of the allocated species TAC made available to the limited access fishery would be determined by the aggregate catch history (potential quota share) attached to the set of LLPs that are not enrolled in a cooperative. The April motion proposes that CV and CP LLPs would have to be in a cooperative by November 1 of the preceding year in order to access an allocation (motion Parts 7.c and 8.c), so NMFS would be aware of the amount of allocated species TAC for limited access and could determine whether or not it is sufficient to open the fishery. In the event that NMFS determines prior to the season start date that it is not able to open the fishery, the Council could consider whether or not license holders in limited access should have a second chance to enroll in a cooperative. This may complicate the annual cooperative formation process. The Council could take the position that the risk of the limited access fishery remaining closed is borne the license holders who opt out of voluntary cooperatives.

Existing regulations such as sector/area/gear allocations, LLP restrictions, and MRAs in the limited access fishery are presumed to be unchanged from the status quo. The limited access fishery would operate in a competitive manner, as it currently does, where license holders are not guaranteed a certain portion of the available limited access TAC.

In addition to being an opt-out fishery, limited access also provides a fishing opportunity for the holder of a LLP with no attached quota or the purchaser of a latent LLP. However, because available catch is determined by the aggregate amount of catch history associated with limited access LLPs, license holders who bring no catch history into the limited access pool would be dependent on the amount of catch history allocated to the fishery via other licenses.

If a very small number of LLPs are entered into the limited access fishery, and absent any new entry by purchasers of latent licenses, the fishery could unintentionally function as a *de facto* allocation to a few license holders. The Council may wish to explore whether or not it can seek a confidentiality waiver in the case that three or fewer individuals are involved in the fishery. Section 2.6.1 provides NMFS's rationale for why the limited access sector would need to be subject to increased monitoring standards, especially if the number of vessels in the sector is small. Closely managing a small "race" fishery could result in high per-vessel management costs to the Agency. If the allocation is too small, the Agency may need to close it to directed fishing at the beginning of the year to prevent the directed fishery allocation or the PSC limit from being exceeded.

The total (shared) amount of PSC available to vessels in the limited access fishery would be similarly determined by the amount of catch history associated with licenses that are not enrolled in cooperatives[22]. The April motion states that annual halibut and Chinook salmon PSC is apportioned to the fishery on a *pro rata* basis relative to the groundfish catch histories associated with limited access LLPs. The motion also includes an option to reduce that aggregate amount of PSC by (options) 10% to 30%. Reducing the available amount of PSC is an additional disincentive to remain independent from a cooperative. At its April 2014 meeting, the Council noted that it did not want to create an "attractive" limited access fishery, but that it also recognized its duty of providing a *viable* non-cooperative opportunity. Lower PSC limits would provide benefits for the prohibited species stocks and users of those directed fisheries, but could have negative economic impacts if the fishery closes early or is never opened. The magnitude of those impacts would depend upon the number of vessels in limited access. Given the incentives for most vessels to join cooperatives, it is unlikely that a poor limited access season would result in a significant threat to approaching optimal groundfish yield.

The Council might consider whether the pool of limited access PSC should be seasonally apportioned. While this would further complicate NMFS inseason management, it may be necessary in order to protect limited access opportunities for fisheries that occur later in the year such as the Pacific cod B season or the pollock C and D seasons. With no controls, limited access CVs fishing for rex sole in the spring could directly impact the likelihood of having enough PSC remaining to prosecute Pacific cod in the fall. The vessels with the highest probability of choosing to remain in limited access may be those vessels that do not rely upon the GOA groundfish fisheries for the majority of their annual revenues. Vessels that do not plan to participate in fall GOA fisheries would not have an incentive to preserve PSC. However, the Council could determine that this possible outcome does not warrant protective action, since those who do rely on GOA fisheries have the option to enroll in a voluntary cooperative.

Assuming that they have PSC available, limited access CVs may have an advantage over cooperative vessels in prosecuting flatfish species that remain unallocated under the proposed GOA trawl LAPP. CVs typically only target flatfish at certain times of year, planning around more lucrative seasons for pollock, Pacific cod, and directed salmon fisheries. Due to this natural time constraint, cooperative vessels may not have much of an advantage in planning the optimal timing of their flatfish participation. Limited access CVs – especially those that do not intend to target GOA Pacific cod or flatfish later in the year – could fish for flatfish intensively and in a relatively high-PSC manner, while cooperative vessels may be preserving halibut PSC for later non-pelagic fisheries. Cooperative vessels that needed to access additional halibut PSC in order to expand flatfish participation would likely have to pay an internal lease fee to their cooperative, while limited access vessels could fish off of the shared limited access PSC apportionment. These vessels would affect year round limited access vessels (if there are any). If unallocated flatfish TACs are harvested quickly, limited access vessels could also be impacting the opportunity of cooperative vessels to utilize their halibut PSC savings for expansion into new flatfish opportunities.

[22] This assumes that the GOA PSC limits are allocated in their entirety, even if some portion of target and secondary species TACs are left unallocated. In other words, there would be no unallocated PSC available to either the limited access fishery or the cooperatives.

Part 2 of the April motion states that vessels fishing in limited access would be subject to full observer coverage. Exempting limited access vessels from increased observer coverage would have created an incentive to opt out of the cooperative program, which would not further the Council's goals. Given that the amount of PSC available to the limited access fishery is likely to be small, inseason managers may need the precision afforded by full coverage in order to keep the fishery open at all. Inclusion in the full coverage category means that vessels from that sector would need to carry an observer when fishing for *any* GOA groundfish, not just species that are allocated under the LAPP. This is necessary because, as with cooperative vessels, the limited access sector's PSC apportionment would be debited any time that halibut or Chinook salmon are taken, and not only when fishing for allocated species.

The Council may wish to consider whether control measures are necessary to prevent the owner of multiple vessels and LLPs from transferring most or all of his or her catch history onto licenses that are enrolled in cooperatives, then allowing the remaining LLP(s) to fish in limited access. The vessel that remains in limited access would be fishing catch history that is attributed to other licenses, while possibly still sharing in the benefits of what is fished in the cooperatives. As long as regulations and monitoring standards are in place to ensure that limited access fishing is not more harmful to PSC stocks than is cooperative fishing, then the impact of this strategy would only be distributive. The possibility of this behavior might serve as a further disincentive for vessels to rely on the limited access fishery. If this behavior is allowed, and a portion of a company's vessels are left in limited access, then relatively more crew persons would be adversely affected by an early closure in the limited access fishery.

2.5 Latent Trawl Licenses

The Council's April 2014 motion requested further information on latent trawl licenses and their effect on the proposed cooperative program. The following information, along with continued stakeholder input, will be used to evaluate the need for further recency actions in the Western and Central GOA trawl CV sectors.

The License Limitation Program (LLP) was implemented on January 1, 2000. Within the following decade, the Council scoped, analyzed, and took action to remove groundfish LLP licenses that had been issued but were not being actively used. The trawl recency action (GOA FMP Amendment 82/BSAI FMP Amendment 92) was implemented on September 14, 2009.[23] That action defines "latent" licenses as LLP licenses that are valid but are not currently being used on a vessel. The LAPP program that is currently being considered would award catch history, which becomes quota when the license is enrolled in a cooperative, for participation that occurred during a range of qualifying years. As a result, the relevant definition of latency for this action is the set of licenses that have not been used on a vessel during the selected qualifying period, as opposed to only those licenses that are not being used "currently" (i.e. in the most recent year). For reference, Table 8 shows RAM's 2014 record of GOA groundfish trawl-endorsed licenses broken out by area (CG, WG) and by operational type (CV, CP). Trawling in the West Yakutat district requires a Central GOA trawl endorsement. Some of these licenses have not been active in GOA

[23] Trawl endorsements (by area) were removed from LLP licenses that had not made a minimum of two landings using trawl gear from 2000 through 2006. Exceptions were granted for LLPs that made at least 20 trawl landings in either the Central or Western GOA from 2005 through 2007. Exceptions were also granted for LLPs that needed to keep its area trawl endorsement in order to continue participating in at least one of the following LAPPs: AFA, Amendment 80, or Central GOA Rockfish (Pilot) Program.

trawling at any point during the considered qualifying periods (spanning 2003 through 2012, as defined in Parts 6, 7, and 8 of the motion). Those licenses are clearly considered "latent" for this program. Other existing licenses have been active since 2003, but not recently enough to be awarded catch history if the qualifying years stretch back only to 2007 or 2008. Table 9 shows how many LLPs would have recorded a "qualifying" landing under the various sets of proposed years. Though the Council's options for qualifying periods all end in 2012 – which comports with the control dates established for this action – Table 9 includes active LLP license counts for periods that run through 2013, in an effort to present the most complete picture of available data. Taken together, the difference in these two tables shows the number of latent licenses, depending on the selected qualifying period. Table 18 through Table 20 (in Section 4.2, Qualifying Years) show the relative dependency on GOA trawl fisheries – relative to other areas and gear types – for LLPs that would receive an initial allocation under any set of considered qualifying years versus those that would be considered latent if only the more recent years are selected.

Table 8 LLPs endorsed for groundfish trawl by area and operation type, 2014

Central GOA	Western GOA	CV LLPs	C/P LLPs	Total
Trawl	Trawl	17	11	**28**
Trawl	None	14	6	**20**
Non-Trawl & Trawl	Non-Trawl	4	1	**5**
Non-Trawl & Trawl	None	28	1	**29**
Non-Trawl & Trawl	Non-Trawl & Trawl	34	2	**36**
Non-Trawl	Non-Trawl & Trawl	16		**16**
None	Non-Trawl & Trawl	4		**4**
None	Trawl	7	7	**14**
Trawl	Non-Trawl			
Trawl	Non-Trawl & Trawl			
Non-Trawl & Trawl	Trawl			
Non-Trawl	Trawl			
TOTAL		**124**	**28**	**152**

Source: RAM LLP database, 2014

Table 9 Active LLPs during proposed program qualifying years and in 2013, by area and operation type

Active Trawl	CV LLPs			C/P LLPs			GOA
LLPS in GOA	WG	CG/WY	Total	WG	CG/WY	Total	Total
2003 - 2012	60	88	112	19	16	23	**132**
2003 - 2013	60	88	112	19	16	23	**132**
2007 - 2012	48	71	92	17	12	20	**111**
2007 - 2013	48	74	94	17	12	20	**113**
2008 - 2012	43	71	89	16	9	19	**108**
2008 - 2013	43	74	91	16	9	19	**110**

Source: RAM LLP files, Fish Tickets, and Catch Accounting
Note: The sum of the CV Total and CP Total does not equal the GOA Total because some vessels had both CV and CP activity.

The set of licenses that would become "latent" if the Council selected the most recent set of qualifying years (2008 through 2012) collectively accounted for 1.8% of GOA trawl groundfish landings over the 2003 through 2013 period. When those vessels were active – between 2003 and 2007 – the vessels named on those licenses harvested between 0.3% and 7.6% of annual GOA trawl groundfish. The Western GOA catch associated with these licenses was 86% pollock and 13% Pacific cod. The associated Central GOA catch was 36% pollock and 20% Pacific cod, but adding in catch of arrowtooth, flathead sole, primary rockfish species (taken outside of the CGOA Rockfish Program), and sablefish accounts for over 90% of their catch.

It is worth noting that two licenses that had not had GOA groundfish landings since 2005 were once again active in 2013. Under the currently proposed set of qualifying years, those LLPs might be latent. Extending the qualifying period to include 2013 would mean the difference between receiving an initial allocation and having to acquire quota through lease or on the transfer market. The vessels name on those LLPs made 24% of their 2013 landings in the Central GOA Rockfish Program. Latent LLP licenses with no catch history could still be enrolled in a cooperative, though the cooperative is under no obligation to "fund" the vessel named on the license with harvest quota. A latent LLP might still be appealing to a cooperative if the license holds a particular area endorsement or a large MLOA, as the cooperative could use that vessel as part of its optimal harvesting strategy.

Table 10 and Table 11 show the various endorsements on the CV licenses that would become latent if the more recent sets of qualifying years are selected. Of the 18 LLPs that would miss out on initial allocations if the start of the qualifying period were moved from 2003 to 2007, only six are endorsed for BS or AI trawling. Two of the three additional LLPs that would be considered latent if the start of qualifying moves from 2007 to 2008 are endorsed for BS or AI trawling.

The Council's decision on whether or not to remove the GOA trawl endorsements from latent licenses through another trawl recency action depends on how it views the likelihood of those licenses being reactivated in the GOA trawl fishery. Removing those endorsements reduces the likelihood of an influx of competitive effort into the limited access fishery. On the other hand, those endorsements represent both an opportunity for new entrants and a tool that might be useful for a cooperative's harvest strategy (in the form of a desirable area endorsement or a larger MLOA). The 21 CV LLPs that would be deemed latent only under the sets of more recent qualifying years – i.e. the licenses that recorded landings only between 2003 and 2006 or 2007 – are less likely to be reactivated in the GOA trawl fishery. Those licenses are being used in the BSAI trawl fisheries, and if trawling in the GOA was important to the business plans for those vessels then their GOA activity would not have lapsed for such a long time. The two LLPs that were reactivated in the GOA in 2013 are exceptions to the previous statement. There are, however, 12 trawl-endorsed CV LLPs that have not been active under even the most inclusive set of qualifying years (2003 through 2012). These licenses are more likely to re-enter the active fishery through acquisition by either a new entrant or a cooperative member seeking a particular endorsement. Whether these 12 licenses constitute a threat or an opportunity is ultimately a policy call, but analysts will continue to explore the recent utilization of those licenses in other fisheries as this process moves forward.

Table 10 **Endorsements on the 18 Catcher Vessel licenses that would not receive initial allocations under a 2007 to 2012 qualifying period**

Endorsements	AI Trawl	BS Trawl	CG Trawl	WG Trawl	AI CV PCod HAL	CG CV PCod HAL	CG CV PCod Pot	WG CV PCod Pot
AI Trawl	3	2	1	2	1	1	0	0
BS Trawl		5	2	4	0	0	0	0
CG Trawl			11	2	0	0	2	1
WG Trawl				9	1	1	1	2
AI CV PCod HAL					1	1	0	0
CG CV PCod HAL						1	0	0
CG CV PCod Pot							3	1
WG CV PCod Pot								3

Table 11 **Endorsements on the 3 Catcher Vessel licenses (additional to those in the Table 10) that would not receive initial allocations under a 2008 to 2012 qualifying period**

Endorsements	AI Trawl	BS Trawl	CG Trawl	WG Trawl	WG CV PCod Pot
AI Trawl	1	1	0	1	0
BS Trawl		2	1	2	0
CG Trawl			2	2	1
WG Trawl				3	1
WG CV PCod Pot					1

Of the 28 existing CP LLPs with GOA trawl endorsements, 23 made GOA groundfish landings since 2003. One of those licenses was last used on a vessel harvesting GOA groundfish in 2003, and two were last used for that purpose in 2006. The LLP that has been inactive since 2003 has remained active the BSAI through 2013, while the two that were used through 2006 remained active in the BSAI for one or two more years and are now inactive in groundfish fishing.

One additional CP LLP was used for GOA groundfish fishing on a CP through 2007. That license was used on a GOA CV in 2008. Since then, it remains active but only in the BSAI.

2.6 Catch Monitoring and Catch Accounting

With the exception of vessels participating in the Central GOA Rockfish Program, fisheries in the GOA are managed at the fishery or sector level. Catch accounting and catch monitoring – including observer coverage, observer sampling, and regulations governing how catch is sorted and weighed – have been

implemented to support fishery-level management. The GOA trawl LAPP being considered would implement transferable groundfish and/or PSC allocations to an entity, such as a cooperative.

Management programs that allocate catch and PSC to an entity are enforced through regulatory provisions that prohibit the entity from exceeding its allocation. This style of fishery management gives catch share recipients more control over their fisheries. Such allocations change the management approach for those fisheries. NOAA may initiate an enforcement action against an entity if it exceeds an allocation. This requires that all concerned parties (NMFS, other management agencies, and quota holders) have access to a single authoritative record that clearly details the amount of quota harvested. This is particularly true when catch, bycatch, or PSC data collected by observers must be used as a basis for an enforcement action should an entity exceed its allocation.

LAPPs can also create a strong incentive for an entity receiving an allocation to maximize the value of each quota pound. One way to do this is to engage in practices such as high-grading or mis-reporting catch. An effective quota management program must recognize that the incentive to engage in illegal activities increases, and management controls must be designed to minimize them. The combination of these factors generally requires a more precise accounting system through a more intensive catch monitoring system, relative to what is required when NMFS manages allocations at a fishery or sector level. NMFS and the Council have addressed these issues in other catch share programs (e.g. CGOA Rockfish, CDQ, AFA, Amendment 80) by articulating goals for the management of catch share fisheries and imposing a combination of monitoring tools, including observer coverage requirements.

This section outlines the monitoring considerations and major monitoring components that NMFS is currently considering for a GOA trawl LAPP. The section will continue to be developed and modified as the Council develops specific alternatives and detailed options for the program. A description of status quo and NMFS's preliminary proposed monitoring measures is illustrated in Table 12 and Table 13, found at the end of Section 2.6.

2.6.1 Monitoring Considerations and Issues

Monitoring challenges could vary depending on the alternatives that the Council develops for the GOA trawl LAPP, so NMFS staff has outlined a few general monitoring considerations. In addition, there are several outstanding issues that may impact the final set of monitoring tools that NMFS recommends to support implementation of the program.

Cooperative vs. Non-Cooperative Participants

Depending on how the Council structures the program, some vessels may operate in a cooperative while other vessels operate in a limited access fishery. However, from a monitoring perspective, the management challenges associated with cooperatives and the limited access fishery would be very similar. This is especially true if the number of vessels participating in the limited access fishery is small and there is a *de facto* "allocation" of catch to those vessels. For example, if the entire TAC of a species is allocated and if only one or two eligible vessels choose to operate in the limited access fishery, those few vessels would share exclusive (though internally rival) access to that portion of the overall available harvest. Those vessels may have incentives to maximize efficiencies and productivity similar to vessels

operating in cooperatives, or they may have an incentive to continue to race for fish. Either scenario would increase the monitoring necessary to effectively manage the limited access portion of the GOA trawl fishery. For these reasons, NMFS would require increased monitoring standards for both vessels that choose to participate in cooperatives ***and*** those in the non-cooperative fisheries.

Central GOA Rockfish Program: Combined or Separate?

The set of monitoring tools that NMFS is currently recommending for this program build upon those that were implemented for the CGOA Rockfish Program. NMFS recommends merging these two programs and consider the monitoring requirements as a single set of tools that will accomplish the goals of both programs. Monitoring, enforcement, and management will become unnecessarily complex if the two programs are different and vessels check in and out of different monitoring requirements. Further discussion of NMFS's recommendation to merge the programs is provided in Section 3.1.

Allocating Some or All Groundfish Species

Many of the fisheries in the GOA are multispecies fisheries where several species are targeted and harvested on a single trip. This Council's April motion considers allocating several species, including primary and secondary species. Harvest under the program could be a blend of quota-species and non-quota species (allocated and unallocated). If only a few groundfish species are allocated, but are harvested concurrently with non-quota species, fishermen could realize a greater incentive to identify and pursue unallocated species. For CVs and shoreside processors, this may increase the incentive to sort and misreport an allocated species as a non-allocated species. For CPs, this has the potential for vessels to pressure the observer regarding species identification. These incentives will need to be considered in the monitoring and catch handling requirements necessary to implement the program. The simpler approach from a catch accounting perspective would be to allocate all species that would be targeted and harvested under the program and to count all of that catch of allocated species towards cooperative quota. That approach was taken during the development and implementation of the Amendment 80 program. However, other parts of this document provide compelling reasons not to allocate *every* species that might be encountered while trawling for GOA groundfish.

Harvest of Trawl Quota with Pot Gear

Depending on what alternatives are developed to allow the harvest of trawl quota with pot gear ("gear conversion"), the monitoring requirements for vessels using pot gear may be identical to those proposed for trawling. For example, halibut and Chinook salmon PSC taken on vessels fishing with pot gear could count toward the cooperative's PSC allocation. If that is the case, then the monitoring tools outlined in Table 13 necessary to manage PSC allocations would likely also be required on pot vessels. NMFS will need to further consider the set of monitoring tools needed for vessels fishing under the program using pot gear as the Council develops specific goals and alternatives.

2.6.2 Monitoring Components

The major components that NMFS is currently considering for catch accounting, observer coverage, and monitoring for the various components of the fishery are described in Table 13. As noted above, these

provisions will continue to be developed and modified as the Council develops alternatives and as NMFS incorporates input from NOAA Office of Law Enforcement and others.

Partial and full observer coverage categories are defined in regulation at §679.51(a)(1) and (2). The full coverage category includes CPs and motherships that are harvesting, receiving, or processing groundfish in a federally managed or parallel fishery. Full coverage also applies to CVs while participating in the Central GOA Rockfish Program, directed fishing for pollock in the Bering Sea, and fishing CDQ groundfish with trawl or hook-and-line gear. The partial coverage category includes all other CVs that are designated on a FFP.

Catcher/Processors

Under any scenario that would allocate groundfish to the CP sector, NMFS would extend the monitoring tools currently in place for CPs fishing under CGOA Rockfish Program[24] to ***all*** CP vessels under this program. These tools would include:

- 200% coverage, which enables every haul to be sampled by an observer;
- Availability of an observer sampling station;
- Requirement to weigh catch on a NMFS-approved flow scale;
- Video system to monitor compliance;
- Use of a single fish processing line in the factory; and
- Prohibition on deck sorting.

If the Council recommends transferrable PSC allocations of Chinook salmon, then additional tools would be required if the PSC accounting is to be based on a census of salmon. These requirements would be the same as the set of tools that were necessary to implement a Chinook salmon census on CPs under Amendment 91 in the Bering Sea. These requirements would include:

- All salmon PSC of any species must be retained until it is counted by an observer;
- Vessel crew must transport all salmon PSC from each haul to an approved storage location adjacent to the observer sampling station so that the observer has free and unobstructed access to the salmon, and the salmon must remain within view of the observer from the observer sampling station at all times;
- The observer must be given the opportunity to count the salmon and take biological samples, even if this requires the vessel crew to stop sorting or processing catch until the counting and sampling is complete;
- The vessel owner must install a video system with a monitor in the observer sample station that provides views of all areas where salmon could be sorted from the catch and the secure location where salmon are stored;
- No salmon PSC of any species may pass the last point where sorting occurs in the factory; and
- Operators of CPs must report the count of salmon by species in each haul to NMFS using an electronic logbook.

[24] Includes CPs fishing under Rockfish Program, but does not include the F/V Golden Fleece

Catcher Vessels

The monitoring tools currently in place for CVs participating in the CGOA Rockfish Program provide the model for the monitoring NMFS would propose for this program. These requirements include:

- Full observer coverage (carry an observer on all trips);
- Retain all primary and secondary groundfish species and salmon PSC;
- After sampling is completed by an observer, discard all halibut PSC;
- Computer for observer to enter data; and
- Deliver all catch to a processor that has a NMFS approved Catch Monitoring and Control Plan (CMCP) and shoreside observer coverage (see details in the following subsection on shoreside processors).

Retention of all primary, secondary, and salmon PSC would be required for CVs fishing under this program. However, observers are unable to monitor all sorting and discard activity aboard CVs while they are completing other duties, so sorting catch at sea can present catch-monitoring vulnerabilities. To ensure that all allocated species make it to the plant, NMFS is considering prohibitions on sorting and discarding groundfish while at sea. However, a broad prohibition on sorting and discarding would necessitate changes to regulations regarding MRAs and would have to incorporate provisions for regulatory discards such as halibut PSC and lingcod during certain times of the year. (Further discussion of full retention requirements is provided in Section 4.5).

The Council's April motion specified a goal of having all trawl GOA CVs in the 100% observer coverage category. NMFS concurs with this recommendation, as it would be necessary to monitor at-sea discards and obtain data to estimate PSC of halibut; however, it might also be possible to accomplish these monitoring goals on CVs using video monitoring systems. Prior to the implementation of full observer coverage on CVs in the Rockfish Program, Alaska Groundfish Databank, in conjunction with NMFS, conducted several pilot studies to assess the efficacy of video for recording and quantifying the discard of halibut from trawl CVs. The studies demonstrated that the use of video had potential, but the costs for the video systems and the video analysis were higher than the cost of observer coverage, and the time lag of up to two weeks to receive the data was unacceptable for NMFS and industry quota managers. One solution suggested that broader use of video could create economies of scale, reducing the costs of the video systems and the associated video data analysis. Implementing a video monitoring system across all fisheries under the GOA trawl LAPP might be a mechanism to accomplish this economy of scale. Since the pilot studies were conducted, NMFS has also begun investigating the use of video analytic software and newer camera technology that might decrease the time lag before video data are available to manage the fisheries. Similar to the discussion of discarding above, NMFS would need to consider prohibitions of sorting and discarding if video monitoring was used as a means to estimate halibut PSC.

Currently, all vessels in full coverage and CVs greater than 125' LOA are required to provide a computer and communication equipment for use by an observer. The requirements include: (1) a computer and data transmission capabilities that meets NMFS specifications and are supplied by the vessel, shoreside, or stationary floating processor, and (2) dedicated software called ATLAS that is provided by NMFS. Together the hardware and software allow observers to communicate with, and transmit data to, NMFS. The ATLAS software contains business rules that perform many quality control and data validation

checks, which dramatically increase the quality of the preliminary observer data when it is submitted. Transmitting data electronically, instead of via fax, reduces the time before the data are available for management by a week or more. Additionally, observers onboard vessels with the ATLAS software have the ability to communicate directly with Observer Program staff in near real time to address questions regarding sampling as well as notify staff of potential compliance concerns.

The CVs participating in the CGOA Rockfish Program are currently required to provide the computer for the ATLAS software but are not required to provide the ability to transmit data while at sea. Under these regulations, observers enter all their data into the ATLAS software that is installed on a computer provided by the vessel. Once the vessel returns to port to offload catch, the observer downloads their data to a memory stick and transmits the data from a shore-based computer with internet access. In development of the Rockfish Program, NMFS determined that vessels made short duration trips and that the costs of requiring communications equipment would outweigh the benefits of increased timeliness of data transmission. This has worked so far under the Rockfish Program. However there can be delays in the availability of the observer data if the observer was unable to get access to a computer onshore to transmit their data before needing to leave on their next trip. This can be especially challenging if the observer has many duties to complete during the offload, or if computer access at the shoreside processing plant is not readily available. One way to avoid these problems and to increase the timeless of the data while still minimizing costs to the vessel might be to require processing plants to provide wireless access to the internet at the dock. This would enable to observer to enter and transmit the data from the computer on the boat instead of downloading data to a USB drive and locating a computer on shore. However, under the GOA trawl LAPP there could be a few vessels that deliver to locations without reliable internet access. This would need to be considered before the Agency could decide to move forward with requirements for wireless internet at processing plants.

If the Council ultimately selects a preferred alternative that places all CVs fishing GOA trawl CQ in the full observer coverage category, then regulations would need to be developed to increase their observer coverage requirements and to move those vessels from the fee percentage observer coverage sector to the pay-as-you-go sector. In order to provide an early opportunity for direction and feedback, NMFS staff has put forward draft language that attempts to capture the Council's intent:

> *If a catcher vessel is used to harvest groundfish with trawl gear in the GOA in a particular year, that vessel would be in the full coverage category for any trips during that same calendar year in which trawl gear is used from that vessel to harvest groundfish in the GOA.*

Shoreside Processors

With the exception of accounting for halibut PSC, which must be discarded at sea, all other catch accounting for allocated species and salmon PSC would take place at the shoreside processing facilities. Catch would be required to be sorted and weighed, by species, on a State approved scale. It would be important for NMFS to ensure that adequate measures have been taken to facilitate accurate catch accounting. In other rationalized fisheries where catch accounting takes place on shore, NMFS has required that processors operate under an approved Catch Monitoring Control Plan (CMCP). The CMCP would be developed by the processor and approved by NMFS. It would detail a series of performance-

based standards ensuring that all delivered catch can be effectively monitored by an observer, that the observer can effectively conduct their sampling duties, and that all catch is accurately sorted and weighed by species. The CMCP standards would include:

- From the observation area, an observer must be able to monitor the entire flow of fish and ensure that no removals of catch have occurred between the delivery point and a location where all sorting has taken place and each species has been weighed.
- All catch delivered to the plant must be sorted and weighed by species. The CMCP must detail the amount and location of space for sorting catch, the number of staff, devoted to catch sorting and the maximum rate that catch will flow through the sorting area.
- The observation point must be located where it is convenient to the observer work station. An observer in average physical condition must be able to walk between the work station and the observation point in less than 20 seconds without encountering safety hazards.
- The observer workstation must be located where the observer has access to unsorted catch.
- An observer work station for the exclusive use of the observer must provide: a platform scale of at least 50 kg capacity, an indoor working area of at least 4.5 square meters, a table, and a secure and lockable cabinet.
- A plant liaison, designated by name, that would be responsible for orienting the observer to the plant, ensuring that the CMCP is implemented, and assisting in the resolution of observer concerns.

Currently, shoreside processors in the GOA are not required to sort and weigh all catch by species prior to the offload entering the factory. Therefore, several GOA shoreside processors do not have dedicated sorting areas and major modifications to many of the shoreside processors would most likely be required in order to incorporate these CMCP requirements. At this time, most processors in Kodiak have CMCPs in place for the Rockfish Program, however, those installations are somewhat temporary as rockfish occurs during a small window of the year. If CMCPs are implemented as part of this program, the Kodiak processors will also likely need to make major renovations to their facilities in order to accommodate these requirements on a full time basis.

The presence of a plant observer would be integral to ensure adherence to the CMCP, to monitor landings in accordance with the CMCP, and to ensure the efficient and accurate submission of data for quota monitoring of allocated groundfish species. In the rockfish program this has been accomplished through observer coverage at the shoreside processor and NMFS personnel. Under the Rockfish Pilot Program, each processor was required to have an observer on duty for every rockfish delivery. In 2012 when the Rockfish Program was implemented, NMFS began using a portion of the cost recovery fees to hire personnel to monitor rockfish landings to ensure compliance with the CMCP. The duties of the rockfish CMCP specialist are to monitor rockfish deliveries to ensure compliance with the CMCP, assist processors with rockfish species identification to ensure accurate catch sorting and quota accounting, and reporting the findings to NMFS. This compliance monitoring serves a different function than observers who conduct biological sampling and independent data collection. Under the GOA trawl LAPP, NMFS could expand the CMCP specialist role (including potentially hiring additional personnel), or require full observer coverage at the shoreside plants.

Additional tools would be needed if the Council recommends transferrable allocations of Chinook salmon PSC that are based on a census count at the processing plant. Currently, sorting of salmon PSC at shoreside processing facilities in the GOA only occurs during pollock deliveries. This sorting often occurs inside the processing area, there is not a dedicated sorting operation, and the vessel observer is frequently the only person sorting out the PSC salmon from a delivery. This is very different from BSAI shoreside processors, which are required to identify in their CMCP a designated sorting area that precedes the fish holding bins and processing equipment and allows an observer to monitor all locations where catch could be sorted. At GOA shoreside processors, salmon that are missed during sorting of the delivery end up inside the processing facility, which requires special treatment by the shoreside processor and the observers to ensure they are counted. These "after-scale" salmon (so called because they were initially weighed along with pollock) create tracking difficulties for the shoreside processor and the observer. Although after-scale salmon are required to be given to an observer, there is no direct observation of salmon once they are moved past the observer and into the processing area. Vessel observers currently record after-scale salmon as if they had collected them. However, after-scale salmon can be better characterized as shoreside processor reported information. Further complications in shoreside processor salmon accounting occur when multiple CVs are delivering in quick succession, making it difficult or impossible to determine to which CV these salmon should be assigned. Also, shoreside processor personnel may not be saving after-scale salmon for observers; therefore, after-scale salmon numbers are difficult to quantify and verify for each delivery.

To address these issues and to enable accurate counts of salmon during both pollock and non-pollock deliveries, additional tools would be necessary to ensure observers have access to all salmon PSC prior to the fish being conveyed into the factory area of the processing plant. The requirements would replicate those that were implemented for Amendment 91 in the Bering Sea and would include:

- Processors would be prohibited from allowing salmon of any species to pass from the area where catch is sorted and into the factory area of the processing plant;
- No salmon of any species would be allowed to pass the observer's sampling area;
- The observer work station currently described in regulations at 679.28(g) would be required to be located within the observation area;
- A location must be designated within the observation area for the storage of salmon, and;
- All salmon of any species must be stored in the observation area and within view of the observer at all times during the offload.

To support Amendment 91 in the Bering Sea, shoreside processors are also required to have 200% observer coverage so that all deliveries can be monitored and that the entire offload for each delivery can be monitored to sort and sample salmon. These plants fall under the full coverage requirements and are required to procure their own observers. The same provision would apply in order to implement transferable salmon PSC in the GOA that is based on a census. However, lower observer coverage (100%) might be possible in the GOA if shoreside processors did not operate 24-hours a day and only took deliveries within a 12-hour period.

Tender Vessels

Tender vessels are vessels that receive catch from CVs and deliver it to a processing plant. NMFS and the Council have identified two potential data quality issues with CVs delivering to tenders: (1) a possible bias in the data, and (2) a decrease in stock-of-origin genetic data for salmon. The potential for data bias was noted by NMFS in June 2013, because it appeared that vessels selected for observer coverage were taking shorter trips than vessels not selected for observer coverage. This could introduce bias if the information collected from observed trips does not represent the fishing activities of all fishing trips. In June 2014, NMFS evaluated a full year of fishing under the restructured observer program and analysis of trip length for vessels in the trip selection pool delivering to tenders did not show a systematic difference in trip length between observed and unobserved vessels. However, the small number of observed trips in 2013 for vessels delivering to tenders may be insufficient to clearly capture any differences in trip length. Therefore, NMFS recommended that continued development of alternatives to deploy observers from or on tenders be considered in the context of other actions and priorities for Council and NMFS analysis.

The second issue of concern with tender deliveries is that observers on catcher vessels must follow different sampling protocols when vessels deliver to a tender, as opposed to when vessels deliver to a shoreplant. The Council has specifically placed a high priority on genetic sampling of salmon intercepted in pollock fisheries. When vessels targeting GOA pollock deliver to a tender, the observer does not have the opportunity to census the offload to account for all the salmon that might have been caught, and then take systematic genetic samples. As pollock deliveries to tenders represent a significant portion of pollock deliveries in some areas of the GOA, this may create a gap in the analysis of the genetic stock composition of GOA salmon bycatch.

Moving CVs from partial coverage to full coverage would remove the potential for data bias associated with observed trips not representing unobserved trips. Every trip, whether it was a delivery to a tender or a shoreside processing plant, would be observed. Implementation of full coverage on trawl CVs fishing under the GOA trawl LAPP would solve the first issue that has been identified for tender trips. However, full coverage on CVs would not address the difficulty of collecting tissue samples from salmon in each delivery before that fish is mixed together on the tender. The Council has requested that NMFS consider options to enable observer sampling on tenders. NMFS is continuing to investigate this option, but there are a variety of safety, logistical, and administrative aspects of deployment of observers from or on tenders that will require additional time to develop.

An alternative approach to resolve PSC estimation and genetic sampling issues is to only allow CVs within the same cooperative to deliver to the same tender. No observers would be on tenders; however there would be a prohibition on sorting at sea (on both the CV and the tender) and compliance video on the tender to verify that no sorting and no discards had occurred. The tender would be required to deliver catch to a shoreside processor with a NMFS-approved CMCP and the offload would be monitored by observers assigned at the shoreside processor. Under this approach, the allocated primary and secondary species and salmon PSC that was delivered to the tender would not be accounted for at the vessel-level because tender vessels frequently take deliveries from several CVs and mix the catch in the RSW tanks. Instead, all the allocated primary and secondary species and salmon PSC would be accounted for at the shoreside processor, observers assigned at the shoreside processor would take biological samples, and all of the allocated primary and secondary species and salmon PSC would be attributed to a single

cooperative, enabling the cooperative to fish within its allocation. A caveat to this approach is that catch from multiple CVs would be mixed together so it would not be possible to link the catch and bycatch to a specific location. For example, if CVs delivering to a tender had fished in multiple NMFS reporting areas, it would not be possible to assign the salmon PSC to a particular NMFS reporting area.

Table 12 Summary of monitoring under status quo management

	CPs		CVs		Shoreside Processors	Tenders
	Rockfish	**Non-rockfish**	**Rockfish**	**Non-rockfish**	• Operate under NMFS-approved CMCP when receiving Rockfish Program deliveries • NMFS CMCP specialist monitors rockfish deliveries	• Groundfish catch is accounted for at the shoreside processor with estimates of weights from each CV • PSC estimation derived from observer at-sea sampling on CV
Status Quo	• 200% observer coverage • NMFS-approved flow scale • Observer sampling station • Computer & transmission capability for observer to enter and send data • Elogbook • VMS	• 100% observer coverage • Computer & transmission capability for observer to enter and send data • VMS	• Full Observer coverage when checked into Rockfish Program • Computer for observer to enter data • VMS • Full retention of salmon PSC PSC estimation: • Halibut & salmon from at-sea samples	• Partial Observer coverage • Full retention of salmon PSC PSC estimation: • Halibut: from at-sea samples • Salmon: from at-sea samples except in the pollock fishery	• No CMCP requirements for non-rockfish deliveries	

Table 13 Summary of monitoring measures being considered by NMFS for implementation of groundfish and PSC allocations under a GOA trawl LAPP

		CPs	CVs	Shoreside Processors	Tenders
Transferable Groundfish Allocations under GOA bycatch management		Apply Rockfish Program CP requirements to all CPs: • 200% observer coverage • NMFS-approved flow scale • Observer sampling station • Computer & transmission capability for observer to enter and • Elogbook • VMS	• Full (100%) Observer coverage • Computer for observer to enter data. Require data transmission capability? • VMS • Full retention all allocated species and salmon PSC Outstanding issue: • Full retention of all groundfish? Need to deal with MRAs and regulatory discards	• Apply CMCP requirements to all deliveries • Full Observer coverage at plant ('pay as you' go by industry) or CMCP specialist to ensure all allocated groundfish species are recorded and weighed.	Outstanding issue: • How to safely conduct observer sampling on tenders Other possible approach: • All CVs delivering to tender must be in same cooperative. • No sorting at sea on either CV or tender. • Compliance video to ensure no sorting occurs on tenders • Observer at processor to ensure all allocated species are recorded and weighed. • Allocated species accounted for at the cooperative level
Transferable PSC Allocations under GOA bycatch management	**Salmon**	If salmon PSC estimation based on census: • All salmon PSC must be retained until counted and sampled by an observer; •Approved salmon storage container; •Compliance video system; •No salmon PSC of any species may pass the last point where sorting occurs	•Salmon PSC estimation based on census at dock Outstanding issues: •Prohibition on sorting catch at sea? Would need to deal with halibut PSC	If salmon PSC estimation based on census at dock: • 200% Observer Coverage • No salmon enter factory • Salmon storage area within view of observer in observation area	• Salmon PSC estimation at the cooperative level, based on census by plant observer at • Genetic sampling at the dock for all salmon in the tender delivery
	Halibut	Continue status quo: •PSC estimation based on extrapolations from at-sea samples •Halibut PSC required to be discarded at sea after observer sampling	Continue status quo: •PSC estimation based on extrapolations from at-sea samples •Halibut PSC required to be discarded at sea after observer sampling	-NA-	-NA-

Note: Some of these monitoring components have outstanding issues, and provisions may change as the Council develops specific alternatives

3 Sector Allocations

Part 6 of the Council's April motion describes how target species, secondary species, and PSC species would be allocated between sectors (CP and CV). Allocations to the trawl CV and CP sectors made as part of the Central GOA Rockfish Program (Amendment 88) and the pollock Inshore/Offshore action (Amendment 23) would be maintained. Amendment 80 provisions that limit the number of CPs eligible to fish for GOA flatfish would be maintained as well. Western and Central GOA Pacific cod allocations made under Amendment 83 (gear sector splits) are maintained *for the CV sector only.* The proposed program would create a Pacific cod incidental catch allowance (ICA) for CPs. This would differ from the

status quo, under which the trawl CP sector is occasionally able to directed fish for Pacific cod if the sector's allocation (from Amendment 83) has not been fully utilized through incidental catch in directed flatfish fisheries.

Section 5 of the discussion paper that was provided to the Council in April 2014 described the existing sector allocations that are referenced in the most recent motion – specifically, Amendment 23 (Inshore/Offshore), and Amendment 83 (Pacific cod sector allocations). That paper also introduced the sideboards that are referenced in Part 13 of the Council's April motion; those are sideboards that apply to AFA CVs (exempt and non-exempt) and Amendment 80 CPs. The latest motion asked staff to consider whether those sideboards should be removed. That discussion is included in Section 8.1 of this document. Having already described the relevant existing sector allocations, the following subsections focus on elements of those and other Council actions that affect how harvest and PSC is allocated or apportioned in the GOA, and whether or not the considered GOA trawl LAPP should modify those measures. Section 3.1 discusses the possible integration of the Central GOA Rockfish Program and the program under consideration. Section 3.2 covers other management measures that affect GOA trawl participation and could be modified at the Council's recommendation.

3.1 Interaction of the Proposed Program and the Central GOA Rockfish Program

The Council may wish to consider whether the CGOA Rockfish Program could be integrated with the proposed GOA Trawl LAPP. The Rockfish Program has many components, some of which may mesh well with the proposed program while others may not. The Rockfish Program is similar to the proposed framework in that a person who is participating in the Rockfish Program may assign an LLP license and the QS assigned to that LLP license to a Rockfish cooperative. In many cases the members of the Rockfish cooperatives and the proposed GOA trawl cooperatives may have similar membership and rules of operation. However, because many of the details of the proposed GOA trawl LAPP have not been defined, harvesters and processors that are active in the GOA trawl fisheries may be apprehensive about committing to combining the two programs. Members of the harvesting sector have expressed concern that combining the Rockfish Program with the proposed GOA trawl LAPP could reopen discussions about the structure of the Rockfish Program. Specifically, provisions that define the relationship between harvesters and processors could be renegotiated. Harvesters have stated that they would prefer not to renegotiate that issue. Processor representatives have stated at previous Council meetings that they are unlikely to support linking the two programs if the GOA trawl LAPP contains the same harvester/processor linkages that are part of the current Rockfish Program.

This issue will require additional analysis as the proposed GOA trawl LAPP is further developed. Given the uncertainty about the proposed program's structure, it will be difficult to gain participants' acceptance at this stage. However, combining the two programs could be beneficial to management agencies, since it will reduce the need for regulations that allow the two programs to function properly and independently of one another. Combining the programs would likely reduce management time and costs. The reduction in management costs would benefit the industry through minimizing reporting and permitting requirements, and would likely reduce cost recovery fees.

NMFS has contributed a recommendation for the incorporation of the Central GOA Rockfish Program into the proposed GOA trawl LAPP. The recommendation centers on the achievement of four desirable outcomes, which are listed below with rationale.

1. **Reduce the likelihood of exceeding GOA rockfish TACs and ABCs**

2. **Reduce potential administrative costs and costs to industry that would result from the management of two separate programs**

3. **Ensure that efforts to minimize bycatch and PSC in GOA trawl fisheries are both comprehensive and effective**

4. **Eliminate the cost and inefficiency of reviewing and renewing (or revising) the Rockfish Program within four or five years of implementing the GOA Trawl Bycatch Management Program (LAPP)**

Overview

Incorporating the Rockfish Program into the GOA trawl LAPP would eliminate the need for NMFS to establish incidental catch allowances (ICA) for GOA rockfish species taken incidentally in trawl groundfish fisheries. This would reduce the likelihood of rockfish TAC and ABC overages. Incidental catch amounts are variable and difficult to predict from year to year. To account for this uncertainty, NMFS establishes conservative ICAs to avoid overages. However, sometimes even conservative ICAs are exceeded, resulting in overages. Conversely, conservative ICAs can result in stranded fish if incidental catch is less than anticipated. If the Rockfish Program and the GOA trawl LAPP are combined, the Council could allocate additional amounts of rockfish primary species (northern rockfish, dusky rockfish, and Pacific ocean perch) to the trawl sector for incidental catch needs in allocated GOA trawl fisheries. As a result, all rockfish primary species would be allocated either to cooperatives or the limited access (opt-out) fishery. NMFS anticipates that this would significantly reduce the likelihood of rockfish TAC and ABC overages because minimal ICAs would be needed for non-trawl fisheries.

Managing Rockfish Program fisheries separately from allocated GOA trawl fisheries maintains the need for NMFS to establish ICAs for GOA rockfish species taken incidentally in trawl groundfish fisheries. In recent years, incidental catch of rockfish in GOA arrowtooth and rex sole fisheries has increased, which has required NMFS to establish increasingly conservative ICAs. If the Rockfish Program and GOA trawl LAPP fisheries are managed separately, NMFS anticipates that the need to establish increasingly conservative ICAs for Rockfish Program primary species taken in allocated GOA trawl fisheries could significantly reduce rockfish primary species allocations to Rockfish Program quota share holders.

Background

Since implementation of the Rockfish Pilot Program in 2007, there has been a steady increase in the incidental catch of rockfish by CV and CP trawl vessels while targeting arrowtooth flounder and rex sole in the Central GOA. In some years, particularly in 2011 and 2014, some of this catch can be attributed to increased directed fishing for arrowtooth flounder (Table 14). However, the catch of rockfish in these directed fisheries has increased as a percentage of total catch as well. Some of the rockfish incidental catch is taken by vessels that participate in the Rockfish Program while they are not checked into the Program.

Table 14 Incidental catch of Pacific ocean perch (POP) in the Central GOA trawl arrowtooth flounder and rex sole fisheries (catch listed in metric tons)

YEAR	Catcher Vessel Catch of POP	Catcher/Processor Catch of POP	Total Trawl Catch of POP	Years with a Central GOA ABC Overage for POP
2007	24	132	156	
2008	35	184	220	
2009	17	399	416	
2010	29	409	439	
2011	332	519	851	X
2012	73	505	578	
2013	110	1,027	1,138	X
2014	603*	793*	1,395*	X (projected)

* Through July 2014. Total catch from NMFS, Alaska Region, Catch accounting system database

As incidental catch of rockfish has increased, NMFS has increased the ICAs of allocated Central GOA rockfish species established in the harvest specifications. However, since the increased catch of rockfish in arrowtooth flounder and rex sole fisheries has been large and unpredictable on an annual basis, this has led to overages of the Central GOA rockfish TACs and ABC limits. Conversely, the variability of incidental catch has also led to increased stranding of rockfish in years when incidental catch declined. Although it is possible to reallocate unharvested rockfish to Rockfish Program cooperatives later in the year, such reallocations would occur at a time when fishing conditions might be unfavorable and the incidental catch of prohibited species, particularly salmon, might be higher. Overall, high ICAs with reallocations to cooperatives later in the year reduce cooperatives' harvest flexibility. Reallocating unharvested species during the fishing year also poses an additional cost to NMFS management.

CP vessels (with the exception of the F/V Golden Fleece) are the primary participants in the West Yakutat and Western GOA rockfish fisheries. The CPs that participate in rockfish fisheries in the Western GOA and in West Yakutat also participate in the Amendment 80 Program and in the Rockfish Program. In 2012 the WGOA overfishing level for POP was exceeded, and the ABCs for other rockfish species have been exceeded in several years. In recent years, the Western GOA rockfish TACs for dusky rockfish, POP, and northern rockfish have been too low to support a directed fishery based on the potential effort. In 2014, NMFS did not open directed fishing for these rockfish species in the Western GOA. Unless the TACs increase or these rockfish fisheries are included in the GOA trawl bycatch management program, it is uncertain whether NMFS can allow directed fishing in the Western GOA rockfish fisheries in future years.

3.2 Other Existing Management Structures that Could Be Considered for Modification

3.2.1 Trip Limits (Western GOA and Central GOA Pollock)

The GOA pollock trip limit was initially implemented in December 1998, when the Council took emergency actions to implement measures consistent with NMFS' proposed Reasonable and Prudent Alternatives (RPAs) to reduce impacts to Steller sea lions. That action for the Gulf of Alaska included: creating four seasons with limits on the percentage of the TAC which could be taken from any one

season; expanding the closure areas around rookery and haul-out sites; and establishing a 300,000 pound trip limit for pollock in the western and central Gulf areas. In response to Council recommendation, on January 22, 1999, NMFS implemented an emergency action to apply Steller sea lion protection measures, including the action described above, to the 1999 fishing season. The reason for the emergency trip limit action was defined in the Federal Register notice to temporally or spatially disperse pollock harvests in the GOA. The second part of the regulation 679.7(b)(3) stipulated that tenders cannot retain on board at any one time more than 272 mt (600,000 pounds) of pollock. The Alaska Board of Fisheries, following the action of the Council, implemented similar regulations within State waters on July 27, 1999. The State trip limit regulation is worded similarly to the NMFS regulation above (see 5 AAC 28.073). The area incorporated into the State trip limit regulation includes State waters adjacent to the Federal management areas 610, 620 and 630, between 147 and 170 degrees west longitude. It should be noted that there is a small discrepancy between the State and Federal regulations. The Federal regulations include management area 640 (between 140 and 147 degrees west longitude) whereas the State regulation cited above extends to the eastward boundary of management area 630 at 147 degrees west longitude. Therefore, State regulations do not currently include management area 640. There is a small pollock fishery in the West Yakutat area, but it is currently managed by the State to include the 300,000 trip limit, so the regulation discrepancy does not result in different State and Federal management approaches.

GOA trip limit regulations were revised and implemented May 25, 2009. The revised GOA pollock trip limit regulation prohibited catcher vessels from retaining more than 136 mt (300,000 lb.) of unprocessed pollock during a calendar day, and landing more than 136 mt (300,000 lb.) of pollock during a fishing trip. The National Marine Fisheries Service also prohibited a vessel from landing a cumulative amount of unprocessed pollock from any Gulf of Alaska (GOA) reporting area that exceeds 136 mt (300,000 lb.) times the number of days the pollock fishery is open to directed fishing in a season. The objective of this rule is to prevent certain pollock catch and delivery practices that allow some vessels to circumvent the intent of the original trip limit regulations. Since trip limits were implemented in 1999, until they were amended in 2009, they had become less effective as multiple trips during a day and partial offloads of pollock product during a trip had allowed for increasing amounts of pollock to be caught in some areas of the GOA. These delivery practices caused seasonal pollock quotas to be exceeded and potentially could have been in conflict with Steller sea lion protection measures under Endangered Species Act (ESA) that are intended to disperse pollock catches in the GOA.

The 1999 GOA pollock trip limits were also analyzed in the November 2001 Steller Sea Lion Protection Measures, Final Supplemental Environmental Impact Statement (SEIS), and were not expected to jeopardize the sustainability of pollock in the Gulf of Alaska or any non-target species associated with the trawl pollock fishery. The pollock trip limit was also determined to be one of several necessary Steller sea lion protection measures for the Federal groundfish fisheries off Alaska in the 2001 biological opinion.

One outcome of the proposed cooperative program is to slow the pace of harvesting groundfish. As a result, there may be less need to have trip limits in place in order to disperse effort. If the Council wishes to consider eliminating this regulation, additional analysis regarding whether the pollock fishery will be slowed sufficiently to meet Steller sea lion RPA requirements will be needed. The LAPP should also address other preemption and overharvest issues that the trip limit was designed to address.

3.2.2 Tendering

Witherell (2013) describes the current tendering restrictions that are in place in the GOA (50 CFR §679.7(b)(3)). To slow pace of the pollock fishery for Steller sea lion conservation, the tendering of pollock was restricted east of 157° W longitude. Tendering was allowed west of 157°W longitude because small CVs delivering to Sand Point and King Cove were dependent on tenders. Larger vessels that operated east of 157° W longitude deliver primarily to Kodiak shoreside processors and they historically had not used tender vessels to deliver pollock. The restriction on tender vessels limited them from retaining more than 600,000 lbs. (272 mt) of unprocessed pollock that was harvested in the GOA. The intent of this limitation was to prevent large scale use of tender vessels to circumvent the vessel trip limit.

The structure of the cooperative program will help determine whether these tender limitations are necessary in the future. Tender limitations, like trip limits, must first be reviewed in the context of Steller sea lion protections. If it is determined that the proposed program adequately slows the fishery to limit removals in time and space to protect Steller sea lions, then other effects of the tender issue can be considered. If 610 and 620 pollock are allocated under the proposed program, then maintaining the tender limits to protect harvesters and to ensure that TAC is not exceeded is likely unnecessary. Tendering could still impact which processors are able to process the harvested pollock, but those issues could be mitigated through port/regional landings requirements and processor limits. These issues can be considered after the Council develops a suite of alternatives to be analyzed. Observer requirements for tender deliveries are provided in Section Monitoring Components2.6.2.

3.2.3 Lack of Chinook Salmon Retention Requirement in West Yakutat

Chinook salmon PSC is not currently required to be retained when taken in the West Yakutat District. The Council could consider adding this requirement to the proposed amendment package in order to improve information about the quantity and origin of the Chinook salmon being taken as PSC. This requirement could mirror regulations that are already in place for the Central and Western GOA.

3.2.4 Halibut PSC Seasonal Allocations

A detailed justification for the fishery and seasonal apportionments of the 1994 halibut PSC limit is described in the EA prepared for that action. In summary, the apportionments implemented reflect the recommendations presented to the Council at its September and December 1993 meetings by an ad hoc industry working group responsible for developing this management measure. These apportionments are intended to accommodate seasonal PSC requirements in a manner that optimizes the 1994 halibut PSC limit established for trawl gear relative to anticipated trawl fishing patterns and 1994 groundfish TACs. Regulations that limited Pacific halibut PSC in the GOA groundfish trawl fisheries resulted in conflict among, and preemption of, groundfish trawling operations in the GOA. Trawl fishery components competed for shares of the available halibut PSC limit. This occurred due to seasonal variations in halibut PSC rates and amounts experienced in the different trawl fisheries, and the lack of trawl fishery categories in regulations that could receive separate apportionments of the halibut PSC limit.

Under previous regulations, it was possible for the activities of one group of trawl vessels that fish for a particular groundfish species or species complex to take a disproportionate amount of the halibut PSC

limit. This could have caused the premature attainment of the halibut PSC limit and closure of all trawling operations in the GOA, except for trawling for pollock with pelagic trawl gear. Such closures could have left significant amounts of economically important TAC unharvested, idling vessels and crew, and disrupting processing and fishing support sectors, fishery dependent communities, and intermediate and final markets. Even if the total trawl PSC limit is not reached prematurely, the threat that the fishery could close at any point during the fishing year could force user groups to incur unnecessary costs, to alter fishing plans, or to make inefficient or undesirable operational decisions.

Many potentially adverse impacts of the present GOA trawl halibut PSC management framework could be avoided or reduced if the PSC limit were apportioned between trawl cooperatives. Allocating trawl PSC could reduce or eliminate the need for halibut PSC to be divided between vessels targeting species in the "shallow-water species complex" (Alaska pollock, Pacific cod, shallow water flatfish, flathead sole, Atka mackerel, or "other species"), and those targeting species in the "deep water species complex" (sablefish, rockfish, deep water flatfish, and arrowtooth flounder). Cooperatives and members of those cooperatives would determine how best to use available PSC, while trawl vessel operators outside the cooperative would not adversely impact a cooperative's ability to access its allocated halibut PSC.

3.2.5 Seasonal Allocations of Pollock and Pacific Cod

Steller sea lions occur in the same location as the pollock and Pacific cod fisheries and are listed as endangered under the Endangered Species Act (ESA). Pollock and Pacific cod have been defined as a principal prey species for Steller sea lions in the GOA. The seasonal apportionment of pollock and Pacific cod harvest is currently considered to be necessary to ensure the groundfish fisheries are not likely to cause jeopardy of extinction or adverse modification of critical habitat for Steller sea lions. Regulations at §679.20(a)(5)(iv) specify how the pollock TAC will be apportioned. Regulations at §679.20(a)(6)(ii) and §679.20(a)(12)(i) specify how the Pacific cod TAC will be apportioned.

Pursuant to §679.20(a)(5)(iv), the final harvest specifications for groundfish in the GOA, seasonal pollock TACs are established by §679.23(d)(2)(i) through (iv). The A, B, C, and D season allowances are available from January 20 to March 10, March 10 to May 31, August 25 to October 1, and October 1 to November 1, respectively. The WYK and SEO District pollock TACs are not allocated by season.

Modifying the directed pollock and Pacific cod seasons must be considered in relation to Steller sea lion protection measures that have been established, because SSL protection was the primary rationale provided for creating the seasons. The structure of the GOA Trawl LAPP must ensure spatial and temporal dispersion of catch to protect Steller sea lions. However, it may be possible to craft a structure that allows catch to be dispersed and provides greater flexibility for the fleet to fish when and where PSC can be minimized. For example, trawlers in the Western GOA could shift more of their annual pollock harvest to the A and B seasons, when their Chinook salmon PSC rates are typically lower. Under current management, where seasonal pollock TAC is set according to the distribution of biomass (as noted in the following subsection), more pollock is allocated to the Western GOA (Area 610) for the C and D seasons.[25]

[25] See Table 3 of the 2014 GOA harvest specifications, http://www.alaskafisheries.noaa.gov/sustainablefisheries/specs14_15/goatable3.pdf.

3.2.6 Prohibition on Targeting Pollock Between November 1 and December 31

Since 1992, the GOA pollock TAC has been apportioned spatially and temporally to reduce potential impacts on Steller sea lions. At the time the Final Recovery Plan for Steller Sea Lions[26] was published in 1992, little was known about the location of Steller sea lions during the late fall and winter. Prior to the ESA listing of Steller sea lions (1977 through 1992), the pollock fishery was increasingly harvested by the US domestic fleet. The US fleet was in the process of replacing foreign/joint venture fleets, and was harvesting a greater percentage of the pollock fishery in the fall and winter to take advantage of the roe value[27]. GOA seasons were established to disperse harvests over time. The details of the apportionment scheme have evolved over time, but the general objective is to allocate the TAC to management areas based on the distribution of surveyed biomass, and to establish three or four seasons between mid-January and autumn, during which some specified fraction of the TAC can be taken.

The Steller sea lion protection measures implemented in 2001 (66 FR 7277, January 22, 2001) established four seasons in the Central and Western Gulf. The current GOA pollock trawling seasons are:

A season : January 20 – March 10,
B season : March 10 – May 31,
C season : August 25 – October 1,
D season : October 1 – November 1.

Like many of the other issues described in this section, the structure of the cooperative program could distribute catch over time and space, and NMFS could mandate that cooperatives limit catch and effort through their contracts. Determining whether that requirement would be sufficient will demand additional analysis of the alternatives that are yet to be identified by the Council.

3.2.7 January 20th Start Date

NMFS published a rule in 1992 that implemented Amendment 24 to the GOA Groundfish FMP. One of the actions in that amendment package delayed the season opening date of the BSAI and GOA groundfish trawl fisheries to January 20 of each fishing year. The intent of the BSAI trawl season delay was to avoid the high PSC rates of Chinook salmon and halibut that were experienced by the 1990 and 1991 BSAI trawl fisheries during the first 3 weeks of January. A concurrent delay of the GOA trawl fisheries was implemented to avoid a temporary influx of trawl effort into the GOA fisheries during the period when the BSAI trawl fisheries are closed. The analysis prepared for this measure also highlighted that a delay of the BSAI trawl fisheries would benefit fishermen that target roe-bearing pollock by delaying the fishery until roe quality and value is optimum.

The intents of the January 20 start date could be addressed using other tools available to the fleet under the AFA, Amendment 80, and the proposed GOA Trawl LAPP. Subsequent to Amendment 24, the Council has address Steller sea lion concerns that include spatial and temporal distribution of catch in critical habitat. Those issues appear to be of greater concern than the issues originally expressed for implementing the delayed start date.

[26] http://www.nmfs.noaa.gov/pr/pdfs/recovery/stellersealion1992.pdf
[27] http://courses.washington.edu/alisonta/pbaf590/pdf/stellar_sea_lions.pdf

3.2.8 CV Exclusive Fishing Seasons for Pollock

The Council recommended and NMFS implemented Steller sea lion management measures for the BSAI and GOA in 2001. That action included a variety of measures to slow the pace of the pollock fishery. One measure prohibits catcher vessels from fishing in both the GOA and BS during the same fishing season (50 CFR §679.23(i)). Current regulations at §679.23(i) define CV prohibitions to participating in certain directed pollock fisheries. These regulations do not pertain to catcher vessels that are less than 125 feet LOA when fishing east of 157° West longitude. Vessels engaged in a BSAI pollock fishery during the A season (January 20 through June 10) are prohibited from fishing in a GOA pollock fishery until the C season (August 25 to October 1). CVs that participate in the BSAI pollock B season (June 10 through November 1) are prohibited from fishing in a GOA pollock fishery until the A season (January 20 through March 10) of the following year. CVs that fish in the GOA pollock A or B seasons (inclusive of January 20 through May 31) are prohibited from fishing in the BSAI pollock fishery until the following B season. CVs that fish during the GOA pollock C or D seasons (August 25 through November 1) are prohibited from fishing in the BSAI pollock fishery until the BSAI A season of the following year.

These regulations were implemented because management of the inshore pollock and Pacific cod fisheries had become increasingly difficult. The risk of harvest overruns had grown due to TAC amounts that are small relative to the potential fishing effort. The problem has been most acute in the Western Regulatory Area of the GOA, due to the constant potential that numerous large catcher vessels based in the Bering Sea could cross into the GOA to participate in pollock and Pacific cod openings that have relatively small TACs. GOA CVs were also concerned that the new AFA regulations would provide greater opportunity for BSAI pollock vessels to participate in GOA fisheries.

3.2.9 BSAI and GOA Stand Down

The final rule for the following stand down requirements was implemented on September 8, 1998. Vessels leaving the BSAI to fish in the GOA, and vice versa, are required to offload all fish caught before deploying trawl gear in the other regulatory areas of the GOA. Operators of vessels may not deploy trawl gear until the third day after the date that offloading was completed. Vessels transiting from the Western Regulatory Area to the BSAI are also subject to a 3-day stand down requirement. Vessels transiting from the Central Regulatory Area to the BSAI are subject to a 2-day stand down. The stand down requirement is not applied to vessels engaged in Community Development Quota (CDQ) fishing in the BSAI.

Stand down regulations were initially implemented to better manage the fisheries, so TACs were not exceeded. The difficulty of managing the pollock fishery in the Western Regulatory Area was demonstrated in 1997 during the September 1 opening of the third season. On September 4, 1997, NMFS announced a closure of the fishery effective September 7, 1997, based on the observed level of effort in the Western Regulatory Area. Once the closure date was announced, a large number of Bering Sea-based vessels entered the GOA to participate in the final 2 days of the fishery. NMFS inseason managers did not anticipate this increase in effort because the Bering Sea pollock fishery was still open at that time and NMFS expected that Bering Sea-based vessels would continue to fish in the Bering Sea. Nevertheless, these Bering Sea-based vessels harvested approximately 7,000 mt of pollock from the Western regulatory Area in the final 2 days of the fishery. As a consequence of this unanticipated effort, the 1997 annual TAC of 18,600 mt for this area was exceeded by 8,017 mt or 43 percent of the total. In response to the

difficulties associated with managing the pollock and Pacific cod fisheries of the W/C Regulatory Areas, the Council developed the stand down requirement for CVs transiting between the two areas.

At the time, NMFS lacked a preseason vessel registration program to gauge potential effort in these fisheries prior to openings. Also, during the 1990s, inseason catch information in these fisheries was neither timely nor accurate enough to allow adequate management. A vessel registration program has subsequently been developed by NMFS and the catch accounting system has been improved to be both timely and more accurate.

4 Allocated Species

The Council's April 2014 motion expanded the list of species to be considered for allocation beyond pollock (Areas 610, 620, 630, and 640), Pacific cod (WG, CG), halibut PSC, and Chinook salmon PSC. Part 5 of the motion lists rex sole, arrowtooth flounder, and deep water flatfish as additional target species to be considered for allocation in the Central GOA. The motion also lists Western GOA rockfish and West Yakutat Pacific ocean perch for consideration. As noted below in Section 4.3.1.1, NMFS has suggested that West Yakutat dusky rockfish also be considered.

The April motion also lists secondary species that the Council may consider for allocation. Allocating valuable or fully utilized secondary species could reduce the incentive for vessels to race for marketable bycatch or to "top off" to the maximum retainable allowance (MRA). Both behaviors could incentivize vessels to fish in a manner, time, or location that results in higher PSC rates or runs counter to a cooperative's fishing plan to minimize PSC. If valuable secondary species remain unallocated, vessels may have an incentive to maximize their retention early in the year (i.e., racing). If, for example, the portion of the sablefish TAC that is allocated to the trawl sector is fully utilized, then sablefish would be placed on non-retention (PSC) status and unnecessary discards could occur later in the year. By contrast, if secondary species are allocated then in-season managers and law enforcement would not have to monitor catch through MRAs; rather, they would only need to ensure that the vessel's cooperative had sufficient quota to cover that secondary species catch. Historical TAC utilization for these species is illustrated in Table 15 and discussed in Section 4.3.2. That section will also address the Council's direction to consider whether secondary species could be well-managed through the cooperatives' operational plan measures, as opposed to allocating quota for the species.

4.1 Historical Data

This section describes the data sources that are available for use in the analysis and implementation of a cooperative catch share program, and highlights issues for Council clarification prior to the stage of Restricted Access Management (RAM) making initial allocations. Three tables of historical data summarize the amount of available TACs that have been harvested by trawl gear and by operational type sector (CP and CV), and the PSC levels and rates that each sector has recorded in the groundfish target categories defined by AKFIN.

If a quota based program is implemented, AKFIN will provide official catch records to RAM. This will include programming code, documentation, fish tickets, and other original data sources. In the past, the

official catch record for allocation has been fish tickets for CVs and Catch Accounting System (CAS) data for CPs. Prior to 2004, weekly production reports (WPR) were the basis for CP catch data in CAS. Since that time CAS has increasingly incorporated observer data to determine CP catch, to the point where observer data is now the primary data source for CPs. CAS does not track catch by LLP license. Because the proposed program would make allocations to LLPs, it is necessary to match historical CP landings from CAS to a license by the vessel's ADF&G number. This is the same process that was used in the implementation of the Central GOA Rockfish Program. The Council or NMFS may wish to provide input or confirm that these are the preferred sources of official catch information prior to the analysis of alternatives.

This paper uses these sources of official catch records to the extent possible – fish ticket data for CV catch and CAS data for CPs. However, PSC records by target fishery are only available through Catch Accounting, so CAS data is used when examining PSC levels in the CV sector compared to the CP sector. Comparing the two sectors' PSC levels in each target fishery is necessary to determine the amount of halibut PSC that would be allocated to each sector for a target fishery then divided among the LLPs in proportion to their historical groundfish catch, as per Part 6 of the April motion.

Revenue data is available at both the ex-vessel and the gross first wholesale level. Ex-vessel values are generally provided by CFEC from fish ticket information, and then appended to CAS data. Wholesale revenues are collected from commercial operators' annual reports (COAR) at the individual processing plant level. Tracking historical trends in product values will be important for the characterization of impacts on harvesters, processors, communities, and tax revenues paid to municipalities and the State of Alaska. Fishing revenues are also used to calculate cost recovery fees and payments into the observer program partial coverage category. In addition, the eventual 5-year and subsequent reviews of an implemented program will need a baseline of revenue data to gauge the net benefits of the management restructuring. A cooperative quota program will bring new costs to the fishery, including increased observer fees and cooperative management costs. While the program might provide additional opportunities to harvest fish through better management of constraining PSC limits, the fishery will likely need to increase the per unit value of groundfish in order to experience a net benefit under a program with additional operating costs.

The Council set control dates at the end of 2012 and the beginning of 2013 for the Central and Western GOA, respectively. The Council may choose not to use catch history that occurred after the relevant control date to make allocations. However, the Council must still review and *consider* the best available data on the fisheries throughout the process of selecting a set of preferred alternatives. If data from years following the control dates generally conform to the patterns of participation that occurred during the qualifying years under current consideration, then using the most recent years to make allocations may not be necessary. Furthermore, it may be desirable to adhere to the published control dates in order to limit the inclusion of qualifying catch history that was made as a direct response to the Council's articulation that it is developing a catch share program.

In this paper, and in future analyses, available data will typically be one year behind the current calendar. AKFIN can provide catch data as a year progresses (though some estimated fields may be revised as new observer reports enter the system), but information on wholesale and ex-vessel values, processor data, and

port of landing are not immediately available. These fields are at least in part derived from COAR data, which are not filed until the following year.

Also regarding data quality over the considered span of historical years, it bears repeating from the April discussion paper that the process for entering CV landings into Catch Accounting changed in 2007. Prior to 2007 fish ticket data were submitted to ADF&G on paper. Since then, landings have been incorporated into CAS through eLandings. As a result, the CAS estimate of retained CV catch differs from the fish ticket record by a slightly greater margin in the pre-2007 years than it does in the years since.[28]

4.1.1 Fish Meal

In addition to being the official record of CV catch in other allocative programs, fish tickets are also the only data source that provides information on the amount of each LLP's catch that was processed into fish meal. The Council will need to state whether or not catch processed as meal will be included in the qualifying catch history that is attributed to a given LLP. Non-target catch of species like smelt, prowfish, snailfish, lumpsucker, or sculpin that was made into meal would not be counted towards catch history under the proposed framework. However, a portion of potentially allocated target and secondary species is also processed as meal. As written, the April motion suggests that catch history will be based on retained catch, which would include fish meal. Over the 2003 to 2013 period, roughly 6% of CV catch of species being considered for allocation was processed as fish meal. That figure drops to 3% when considering only pollock and Pacific cod.

One argument against the inclusion of fish meal is that awarding catch history would benefit fishermen who delivered small or poor quality fish. Another reason that including meal could be problematic is an industry stakeholder report noting that some processors have improperly recorded meal fish as a dockside discard. If this is the case, then the LLP holders whose delivery was recorded as a discard would lose out on a portion of their initially allocated quota share due to a plant's error.

On the other hand, if recording discrepancies across processors can be identified and reconciled, the Council may decide that including fish meal in qualifying catch history is most fair to LLP holders. Whether or not to process fish or send it to the meal plant is a processor's decision that could be dictated by access to markets for smaller fish (e.g., demand for surimi) or whether the processor had the necessary line capacity at time of the delivery. Discounting meal fish entirely might adversely impact the initial allocations to LLP holders who delivered to shore plants that were more likely to produce meal for reasons beyond the harvester's control.

4.1.2 Non-Commercial Catch

CFEC defines non-commercial catch as including deadloss, discards, forfeited, and educational harvest, as well as catch in special fisheries like derbies and test fishing. Some of this fish can be sold legally. The analysts look to the Council to confirm that non-commercial catch – even if it is marketed – would not be considered as qualifying catch history. Specific direction is requested for catch under an exempted fishing

[28] It should be noted that even in the years since 2007, CAS and Fish Ticket records for CVs may differ slightly since the trip targets listed on Fish Tickets and those entered into Catch Accounting via AKFIN's targeting algorithm are not always identical.

permit (EFP). The analysts' operating assumption is that EFP catch history would not be counted in the basis for allocation because it occurred outside of the normal fishery when all endorsed LLP holders had an opportunity to make landings.

4.1.3 Unattributed Catch

In reviewing catch data by LLPs, the analysts noted several instances where catch was not attributed to a license. Since 2000, a LLP groundfish licenses has been required on a vessel that is directed fishing for any groundfish in federal waters. Vessels have been named on the license since 2002. If the vessel was fishing in federal waters without a license then the catch would not have been made legally and thus would not be included in qualifying catch history. The vessel could also have been fishing in state waters, in which case an LLP is not required. In such a case, the catch would still have been counted against the federal TAC as a result of having been made in a parallel fishery.

Three cases were noted where a vessel landed groundfish while temporarily without an LLP, possibly due a gap in the process of transferring its license to another vessel and acquiring a different license. In one case the amount of catch was significant – over 1 million pounds – and occurred prior to the control date. If the catch was made legally (i.e. in state waters), then the Council may consider whether to allow that catch to be attributed to the license on which the vessel was named two weeks after the catch occurred, although the April motion does state that allocations are made based on LLP catch.

Data review also revealed four instances where a vessel recorded groundfish catch – ranging from 23,000 lbs. to 526,000 lbs. – in an area for which it did not hold a trawl endorsement. These records are attributed to LLPs, so for now they are included in the analysts' working catch data set. As this action moves into the analysis phase, it may be necessary to have these records audited by RAM.

Table 15 **Harvest specifications and catch (overall, by trawl gear, by CV and CP) for GOA species that may be considered for allocation, 2010 through 2013 (Sources: NMFS Catch Reports, Fish Tickets, and Catch Accounting)**

		2013						2012						2011						2010					
Species	Area	ABC	TAC	NMFS Catch	% Trawl	Trawl % CV	Trawl % CP	ABC	TAC	NMFS Catch	% Trawl	Trawl % CV	Trawl % CP	ABC	TAC	NMFS Catch	% Trawl	Trawl % CV	Trawl % CP	ABC	TAC	NMFS Catch	% Trawl	Trawl % CV	Trawl % CP
Pollock	610	28,072	28,072	7,711	98%	98%	2%	30,270	30,270	27,893	97%	99%	1%	27,031	27,031	20,594	98%	99%	1%	26,256	26,256	26,051	94%	99%	1%
	620	51,443	51,443	53,112	97%	99%	1%	45,808	45,808	45,095	97%	99%	1%	37,365	37,365	37,223	94%	99%	1%	28,095	28,095	28,250	93%	99%	1%
	630	27,372	27,372	29,888	92%	98%	2%	26,348	26,348	25,987	95%	98%	2%	20,235	20,235	19,704	95%	97%	3%	19,118	19,118	19,134	94%	97%	3%
	640	3,385	3,385	2,940	99%	99%	1%	3,244	3,244	2,381	99%	98%	2%	2,339	2,339	2,271	99%	100%	0%	2,031	2,031	1,637	97%	98%	2%
Pacific	WG	28,280	21,210	19,077	32%	96%	4%	28,032	21,024	18,374	37%	92%	8%	30,380	22,785	22,292	13%	84%	16%	27,685	20,764	21,001	15%	88%	12%
Cod	CG	49,288	36,966	31,936	40%	94%	6%	56,940	42,705	37,776	33%	95%	5%	53,816	40,362	39,511	32%	94%	6%	49,042	36,782	36,824	43%	95%	5%
Rex	WG	1,300	1,300	104	89%	0%	100%	1,307	1,307	215	96%	< 1%	100%	1,517	1,517	131	90%	< 1%	100%	1,543	1,543	134	90%	1%	99%
Sole	CG	6,376	6,376	3,603	96%	48%	52%	6,412	6,412	2,210	95%	40%	60%	6,294	6,294	2,745	95%	38%	62%	6,403	6,403	3,500	96%	27%	73%
Arrowtooth	WG	27,181	14,500	805	11%	0%	100%	27,495	14,500	1,233	64%	49%	51%	34,317	8,000	1,684	58%	19%	81%	34,773	8,000	2,406	14%	2%	98%
Flounder	CG	141,527	75,000	20,561	60%	54%	46%	143,162	75,000	19,328	65%	47%	53%	144,559	30,000	28,964	67%	55%	45%	146,407	30,000	21,605	46%	75%	25%
	WY	20,917	6,900	40	-			21,159	6,900	28	-			22,551	2,500	144	< 1%	27%	73%	22,835	2,500	138	2%	10%	90%
Deep	WG	176	176	20	6%	0%	100%	176	176	2	12%	0%	100%	529	529	13	52%	0%	100%	521	521	2	13%	0%	100%
Water	CG	2,308	2,308	215	56%	95%	5%	2,308	2,308	284	23%	87%	13%	2,919	2,919	444	45%	99%	1%	2,865	2,865	532	57%	96%	4%
Flatfish	WY	1,581	1,581	3	0%			1,581	1,581	3	0%			2,083	2,083	7	32%	100%	0%	2,044	2,044	7	8%	100%	0%
Shallow	WG	19,489	13,250	155	10%	1%	99%	21,994	13,250	153	32%	< 1%	100%	23,681	4,500	124	20%	0%	100%	23,681	4,500	84	37%	0%	100%
Water	CG	20,168	18,000	5,357	94%	76%	24%	22,910	18,000	3,869	91%	90%	10%	29,999	13,000	3,863	89%	90%	10%	29,999	13,000	5,448	88%	94%	6%
Flatfish	WY	4,647	4,647	1	-			4,307	4,307	-	-			1,228	1,228	-	-			1,228	1,228	1	-		
Pacific	WG	2,040	2,040	447	43%	0%	100%	2,102	2,102	2,452	88%	< 1%	100%	2,798	2,798	1,819	94%	< 1%	100%	2,895	2,895	3,141	92%	< 1%	100%
Ocean	CG	10,926	10,926	11,199	92%	60%	40%	11,263	11,263	10,777	97%	60%	40%	10,379	10,379	10,523	92%	60%	40%	10,737	10,737	10,550	95%	59%	41%
Perch	WY	1,641	1,641	1,537	100%	4%	96%	1,692	1,692	1,682	90%	18%	82%	1,937	1,937	1,870	98%	33%	67%	2,004	2,004	1,926	99%	31%	69%
Northern	WG	2,008	2,008	2,175	99%	0%	100%	2,156	2,156	1,817	99%	< 1%	100%	2,573	2,573	1,742	98%	0%	100%	2,703	2,703	2,038	98%	0%	100%
Rockfish	CG	3,122	3,122	2,705	93%	56%	44%	3,351	3,351	3,246	97%	58%	42%	2,281	2,281	1,698	94%	57%	43%	2,395	2,395	1,864	97%	63%	37%
Dusky	WG	377	377	217	96%	0%	100%	409	409	435	89%	0%	100%												
Rockfish	CG	3,533	3,533	2,930	94%	55%	45%	3,849	3,849	3,567	96%	59%	41%	Dusky Rockfish were part of Pelagic Shelf Rockfish until 2012											
	WY	495	495	4	40%	1%	99%	542	542	2	75%	63%	37%												
Pelagic	WG	After 2011, Dusky Rockfish was split out for its own TAC; Widow and Yellowtail Rockfish were merged with Other Rockfish												611	611	367	94%	0%	100%	650	650	533	96%	< 1%	100%
Shelf	CG													3,052	3,052	2,111	97%	44%	56%	3,249	3,249	2,499	96%	53%	47%
Rockfish	WY													407	407	58	97%	5%	95%	434	434	75	92%	3%	97%
Thornyhead	WG	150	150	302	3%	0%	100%	150	150	186	21%	0%	100%	425	425	159	37%	0%	100%	425	425	140	17%	0%	100%
Rockfish	CG	766	766	540	34%	44%	56%	766	766	344	26%	48%	52%	637	637	302	46%	45%	55%	637	637	279	46%	47%	53%
Shortraker	WG	104	104	35	3%	0%	100%	104	104	91	60%	0%	100%	134	134	81	64%	0%	100%	134	134	80	34%	0%	100%
Rockfish	CG	452	452	431	47%	5%	95%	452	452	309	58%	4%	96%	325	325	240	62%	11%	89%	325	325	142	26%	28%	72%
Rougheye	WG	81	81	15	14%	0%	100%	80	80	29	60%	0%	100%	81	81	25	61%	0%	100%	80	80	91	61%	0%	100%
Rockfish	CG	856	856	388	80%	7%	93%	850	850	376	83%	10%	90%	868	868	367	82%	9%	91%	862	862	216	67%	19%	81%
Other	WG	44	44	201	10%	0%	100%	44	44	255	28%	0%	100%	212	212	300	18%	0%	100%	212	212	364	15%	0%	100%
Rockfish	CG	606	606	475	10%	27%	73%	606	606	723	27%	7%	93%	507	507	355	34%	8%	92%	507	507	420	21%	19%	81%
	WY	230	230	77	0%	0%	100%	230	230	38	29%	1%	99%	276	276	191	27%	2%	98%	273	273	130	11%	37%	63%
Sablefish	WG	1,750	1,750	1,384	1%	0%	100%	1,780	1,780	1,397	4%	0%	100%	1,620	1,620	1,396	4%	0%	100%	1,660	1,660	1,352	2%	0%	100%
	CG (non-RP)	5,540	4,970	4,664	2%	35%	65%	5,760	5,167	4,761	2%	36%	64%	4,740	4,268	4,428	7%	54%	46%	4,510	4,059	4,041	5%	42%	58%
	CG (RP)		570	543	100%	68%	32%		593	566	100%	66%	34%		472	463	100%	76%	24%		451	473	100%	73%	27%
	WY	2,030	2,030	2,106	7%	1%	99%	2,247	2,247	2,033	3%	2%	98%	1,990	1,990	1,895	5%	8%	92%	1,620	1,620	1,579	9%	14%	86%
Big	WG	469	469	121	6%	0%	100%	469	469	66	16%	0%	100%	598	598	94	7%	0%	100%	598	598	146	6%	0%	100%
Skate	CG	1,793	1,793	2,300	56%	92%	8%	1,793	1,793	1,894	72%	86%	14%	2,049	2,049	2,072	64%	85%	15%	2,049	2,049	2,214	58%	83%	17%
Longnose	WG	70	70	90	2%	0%	100%	70	70	35	12%	0%	100%	81	81	62	4%	0%	100%	81	81	104	7%	0%	100%
Skate	CG	1,879	1,879	1,258	28%	82%	18%	1,879	1,879	783	41%	63%	37%	2,009	2,009	852	48%	74%	26%	2,009	2,009	848	51%	82%	18%

Note: Flathead sole was unintentionally omitted from this table – **2013 CG:** TAC = 15,400mt, NMFS Catch = 2,228mt, % Trawl = 89%, Trawl % CV = 56%, Trawl % CP = 44%; **2013 WG:** TAC = 8,650mt, NMFS Catch = 588mt, % Trawl = 57%, Trawl % CV = 14%, Trawl % CP = 86%

Table 16 **Estimates of PSC usage and rates in the GOA trawl CV sector by area, target fishery, and year**

	2008				2009				2010				2011				2012				2013				Average			
	WG	CG	WY	Total	WG	CG	WY	Total	WG	CG	WY	Total	WG	CG	WY	Total	WG	CG	WY	Total	WG	CG	WY	Total	WG	CG	WY	Total
Pollock																												
Halibut Mortality (mt)	4	65	1	71	0	37	0	38	3	28	0	32	6	107	1	114	2	52	0	54	1	152	1	154	3	74	0	77
Chinook Salmon (# Fish)	2,116	8,063	390	10,568	438	2,212	59	2,709	31,796	12,350	439	44,585	3,764	10,759	109	14,632	7,664	10,862	120	18,647	2,110	11,078	248	13,436	7,981	9,221	228	17,429
Groundfish (mt)	15,455	32,244	1,207	48,907	14,417	23,394	1,212	39,023	28,421	45,302	1,612	75,335	21,173	55,484	2,366	79,022	28,425	68,848	2,364	99,637	7,818	80,768	2,995	91,582	19,285	51,007	1,959	72,251
Halibut Rate (mort./gfish)	0.000	0.002	0.001	0.001	0.000	0.002	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.002	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.002	0.000	0.001	0.000	0.001
Chinook Rate (#Chnk/gfish)	0.137	0.250	0.323	0.216	0.030	0.095	0.049	0.069	1.119	0.273	0.272	0.592	0.178	0.194	0.046	0.185	0.270	0.158	0.051	0.187	0.270	0.137	0.083	0.147	0.414	0.181	0.116	0.241
Pacific Cod																												
Halibut Mortality (mt)	98	474		573	43	214		257	6	229		235	37	389		426	112	365		477	93	197		290	65	311		376
Chinook Salmon (# Fish)	107	264		371	10	101		111	0	434		434	96	1,008		1,104	1	393		394	15	355		371	38	426		464
Groundfish (mt)	4,421	11,892		16,312	1,804	5,339		7,144	1,833	14,005		15,838	2,099	10,336		12,434	5,775	11,552		17,327	5,688	12,392		18,081	3,603	10,919		14,523
Halibut Rate (mort./gfish)	0.022	0.040		0.035	0.024	0.040		0.036	0.003	0.016		0.015	0.018	0.038		0.034	0.019	0.032		0.028	0.016	0.016		0.016	0.018	0.029		0.026
Chinook Rate (#Chnk/gfish)	0.024	0.022		0.023	0.005	0.019		0.016	0.000	0.031		0.027	0.046	0.098		0.089	0.000	0.034		0.023	0.003	0.029		0.021	0.011	0.039		0.032
Rockfish																												
Halibut Mortality (mt)	c	c	c	c		1		1		2	2	4		0	1	2		c	c	c					*	1	1	1
Chinook Salmon (# Fish)	c	c	c	c		0		0		0	15	15		6	0	6		c	c	c					*	4	5	9
Groundfish (mt)	c	c	c	c		565		565		596	674	1,270		551	594	1,145		c	c	c					*	290	322	657
Halibut Rate (mort./gfish)	c	c	c	c		0.002		0.002		0.004	0.003	0.003		0.001	0.002	0.002		c	c	c					*	0.002	0.002	0.002
Chinook Rate (#Chnk/gfish)	c	c	c	c		0.000		0.000		0.000	0.022	0.012		0.010	0.000	0.005		c	c	c					*	0.013	0.015	0.013
Shallow-water Flatfish																												
Halibut Mortality (mt)		*		*		789		789		475		475		244		244		c		c		125		125		416		416
Chinook Salmon (# Fish)		*		*		1,746		1,746		932		932		84		84		c		c		477		477		614		614
Groundfish (mt)		*		*		12,342		12,342		7,499		7,499		3,148		3,148		c		c		4,405		4,405		7,134		7,134
Halibut Rate (mort./gfish)		*		*		0.064		0.064		0.063		0.063		0.078		0.078		c		c		0.028		0.028		0.058		0.058
Chinook Rate (#Chnk/gfish)		*		*		0.141		0.141		0.124		0.124		0.027		0.027		c		c		0.108		0.108		0.086		0.086
Deep Water Flatfish																												
Halibut Mortality (mt)		311		311		254		254		344		344		522		522		382		382		255		255		345		345
Chinook Salmon (# Fish)		277		277		159		159		2,795		2,795		2,351		2,351		279		279		3,686		3,686		1,591		1,591
Groundfish (mt)		14,754		14,754		13,864		13,864		12,926		12,926		18,091		18,091		9,323		9,323		13,119		13,119		13,679		13,679
Halibut Rate (mort./gfish)		0.021		0.021		0.018		0.018		0.027		0.027		0.029		0.029		0.041		0.041		0.019		0.019		0.025		0.025
Chinook Rate (#Chnk/gfish)		0.019		0.019		0.011		0.011		0.216		0.216		0.130		0.130		0.030		0.030		0.281		0.281		0.116		0.116
All CV Targets																												
Halibut Mortality (mt)	102	1,363	1	1,467	44	1,297	0	1,340	9	1,079	2	1,090	43	1,262	2	1,307	114	1,148	1	1,263	94	729	1	824	68	1,146	1	1,215
Chinook Salmon (# Fish)	2,223	8,812	396	11,431	448	4,218	59	4,725	31,796	16,511	454	48,761	3,860	14,208	109	18,177	7,665	11,788	128	19,581	2,125	15,597	248	17,970	8,019	11,856	232	20,107
CV Target Landings (mt)	20,140	69,998	1,616	91,755	16,222	55,542	1,212	72,975	30,255	80,340	2,286	112,881	23,272	87,637	2,960	113,868	34,200	94,077	2,621	130,898	13,506	110,692	2,995	127,194	22,932	83,048	2,282	108,262
Halibut Rate (mort./gfish)	0.005	0.019	0.001	0.016	0.003	0.023	0.000	0.018	0.000	0.013	0.001	0.010	0.002	0.014	0.001	0.011	0.003	0.012	0.000	0.010	0.007	0.007	0.000	0.006	0.003	0.014	0.001	0.011
Chinook Rate (#Chnk/gfish)	0.110	0.126	0.245	0.125	0.028	0.076	0.049	0.065	1.051	0.206	0.199	0.432	0.166	0.162	0.037	0.160	0.224	0.125	0.049	0.150	0.157	0.141	0.083	0.141	0.350	0.143	0.102	0.186

'c' denotes confidential data

* denotes data redacted to maintain confidentiality in other cells

Table 17 **Estimates of PSC usage and rates in the GOA trawl CP sector by area, target fishery, and year**

	2008				2009				2010				2011				2012				2013				Average			
	WG	CG	WY	Total	WG	CG	WY	Total	WG	CG	WY	Total	WG	CG	WY	Total	WG	CG	WY	Total	WG	CG	WY	Total	WG	CG	WY	Total
Deep Water Flatfish																												
Halibut Mortality (mt)	46	269		316	22	288		310	10	306		316	18	360		378	25	250		275	4	242		246	21	286		307
Chinook Salmon (# Fish)	125	2,193		2,318	0	1,758		1,758	840	2,700		3,540	1	1,998		1,998	0	1,013		1,013	40	2,909		2,949	168	2,095		2,263
Groundfish (mt)	1,790	7,230		9,020	776	6,335		7,111	427	6,271		6,699	993	12,390		13,383	529	8,719		9,248	39	8,970		9,008	759	8,319		9,078
Halibut Rate (mort./gfish)	0.026	0.037		0.035	0.028	0.045		0.044	0.023	0.049		0.047	0.018	0.029		0.028	0.047	0.029		0.030	0.097	0.027		0.027	0.027	0.034		0.034
Chinook Rate (#Chnk/gfish)	0.070	0.303		0.257	0.000	0.277		0.247	1.966	0.431		0.529	0.001	0.161		0.149	0.000	0.116		0.110	1.038	0.324		0.327	0.221	0.252		0.249
Pacific Cod																												
Halibut Mortality (mt)	2	c		*	10	16		26	c			c	c			c	c	c		13	0			0	6	4		9
Chinook Salmon (# Fish)	0	c		*	0	0		0	c			c	c			c	c	c		0	16			16	44	1		44
Groundfish (mt)	61	c		*	193	243		436	c			c	c			c	c	c		571	4			4	207	63		269
Halibut Rate (mort./gfish)	0.033	c		*	0.051	0.066		0.059	c			c	c			c	c	c		0.023	0.014			0.014	0.028	0.057		0.035
Chinook Rate (#Chnk/gfish)	0.004	c		*	0.000	0.000		0.000	c			c	c			c	c	c		0.000	3.730			3.730	0.211	0.011		0.165
Pollock																												
Halibut Mortality (mt)							c	c					c	c		1		c		c	*	*		4	0	1	c	*
Chinook Salmon (# Fish)							c	c					c	c		0		c		c	*	*		50	8	0	c	*
Groundfish (mt)							c	c					c	c		27		c		c	*	*		139	7	30	c	*
Halibut Rate (mort./gfish)							c	c					c	c		0.030		c		c	*	*		0.030	0.042	0.034	c	*
Chinook Rate (#Chnk/gfish)							c	c					c	c		0.000		c		c	*	*		0.360	1.151	0.000	c	*
Rockfish																												
Halibut Mortality (mt)	63	c	c	86	37	10	5	53	36	c	c	44	22	c	c	30	34	c	c	37	24	3	0	28	36	7	3	46
Chinook Salmon (# Fish)	49	c	c	365	107	4	128	239	292	c	c	347	225	c	c	405	385	c	c	445	0	192	0	192	177	57	98	332
Groundfish (mt)	6,964	c	c	11,439	8,059	2,768	1,479	12,306	6,959	c	c	9,617	4,923	c	c	7,607	5,336	c	c	6,868	3,217	319	1,700	5,236	5,910	1,494	1,442	8,845
Halibut Rate (mort./gfish)	0.009	c	c	0.008	0.005	0.004	0.004	0.004	0.005	c	c	0.005	0.004	c	c	0.004	0.006	c	c	0.005	0.008	0.009	0.000	0.005	0.006	0.005	0.002	0.005
Chinook Rate (#Chnk/gfish)	0.007	c	c	0.032	0.013	0.001	0.086	0.019	0.042	c	c	0.036	0.046	c	c	0.053	0.072	c	c	0.065	0.000	0.602	0.000	0.037	0.030	0.038	0.068	0.038
Shallow-water Flatfish																												
Halibut Mortality (mt)	*	*		40	13	62		75	14	107		122	15	59		73	c	c		34	18	49		67	14	55		69
Chinook Salmon (# Fish)	*	*		0	0	118		118	144	403		547	15	17		32	c	c		53	55	502		556	44	173		218
Groundfish (mt)	*	*		606	192	1,386		1,578	365	1,539		1,904	196	928		1,124	c	c		1,123	484	2,171		2,655	256	1,243		1,498
Halibut Rate (mort./gfish)	*	*		0.066	0.069	0.045		0.048	0.039	0.070		0.064	0.074	0.063		0.065	c	c		0.030	0.037	0.022		0.025	0.053	0.044		0.046
Chinook Rate (#Chnk/gfish)	*	*		0.000	0.000	0.085		0.075	0.394	0.262		0.287	0.077	0.018		0.028	c	c		0.047	0.113	0.231		0.210	0.174	0.139		0.145
All C/P Targets																												
Halibut Mortality (mt)	127	c	c	447	82	*	5	*	62	420	2	484	64	422	5	491	77	283	c	*	47	297	0	345	77	353	3	432
Chinook Salmon (# Fish)	174	c	c	2,687	107	*	128	*	1,277	3,106	52	4,435	487	2,159	35	2,681	438	1,013	c	*	161	3,603	0	3,763	441	2,326	98	2,865
CP Target Landings (mt)	8,989	c	c	21,244	9,220	*	1,515	*	7,762	8,965	1,652	18,379	6,541	14,496	1,520	22,558	6,543	9,884	c	*	3,774	11,568	1,700	17,042	7,138	11,149	1,472	19,760
Halibut Rate (mort./gfish)	0.014	c	c	0.021	0.009	*	0.004	*	0.008	0.047	0.001	0.026	0.010	0.029	0.003	0.022	0.012	0.029	c	*	0.013	0.026	0.000	0.020	0.011	0.032	0.002	0.022
Chinook Rate (#Chnk/gfish)	0.019	c	c	0.127	0.012	*	0.084	*	0.164	0.346	0.031	0.241	0.074	0.149	0.023	0.119	0.067	0.102	c	*	0.043	0.311	0.000	0.221	0.062	0.209	0.067	0.145

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4.2 Qualifying Years

The April motion lists three options for the qualifying years to be used for CV and CP LLP catch history, and allocation of non-pollock/non-Pacific cod target and secondary species and halibut PSC between the CP and CV sectors (Parts 6, 7, and 8 of the motion). This section identifies program eligible LLPs that would not receive initial allocations under Options 1 and 2 (below), and characterizes their overall groundfish harvest distribution throughout the considered historical period.

Option 1: 2008 – 2012
Option 2: 2007 – 2012
Option 3: 2003 – 2012

It is assumed that only legal commercial catch in federal and parallel groundfish fisheries would count towards quota history, and the vessel making the landing must be named on an LLP. For all options, the current proposal would not count historical catch and PSC that occurred in the Central GOA Rockfish (Pilot) Program since that fishing opportunity has already been allocated.

If the Council selects Option 1 or 2, some LLPs that were not removed from the fishery by the 2009 trawl recency action would continue to exist but would not receive any initial quota allocation, by virtue of not having made a GOA groundfish trawl landing since either 2007 (Option 1) or 2006 (Option 2). The catch history associated with those "latent" LLPs would not be included in the allocation formula, meaning that the qualifying LLPs would simply receive QS in proportion to their share of the pool of all qualifying catch history (for an allocated species) that accrued to licenses during the selected range of years.

License holders that still possess a valid trawl endorsement but do not receive an initial quota allocation are still eligible to participate in the proposed GOA Trawl LAPP. They would also be able to fish for any groundfish species that is not allocated under the program. Such a license could be used in the limited access fishery, but it would not have any catch history to contribute to the available limited access TAC. That license holder would be dependent on enough other LLPs with associated catch history enrolling in the limited access fishery in order for NMFS to open the fishery. A trawl LLP could also join a cooperative.[29] Though, again, the LLP would not contribute to the cooperative's quota pool, the vessel holding that LLP could fish for others in the cooperative. A cooperative might benefit from having a particular LLP on its roster if that license has a larger MLOA that could help make the cooperative's harvest strategy more efficient. Alternatively, an LLP with no catch history but with desirable area trawl endorsements could be purchased or leased by a vessel owner that already has catch history attached to his or her license. Table 10 and Table 11 in Section 2.5 show the endorsements that are currently held on the "would-be latent" LLPs that would not receive initial allocations under Options 1 and 2.

[29] The analysts assume that no cooperative can refuse membership to any holder of a valid, eligible LLP license, regardless of whether or not that license has any catch history attached to it. A cooperative would not, however, be obligated to provide that license holder with the opportunity to fish the quota that is associated with the licenses of other cooperative members.

Selecting Option 3 could increase the complexity of determining accurate historical harvest because some of the GOA catch recorded between 2003 and 2007 was already used as qualifying history to make allocations for the Rockfish Pilot Program. Staff would need to remove any landing that was used to make a RPP allocation to a LLP from the qualifying history records that would be used by RAM to make allocations under the considered GOA Trawl LAPP.

In theory, an LLPs that qualifies for initial allocation under Option 3 of the proposed program but not under Options 1 or 2 (LLPs that only recorded GOA trawl landings between 2003 and 2006) could have had its trawl endorsement removed by the 2009 trawl recency action.[30] In that case, the Council would have to determine what to do with that catch history if Option 3 was selected. However, it appears that the LLPs that were either revoked or had an area endorsement removed in 2009 did not make any GOA groundfish landings since 2003 in areas for which they no longer hold a trawl endorsement. The analysts reviewed the preliminary records of qualifying catch history and determined that the 10 LLPs that were completely revoked did not make any landings during the time period for Option 3. The 36 LLPs that had one or more trawl area endorsements removed from the license did not make any landings in those removed areas during the relevant time period. As such, no Council determination is needed for how to treat catch history attributed to LLPs lacking endorsements for the area in which the history was earned.

Table 18 through Table 20 illustrate the dependency on GOA groundfish of CV LLPs that were active in any Alaska groundfish trawl fishery.[31] The tables break down the distribution of aggregate harvest (in metric tons) for LLPs that were active during a given set of years. Table 18 describes the activity of the 100 CV LLPs that made a groundfish landing during the most restrictive set of qualifying years (Option 1). Table 19 provides the same breakdown for the set of 18 CV LLPs that made a landing during the broadest set of qualifying years (Option 3) but would not receive an initial allocation if the qualifying years were set at 2007 through 2012 (Option 2) – these LLPs are excluded from Table 18. Table 20 provides the same information for the three CV LLPs that made a landing between 2003 and 2007 (qualifying under Options 2 and 3) but not since 2008, thus they would not receive an initial allocation under Option 1 – these LLPs are also excluded from Table 18. Overall, vessels holding LLPs that would not receive an initial allocation under the Options that select for more recent GOA groundfish trawl participation (Options 1 and 2) tend to have shifted their effort to the BSAI trawl fishery.

[30] A license's trawl endorsement could have survived recency if it made a certain number of trawl landings in 2005 and 2006, or if its trawl endorsement was required for continued participation in AFA, Amendment 80, or the CGOA Rockfish Program. Criteria for license removal under the trawl recency action are described in Section 2.5.
[31] This is high-level summary data, and does include some groundfish catch that occurred in state fisheries – particularly groundfish catch taken with pot gear.

Table 18 **Groundfish harvest distribution for CV LLPs that were active under all of the proposed qualifying periods**

Year	# LLPs Active	GOA			BSAI		
		Trawl	Pot	HAL	Trawl	Pot	HAL
2003	92	36%	2%	< 1%	61%	< 1%	< 1%
2004	92	40%	2%	< 1%	57%	1%	< 1%
2005	92	45%	1%	< 1%	54%	< 1%	
2006	91	47%	1%	< 1%	51%	1%	< 1%
2007	92	45%	1%	< 1%	54%	< 1%	
2008	97	55%	1%	< 1%	43%	1%	< 1%
2009	92	53%	1%	< 1%	45%	< 1%	< 1%
2010	92	62%	3%	< 1%	35%	< 1%	< 1%
2011	95	51%	3%	< 1%	46%	< 1%	< 1%
2012	94	55%	1%	< 1%	43%	1%	< 1%
2013	90	53%	1%	< 1%	45%	< 1%	< 1%
Period Total	100	49%	1%	< 1%	49%	< 1%	< 1%

Table 19 **Groundfish harvest distribution for CV LLPs that would not receive an allocation under a 2007 to 2012 qualifying period**

Year	# LLPs Active	GOA			BSAI		
		Trawl	Pot	HAL	Trawl	Pot	HAL
2003	18	20%	2%	< 1%	77%	< 1%	< 1%
2004	14	21%	2%	< 1%	76%	1%	< 1%
2005	12	9%	3%	< 1%	85%	3%	
2006	12	5%	2%	< 1%	90%	3%	< 1%
2007	10		4%	< 1%	93%	2%	
2008	10		3%	1%	91%	5%	< 1%
2009	10		3%	1%	88%	7%	< 1%
2010	11		5%	1%	88%	7%	< 1%
2011	11		8%	1%	87%	5%	< 1%
2012	10	*	5%	< 1%	92%	3%	< 1%
2013	10	15%	1%	1%	81%	3%	
Period Total	18	7%	3%	< 1%	86%	3%	< 1%

* Indicates one LLP holder who otherwise made no qualifying landings since prior to 2007 recorded a GOA groundfish landing in a GOA area for which it did not hold a trawl endorsement. The analysts assume that this would not be considered a qualifying landing, though RAM would have to look into the case if this option were selected to move forward for analysis.

Table 20 Groundfish harvest distribution for additional CV LLPs that would not receive an allocation under a 2008 to 2012 qualifying period

Year	# LLPs Active	GOA			BSAI		
		Trawl	Pot	HAL	Trawl	Pot	HAL
2003	3	9%	2%		89%		
2004	3	12%			88%		
2005	3	22%	1%	< 1%	76%	< 1%	
2006	3	13%	2%	1%	84%		
2007	3	4%	2%	1%	93%		
2008	2		5%	1%	94%		
2009	2		7%	1%	93%		
2010	3		5%	1%	94%		
2011	2		4%	< 1%	95%		
2012	2		1%		88%	12%	
2013	2				87%	13%	1%
Period Total	3	7%	2%	< 1%	88%	3%	< 1%

Eligible CP LLPs – those with and without valid GOA trawl endorsements, as discussed in Section 2.2.1 (Sector Eligibility) – land the majority of their harvest with trawl gear in the BSAI areas. Of the 28 CP LLPs that landed Alaska groundfish with trawl gear since 2003, 23 made GOA landings during the most restrictive set of potential qualifying years (2008 through 2012) *and* are found on the roster of eligible Amendment 80 vessels (Table 31 to Part 679 in regulation).

Table 21 shows how the metric tons of groundfish harvest by vessels named on these LLPs are distributed among areas and gear types. The table does not include groundfish harvest attributed to LLPs that: (1) have a GOA trawl endorsement but are not named on an Amendment 80 vessel, thus not "eligible" under the definition provided in the April motion, or (2) are eligible but would not receive an initial allocation if a more restrictive set of qualifying years – Option 1 or 2 – is selected.[32]

The three CP LLPs that have GOA trawl endorsements but are not named on an Amendment 80 vessel, in aggregate, caught less than 1% of their total groundfish in the GOA. One of these LLPs has not recorded any GOA trawl groundfish harvest in the analyzed period (since 2003); another landed GOA trawl groundfish only in 2003; the other landed GOA trawl groundfish as a CP up through 2007, then the LLP was transferred to a CV which fished in the GOA in 2008 and has been fished in the Bering Sea since then.[33]

The three CP LLPs that would receive an initial allocation only under qualifying year Options 2 or 3 – meaning they had no GOA trawl groundfish catch since 2006 or before – made only 2% of their 2003 through 2013 aggregate groundfish landings in the GOA. One of these LLPs is among the group of three that is not named on an eligible Amendment 80 vessel.

[32] Also not included in
Table **21**: catch by LLPs that are on the original list of Amendment 80 LLPs but that are presently "unassigned".
[33] This third LLP would only have qualifying CP history under Options 2 and 3; 20% of its CP landings from 2003 through 2007 were caught in GOA trawl fisheries.

Table 21 Groundfish harvest distribution for CP LLPs that were active under all of the proposed qualifying periods

Year	# LLPs Active	GOA		BSAI	
		Trawl	Pot	Trawl	Pot
2003	23	15%	< 1%	85%	
2004	23	9%		91%	< 1%
2005	23	9%		91%	< 1%
2006	22	11%		89%	
2007	22	10%		90%	
2008	23	8%		92%	
2009	23	8%		92%	
2010	21	8%		92%	
2011	22	9%		91%	
2012	22	9%		91%	
2013	20	8%		92%	
Period Total	23	9%	< 1%	91%	< 1%

4.3 Species Considered for Allocation

The Council requested that staff review the list of species that are considered for allocation under the proposed program. As part of this review Council staff requested that NMFS Sustainable Fisheries staff also review the proposed list. NMFS SF's review and recommendations are incorporated into this section.

The review considers all of the species listed in Part 5 of the Council's April motion. Additional species that were not included on the Council's list were considered to determine if they were also reasonable and viable candidates for allocation. Information on the trawl gear catch of each GOA species (or species grouping) that have a TAC limit is provided in Table 15 of this paper. The list of species that the Council is considering for allocation is a subset of the species in that table, plus halibut PSC and Chinook salmon PSC.

Three species classifications are considered in this review. Primary species are those species that are open to directed fishing at defined times during the fishing year, secondary species are those closed to directed fishing for the entire year, and PSC species. Table 22 shows directed fishing closures for 2014.

Table 22 2014 GOA Directed Fishing Closures

Target	Area	Component/Gear	ICA (mt)
Pollock	All	Offshore	N/A
Sablefish*	All	Trawl	1,453
Pacific Cod	WGOA	CP Trawl	536
Shortraker Rockfish*	All	All	1,323
Other Rockfish	All	All	1,811
Rougheye Rockfish*	All	All	1,244
Thornyhead Rockfish	All	All	1,841
Atka Mackerel	All	All	2,000
Big Skate	All	All	3,762
Longnose Skate	All	All	2,876
Other Skates	All	All	1,989
Sharks	All	All	5,989
Squids	All	All	1,148
Octopuses	All	All	1,507

* Closure not applicable to participants in cooperatives conducted under the Central GOA Rockfish Program

Source: FR Notice, Vol. 79, No. 44. Table 36. See http://alaskafisheries.noaa.gov/frules/79fr12890.pdf.

4.3.1 Primary Species

A summary of the NMFS Alaska Region Office (AKRO) Sustainable Fisheries (SF) staff recommendations for primary species is included in Table 23. The table includes two species groups that were not part of the Council's April motion. If the Council allocates West Yakutat Pacific ocean perch, then NMFS AKRO SF staff recommends adding West Yakutat dusky rockfish since their harvests are closely linked. SF staff also recommends allocating Western GOA flatfish. Justification for considering allocating those species is presented later in this section.

Table 23 NMFS AKRO SF recommendations for primary species in the GOA Trawl Bycatch Management Program (in reference to Part 5 of the Council's April motion)

Target species	NMFS recommends allocating (Yes/No)
Pollock (610/620/630/640)	Yes
Pacific cod (WG/CG)	Yes
CGOA flatfish: rex sole, arrowtooth flounder, and/or deep water flatfish	Yes
WGOA rockfish	Yes - Pacific ocean perch, dusky rockfish, and northern rockfish
WY POP	Yes
WY dusky rockfish	Yes - If WY POP is allocated
WGOA flatfish	Yes

Note: Species in bold are recommendations to allocate species that were not included in the Council's April motion.

Table 15 indicates that pollock and Pacific cod are the only groundfish species that are primarily harvested by CVs. Offshore CPs are prohibited from directed fishing for these two species. During the four years from 2010 through 2013, CPs accounted for 1% to 3% of the trawl catch of pollock in the GOA subareas. The Council is considering managing offshore CP vessels through an ICA. NMFS must determine the appropriate ICA amount. Based on catch data reported in this paper it should be a relatively small percentage of the TAC. CPs accounted for 4% to 16% of the Pacific cod harvest by trawl gear in the Western and Central GOA. In providing input for this discussion paper, NMFS noted that the small amount of historical pollock harvest in West Yakutat district would mean that a limited access (opt-out) fishery – if one were to exist – would likely have a small TAC and would be difficult for NMFS to open for directed fishing.

Harvest of Pacific cod in the West Yakutat District has been minimal. From 2003 through 2013 the CV fleet has taken only 7.5 mt of Pacific cod from the West Yakutat District; the CP fleet has taken only 11.4 mt of Pacific cod from that area. It is assumed that West Yakutat Pacific cod would not be allocated under this program, but if policymakers are concerned about substantial increases in effort, any Pacific cod catch could be debited from the cooperative's Central GOA Pacific cod allocation. Recall that the TAC for Pacific cod is set for the Eastern GOA and not specifically for the West Yakutat District. That area is excluded from the recommended allocation list because of limited effort and because West Yakutat does not have a specific TAC.

All other groundfish species in the Western GOA are almost exclusively harvested by CPs. Any allocation of Western GOA rockfish or flatfish[34] that is based only on catch history would be allocated to the CP sector. Because the entire TAC has not been harvested during the proposed qualifying periods, the Council could consider a set-aside of some percentage of the TAC for persons that have PSC available.

For Western GOA CVs, the halibut available would be derived from Central GOA catch history[35] or Pacific cod harvests in the Western GOA. In the Central GOA, harvests of rex sole and arrowtooth flounder are almost equally divided between CVs and CPs. Deep water flatfish are primarily harvested by CVs. Rex sole has been described as a flatfish species that commands are relatively high price. Leaving rex sole unallocated could result in fishing practices that do not minimize halibut PSC to the extent practicable. Arrowtooth has a lower value than rex sole, but the market for that species has developed in recent years. Until the Central GOA TAC was increased from 30,000 mt to 75,000 mt in 2012, the catch was approaching the TAC. Reductions in PSC rates that may be expected under the proposed catch share program and the competition between various sectors for this species result in it being recommended for allocation. Deep water flatfish harvests have been relatively small and well below the TAC. However, the TAC is relatively small and is set equal to the ABC. Modest increases in effort in this fishery could result in a race to harvest the TAC, which could negatively impact efforts to minimize PSC usage.

Small TACs in the Western GOA rockfish fisheries could result in a competition to harvest the available amount. Many of these species are of sufficiently high value that leaving them unallocated could cause

[34] Allocation of Western GOA flatfish was recommended by NMFS SF staff.
[35] Buying Central GOA flatfish quota (and associated halibut PSC) may not help Western GOA license holders if the landings are regionalized (as described in Section 5.3).

inefficiencies that may be avoided through allocation. Increased effort could come from the CV sector if CV license holders have halibut PSC available. Competition between the two Amendment 80 cooperatives could also increase competition for Western GOA rockfish.

Leaving some portion of the TAC for traditionally underharvested species unallocated might, in theory, provide an incentive for cooperatives to conserve their PSC allocations. However, many of the species for which TAC is not typically met are lower in value, and would only be an attractive "use" of available PSC if more valuable fisheries are closed.

4.3.1.1 Additional primary species suggested by NMFS SF for allocation

West Yakutat Dusky Rockfish

If West Yakutat (WY) Pacific ocean perch (POP) is allocated as a target species in the GOA trawl LAPP, NMFS recommends that WY dusky rockfish be allocated as well. If dusky rockfish is not allocated, increased targeting of dusky rockfish could result in substantial incidental catch of POP. The dusky rockfish fishery would be an extremely difficult fishery to manage and would almost certainly lead to either stranded TAC or overages.

CPs primarily harvest rockfish in the WY area. The WY dusky rockfish TAC has not been fully harvested in recent years. Participating vessels have focused effort in the WY limited access POP fishery in July, when the Rockfish Program sideboard limits are in effect. The participants have voluntarily chosen to forego targeting dusky rockfish in order to participate in the July POP limited access fishery. If these vessels had targeted dusky rockfish instead, NMFS would have set aside much of the POP TAC to cover incidental catch. Incidental catch rates of POP are uncertain when vessels are targeting dusky rockfish, and NMFS would have established a conservative ICA for POP. This could have resulted in stranded TAC if less than the anticipated incidental catch of POP was taken in the dusky rockfish fishery.

The Council could either allocate WY rockfish based on catch history, allocate it as a secondary species based on WY POP catches, or could allocate it based on Amendment 80 sideboard amounts. Allocating based on catch history may be problematic since the incidental catch amounts of dusky rockfish might not match the actual rockfish catches under the proposed GOA trawl LAPP. Some vessels used pelagic trawl gear for WY POP, while others used non-pelagic gear. Vessels that used pelagic trawl gear would likely have lower catch of dusky rockfish, and therefore would receive reduced allocations if allocation is based on catch history.

An additional problem with using catch history to allocate dusky rockfish is that some participants could receive large amounts of dusky rockfish catch history, but insufficient POP catch history to prosecute the fishery. Generally, vessels can target POP with relatively little dusky rockfish incidental catch, but it has proven difficult in the WY district to target dusky rockfish without catching significant amounts of POP.

Western GOA Flatfish

NMFS recommends that the Council consider allocating Western GOA (WGOA) flatfish as a target species under the proposed GOA trawl LAPP. If WGOA flatfish are not allocated, NMFS anticipates that

there could be increased participation in these fisheries as vessels look for fisheries that are open to them outside of the program.

WGOA Flatfish fisheries include rex sole, arrowtooth flounder, flathead sole, the deep water flatfish species group (Dover sole, Greenland turbot, Kamchatka flounder, and deepsea sole), and the shallow water flatfish species group (flatfish not including the following: deep-water flatfish, flathead sole, rex sole, and arrowtooth flounder). All GOA flatfish trawl fisheries are open from January 20 through December 31, with no further seasonal apportionments.

If WGOA flatfish fisheries are not allocated under the program, NMFS would manage these fisheries inseason. With the exception of the deep water flatfish species group, recent flatfish TACs have been sufficiently high enough to effectively manage directed fisheries inseason. The species with the lowest ABC/TAC is WGOA deep water flatfish. From 2010 through 2014, the WGOA deep water flatfish TAC has been set equal to the ABC. Annual TACs have ranged from 176 mt to 529 mt during that time. Depending on the number of participants, it may be difficult for NMFS to manage such small TACs in a directed fishery, and the deep water flatfish species group might be closed to directed fishing and instead managed under maximum retainable amounts (MRAs).

The WGOA flatfish fisheries have never been fully prosecuted, so little is known about the amount of halibut PSC needed to fully prosecute WGOA flatfish fisheries. Central GOA (CGOA) flatfish fisheries have shown that halibut PSC can be high when targeting flatfish; similar high PSC may be expected in the WGOA. If vessels do participate in WGOA flatfish fisheries, halibut PSC would potentially be a limiting factor.

NMFS assumes that the Council intends to allocate a portion of the GOA-wide halibut PSC limit to cooperatives. Vessels in cooperatives would then be responsible for managing their own halibut PSC even when participating in a non-program allocated fishery. Since cooperatives would be required to manage their halibut PSC during a WGOA flatfish fishery, NMFS would not be required to manage small PSC limits. However, if vessels elect not to join a cooperative (or are not subject to cooperative PSC limits while fishing for non-program allocated species – which is presumed not to be the Council's intent) they would be fishing in the limited access sector. NMFS would be responsible for inseason management of GOA-wide halibut PSC limits in the limited access fishery. These halibut PSC limits will likely be small, and could be difficult to manage. Additionally, NMFS would be responsible for managing even smaller halibut PSC limits if limits were further allocated by seasons. This would pose an even greater challenge to the Agency. It is possible that vessels would not choose to participate in WGOA flatfish fisheries if they are required to use their program-allocated halibut PSC limit. Vessels would most likely want to ensure they have enough halibut PSC available to fully harvest more lucrative target species before harvesting lower valued flatfish species.

If the Council intends to set aside GOA-wide halibut PSC limits to be used in unallocated fisheries, then NMFS would be required to manage that PSC limit inseason. Inseason management of halibut PSC limits could be difficult depending on the size of the limit. Reductions to halibut PSC limits implemented by GOA Groundfish FMP Amendment 95 will reduce the overall GOA halibut PSC limit for the trawl sector by 15 percent (to 1,705 mt) by 2016. If a large portion of this halibut PSC limit is allocated to the GOA

trawl LAPP, then the remaining PSC limit available for unallocated species would be difficult to manage inseason.

Historically, there has not been a shoreside market for flatfish in the WGOA, and currently no shoreside processors in the WGOA take directed flatfish deliveries. The distance from the WGOA fishing grounds to processors outside of the region who do take flatfish may be prohibitive for some CVs. Some flatfish species like arrowtooth flounder must be processed soon after harvest in order to maintain flesh quality; this may be difficult if the processors accepting flatfish are farther away. However, there is interest in developing a shoreside WGOA flatfish fishery, and some WGOA processors are currently exploring potential markets. If a market is developed and if processors in the WGOA accept flatfish deliveries, CV interest in these fisheries would increase. The number of participants and the timing of participation would likely depend upon other concurrent fisheries, including State fisheries such as salmon. Future flatfish participation may also be limited by WGOA CVs' available halibut PSC, since basically all of their halibut PSC would have to be derived from their historical Pacific cod activity.

The Council is recommending 100% observer coverage on all GOA trawl vessels, regardless of the target species or whether the fishing is occurring within or outside of the LAPP. Currently, WGOA trawl CVs are in the partial coverage category. These CVs do not pay for observers directly, and are instead subject to an observer fee deducted from each landing. If these CVs move into the full coverage category, then they would be responsible for securing and paying for observers directly. Flatfish species are considered to be of low monetary value compared with other groundfish species. It may not be cost effective for a CV to pay for an observer to target flatfish, thus participation in those fisheries would be discouraged.

Amendment 80 vessels are more likely to take advantage of an unallocated WGOA flatfish fishery. Some of these CPs already participate in WGOA flatfish fisheries and already have an available market (see Table 15). Amendment 80 limited the participation in GOA flatfish fisheries by vessels from that program, based on each vessel's flatfish fishing history. The Council's April motion states that these limitations would be maintained. There are eleven Amendment 80 vessels eligible to participate in GOA flatfish (Table 39 of 50 CFR part 679), but only eight of those vessels currently have the LLP license endorsement required to participate in the WGOA. The other three vessels could participate in the GOA if they obtain a LLP licenses with a WGOA endorsement. The F/V GOLDEN FLEECE, which is unique from other Amendment 80 vessels in that it is not subject to GOA sideboard limits, does not have a WGOA-endorsed LLP license. There are a limited number of LLP licenses available with WGOA endorsements (see Table 8 in Section 2.5). Therefore, it is somewhat unlikely that owner of the F/V GOLDEN FLEECE would be able to obtain a WGOA-endorsed LLP license.

The Council's April motion states that the offshore sector (trawl CPs) would receive an ICA for Pacific cod and pollock, and that they would be managed under the MRA. It is currently unknown what size pollock and Pacific cod ICAs would be needed to fully prosecute a WGOA flatfish fishery. The MRA for Pacific cod and pollock in the GOA is 20% when retained flatfish is the basis species. Currently, the CP trawl sector is allocated a portion of the WGOA Pacific cod TAC through GOA Groundfish FMP Amendment 83 (0.90% of the A season WGOA Pacific cod TAC and 1.50% of the B season WGOA Pacific cod TAC). The WGOA CP trawl allocation of the TAC is small, which resulted in NMFS closing the directed Pacific cod fishery for trawl CPs in 2013 and 2014. If the Council retains the Amendment 83

trawl CP sector allocation, then any WGOA Pacific cod harvested by the trawl CP sector under the ICA would be deducted from this TAC. WGOA offshore pollock ICA harvest is deducted from the overall 610 pollock TAC; this would continue to be the case under the GOA trawl LAPP. Managing these species with ICAs might encourage vessels to "top off" on Pacific cod and pollock while directed fishing for flatfish species. If the CPs were allocated Pacific cod and pollock as secondary species through the considered program, then they would be responsible for managing their own incidental catch and would have a greater incentive to harvest these species conservatively, thus ensuring the availability of quota for other directed fisheries. Amendment 80 and Central GOA Rockfish Program sideboard limits are further discussed in Section 8.1.

4.3.2 Secondary Species

NMFS recommends allocating all the secondary species included in the Council's April motion except for Central GOA big skate and longnose skates. Leaving valuable secondary species unallocated can create an incentive to "top off" on those species, some of which are fully harvested or have experienced overages in recent years.

Table 24 NMFS AKRO SF staff recommendations for allocating secondary species

Secondary species	NMFS recommends allocating (Yes/No)
Sablefish	Yes
CGOA skates (big and longnose)	No
Thornyhead rockfish	Yes – CV only
Shortraker rockfish	Yes – CP only
Rougheye/blackspotted rockfish	Yes – CP only
Other rockfish	Yes

Two primary reasons were articulated for excluding the two skate species from the allocation. First, data available from the 2013 observer restructure program seems to indicate that a substantial amount of the TAC would need to be set aside as an ICA for the fixed gear fleet. The amount that would remain, after the fixed gear set-aside is removed, could be limiting for the cooperatives. If insufficient TAC is available, these skate allocations could prevent cooperatives from harvesting all of their primary allocations. Rather than creating a situation where a secondary species could be a constraint, NMFS is recommending not allocating big and longnose skates to cooperatives and is recommending managing the incidental catch of those species in all fisheries including the trawl fishery through MRAs. A second reason for not allocating big and longnose skates is that it appears some vessels may have been topping off with these species. Although topping off is an allowable practice under MRAs, allocating these skate species to licenses, based on historic catch, would reward that behavior.

The Council could consider two options to prevent "topping off" behavior: lowering the MRA for species of concern while targeting flatfish and other necessary target fisheries, or allocating to cooperatives *a portion* of the TAC for species of concern. A lower MRA might discourage vessels from participating in a flatfish target with the intention of harvesting a more valuable incidental catch species. Allocating to a cooperative a portion of top-off species would create hard caps that each cooperative would be required to

manage internally. Making vessels responsible for managing their own allocations for these species may ultimately help to control "topping off" behavior.

The Council is currently considering a separate action to reduce the MRA for big and longnose skates in the GOA. This action is intended to slow the harvest rate of skates by reducing the incentive for vessels to top off on skates by reducing the MRA to levels that more accurately reflect the intrinsic rate of bycatch in the GOA groundfish fisheries. If the Council recommends reducing MRAs for big and longnose skates in the GOA, NMFS expects the action would be implemented prior to the proposed GOA trawl LAPP. If the MRA action is implemented, incidental catch of skates in GOA groundfish fisheries could decline. However, NMFS anticipates that secondary species allocations of skates under the GOA trawl LAPP would still be constraining and could prevent cooperatives from harvesting all of their primary species allocations. Therefore, NMFS would continue to recommend the management of big and longnose skates through MRAs under the proposed program.

Species of particular concern for "topping off" include Atka mackerel, longnose skate, and big skate. NMFS closes directed fishing in the WGOA for these species and they may only be harvested under the MRAs. The MRA for Atka mackerel and all skate species in the GOA is currently 20% retention for flatfish basis species. In 2013 the Atka mackerel ex-vessel price in the GOA for vessels using trawl gear was $0.39 per pound, longnose skates were worth $0.44 per pound, and big skates were worth $0.45 per pound.

Increased participation in the WGOA flatfish fisheries would most likely increase overall harvest in the WGOA, therefore NMFS would anticipate an overall increase in incidental catches for that area. Little is known about specific species or amounts that might be harvested incidentally during WGOA flatfish fisheries. NMFS may have to close some species/species groups to directed fishing or place them on PSC status during the season depending on how much is incidentally harvested during flatfish fisheries.

There are several species/species groups in the WGOA for which harvest has been near or exceeded the ABC in recent years. Of particular concern would be the "other" rockfish species group. From 2009 through 2013 the WGOA other rockfish species group TACs were set equal to the ABC, with TACs ranging from 44 mt to 357 mt. The TACs/ABCs was exceeded in every year. In 2014 the WGOA and CGOA other rockfish ABCs and TACs were combined; it remains to be seen whether they will be exceeded. Other WGOA species that have neared or exceeded ABCs in recent years include longnose skates, thornyhead rockfish, Pacific ocean perch, rougheye rockfish, northern rockfish, shortraker rockfish, dusky rockfish, and GOA-wide "other" skates. Increased flatfish fishery participation may cause further overages of these species. Small TACs are difficult to manage inseason and added fishing pressure may make increase that difficulty. In addition, "topping off" behavior is most likely for these species of relative high value; this behavior creates additional fishing pressure.

4.3.3 PSC Species

Staff recommends allocating halibut and Chinook salmon PSC as part of this program. Each PSC species would be allocated based on historical groundfish harvest (*pro rata*). Allocating PSC meets the Council's objective of the Council because it internalizes the value of PSC within a cooperative, creating incentives to minimize its use as long as directed fisheries are available. Because the proposal would have

cooperatives use their PSC allocations for all fishing, not just that of allocated target species, it creates incentives to avoid PSC the extent practicable. Allocation based on groundfish harvests does not directly reward individuals for high PSC rates. Allocating according to historical groundfish harvest is also responsive to the objective of considering historical investment in and dependence on the groundfish fisheries.

West Yakutat is not included in the GOA Groundfish FMP Amendment 93 pollock Chinook limit. The analysis assumes that cooperative members would need to have available Chinook PSC for the Central GOA available in order to fish in the West Yakutat District. If Chinook salmon PSC limits are not maintained for subareas of the GOA, then the cooperative could also use Chinook salmon PSC allocated based on WGOA catch history to fish in the West Yakutat District.

4.4 Seasonal Rollover of Unused Quota

The LAPP proposal would allocate target and PSC species for which seasonal allocations currently exist. Seasonal limits for pollock, Pacific cod, Chinook salmon PSC, and halibut PSC are discussed below. Some seasonal limits have been implemented in order to moderate the pace and spatial distribution of fishing effort, in connection to biomass distribution and Steller sea lion protection measures. Seasonal allocation of PSC species has historically been used as a measure to check the pace of PSC usage in order to preserve harvest opportunities in directed fisheries that occur later in the year. In moving forward, it is logical for the Council to clarify whether and how the program might allow for within-year rollovers of cooperative quota for these species.[36]

- **Pollock**
  The TAC for the Inshore component in Areas 610, 620, and 630 of the GOA pollock fishery is divided according to biomass distributions. Each area's apportionment is divided into four seasons (A, B, C, and D) with 25 percent of the TAC assigned to each season.[37] Under current regulation, the underharvested amount of a seasonal apportionment may be added to the subsequent season's apportionment so long as the resulting apportionment is not increased by more than 20 percent above that season's original limit.[38]

- **Pacific cod**
  The Western and Central GOA Pacific cod TACs are seasonally apportioned to each gear sector for an A season (60%) and a B season (40%). For trawl, the A season runs from January 20 to June 10, and the B season runs from September 1 through November 1. Regulations allow the NMFS Regional Administrator to reapportion underages from one season to the subsequent season within the same harvest sector. NMFS can also make inseason reallocations if it determines that a sector will be unable to harvest the entire amount of its Pacific cod TAC. Regulations state that reallocation to the

[36] The Council has already stated that it is not pursuing alternatives that would allow unharvested quota to be rolled over from one calendar year to the next.
[37] The Area 640 pollock TAC is not divided into seasons, therefore there is no rollover.
[38] Any remaining underharvest from the preceding season may be further apportioned to the subsequent season in other statistical areas in proportion to estimated biomass, and also subject to the restriction on an increase in the seasonal catch allowance of no more than 20 percent.

CV gear sectors will be considered first, then to the combined CV and CP pot sector, and then to all other CP sectors, taking into account the ability of a sector to harvest the remaining TAC.

- **Chinook salmon PSC**
  GOA Groundfish FMP Amendment 97, which is currently in the process of implementation, establishes Chinook salmon PSC limits for non-pollock trawl fisheries. The Central GOA Rockfish Program CV sector would receive an apportionment of 1,200 Chinook salmon PSC, of which all but 150 fish of any remaining Chinook salmon PSC would be rolled over to CVs fishing outside of the Rockfish Program as of October 1. All remaining Chinook salmon PSC in the Rockfish Program CV sector would roll over to other CV fisheries when the Program fishery ends on November 15.

- **Halibut PSC**
  Halibut PSC is seasonally apportioned across five seasons (also described in Section 3.2.4). The Rockfish Program receives 191 mt from the third season deep-water complex halibut PSC apportionment (395 mt). As Rockfish Program cooperatives check out of that LAPP, 55 percent of their unused halibut PSC is rolled over into the fifth season halibut PSC apportionment (October 1 through December 31), which is not divided between the deep- and shallow-water species complexes.

Allowing the rollover of directed fishery TACs from one season to the next provides operational flexibility for the harvesting and processing sectors. The pollock fleet can stand down from harvesting in January as it waits for optimal roe conditions, knowing that some amount of the A season TAC can be caught in the B season. Similarly, vessels are under less pressure to commence the C season on the regulatory start date if their primary markets are still devoting processing capacity to directed salmon fisheries. TAC rollovers are also a tool for fleet managers to help their vessels minimize PSC by shifting harvest to lower-incidence times of year.

PSC rollovers are both a precautionary management measure and an incentive. Under Amendment 97, the Council's preferred alternative apportioned 1,200 Chinook salmon PSC to Rockfish Program CVs. That amount of Chinook PSC is greater than the sector's historical average salmon take. The Council, in part, selected that level to minimize the probability of early closures in that economically important fishery, and made that decision contingent upon the ability to roll over the unused amount to support fall fisheries. The ability to roll over unused Chinook *and* halibut PSC from the Rockfish Program gives the fleet a vested interest in performing better than the maximum amount of allowable PSC.

In crafting a GOA Trawl LAPP, the Council should consider whether seasonal rollovers will continue to serve their intended purpose – providing flexibility, creating incentives, and protecting other harvest opportunities within the trawl sector – and, if so, how rollovers should be tracked in catch accounting.

As written, the pollock quota allocated to cooperatives under the proposed program would retain its seasonal nature, so the Council could choose to simply continue pollock rollovers in their current form. This would mean that each cooperative could roll over an amount up to 20 percent of its own pollock allocation for the subsequent season. The aggregate rollover cap of 20 percent would not be violated, even if all cooperatives rolled over the maximum allowable amount. The ability to rollover underharvested pollock – in excess of the 20 percent cap – to other statistical areas might only apply if the cooperative

also had quota in those areas. Because the 20 percent cap on rollovers is part of the Council's approach to moderating the impact of concentrated harvest on protected marine mammals, changing that limit might be outside the scope of the considered action.

Pollock and Pacific cod allocations to cooperatives carry *pro rata* allocations of Chinook salmon and halibut PSC. The Council may wish to clarify whether these PSC allocations are for use in all cooperative fishing activity throughout the year, or are linked to seasonal allocations and are thus apportioned to each season. In the latter case, the Council should state whether seasonal PSC rollovers are similarly capped by virtue of being linked to seasonal TACs. The analysts presume that the pro rata cooperative PSC allocations are made at the beginning of the year and are available for use as fits the cooperative's fishing and PSC mitigation strategy. This approach best serves the Council's intent of creating an incentive to reduce PSC use in one fishery in order to support other fishing opportunities.

Both existing PSC rollovers are associated with the Central GOA Rockfish Program. Barring the merger of the proposed GOA Trawl LAPP with the Rockfish Program, NMFS in-season managers will need clear protocols defining to whom unused Rockfish Program PSC is rolled over. The current proposal would likely create groundfish trawl cooperatives whose rosters are not identical to those already existing in the Rockfish Program. Unused Rockfish Program halibut PSC is rolled over to the fifth halibut PSC season on a RP cooperative-by-cooperative basis. Some RP cooperatives may roll over more halibut PSC than others. The Council could choose divide all rolled over halibut PSC equally among cooperatives (perhaps accounting for CV and CP cooperatives separately), or it could link the rolled-over halibut PSC to groundfish cooperatives on the basis of whether their member LLPs fished in the Rockfish Program. The latter option would enhance the incentive of vessels fishing under the Rockfish Program to minimize halibut PSC, since their groundfish cooperatives would directly benefit from the rollover. However, given that the current halibut PSC rollover accrues to the unapportioned fifth halibut season, choosing the former option is not significantly different from the status quo.[39] The rollover of Rockfish Program Chinook salmon PSC is similar in that it currently rolls over to *all* GOA CVs, so the Council could apportion the rollover evenly (among CV cooperatives). In general, even apportionment would simplify catch accounting and is not out of line with current PSC management structures, but it may reduce RP cooperative incentives to maximize PSC avoidance.

4.5 Full Retention

In public testimony, Inshore sector stakeholders asked the Council to consider allowing full retention of pollock and Pacific cod. The request stems from a desire to reduce regulatory groundfish discards, which is among the Council's stated goals and objectives listed in Section 1.4. Retention of these species on GOA trawl trips is currently limited by 300,000 lb. trip limits for pollock and by groundfish MRAs (defined in Table 10 to Part 679 in regulation[40]).

The pollock trip limit, described in Section 3.2.1, was originally implemented as a Steller sea lion protection measure meant to slow the pace of the fishery. Further analysis and coordination would be

[39] If the Council does consider removing the general seasonal apportionment of annual halibut PSC (5-season approach), as discussed in Section 3.2.4, it will be necessary to specify that a cooperative can use rolled-over halibut PSC in any remaining GOA trawl fishery.
[40] http://alaskafisheries.noaa.gov/rr/tables/tabl10.pdf

required before a sea lion protection measure could be removed. However, the Council could consider allowing for flexibility around the limit in order to reduce regulatory discards of otherwise marketable pollock. Pollock tows are associated with Chinook salmon PSC, which would be capped by cooperative PSC limits; bycatch of other marketable groundfish is generally low in pollock trawl fishing.

The GOA Trawl LAPP, as currently proposed, would mitigate MRA-related discards for allocated species, assuming that vessels can retain any amount of allocated species for which its cooperative has quota. If the prior assumption is valid, full retention only changes the proposal by *requiring* a cooperative to acquire additional quota necessary to cover the catch of allocated species post-delivery (as permitted under Part 7.k of the April motion), which could have a situational impact on the short-term quota share market. Retention of non-allocated species would likely remain under the status quo MRA structure.[41]

The assumption that vessels fishing under a cooperative could retain allocated groundfish beyond the MRA limit is complicated by area closures in Steller sea lion critical habitat, where "directed fishing" for pollock is prohibited. A vessel is said to be directed fishing if it is in excess of the MRA standard for pollock – 5 percent of the basis species for arrowtooth flounder or 20 percent for other groundfish. Without additional regulatory changes, the Steller sea lion protection measure would require a vessel to discard pollock in a critical habitat area even if the Council revises MRA standards for vessels fishing for species allocated under the program.

The Council could require full retention of *all* allocated species. However, some species that are being considered for allocation might be problematic to retain when not being targeted. Arrowtooth flounder, for example, are quick to degrade. If a vessel encountered arrowtooth on the first day of a multi-day trip and was required to retain it then the vessel might have to shorten the planned length of its trip, which would cause a clear inefficiency.

Regardless of whether or not the Council makes full retention part of its final preferred alternative, it is likely that an allocative program will reduce discards because fishermen can be more selective about the time and area that they are fishing while under the program. More selective fishing is expected to yield higher quality fish, or at least allow for test tows that could reduce the amount of less desirable fish that is brought onboard.

4.6 Harvest Allocations for Shoreside Processors

The Council's April 2014 proposes making harvest allocations to LLP licenses. Thus, allocating groundfish quota to shore-based processors is not considered. The exceptions to this statement are the cases where a processing company owns or purchases LLPs, which does and could continue to occur in the GOA groundfish trawl fishery.

Stakeholder testimony and proposals submitted to the Council have made the assertion that issuing quota only to the harvesting sector would drive up ex-vessel prices as shore plants compete for deliveries to fill

[41] Note that the Council is considering a separate action that would revise MRA enforcement on CVs, changing the enforcement period from instantaneous – where a vessel is responsible for being within the allowable target/non-target species ratios at all times – to a trip-length period. If implemented, this action would be expected to reduce regulatory discards in the CV sector.

their existing processing capacity. Moreover, processors note that they have made capital investments to accommodate high-pulse fisheries where large amounts of groundfish are delivered over a short period of time. The written assertion in a submitted proposal and its supporting discussion document is that a cooperative quota-based management structure will slow the pace of deliveries and leave shore plants with underutilized processing capacity, or stranded capital investment.

The proposed framework attempts to address concerns about economic rents shifting from processors to harvesters – through increased ex-vessel payments – by linking the two sectors in the initial formation of Inshore cooperatives (Section 2.2.2.1). The initial formation requirements eliminate the need for shore plants to compete with one another for deliveries during the first two years of the program. It is anticipated that the private contract between the harvester and processor members of a cooperative will further moderate the ability of catcher vessels to freely shop their catch to the highest paying processor after the initial two year cooling-off period. Furthermore, absent entry by new processors in remote Western GOA trawl communities, the geographic reality of some areas covered by this program is and will continue to be a factor limiting the ability of catcher vessels to sell their catch on a truly open market. As this action moves into the analytical phase, the Council may consider whether new processor entry into what are currently single-processor communities can be reasonably expected, or whether increased participation by motherships or shoreside floating processors could significantly impact the shore-based processing sector's existing investments.

The argument that a quota-based program could leave the processing sector with significant overcapacity is partially based on the assumption that groundfish will be delivered over a lengthened time period, relative to the status quo. While this is generally accepted in literature on catch share management, the level of impact on the utilization of shore plant investments depends upon the extent of the change in delivery patterns. It should be noted that the proposed program would be applied to a fishery where existing limitations on season length will be maintained. Seasonal deliveries will remain bounded by regulatory seasons for pollock and Pacific cod. In addition, harvesters will continue to focus effort on times when product value is high. For example, pollock deliveries are likely to stay concentrated around times of peak roe content, regardless of management.

The final EIS for the analogous west coast groundfish trawl rationalization program discusses the Pacific Fishery Management Council (PFMC) decision to allocate harvest quota to processors for whiting but not for non-whiting groundfish. The decision not to issue non-whiting quota to processors was in part based on the predicted change in season length. The EIS also discusses the possibility that allocating non-whiting harvest quota only to permit holders would increase processors' ex-vessel payments. The document concludes that "in a cooperative program with linkages between harvesting and processing entities, it is unclear what will happen to ex-vessel prices" (PFMC 2010, p. 502). The proposal for the GOA trawl fishery, in which some processors actually hold harvest permits (LLPs), undoubtedly creates such a linkage.

5 Fishery Dependent Community Stability

Part 9 of the Council's April 2014 motion outlines three measures to promote stability in communities that depend upon the GOA groundfish trawl fishery. These measures would apply only to the Inshore cooperatives, as defined in Section 2.2.1 and described in Section 2.2.2. The following subsection provides high-level summary data on the extent to which GOA communities that receive trawl groundfish shoreside deliveries depend upon those fisheries as a source of total fisheries production. Sections 5.2 through 5.4 discuss the measures found in the Council motion: consolidation limits, regionalization of landings, and eligibility criteria that could be established to limit the class of individuals or entities that could purchase CV trawl LLPs and their associated catch history.

5.1 Dependency Data

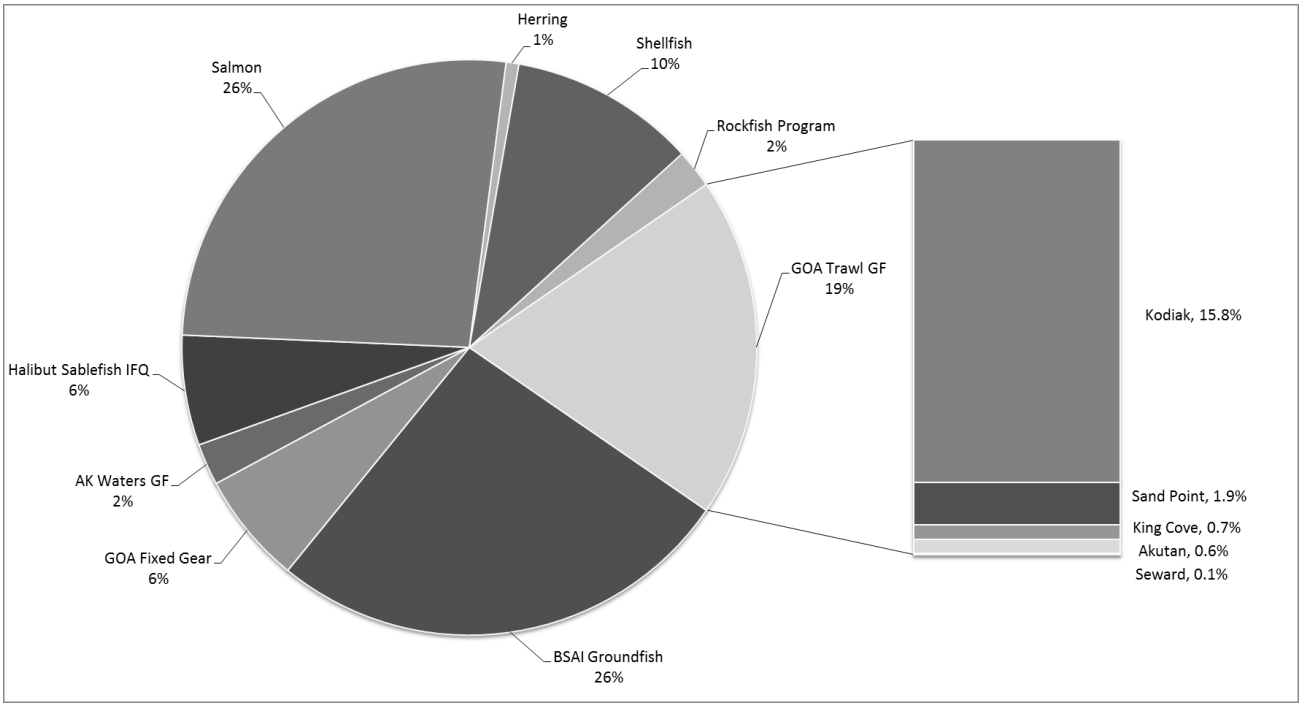
Since 2003, shoreside processors in 10 GOA communities have received deliveries of trawl-caught groundfish. Figure 2 illustrates the portion of total gross first wholesale revenues that were generated from groundfish trawl activity in 2013, the most recent available year of complete data.[42] GOA groundfish trawling, exclusive of the Central GOA Rockfish Program, accounted for 19% of total wholesale revenues in the five communities where CVs made shoreside deliveries during that year.[43] Of the total GOA groundfish trawl revenues generated from deliveries to shore plants, 83% are attributed to Kodiak processors (15.8% of overall wholesale revenues). When taken as a whole, GOA communities that processed GOA trawl-caught groundfish onshore generated the majority of their wholesale revenue from BSAI trawl groundfish and from directed salmon fisheries. Revenues from BSAI groundfish (26% of overall wholesale revenues) were overwhelmingly generated in Akutan, Dutch Harbor and Unalaska, and to a much lesser extent in King Cove. Revenues from directed salmon fisheries (also 26% of overall wholesale revenues) were primarily generated in Kodiak, King Cove, Seward, and Sand Point – in descending order of magnitude.

Table 25 breaks out the percentage of each GOA community's aggregate gross first wholesale processing revenues by fishery for each of the four most recent years of complete data. Kodiak and Sand Point rely most heavily on GOA trawl-caught groundfish, while Akutan, Dutch Harbor, and Unalaska are largely dependent upon revenues from BSAI groundfish fisheries. Directed salmon fisheries make up a signification portion of total revenues in key GOA groundfish processing communities like Kodiak, King Cove, and Sand Point, while salmon are clearly the most critical production input for the Southeast Alaska communities that did process some amount of GOA groundfish (Seward and Sitka).

Neither the figure nor the table in this section presents actual revenue values in order to preserve confidential information for communities in which there is only a single processing entity.

[42] Looking at the entire period since 2003, as opposed to only the 2013 snapshot, Dutch Harbor, Unalaska, Ninilchik, Homer, and Sitka also received shoreside GOA groundfish trawl deliveries. Homer only received deliveries in 2003, Ninilchick received deliveries in 2003 and 2006, and Sitka only received deliveries in 2012.
[43] Deliveries to stationary floating processors, which are also part of the shoreside processing sector as defined in this action, are not included in this data. SFPs do, however, contribute to local economies through employment and through fish taxes levied by the State of Alaska at a rate higher than those paid by shore-based processors.

Figure 2 Composition of total gross first wholesale revenue in GOA communities where GOA trawl groundfish was processed, 2013



Source notes: Groundfish revenues are from Comprehensive Blend Catch Accounting data; other revenues are from Comprehensive COAR Production Reports. CAS does not include non-groundfish data, but is preferred for groundfish data because it provides gear type and area information.

Table 25 Fishery contributions to GOA groundfish trawl processing communities' total gross first wholesale revenues, 2010 through 2013

Community	Year	**GOA Trawl GF**	Rockfish Program	GOA Fixed Gear	BSAI GF All Gear	AK State Fisheries	Halibut Sablefish IFQ	Salmon	Herring	Shellfish
Kodiak	2010	**30%**	5%	11%	<1%	4%	20%	25%	1%	4%
	2011	**30%**	5%	14%	<1%	4%	19%	23%	1%	4%
	2012	**32%**	7%	13%	<1%	4%	13%	27%	1%	2%
	2013	**36%**	5%	8%	<1%	2%	9%	37%	1%	1%
Kodiak Total		**32%**	6%	12%	<1%	3%	15%	28%	1%	3%
King Cove	2010	**9%**		11%	14%	5%	6%	32%		23%
	2011	**6%**		8%	13%	4%	4%	32%		33%
	2012	**11%**		5%	15%	4%	4%	22%		39%
	2013	**5%**		6%	13%	4%	2%	44%	<1%	27%
King Cove Total		**7%**		7%	14%	4%	4%	33%	<1%	31%
Sand Point	2010	**23%**		17%	<1%	12%	23%	23%		3%
	2011	**18%**		21%	3%	8%	15%	28%		7%
	2012	**35%**		14%	2%	5%	19%	18%		6%
	2013	**21%**		19%	3%	7%	13%	34%		2%
Sand Point Total		**24%**		18%	2%	8%	17%	26%		5%
Akutan	2010	**1%**		1%	73%	<1%	6%	<1%	<1%	19%
	2011	**<1%**		1%	77%	<1%	6%	<1%	<1%	16%
	2012	**<1%**		<1%	77%	<1%	2%	<1%	<1%	19%
	2013	**2%**		<1%	76%	<1%	3%		1%	18%
Akutan Total		**1%**		1%	76%	<1%	4%	<1%	<1%	18%
Dutch Harbor	2011	**<1%**		<1%	94%		2%			3%
	2012	**<1%**		<1%	67%	<1%	7%		<1%	25%
Dutch Harbor Total		**<1%**		<1%	80%	<1%	5%		<1%	15%
Unalaska	2010	**2%**		<1%	98%					
	2011	**<1%**		<1%	83%	<1%			<1%	17%
Unalaska Total		**1%**		<1%	89%	<1%			<1%	10%
Seward	2010	**<1%**		13%		<1%	26%	60%	<1%	<1%
	2011	**1%**		21%		2%	30%	46%		<1%
	2012	**1%**		19%		1%	31%	48%		<1%
	2013	**12%**				15%	<1%	73%		
Seward Total		**1%**		17%		1%	28%	52%	<1%	<1%
Sitka	2012	**<1%**					<1%	82%	15%	3%
Sitka Total		**<1%**					<1%	82%	15%	3%
Overall 2010 - 2013 Total		**14%**	2%	8%	32%	2%	10%	20%	1%	11%

5.2 Consolidation Limits

The discussion paper presented to the Council in April 2014 covered general issues relating to consolidation limits for CV harvesters and processors (April Section 6.1). Part 9 of the Council's motion provides additional resolution on how CV quota control and use limits – caps on quota holdings and vessel caps – and facility-based processing caps are currently envisioned. Given that these measures are part of the Council's approach to fishery dependent community stability, they exclusively address the Inshore sector of the proposed program.

The previous paper noted that the MSA's LAPP requirements direct the Council to ensure that privilege holders do not acquire an excessive share of the fishery (§303A(c)(5)(D)). Concentration of ownership (excessive shares) could theoretically lead to monopoly influence over production. In reality, the likelihood of this outcome is very low for a groundfish fishery that generates product types with many substitutes from other fisheries. In other words, it is not likely that an entity could acquire such a high

percentage of the quota pool that it has an incentive to withhold production, especially in the event that initial allocations are based on historical participation (NMFS 2007).

The Council's motivation for considering consolidation limits relates more directly to the management objectives listed in Section 1.4 of this paper. Three of the 14 Goals and Objectives could be advanced, in part, through the proposed caps: limiting consolidation, providing employment and entry opportunities, and increasing the economic viability of the harvest, processor, and support industries (Goal #6); promoting active participation (Goal #14); and authorizing fair and equitable access privileges that consider fishery investments and dependency (Goal #4). Though not specifically mentioned in the Council Goals, maintaining historical "fleet diversity" would be associated with the community stability objectives referenced in Goal #6.

There is no formula for choosing consolidation limits that satisfy all management objectives. In fact, the economic viability of the harvest fleet might actually be enhanced through some amount of consolidation – with obvious economic costs to those vessels whose participation is reduced, and for supporting businesses whose revenues are driven by the number of active vessels. As a guiding principle, the Council may consider the trade-off between operational efficiency (e.g., lower total harvest or processing costs, lower management costs) and maintained opportunities in the harvest/support sectors, which provide both social and economic values. A goal of maintaining historical vessel crew employment would likely require lower vessel use caps than a goal of simply ensuring historical product flows to the GOA communities involved in shore-based processing.

The Council's motion is not clear on the units by which quota control, use, and processing caps would be monitored. The motion speaks in terms of "percentages", which could be either a percentage of the total QS issued or a percentage of the annually issued quota pounds (a conversion of QS to harvestable pounds according to a ratio determined by that year's TAC). Tracking caps in terms of quota share versus annual harvestable pounds should not make a difference for caps that apply to a single species, as the QS:pounds ratio would be the same for all quota holders during a given year. However, since some initial allocation recipients may be closer to the cap than others when the program is implemented, using QS units might be the preferred choice. Annual TACs, which determine the QS:pounds ratio, can be volatile; a reduction in the TAC could push a subset of participants over a poundage limit and force them to divest. By contrast, QS units are stable from year to year.

The PFMC's west coast groundfish trawl program includes an aggregate quota holdings cap in addition to caps for each allocated species. The wording of the April motion does not clearly suggest that aggregate caps are under consideration for this program, but the Council may wish to state its position on the matter. An aggregate cap would only have an effect if it were set lower than the sum of the species-specific caps that are clearly suggested in the motion. An aggregate quota cap would not be effective in the absence of species-level caps, as an entity could use its entire aggregate cap to control the quota pool of a single species that is of high value, is desirable due to opportunities to retain unallocated marketable bycatch species, or is needed as bycatch to participate in other directed fisheries.

Depending on which species are allocated, the Council may have to deal with control of (or access to) unallocated species that are only denominated in pounds, since no quota was issued for those species. If a

company controlled a large amount of quota for a certain allocated species, by virtue of owning the maximum 10 groundfish LLPs and purchasing quota up to the limit on each license, that company could also control access to a significant share of an unallocated species that is taken as marketable bycatch in the target fishery. This outcome would mainly be of concern if a directed fishery exists for the unallocated species, serving as a fishing opportunity for license holders with relatively small holdings of quota for the allocated species; it is of less concern if the unallocated species is almost always caught incidentally during directed fishing for the allocated species. An aggregate vessel use cap, covering all species, could reduce the impact of license holders who use target quota to maximize retention of unallocated secondary species at a cost to other directed fisheries. Any cap that covers unallocated species would have to be denominated in pounds, which would be vulnerable to annual TAC variations that impact QS:pounds ratios. This type of aggregate cap might also reduce the ability of vessels to optimize harvest returns.

5.2.1 Quota Control Caps

The first consolidation cap described in Part 9.a of the Council's April motion would limit the percentage of the total CV allocation for a particular species that can be attached to the LLP or LLPs held by an individual and enrolled in a cooperative.[44] The portion of the total species allocation attached to each license is initially determined by catch history, but could be altered by the long-term transfer of severable quota shares after program implementation. As described in Section 2 of this paper, annual harvest quota is attached to the LLP license, but is only accessible by enrolling in a cooperative. The allowable percentage of a species-specific quota share pool would be measured at the regional level (WGOA or CGOA/WY). The motion proposes three options for quota control caps:

Option 1: 3%
Option 2: 5%
Option 3: 7%

The Council should state whether different limits (Options) could apply to different allocated species, or whether one limit should apply to all species' quota caps. Selecting the highest limit (Option 3) would allow for the most potential consolidation. However, a high limit could provide an additional incentive for the expanded prosecution of species that are allocated but not fully utilized due to PSC constraints. An entity would be marginally more motivated to reduce halibut PSC in one target fishery in order to build a larger share of quota holdings for another species.

The selected quota control cap[45] would be assessed using the "individual and collective rule". Under this rule, both a person's direct and indirect holdings are credited toward the cap. Indirect holdings are

[44] The April motion specifically references that caps would apply to "target species CV [quota] shares". The analysts assume that harvest quota for secondary species would also be governed by this type of cap, if those species are allocated. The Council may need to clarify its intent in this matter.

[45] The analysts are temporarily using the term "quota control cap" where ownership cap or use cap have been used in the past. The wording of the Council's April motion, and the MSA, do not suggest any property ownership right for the quota that is attached to a LLP license, and MSA clearly states that LAPP privileges are revocable by NMFS. The motion does, however, confer a measure of control over the deployment of quota to the license holder; the license holder makes the choice to enroll in a cooperative, and could have the ability to transfer catch history attached to the license to another eligible license holder. The analysts have avoided the term "use cap" to minimize confusion with vessel use caps, which are described in the following section. The Council may wish to name a different term upon future action.

determined by the portion of an individual's ownership stake in a non-individual entity that holds quota. For example, if a person holds a 20 percent interest in a company that holds LLPs linked to 100 quota shares, then that individual would be counted as holding 20 quota shares for purposes of determining compliance with his or her individual cap. This method is similar to what is already used in the Halibut and Sablefish IFQ program.[46] NMFS is able to track individual and collective holdings through information gathered on the LLP Groundfish/Crab License Application for Transfer[47] (Block H), in addition to its knowledge of all original quota holdings from initial allocations. The Agency should be able to collate an individual's ownership interests and determine whether total quota holdings across all of the individual's permits are in compliance with the selected cap.

A quota control cap would directly reduce the possibility that an entity could gain market power in the market for transferrable quota. As mentioned above, it is unlikely that any entity could reach the point where engaging in monopolistic behavior is privately beneficial. However, allowing an entity to control an excessive share of the quota share pool within a regulatory area could impact the amount of quota on the market for new entrants or entities seeking to expand their operation. Moreover, an entity that holds more quota than it could fish on its own vessel(s) is likely to engage in quota leasing, which expropriates economic rents, discourages investment by entities that pay lease fees, and could reduce the value of crew shares on vessels that lease quota.

The motion allows for CV harvesters who exceed the selected quota control cap at the time of implementation to be grandfathered in at a higher level. The Council may need to specify whether a license holder who is grandfathered in at a level above the control cap for one species is able to acquire additional quota of another species, for which their holdings are not in excess of the species cap. This type of acquisition is permitted in the west coast trawl program, so long as the individual is not above that program's aggregate holdings cap.

The Council may also wish to consider whether quota holdings grandfathered in at levels above quota control caps might sunset after a pre-determined period. The expiration of initial allocations would be a direct impact on some quota holders, but could also create an acquisition opportunity for holders of eligible licenses that were allocated few or no initial shares.[48] Sunsetting grandfathered quota is another example drawn from the west coast groundfish program. The motivation for that program element was linked to the specific case of a non-fishing non-profit entity that held a number of licenses; the PFMC had an interest in seeing a portion of those holdings return to active fishing stakeholders. NMFS will redistribute quota held in excess of a cap that has not been divested by the required date to license holders whose quota is below the cap, using the same formula by which initial allocations were made.

Absent any grandfathered quota holding entities, the minimum number of remaining license holders could be determined by dividing 100% by the selected percentage Option (3%, 5%, or 7%). For example, in the limit, selecting Option 1 (3%) would mean that at least 34 license holding entities would remain after

[46] The motion does not propose the use of the "threshold" rule, which is employed in fisheries where processor quota shares are issued. Under that rule, an individual would be assessed the total amount of the holdings of a non-individual entity in which that individual held more than a certain percentage (threshold) ownership stake.
[47] http://alaskafisheries.noaa.gov/ram/llp_trans_form.pdf.
[48] This could also create an opportunity for community fisheries associations (CFAs), if they are authorized in the Council's final preferred alternative.

maximum consolidation. The restriction on owning more than 10 groundfish LLPs (§679.7(i)(1)(i)) could also serve as a break on extreme consolidation. Groundfish LLPs with only BS or AI trawl endorsements do count against the limit of owning no more than 10 LLPs.

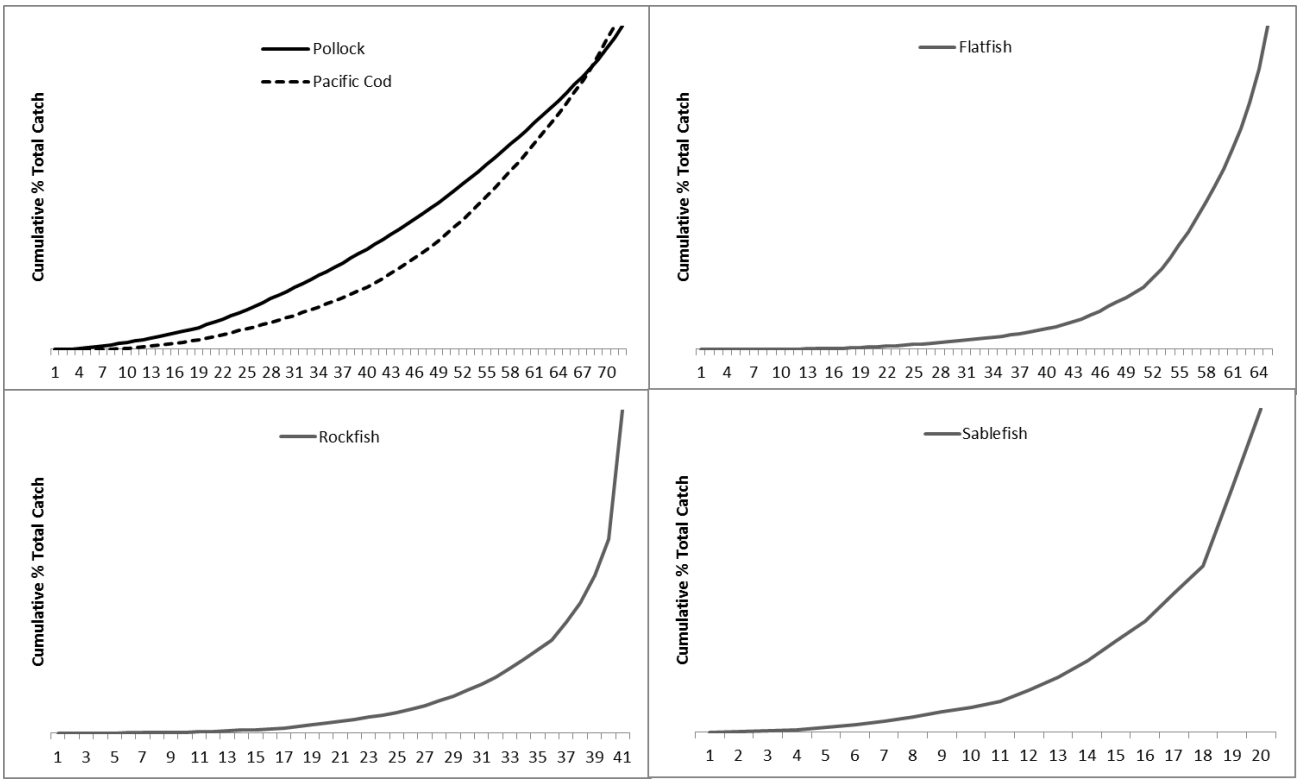
Other quota-based programs in the Alaska region include provisions for the inheritance of quota shares or of licenses with attached quota. Under the Halibut and Sablefish IFQ program, an individual who inherits quota share that puts them over a cap can hold and use that quota for a period of up to three years. By the end of that three-year period the individual must divest down to the cap, or to his or her pre-inheritance level if the individual had been grandfathered into the program at a level above the cap.

Table 26 and Figure 3 provide a summary snapshot of how harvest was distributed among CV LLPs in 2012. Both items are drawn from fish ticket data, so catch information is on a species basis as opposed to capturing catch by trip target designation (this is closer to how allocations would be made). For simplicity, species catch of rockfish and flatfish are aggregated under the AKFIN target name that is assigned to each specific species. All catch made under the Central GOA Rockfish Program has been removed. Table 26 shows the number of CV LLPs that recorded a 2102 landing of GOA groundfish that could be allocated under the proposed program. The table reflects that most LLPs were credited with a portion of the annual species harvest that would be under the lowest proposed quota control cap of 3%. Using 2012 as an example, the LLPs listed in rows corresponding to a higher percentage of total species catch would be those who are grandfathered in above the cap. Figure 3 graphically illustrates the distribution of 2012 catch across LLPs. The panels are not labeled in order to maintain confidentiality, however the y-axes all range from 0% to 100%; the x-axes show the number of LLPs in the 2012 fishery. Moving from left to right within each panel, the curve shows the cumulative portion of annual catch for the number of LLPs indicated on the x-axis. A line with a constant slope (straight) would indicate that each LLP recorded an identical portion of the annual catch. Pollock and Pacific cod harvests were the closest to being evenly distributed across licenses. A line that begins near flat and then rapidly slopes upwards near the end of the LLP count (x-axis) would indicate than most licenses accounted for only a small portion of the total catch, and a few licenses accounted for a large portion. Rockfish (non-Rockfish Program), flatfish, and trawl sablefish are better characterized by the latter distribution pattern. These are high-level summary measures, and are not broken out by Western GOA or Central GOA/West Yakutat, which would be the case for the quota control caps described in the April motion.

Table 26 **Number of CV LLPs under each quota control cap level, 2012 GOA fishery**

	Pollock	Pacific Cod	Rockfish	Flatfish	Sablefish
3% or Less	69	62	36	52	11
3.01% to 5%	3	9	-	7	2
5.01% to 7%	-	-	2	3	3
More than 7%	-	-	3	3	4
Total CV LLPs	**72**	**71**	**41**	**65**	**20**

Figure 3 Catch distribution across active CV LLPs (GOA-wide), 2012 fishery



5.2.2 Vessel Use Caps

A vessel use cap limits the amount of an allocated target[49] species that can be harvested on a single vessel. Since cooperatives have the ability to reallocate fishing privileges within the cooperative, merely limiting quota holdings would not necessarily prevent a reduction in overall fleet size. In simplest terms, higher vessel use caps would allow a cooperative to harvest its quota with fewer vessels while a lower vessel use cap would ensure that more CVs remain active. The motion proposes three options for vessel use caps:

Option 1: 3%
Option 2: 10%
Option 3: 15%

The language in the motion states that "vessel use caps are applicable within the cooperative." The analysts presume that this means caps are applicable within a cooperative in addition to the more general case (i.e. the cap represents the percentage of total harvest of an allocated species across all CVs that are fishing an allocation). The April discussion paper estimated the likely size of the initial cooperatives, and most were made up of fewer than 10 vessels. None would have as many of 34 vessels, so a considered vessel use cap of 3% would not make sense. As a result, the percentages in the options above are assumed to refer to the portion of the total available CV quota for a given species *across all cooperatives*. However, it could also be read as referring to the total available CV harvest for a given species, including both quota allocated to cooperatives and any limited access fishery TAC. The former reading is the most

[49] Again, the motion refers to "target" species, but it is assumed that the vessel use cap would apply to secondary species if such species are allocated under the program.

logical if the Council is primarily concerned with maintaining historical levels of active vessels within cooperatives, where annual harvest quota is freely transferrable. The April motion indicates that vessel use cap percentages are a portion of all CV quota for an allocated species, summed over all relevant management areas (WG, CG and WY, or 610, 620, 630 and 640). The Council should state otherwise if it intends for use caps to apply to the quota pool within each specific area.

Again, the Council should clarify whether a different option could be selected for each allocated species. If higher use caps were selected for higher value species, some vessels may shift effort into those targets (up to the limit). If target species quota is severable from a license, higher use caps may create additional demand for high-value species quota. Pacific cod, a higher value species, is incidentally caught in lower value fisheries for flatfish. After having used most of its cod quota in the directed fishery, a higher use cap might have a positive impact if a vessel needed to temporarily transfer additional cod quota from within its cooperative in order to cover flatfish activity later in the year. In April, it was mentioned that higher use caps for cod could actually decrease interest in flatfish targets because cod is more valuable. Without fully analyzing this claim, it is worthwhile to note that there will always be at least some interest in targeting flatfish. As the cod TAC is approached, the fishery may be changed from open to "bycatch" status. Also, the Pacific cod B season closes by regulation on November 1, after which some cod may still be taken as incidental in flatfish fisheries.

One potential disadvantage of low vessel caps is a reduction in operational flexibility within the cooperative. If, near the end of a season, some vessels that are needed in order for a cooperative to fully harvest its quota allocation have reached their use cap, then the cap could cause allocated fish to be left in the water. Mechanical breakdowns and other unforeseen problems could create situations where cooperatives need room within use caps to reassign quota to operational vessels over the short-term.

In theory, reduced fleet size could increase overall harvest efficiency and potentially improve coordination between vessels seeking to minimize PSC. However, these benefits do not fit with the Council's stated objectives of limiting consolidation, maintaining fleet diversity, and making allocations in consideration of historical investment and dependency on the fishery. Moreover, the cooperative structure outlined in the existing proposal already seeks to divide the fleet into subgroups with aligned incentives and enhanced communication.

Use caps may be an effective way to moderate increased participation from vessels that bring in additional capital from other fisheries, especially in cases where existing sideboards are removed. Section 8.1 provides the Council with rationale for why it might consider removing the GOA sideboards on non-exempt AFA catcher vessels. Maintaining those sideboards within a cooperative structure may be difficult since the AFA sideboards are vessel-based and the non-exempt AFA vessels may be dispersed throughout several GOA cooperatives that each have a mix of sideboarded and non-sideboarded vessels. In the absence of vessel use caps, these AFA boats might be able to fish a larger portion of their cooperative's quota than the amount dictated by the catch history attached to their LLPs, since their GOA catch history was limited by the existing sideboard.

In the analytical phase, staff may consider possible distributive effects of use caps on vessels that fish in the GOA year-round compared to vessels that spend parts of the year fishing in other areas, regions, or

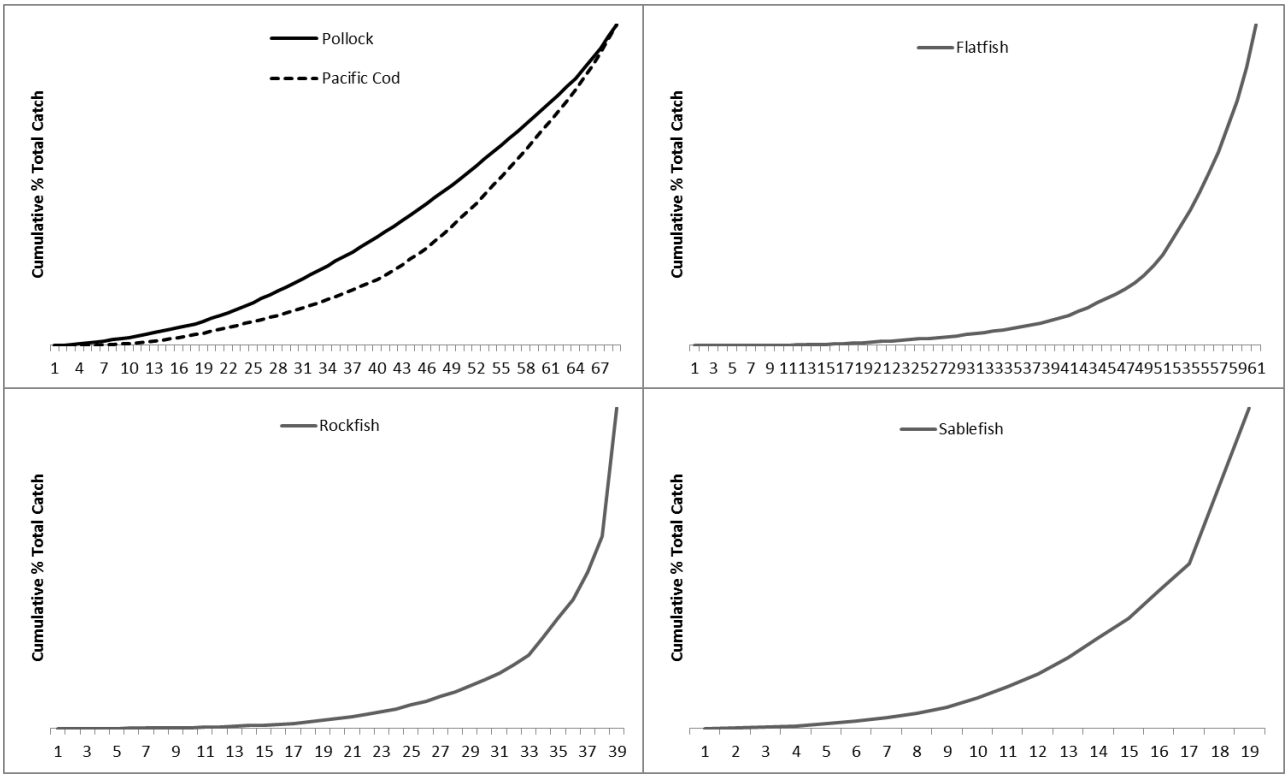
tendering. It is possible that use caps would be more of a constraint to cooperative vessels that spend the majority of their time in the GOA. However, vessels that are relatively more dependent on GOA fisheries are likely to be those that would be grandfathered in above the selected cap. Nevertheless, vessels whose historical activity places them near the selected cap would have fewer opportunities to expand their business through improved efficiency in PSC usage.

Table 27 and Figure 4 respond to the Council's request for information that approximates a "fleet profile" for GOA CVs. Similar to the table and figure in the previous section, this information is drawn from fish ticket data at a species level, but presented as grouped under AKFIN targets. Again, catch made under the Central GOA Rockfish Program is excluded. Percentages are calculated from GOA-wide catch, since this portion of the April motion does not state that use caps would be assessed on a region- or area-basis. Figure 4 shows a distribution of harvest across vessels that is similar to the distribution of harvest across LLPs (Figure 3). Catch of pollock and Pacific cod is more evenly distributed, while a few select vessels account for a large portion of rockfish, flatfish and sablefish catch.

Table 27 **Number of vessels under each usage cap level, 2012 GOA fishery**

	Pollock	Pacific Cod	Rockfish	Flatfish	Sablefish
3% or Less	65	60	33	49	9
3.01% to 10%	4	9	4	10	8
10.01% to 15%	-	-	1	2	-
More than 15%	-	-	1	-	2
Total Vessels	**69**	**69**	**39**	**61**	**19**

Figure 4 **Catch distribution across the CV fleet (GOA-wide), 2012 fishery**



5.2.3 Processor Use Caps

The April motion clarified that use caps for shoreside processors (as defined in Section 2.2.1) would be applied at the facility level and within each region (WG and CG/WY). The selected cap would limit the percentage of aggregate Inshore cooperative quota[50] that a plant could process. The assumed metric for this cap is round, unprocessed fish. This language suggests that plants would not be limited in the amount of unallocated species that they could process, and that deliveries from vessels fishing in the limited access fishery would not accrue to the plant's use cap. The Council proposed three options for processor cap levels[51], noting that the highest limit (Option 3) is based on a similar cap that was implemented for the Central GOA Rockfish Program:

Option 1: 10%
Option 2: 20%
Option 3: 30%

For reference, Table 28 shows how the activity of processing facilities that received non-Rockfish Program groundfish in 2012 relates to the three Options.

Table 28 Number of shoreside facilities under each processor use cap level, 2012 fishery

	WG	CG/WY
10% or Less	4	8
10.01% to 20%	-	4
20.01% to 30%	-	2
More than 30%	2	-
Total Shoreside Processors	**6**	**14**

Processor caps could have the benefit of moderating consolidation that could adversely impact both community employment and market competition in ex-vessel pricing. As with other consolidation limits, protections against consolidation decrease when a higher cap level is selected. The impact on ex-vessel prices is expected to be less strong, since the proposed program creates a strong initial link between harvesters and processors; the strength of that link going forward depends on how cooperatives structure the "exit provisions" in their private contracts. In the medium-to-long term – once LLP holders are able to exit the processor-linked cooperative to which they were initially assigned – facility-based processor caps would reduce the likelihood that CV deliveries will migrate to plants that compete by offering marginally higher ex-vessel payments. This effect would only be noticeable as plants are approaching their caps, so lower cap levels are more likely to obviate the need to bid up dock prices. This protection for processors would come at the cost of limited growth potential for plants that are initially close to, but below, the selected cap level.

[50] Again, the motion names "target species cooperative quota", but the analysts presume that this would apply to any allocated secondary species as well.
[51] NOAA GC has indicated that it may develop legal comments on the application of processor use caps.

The April motion includes a grandfather provision for plants that have historically processed more than the cap would allow. This feature is consistent with the Council's objective of recognizing investment in the fishery, but might also perpetuate existing size discrepancies between large and small facilities.

The Council may wish to consider whether setting processor use caps at the aggregate level, as opposed to the allocated species level, might allow a facility to "corner the market" for a valuable species. The likelihood of this outcome depends upon how the severability of quota from a license is defined.

However unlikely, it may be necessary to consider whether low use caps might be inflexible in the face of unexpected drops in regional processing capacity. A plant exiting the fishery or going offline would be more likely to create a capacity gap in the Western GOA, where facilities are fewer and farther apart. Setting a particularly low processing cap could limit response options in Kodiak if other plants are unable to accept additional deliveries. While such a case seems remote, one must keep in mind that the considered program will likely be in place for many years. Motherships and floating processors could provide a short-term response to a capacity shortfall, though their ability to take deliveries from Inshore cooperative vessels could be limited by whatever language is developed for sector eligibility regulations.

5.3 Regionalization of Landings

Section 9.b of the Council's April motion states that target species quota assigned to Inshore cooperatives would be required to be landed in the region for which it is designated (WG or CG/WY) based on historical delivery patterns. In addition, the motion contains an option wherein target species CG quota that has historically been landed in Kodiak would have a port of landing requirement to be delivered to Kodiak. The Council included a City of Kodiak landing requirement in the Central GOA Rockfish program; nevertheless, NOAA GC has indicated that it may provide a legal comment on this element of the motion. A Kodiak landing requirement, in and of itself, is not likely to be the factor that prevents CVs from finding a fair market price for their catch. Kodiak has multiple groundfish processing facilities, and (subject to any exit provisions that are developed in the private cooperative contracts) CV license holders would be able to deliver to a Kodiak processor in another cooperative after the initial two-year cooling off period.

Regionalization of target species allocations would be defined using either the qualifying years for determining target species allocations or a more recent time period to reflect more current delivery patterns (2011 through 2012).

Based on the Council's motion, this section of the analysis assumes the following:

1. CP quota may be used by Inshore cooperatives and would not have a regional or port of landing delivery requirement;
2. Secondary species are not open to directed fishing and are not considered to be target species, so those species are excluded[52] from any regionalization/port of landing requirements;

[52] Secondary species would be regionalized indirectly, since the target species they are harvested in association with may be regionalized. It is unlikely that deliveries from the same trip will be offloaded at two different ports/regions. However, if that is a concern, the Council could consider requiring all fish harvested on a trip where regionalized quota is used to deliver all the harvest to the region/port where the quota is designated. Cooperative contracts may also address this issue if required to do so by the Council.

3. PSC is not landed and is not a target fishery, thus there would not be a regional or port designation assigned to its use;
4. Target species that were not landed in the WG or CG/WY areas would not be regionalized.[53]

As the Council selects the sets of qualifying years that will determine allocations and regionalization, it may wish to consider how those criteria might interact. If the same years are selected for both the initial allocation and regionalization, the quota assigned to a license could be regionalized based on where that history was delivered. If different years are used, the history (quota) attached to a license may need to be adjusted to account for the different delivery patterns that occurred during the regionalization period and the qualifying period. The adjustments could be made by: (1) adjusting each license's regionalized quota by a ratio that is equal to the CV trawl landings history in a region during the regionalization period divided by the CV trawl landings during the qualification period; or (2) by assigning all licenses the same percentage of regionalized target species. Consider the following as an illustration of how the second method would work: all Area 610 pollock would be allocated and 93.7 percent (based on Table 29, below, using 2011 and 2012 data) of each cooperative's quota (before transfers) would be required to be delivered to a processor located in the WG. The remaining 6.3% would not be regionalized because it was delivered to processors outside the WG and CG/WY areas. Cooperatives would be allowed to transfer regionalized quota to another cooperative, but it would retain the regionalization requirement assigned to the quota at the time of initial allocation.

Selecting the same years for allocating target species and regionalizing quota would be the simplest approach for implementation. However, if the Council determines that using different years better meets its goals and objectives, either of the above methods could be implemented.

The list of target species that are being considered by the Council and those recommended by NMFS are provided in Table 29 (see also the allocation discussion in Section 4.3). That list is assumed to be the target species under consideration for regionalization.

The Council has stated a strong intent to allocate pollock and Pacific cod. Each of these target species has markets that could accommodate fully harvest of the TAC. In years during which the TAC is not taken, it was typically due to PSC constraints or low catch rates. Based on information presented in Table 29, between about 93% and 95% of the Area 610 pollock quota would be regionalized for the WG. This would ensure that the 610 pollock fishery is delivered to processors located in that area, but does not provide protections at the port level. Regionalization would protect processors in the WG from losing market shares of the pollock fishery to communities outside the regionalized area. However, if the objective is to provide additional protections for King Cove and Sand Point, narrower delivery requirements could be considered (port of landing or limiting regionalization to only those ports). WG processing stakeholders have communicated to staff that, in their opinion, locality-specific protections are "essential" to protecting their financial investments and the infrastructure of their home-communities. When considering how narrow delivery requirements should be, the Council will need to balance community protections with shifting market power between harvesters and processors. Port of landing requirements in these two communities would currently require that harvesters negotiate with a single

[53] This would include deliveries made to Southeast Alaska, Dutch Harbor/Unalaska, or outside of Alaska, for example.

processor. Those negotiations would take place within the cooperative structure. If the Council wishes to define regionalization in this area more narrowly, the Council may request specific information in the cooperative reports to determine how ex-vessel prices have changed in regions with limited competition. Comparisons could be made to areas where harvesters have more delivery opportunities (after the first two years of the program). The Council may also consider reviewing how reported ex-vessel prices change over time relative to reported first wholesale prices.

About 95% of the Area 620 pollock quota would have a port of landing requirement for Kodiak. The entire Area 630 pollock fishery would have a Kodiak delivery requirement. Pollock from Area 640 would all be regionalized for the CG, with about 82% to 90% having a Kodiak delivery requirement. Implementing these requirements would protect the historical participation of Kodiak in the pollock fishery, but would not allow opportunities for other ports to participate in these fisheries at any substantial level. After the first two years of the program, harvesters could potentially have greater flexibility to negotiate with different processors that are active within the community.

Between 96% and 98% of the WG Pacific cod TAC would be regionalized for delivery to processors in the WG area. The remaining quota would not be regionalized. Regionalization of the Pacific cod TAC would provide substantial protection for the region, but not for individual communities within the region. Between 82% and 94% of the CG Pacific cod TAC would have Kodiak port of landing requirement. Of the remaining TAC, about 1% would be regionalized for the CG. Roughly 2% to 4% of the TAC would not be regionalized and the remainder would have a WG delivery requirement.

The Council may consider defining whether quota that is regionalized for the CG (but does not have a port of landing requirement, if that option is selected) may be delivered to Kodiak, or whether it must be delivered to a CG processor outside of the city of Kodiak. This issue will likely require additional analysis, in terms of regionalization and cooperative formation requirement, to determine what opportunities will exist during the first two years of the program to deliver this quota outside of Kodiak.

The Council considered regional landing requirements during development of the Central GOA Rockfish Program. Ultimately, the Council recommended a specific landing requirement within the City of Kodiak, and processing caps to preserve flexibility for harvesters to deliver to multiple shoreside markets. The purpose of the port landing requirement and the processing caps is to maintain the traditional shorebased processing activity within Kodiak and to limit consolidation of rockfish processing activity that may be detrimental to existing processors and harvesters. The data in Table 29 indicates that essentially 100% of the CG target species considered for allocation, other than pollock and Pacific cod, would be assigned a Kodiak port of landing requirement. If all of the TAC of the species in Table 29 is allocated, it would protect the community of Kodiak from competition from outside and guarantee the entire directed fishery TAC for those flatfish species is delivered there for the duration of the program, which encompasses the foreseeable future. If only the percentage of the TAC that was historically caught is allocated and/or regionalized, Kodiak would be protected at historic levels, but may need to compete with other communities for the percentage of the TAC that is not allocated.

Regionalizing only the percentage of TAC that was harvested during the qualifying period would provide an opportunity for any community to benefit from increased harvests resulting from the program.

Currently about 55,000 mt of CG arrowtooth TAC, about 2,000 mt of CG deep water flatfish TAC, and about 3,000 mt of the current CG rex sole TAC is unharvested. These fish would be unallocated and not regionalized if the target fishery allocations are based on the actual historically harvested percentage of the TAC. Under a non-total allocation scheme, these fisheries and all other species that are open to directed fishing (other than pollock and Pacific cod) could be delivered to any processor. Whether those species could support a processing operation depends on many factors including markets for products, other fisheries over which the processor may spread fixed costs, and finding vessels that are willing to deliver to their location. Alternatively, the Council could consider not regionalizing any CG flatfish, given the unlikelihood of the arrowtooth TAC being taken and the relatively small TACs (and value to the community) that are set for rex sole and deep water flatfish.

Only small amounts of non-pollock/non-cod target species have been harvested by CVs and delivered to Western GOA shoreside processors (Table 15). Given that the CV fleet, processing plants, and communities in WG have not relied upon those fisheries, regionalizing any quota assigned to the inshore cooperatives will provide limited community protections for the WG. WG stakeholders are more likely to find benefits in accessing portions of the non-pollock/non-cod TACs that are not allocated under this program. However, halibut PSC limitations will likely limit substantial increases in WG CV flatfish and rockfish effort.

Table 29 Percent of GOA trawl CV landings by allocated target species (proposed) and region of delivery

Target species	Harvest Area	2011 & 2012				2008-2012				2007-2012				2003-2012			
		Kodiak	CG	WG	BS/EG/ Non-AK	Kodiak	CG	WG	BS/EG/ Non-AK	Kodiak	CG	WG	BS/EG/ Non-AK	Kodiak	CG	WG	BS/EG/N on-AK
Pollock	610			93.7%	6.1%	0.0%		94.8%	5.1%	0.0%		94.3%	5.7%	0.0%		92.7%	7.3%
Pollock	620	94.1%	0.2%	5.7%		95.6%	0.1%	4.3%	0.0%	96.0%	0.1%	3.9%	0.0%	96.0%	0.1%	4.0%	0.0%
Pollock	630	100.0%	0.0%			99.6%	0.0%	0.3%	0.3%	99.7%	0.0%	0.3%	0.0%	99.8%	0.0%	0.2%	0.0%
Pollock	640	82.5%	17.3%		0.2%	90.0%	9.9%		0.1%	90.1%	9.8%		0.1%	88.5%	7.9%		3.6%
Pacific cod	CG	82.0%	1.1%	13.1%	3.8%	90.0%	0.4%	5.4%	4.1%	91.2%	1.0%	4.8%	3.0%	94.3%	0.3%	3.3%	2.2%
Deep-water flatfish	CG	100.0%				100.0%				100.0%				99.9%	0.1%		0.0%
Rex sole	CG	100.0%				100.0%				100.0%				100.0%		0.0%	0.0%
Arrowtooth flounder	CG	99.9%		0.1%		99.9%		0.1%		99.9%		0.1%		99.9%		0.1%	
Pacific cod	WG			96.0%	4.0%	0.0%		97.7%	2.2%					0.0%	0.0%	98.5%	1.5%
POP	WG			0.2%	99.8%			2.2%	97.8%	14.3%		2.1%	83.7%	13.4%		7.7%	78.9%
Dusky rockfish	WG							11.6%	88.4%	95.6%		0.5%	3.9%	95.6%		0.5%	3.9%
Northern rockfish	WG			100.0%				100.0%		99.9%		0.1%		95.4%		4.6%	
Arrowtooth flounder	**WG**			100.0%				99.9%	0.1%			99.9%	0.1%			98.7%	1.3%
Deep-water flatfish	**WG**											100.0%				100.0%	
Flathead sole	**WG**			34.4%	65.6%			94.4%	5.6%			95.2%	4.8%	4.6%		91.8%	3.5%
Rex sole	**WG**			48.6%	51.4%			47.9%	52.1%			57.4%	42.6%			54.1%	57.4%
POP	WY	82.6%	2.4%		15.0%	79.9%	12.8%		7.3%	83.3%	10.6%			86.3%	8.7%		4.9%
Dusky rockfish	**WY**	87.3%			12.7%	97.4%	1.8%		0.8%	98.0%	1.4%		0.6%	98.1%	1.3%		0.6%

Note: Species in bold are species that NMFS recommends for allocation, but were not included in the Council's April 2014 motion. The Western GOA area includes Akutan and floating processors in the region. The Council could consider excluding any processor located outside of the communities of Sand Point and King Cove for regionalization, but historical delivery percentages could not be provided under the current confidentiality standards.

5.4 Transfer Limitations

Part 9.c of the motion suggests that the Council might develop further eligibility criteria that could restrict the types of individuals or entities that can purchase a trawl license. These criteria could be based on some measure of fishery participation. The Council asked staff to describe similar eligibility criteria that have been used in other fisheries; this information was included in Section 1.5.1.1. The Council has indicated that it is still receptive to new stakeholder proposals for license purchase restrictions that are additional to those described in Section 1.5.1.1.

The License Limitation Program instituted a cap of holding no more than 10 groundfish licenses (for GOA or BSAI). Any change to that limitation would require an amendment to the licensing regulations. Section 6.3, below, does contemplate one reason to consider lowering this limit if licenses and their attached catch history are treated as "blocks" (similar to the halibut/sablefish IFQ program) in order to prevent entities with high access to capital from buying up all available pieces of quota.

6 Transferability

Any LAPP must define whether or not fishing privileges may be transferred. Programs in the North Pacific allow transfers within parameters defined for each program. The transfers of fishing privileges are typically associated with the structure of the overall program. Programs that have attached the catch history to the vessel (Amendment 80 and AFA) require the sale of the vessel for quota to transfer. The Rockfish Program attached catch history to the LLP license with which the catch history was earned. The sale of the vessel is not required. History and the associated harvest privilege flows with the license. The Council is also considering making target fishery quota units/catch history severable from CV license to which it is attached. This would allow portions of a person's catch history to be transferred from the original license to another GOA trawl-endorsed CV license. Based on the Council's proposed program structure, transferability is discussed within the cooperative structure. Intra-season and inter-season transfers are considered. Transfer rules could differ depending on whether they involve members of the same cooperative, members from different cooperatives, or cooperative members and persons that traditionally chose to fish in the Limited Access fishery.

6.1 Intra-year Transfers (Short term)

Intra-year (within-year) transfers are transfers that take place after CQ is issued to a cooperative annually. Intra-year transfers of fishing privileges within a cooperative are governed by the cooperative's bylaws. NMFS and enforcement agencies are only concerned that the cooperative does not exceed its harvest allocations of groundfish, PSC limits, or any vessel use caps that are defined under the program. NMFS and enforcement agencies are not concerned with determining whether individual vessels in a cooperative exceed the harvest of the CQ attached to licenses on which their vessel is named. Within these parameters, members of the cooperative are free to determine how the CQ is harvested by members. Contracts between cooperative members determine the amount of CQ that is leased and the terms of those leases.

Intra-year CQ transfers occurring *between* cooperatives require that an official and complete transfer request is submitted to and approved by RAM. The form[54] used in the Rockfish Program provides a template for the application that could be required. Before NMFS will approve an inter-cooperative transfer, both parties must already be established and recognized by NMFS as a cooperative. Depending on the rules defined under the program, a cooperative may transfer all or part of its CQ to another cooperative. NMFS requires that the transfer application is submitted using its online application. Any intra-year transfer of an annual catch is only valid during the calendar year of the transfer. Under the Rockfish Program, NMFS also stipulates the that the application must be received before the start of fishing under the Rockfish Program (a completed application must be received by NMFS no later than 1700 hours, A.l.t., on March 1). The Council and NMFS would need to define when the application must be received, since these fisheries currently begin on January 20.

Restrictions may be placed on CQ transfers between cooperatives. For example, a cooperative in the catcher vessel sector may not transfer annual harvest privileges to a cooperative in the CP sector. Also, a transfer will not be approved if it causes the recipient to exceed a defined use cap. Transfers would not be allowed between members of the Limited Access fishery and cooperative members.

Part 8.f of the April motion states that CP annual cooperative allocations may be transferred to Inshore cooperatives. This type of transfer was also permitted in the Rockfish Pilot Program; however, such annual rockfish CQ transfers quickly put some Rockfish CV cooperatives over allowable use cap levels. As a result, the inter-sector transfer allowance did not function properly in letting CVs fish CP quota. When the Rockfish Program was implemented in 2012, the Council specified that offshore quota did not apply to CV sector use caps. The language implementing use caps specifically named "catcher vessel quota". The transferred quota was treated as CP quota even when it was being harvested by CV cooperatives.

6.2 Post-Delivery Inter-Cooperative Transfers

As presented in the RIR for Amendment 78 to the GOA FMP, participants are most likely to rely on the post-delivery transfer provision for unintended small overages (this provision is described in Parts 7.k and 8.i of the April motion). In most cases, these transfers could be, to some extent, prearranged through an inter-cooperative agreement within their sector. Allowing post-delivery transfer could increase the number of overages at the time of landing, so long as participants anticipate that they will be able to cover the overage with a prearranged transfer-agreement. Overages that are not covered, and thus subject to penalty, should be fewer than under the status quo, since the provision will allow participants to address some overharvest via transfers. Vessels would be more likely to harvest closer to their allocation limit if they have the option to avoid a violation with small transfers.

It is assumed that post-delivery transfers will be limited by any port of landing/regionalization requirements attached to quota. These additional quota requirements will reduce the amount of quota available to cover overages, but they would reduce the number of potential trading partners through which an overage could be covered. If the Inshore sector develops an inter-cooperative agreement, quotas are likely to be closely tracked throughout the season. An inter-cooperative agreement may help facilitate

[54] http://alaskafisheries.noaa.gov/ram/rockfish/ictransferapp_readonly.pdf

more stable and predictable prices for post-delivery transfers. Based on the Rockfish Program structure, the inter-cooperative agreement may include punitive lease rates that would apply to large overages. Lease rates for minor, infrequent overages are likely to be offered at a lower rate compared to large overages or for persons that frequently exceed their harvest limits.

As noted, the Council motion would require the overage to be covered by a transfer filed with managers on or before December 31 of the year in which the overage occurred. Establishing a lengthy period during which an overage could be covered might result in procrastination, which could in turn result in more uncovered overages at the end of the year, when less unharvested quota is likely to be available.

Minor impacts on processors are expected. Any transfer of quota "out" of a cooperative will likely require the consent of the cooperative's processor member. This would ensure the processor's involvement in inter-cooperative transfers (including those undertaken to cover overages). Two types of post-delivery transfers are likely to occur. Unexpected transfers covering relatively small amounts of catch would not likely have a large impact on a processor due to their small magnitude. Larger, prearranged post-delivery transfers are more likely to impact a processor's revenue, and the processor would thus be more likely to participate in the negotiation of these prearranged transfers. Without compensation, a processor is unlikely to support a transfer that it views as significant and adverse. Although processor involvement is likely to complicate transactions for harvesters, processor consent will ensure that transfers are not detrimental to processors.

The increase in administrative and record keeping requirements to address post-delivery transfers is somewhat limited. Changes in the timing of administrative decisions and processes will pose challenges, but these have been addressed in the Rockfish Program. NMFS will oversee share accounts and share usage, maintaining a record of any overage. Instead of referring overages to NOAA Fisheries Office of Law Enforcement immediately, that notice would be deferred until the end of the calendar year. Overall, allowing post-delivery transfers should reduce the number of enforcement actions prosecuting overages, since a cooperative will have the opportunity – though not a guarantee – to acquire shares to correct the pending violation.

This section (and the previous section, which addressed another form of short-term transfer) has not yet discussed whether PSC could be transferred independently from the groundfish quota through which it was initially allocated to a cooperative. The Council's motion does not envision PSC being separately tradable, as the program's intent is not to make PSC a commodity. However, the Council may wish to consider whether or not PSC could be transferred, by itself, from one cooperative to another in order to cover an overage. If this is allowed, such a transfer would likely be compensated in some form, which would run counter to the Council's intent. If no such transfers are allowed, the Council may need to define accountability measures for cooperatives that go over their aggregate PSC allocation. A PSC overage would be small because the cooperative would not be allowed start new fishing activities after NMFS inseason management detected the overage.

6.3 Inter-year Transfers (Long term)

Inter-year transfers are transfer of the underlying harvest history that determines annual CQ allocations. Under the proposed program, this could take the form of an LLP license transfer or, if catch history is

severable from the license, some or all of the groundfish catch history could be transferred from one GOA trawl license to another.

RAM has established a groundfish license transfer protocol. The application to transfer a license[55] identifies the persons buying and selling the license and the type of license to be transferred. In addition "Block C" of the transfer application applies only to Rockfish Quota Share[56] assigned to an LLP license that exceeds a use cap. Only this Rockfish QS in excess of the cap is severable from the LLP license to which it was initially allocated. The Council will need to define the rules that determine to what extent catch history and the associated quota may be severed from a license (if at all). If quota is severable from a license, the Council may wish to consider whether the transfers should be limited to members of the same cooperative for the first two years of the program. The proposed Inshore cooperative structure would require that, for the first two years of the program, any license holder that joins a cooperative must be in the cooperative associated with the shoreside processor to which the vessel named on that license delivered a majority of its catch during the qualifying period. Since the license must be associated with that cooperative, the Council's intent may have also been to keep all the associated catch history within that same cooperative. If inter-year quota transfers between cooperatives are disallowed during the first two years, sales between members of the same cooperative could be allowed. Alternatively, the Council could only allow intra-year transfers during the first two years.

The Council implemented quota share blocks under the halibut and sablefish IFQ Program. Blocked quota was meant to prevent the "sweeping up" of all small quota parcels by those who could out-compete on price per QS unit. The intent of blocking quota and capping the number of blocks that an individual can hold was to leaves blocks (and small blocks) available for acquisition by small-scale participants. Attaching quota to licenses and limiting the number of licenses that a person may hold could serve a similar purpose for the CV fleet. If this is a concern, the ownership limit of 10 licenses likely needs to be reduced. Overall this issue seems less important in the trawl fishery, where fewer fishing entities participate in the fishery and there is less size/capital heterogeneity among CVs. Once alternatives are developed, the analysts could explore the dispersion of GOA and total annual revenue across eligible licenses.

The Council could allow inter-season transfers between cooperatives and license holders that fish in the limited access fishery. Once the transfer is completed, depending on other restrictions associated with quota movement, the buyer could move the license and the associated CQ into their own cooperative. Limited Access participants may also be allowed to purchase licenses that are associated with cooperatives. The economic incentives built into the program make it less likely that licenses would flow from a cooperative to the Limited Access fishery, and more likely that the licenses of Limited Access participants would be purchased by cooperative members.

[55] http://alaskafisheries.noaa.gov/ram/LLP_trans_form.pdf
[56] A new block that identifies groundfish quota that is transferred may need to be added, depending on the transfer limitations associated with the GOA trawl groundfish program.

7 Gear Conversion

Part 11 of the Council's motion would allow CVs to harvest GOA Pacific cod trawl allocations with pot gear. This provision could be a tool for the industry to reduce the amount of halibut and Chinook salmon PSC that is taken in the Pacific cod trawl fishery. Only CVs are included in the motion, because the Offshore sector's allocation of Pacific cod is primarily used as an ICA for other directed fisheries. The motion specifically focuses on the use of pots for Pacific cod fishing because cod is the only GOA directed groundfish fishery in which pot gear makes up a significant portion of annual harvest. Presumably, the Council could expand options to prosecute groundfish trawl TACs with pot gear if the industry expressed an interest in changing its mode of fishing; however, expansion of the gear conversion provision would need to be raised in a future action.

Table 4 in Section 2.2.1 shows that 98 groundfish licenses have a CGOA trawl endorsement (2014 RAM LLP data). Only 6 of those licenses also have a CGOA pot endorsement. There are 79 licenses with a WGOA trawl endorsement and 30 of those licenses also have a WGOA pot endorsement. Based on activity during the selected qualifying years, some of these licenses would not receive an initial allocation of GOA PSC or groundfish quota. The number of "latent" licenses will vary depending on the qualifying years selected, but Table 5 in the same section reports the number of licenses with qualifying catch history occurring since 2007. The Council will need to define whether a vessel's LLP must have a pot endorsement in order to use the gear conversion component of the proposed program. Section 8.2 (regarding the potential creation of new sideboards) also touches on issues relating to LLPs that are endorsed for both trawl and pot fishing, as well as the acquisition of pot-endorsed licenses.

7.1 Limitations on Transfers

It is assumed that the overall transfer rules of the program also apply to the gear conversion provision. A person could purchase the groundfish license and its associated GOA trawl quota if that individual is: (1) under the LLP license ownership cap; (2) is under the ownership caps that will be developed as part of this program (see Section 5.2); (3) he or she meets the U.S. ownership requirements defined in MSA; and (4) he or she meets any additional quota ownership requirements that the Council may define for this program.

To purchase GOA trawl quota that is separated from the original license to which it was assigned (if the Council/Secretary allows for quota severability), it is assumed that the person purchasing the quota must hold a valid GOA groundfish license with a trawl endorsement for the same area to which the Pacific cod was assigned on the original license to which it was issued (WG or CG). Because the trawl endorsed licenses that do not receive an initial allocation remain eligible under the proposed program, they could still be used with purchased quota and could utilize the proposed gear conversion tool.

If Pacific cod quota may be separated from the license to which it was initially assigned, it is assumed that the PSC (halibut and Chinook salmon) associated with that Pacific cod quota would also automatically transfer. Any PSC that is not used in the Pacific cod fishery, due to reductions in PSC use through gear conversion, would be available for use in other fisheries or as a savings to overall PSC mortality. Ultimately, the issue of what may be transferred after initial allocation is a policy decision that the Council must address in its entirety at final action.

7.2 Prohibited Species Catch

As stated above, gear conversion is meant to provide the trawl CV sector with an additional tool to avoid PSC to the extent possible. The halibut and Chinook salmon sections that follow show the 2013 halibut mortality rates that were estimated by NMFS in the non-pelagic trawl fishery and the pot fishery by week and by GOA area. Annual variation in PSC rates is common, so the estimated amount of savings in the Pacific cod fishery will vary by year. Therefore, the information presented should not be considered an estimate of future savings, but simply a presentation of the reductions in halibut and Chinook salmon PSC mortality that could have been realized in the Pacific cod fishery if gear conversion had been an option in the past. The calculations also assume that the same rates and would occur during each week and area if more or less Pacific cod was harvested with a given gear type. These "savings", particularly of halibut, would have then been available for use in other directed fisheries, so they should not be considered reductions in total mortality.

7.2.1 Halibut

In 2013, the non-pelagic trawl fishery accounted for 95 percent of the halibut PSC mortality attributed to the trawl and pot fisheries, and roughly 80 percent of the halibut mortality across all gear types. Pacific cod activity accounted for roughly 28 percent of halibut PSC within the trawl fisheries. During the Pacific cod A season, the Area 610 non-pelagic trawl fishery incurred an additional 31.1 lbs. of halibut mortality per metric ton of groundfish harvested when compared to the pot fishery.[57] In Area 620, the non-pelagic trawl gear had an average of 20.8 lbs. more halibut mortality per metric ton of groundfish than the pot fishery. That number almost doubled in Area 630 to 41.0 lbs. of additional halibut mortality per metric ton of groundfish. The GOA-wide average was 31.3 lbs. of halibut additional mortality per metric ton of groundfish.

During the B season, the GOA-wide estimate was 39.5 lbs. of halibut mortality savings per metric ton of groundfish in the Pacific cod pot fishery, as compared to the non-pelagic trawl fishery. B season estimates are not provided for other areas because of the limited trawl participation in Area 610 and limited Pacific cod pot fishing in Area 620.

[57] The relative difference is calculated as the non-pelagic trawl rate minus the pot rate; the result is then multiplied by 2,204.6.

Table 30 Halibut PSC mortality estimates by GOA area and gear type in the Pacific cod fisheries, 2013

	Non-pelagic Trawl				Pot			
Week Ending	610	620	630	GOA	610	620	630	GOA
1/5/2013					0.0005	0.0006	0.0005	0.0005
1/12/2013					0.0005	0.0045	0.0005	0.0009
1/19/2013					0.0004	0.0049	0.0005	0.0009
1/26/2013	0.0132	0.0195	0.0195	0.0156	0.0004	0.0025	0.0005	0.0005
2/2/2013	0.0116			0.0116	0.0005	0.0001	0.0003	0.0003
2/9/2013	0.0145			0.0145		0.0001	0.0004	0.0003
2/16/2013	0.0205	0.0370	0.0234	0.0225			0.0005	0.0005
2/23/2013		0.0775	0.0258	0.0469		0.0005	0.0005	0.0005
3/2/2013	0.0147	0.0136	0.0275	0.0187		0.0006	0.0006	0.0006
3/9/2013		0.0043	0.0265	0.0160	0.0004	0.0002	0.0002	0.0003
3/16/2013		0.0029		0.0038	0.0004	0.0003	0.0003	0.0004
3/23/2013		0.0045	0.0143	0.0106	0.0002	0.0001	0.0001	0.0002
3/30/2013					0.0006	0.0006	0.0006	0.0006
4/6/2013						0.0006	0.0006	0.0006
A Season Average	0.0145	0.0101	0.0191	0.0147	0.0004	0.0007	0.0004	0.0005
	Between A and B Seasons							
9/7/2013		0.0054	0.0212	0.0148	0.0012		0.0000	0.0010
9/14/2013		0.0054	0.0206	0.0145	0.0009		0.0000	0.0008
9/21/2013			0.0242	0.0273	0.0004		0.0000	0.0004
9/28/2013					0.0006		0.0000	0.0005
10/5/2013					0.0007		0.0000	0.0005
10/12/2013			0.0191	0.0191	0.0006		0.0004	0.0005
10/19/2013			0.0191	0.0232	0.0003			0.0005
10/26/2013					0.0007		0.0006	0.0007
11/2/2013					0.0005		0.0005	0.0005
11/9/2013					0.0005			0.0005
11/16/2013					0.0000		0.0005	0.0001
11/23/2013					0.0004		0.0004	0.0004
11/30/2013					0.0005		0.0006	0.0005
12/7/2013					0.0005		0.0005	0.0005
12/14/2013							0.0005	0.0012
12/21/2013							0.0001	0.0001
12/28/2013							0.0007	0.0014
12/31/2013							0.0008	0.0049
B Season Average		0.0076	0.0229	0.0184	0.0006		0.0003	0.0005
Annual Average	0.0145	0.0103	0.0206	0.0156	0.0004	0.0007	0.0004	0.0005

Note: The annual or seasonal average might be slightly greater than the weekly averages because weeks when PSC was reported but groundfish catch was zero yield an undefined value and are excluded from the table.
Source: NMFS Catch Accounting data (http://alaskafisheries.noaa.gov/2013/car240_psc_halibut.csv)

7.2.2 Chinook salmon

Information from the 2013 fishing year indicates that total Chinook salmon PSC in the GOA Pacific cod trawl and pot fisheries was estimated at 368 fish. All of this PSC occurred in the trawl fishery. Based on this year alone, the savings from gear conversion would modest and primarily realized in Area 630. Chinook salmon PSC was higher during 2012 in Area 620, while other areas were similar to their 2013 levels. In 2011, the Chinook PSC rate in Area 630 was roughly twice that of 2012. Since gross groundfish catch was also higher in 2011, Chinook PSC was more than double the 2012 amount. Table 31 illustrates both the variable nature of Chinook salmon PSC, by year, and the **maximum** amount of Chinook salmon

PSC savings that could have been realized those years if gear conversion had been implemented and utilized to the maximum extent possible. However, the maximum possible reduction is not likely to be realized, since a total switch from trawl to pot gear is not expected to occur under any program..

Table 31 Chinooks salmon PSC estimates by GOA area (WG and CG) and gear type in the Pacific cod fisheries, 2011 through 2013

	Non-pelagic trawl			Pot		
Area	Groundfish (mt)	# of Chinook	Rate	Groundfish (mt)	# of Chinook	Rate
2013						
610	6,388	15	0.002	15,668	0	0.000
620	5,215	29	0.006	6,467	0	0.000
630	7,075	324	0.046	9,106	0	0.000
GOA	18,678	368	0.020	31,241	0	0.000
2012						
610	6,163	1	0.000	14,407	0	0.000
620	5,670	174	0.031	6,686	0	0.000
630	6,143	347	0.056	16,238	0	0.000
GOA	17,976	522	0.029	37,332	0	0.000
2011						
610	1,945	96	0.049	20,049	0	0.000
620	2,697	144	0.053	6,897	0	0.000
630	8,063	865	0.107	19,553	0	0.000
GOA	12,704	1,105	0.087	46,499	0	0.000

Source: NMFS PSC data for 2011 through 2013 (e.g., http://alaskafisheries.noaa.gov/2011/car260_psc_salmon.csv)

7.3 Catch Accounting Issues

In order to make the gear conversion element of the program function as intended, cooperative members' Pacific cod catch must be deducted from the appropriate account – either the cooperative's Pacific cod trawl quota (CQ) or the Pacific cod allocation to the pot sector as defined in harvest specifications.[58] In order to avoid limiting the ability of the trawl sector to distribute its cod harvest over the traditional time periods, and to avoid conferring an advantage on one gear sector or another, accounting for Pacific cod catch may require Council policy decisions.

The main consideration is when GOA Pacific cod catch should be debited against trawl CQ and when it should accrue to the pot sector TAC. A more specific question is whether a vessel named on an LLP with both trawl quota and a pot endorsement should *always* have its pot catch deducted from its trawl account. This approach would be the simplest means of catch accounting. However, the Council may wish to consider vessels that historically fish for Pacific cod with a given gear type at different times during the year. For example, some dual-endorsed (trawl and pot) LLP holders historically fish federally managed

[58] Depending on how the overall LAPP is structured, retained bycatch of marketable species would also have to be counted against cooperative allocations of other target or secondary species, ICAs, or TACs for unallocated species.

Pacific cod with pot gear prior to January 20, then fish with trawl gear during the A season, and then fish the B season with pot gear. This particular case is representative of some Western GOA stakeholders.

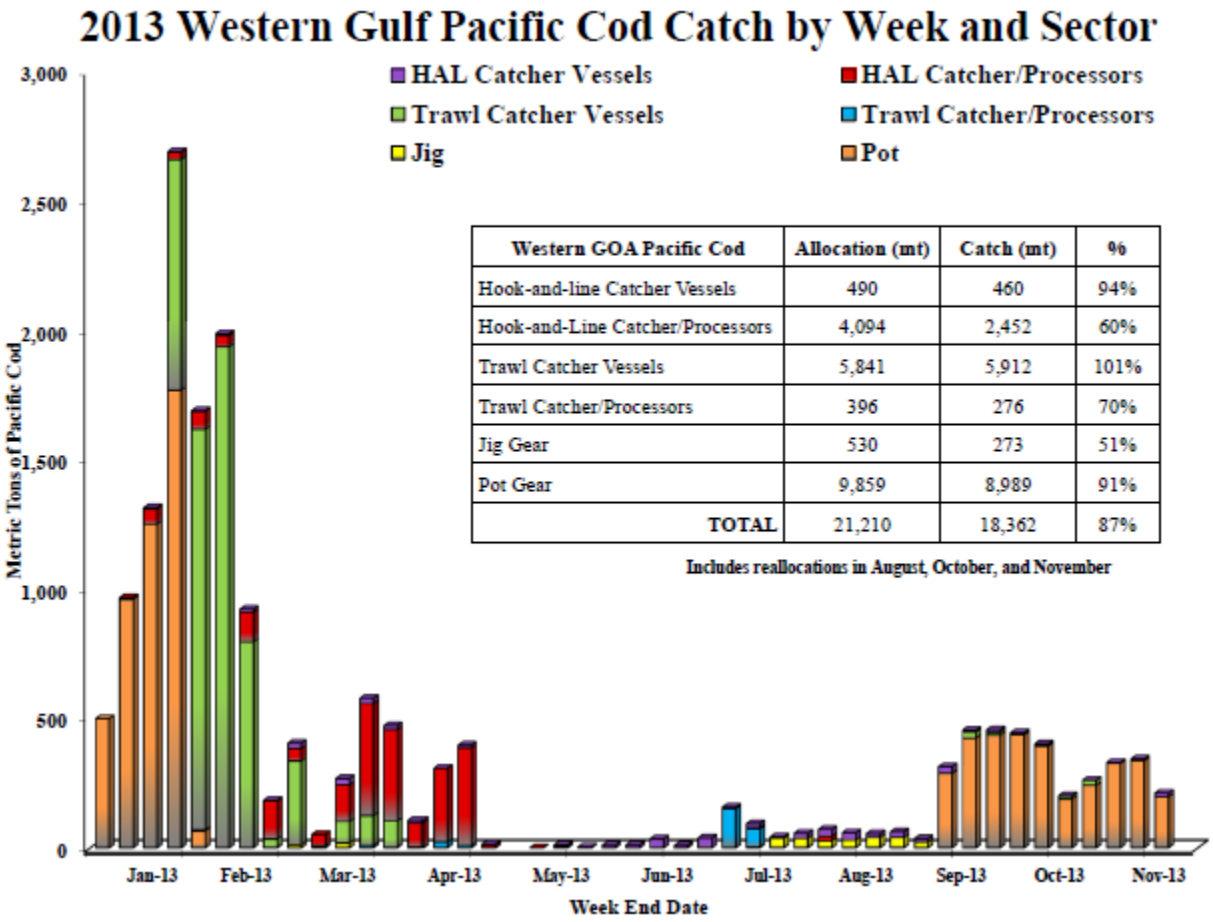
In general, the analysts propose that unintended effects on fishing effort are minimized by deducting Pacific cod catch from the account that best corresponds to historical patterns of gear deployment. For example, deducting a cooperative member's pot cod catch taken between January 1 and January 20 from trawl CQ would reduce the incentive for that trawl quota holding vessel to continue its historical participation in the early-year pot fishery. Under this scenario, an LLP holder would be "fishing into" his or her ability to fully prosecute the available trawl cod allocation, which is assumed to be a higher profit-margin opportunity. A rational fisherman may choose to reduce pot participation before the trawl opener in order to preserve a trawl opportunity. Once the trawl A season opens on January 20, however, allowing CQ holders to debit pot harvest against the fixed gear TAC would confer an advantage to trawl quota holders who could deploy pot gear in a competitive limited access pot fishery before then falling back on their opportunity to harvest a secure cod trawl allocation.

Consideration of historical fishing modes is most crucial when accounting for catch in the Pacific cod B season. A significant portion of the WGOA LLPs with both a trawl endorsement and a Pacific cod pot gear endorsement have historically participated in the WGOA pot fishery, fishing off of a different Pacific cod TAC from the one that would be allocated under the proposed program. Figure 5 and Figure 6 show that Western GOA Pacific cod fishermen primarily use pot gear, as opposed to trawl gear, in the B season. Figure 5 provides a summary of the 2013 WGOA Pacific cod fishery. Pot landings are primarily made from January 1 until the trawl fishery opens on January 20. Catch using trawl gear then dominates Pacific cod harvests until the pollock B season opens on March 10. Pacific cod catches with trawl gear slow considerably, and HAL CPs then account for the majority of the Pacific cod catch until mid-April. Pot harvests do not resume until the B season opens. Pots are the primary gear used to harvest Pacific cod through the end of the year.[59]

Though the trawl fishery is often open during the Western GOA B season, deducting pot harvest from trawl CQ would cut into these LLP holders' historically based annual trawl cod allocations when, in fact, no gear "conversion" (relative to historical modes) has occurred. In this scenario, it might be the case that CQ holders would have to reduce their participation in the A season trawl fishery in order to reserve quota for their traditional fall pot activity. It may be appropriate to try to separate the two fisheries, in consideration of historic harvest patterns. If the gear conversion provision is moved forward for analysis, it may be necessary to further explore the motivation behind the tendency of dual-endorsed WGOA Pacific cod participants to rely on pot gear during the B season.[60]

[59] Fishing for pollock and Pacific cod with trawl gear closes on November 1for the remainder of the calendar year.
[60] GOA-wide halibut PSC limits have constrained the Western GOA Pacific cod trawl B season in the past, but the extent to which other factors like species aggregation have influenced fishermen's decision not to trawl have not been explored. If competition between the Central and Western GOA for available halibut PSC has been the determining factor, then it is possible that interest in a Western GOA trawl B season might increase once PSC is allocated to cooperatives.

Figure 5 NMFS summary of 2013 Western GOA Pacific cod fishery



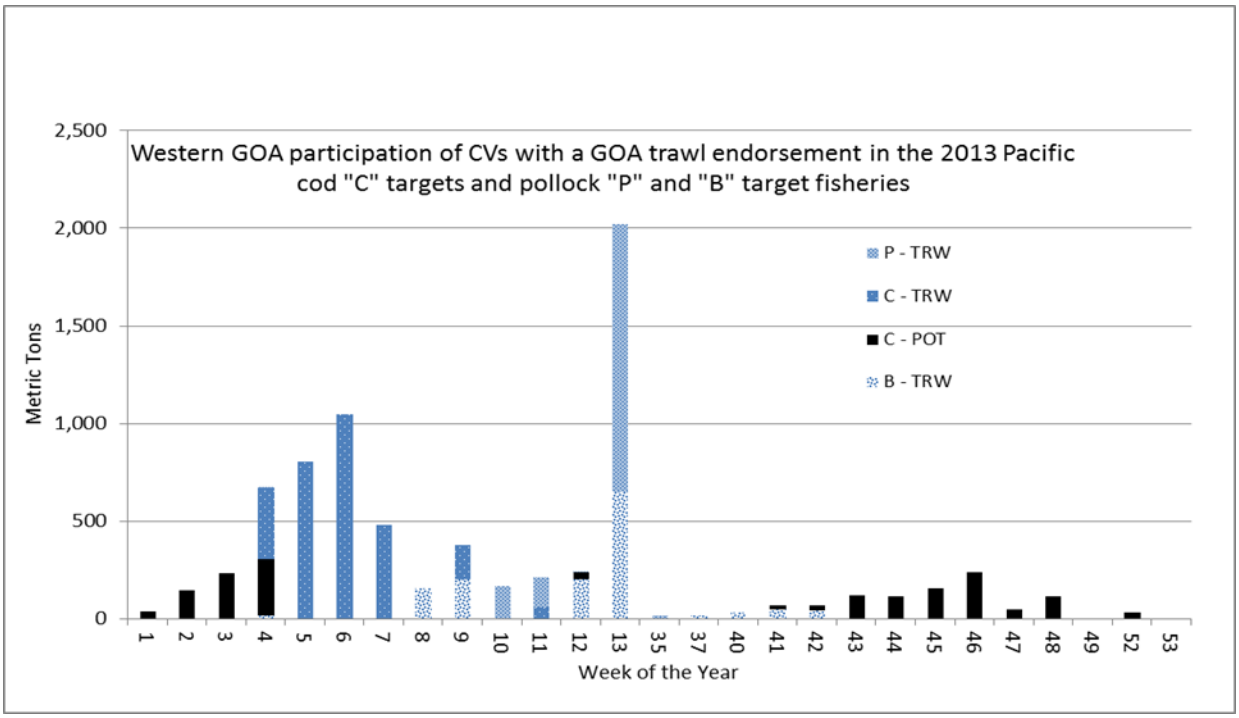
Western GOA Pacific Cod	Allocation (mt)	Catch (mt)	%
Hook-and-line Catcher Vessels	490	460	94%
Hook-and-Line Catcher/Processors	4,094	2,452	60%
Trawl Catcher Vessels	5,841	5,912	101%
Trawl Catcher/Processors	396	276	70%
Jig Gear	530	273	51%
Pot Gear	9,859	8,989	91%
TOTAL	21,210	18,362	87%

Includes reallocations in August, October, and November

Source: Alaska Region NMFS 2013 GOA Inseason Management Report to the NPFMC, December 2013 (Page 11)

Figure 6 shows the 2013 Western GOA pollock and Pacific cod harvest of CVs with a GOA trawl endorsement. These vessels also had limited particpation in the WGOA rockfish fisheries during the July weeks that are excluded from the figure. This data shows that vessels with GOA trawl endorsements tend to harvest Pacific cod with pot gear before the start of the trawl fishing year and during the Pacific cod B season. Pollock fishing occurs after the Pacific cod A season is closed and in limited amounts in the early fall fisheries. Fishing patterns indicate little overlap of these vessels fishing Pacific cod with trawl and pot gear during the same weeks of the year.

Figure 6 **Catch in 2013 Western GOA pollock and Pacific cod target fisheries by vessels with a GOA trawl endorsement**



Note: "C" indicates cod, "P" indicates pelagic trawl pollock, and "B" indicates bottom trawl pollock.

Based on the information above, it may be appropriate to only count Pacific cod harvests made with pot gear against the trawl cooperatives' quota if it occurs during the Pacific cod A season from January 20th until the pot fishery closes. Only trawl harvests would count against the cooperatives' Pacific cod trawl quota in the B season, since limited trawl harvests were made during that time of the year.

Sideboards based on quantity (mt) may be more complicated to administer than sideboards that prohibit LLPs from participating in the pot fishery if (1) the license is allocated trawl quota, and (2) the license does not have a defined level of historical participation in the pot fishery. This would have the same effect as a new pot endorsement recency requirement for LLPs that are allocated trawl CQ.

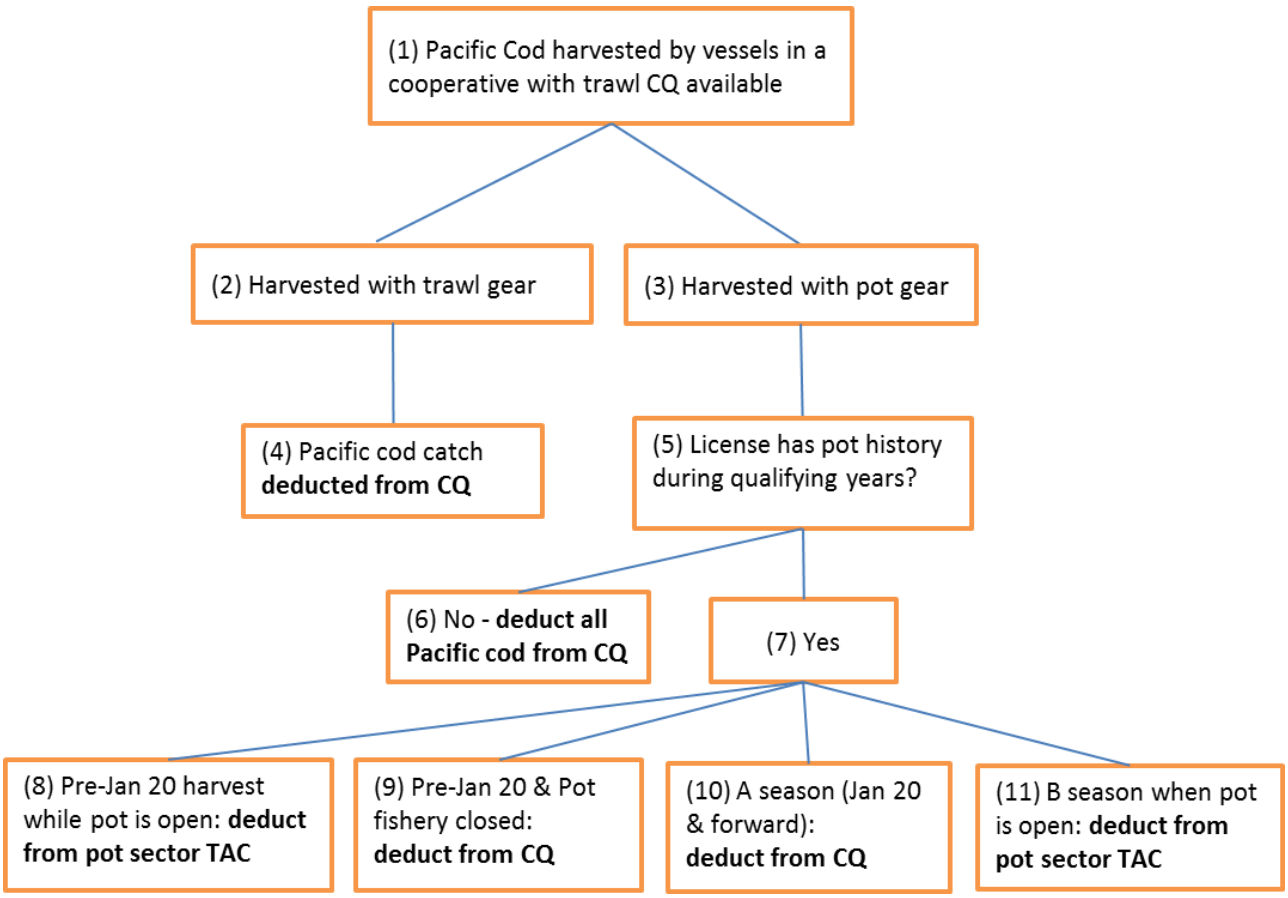
Council policy decisions will determine to whom the option for gear conversion is made available. Vessels named on LLPs that have both trawl and pot endorsements would be obvious candidates for gear conversion.[61] Gear endorsements are area-specific, and many vessels that are eligible for cooperative membership hold only trawl endorsements in one or both GOA areas. The Council should state whether these vessels have the option to use pot gear in an area for which they are not pot endorsed, presuming that their pot catch would be accounted for in a manner that does not impact the fishing opportunities available to vessels that rely on the Pacific cod fixed gear fishery. Loosening restrictions on who can use pot gear expands the pool of vessels with access to a PSC mitigation tool – namely, pot fishing. Other

[61] According to the 2014 RAM LLP file, 31 LLPs are endorsed for Western GOA Pacific cod pot fishing – 30 of those LLPs are endorsed for Western GOA trawl and 17 are endorsed for Central GOA trawl. Seven LLPs are endorsed for Central GOA Pacific cod pot fishing – 6 of those LLPs are endorsed for Central GOA trawl and 3 are endorsed for Western GOA trawl.

vessels that are in a cooperative by virtue of their trawl endorsement in one area may have only a fixed gear endorsement in the other area. If that vessel's cooperative holds trawl CQ in the second area, the Council may wish to consider whether the vessel could fish off the cooperative's trawl quota using pot gear.

Figure 7 illustrates a potential catch accounting scheme for GOA Pacific cod. Moving from top to bottom, the flow chart describes how cod catch might be debited against either trawl CQ or the GOA pot sector allocation depending on the gear used, the time of year, and whether the license recorded pot catch history during the selected qualifying years.[62] Catch accounting "decisions" are reached in cells 4, 6, 8, 9, 10, and 11.

Figure 7 Flow chart of potential catch accounting scheme for gear conversion



Cells 2 → 4 describe the obvious assumption that vessels fishing in a cooperative have their Pacific cod catch deducted from the cooperative's quota when trawl gear is used. The other branch of the chart explores scenarios where a cooperative vessel uses pot gear.

Embedded in Cell 3 are the Council's policy decisions, described above, on what type of LLP endorsements are necessary to utilize the gear conversion option. The Council will be considering

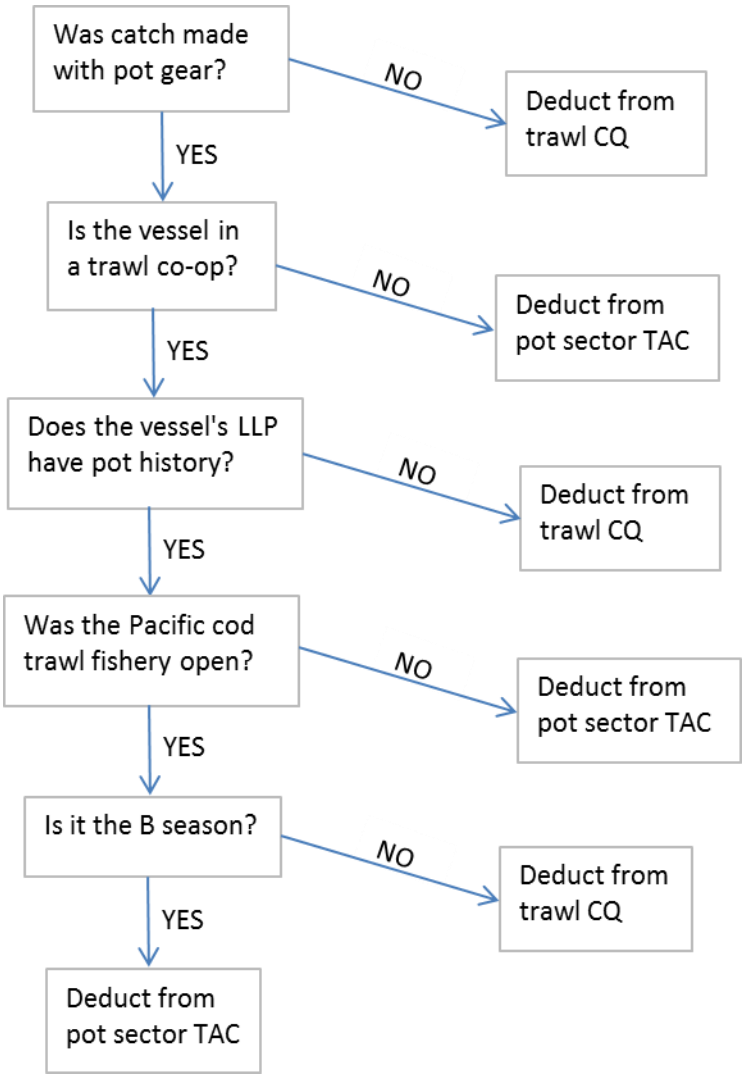
[62] Note that qualifying years used for this determination do not *necessarily* have to be identical to those selected for initial quota allocations.

whether vessels with trawl-only endorsements in an area can use pot gear to harvest CQ. Pacific cod catch taken in this manner would need to be debited against the cooperative's trawl CQ to ensure that this instance of gear conversion does not adversely impact fishing opportunities in the permitted fixed gear sector. The Council will also consider whether a cooperative member without a trawl endorsement in an area can use its pot endorsement to harvest their co-op's trawl CQ. Allowing this behavior could expand a cooperative's options for coordinating its members' fishing behavior in a manner that optimizes returns and mitigates PSC. Vessels with pot-only endorsements would have their pot cod catch in that area deducted from the pot sector TAC only if the following conditions are simultaneously met: (1) the license had pot catch history, and (2) the Pacific cod pot fishery is open at the time the catch occurs. When neither condition is met, that catch would be deducted from the cooperative's Pacific cod CQ. The first condition is set as a protection for stakeholders who are, historically, at least partially invested in the pot fishery.

Cells branching from 3 → 5 → 7 lead to a range of gear conversion scenarios where the timing of harvest might impact the appropriate catch accounting. Cells 8 through 11 are arranged left-to-right in chronological order as they would occur during a calendar year. Cells 8 and 11 are the cases where pots have been deployed in the past. Deducting that catch from trawl CQ would either reduce cooperative members' incentive to fish at these times or would cut into those participants' ability to fully prosecute their historical trawl harvest. If the gear conversion option is moved forward for analysis, it may be necessary to explore whether the catch accounting scenario described in Cell 11 would differ between the Western and Central GOA, based on historical gear deployment during the B season. Cell 9 describes the Council's option to allow trawl CQ holders to fish with pots before the trawl season opens on January 20. If the pot sector is closed, any catch would have to be debited against trawl quota. Allowing this behavior could be framed as a measure to provide cooperatives with flexibility in response to evolving market and environmental conditions, without adversely impacting the non-trawl sector. Cell 10 simply concludes that fishing with pot gear during the traditional trawl season should be deducted from trawl CQ. This type of fishing would be the most obvious example of true gear "conversion", where pots are being deployed as a means to reduce PSC when trawl gear would have been used in the past, or in the absence of the gear conversion option.

Tracking the various endorsements on active LLPs would be onerous for NMFS in-season managers. To the extent possible, NMFS's task would be made easier if catch accounting under gear conversion were based clearly on a series of Yes/No tests. Figure 8 provides a possible decision tree that incorporates each of the pot harvest scenarios incorporated in the right-hand branch (stemming from Cell 3) of Figure 7, above. Each of the following Yes/No tests could be answered with the information provided on fish tickets, a roster of vessels in trawl cooperatives, and a list of the vessels that are named on LLPs that have Pacific cod pot history in the relevant management areas. The goal of this catch accounting strategy is to avoid the management and compliance burden of requiring cooperative member vessels from having to "check in" or "check out" of the LAPP in order to ensure that their catch is debited from the proper account.

Figure 8 Decision tree for catch accounting under the gear conversion provision



7.4 Observer Coverage

The Council may need to state whether cooperative member vessels that are utilizing the gear conversion option are required to carry an observer when fishing with pot gear. Under current management, any vessel fishing in a LAPP is required to have 100% observer coverage. Allowing cooperative member vessels fishing under the gear conversion provision to fall back into the partial coverage category would require a regulatory amendment.

Currently, there are no PSC limits on the pot sector. Halibut and Chinook salmon PSC rates in the pot sector are assumed to be negligible (see Table 30 and Table 31). Exempting trawl cooperative members from full observer coverage when fishing pot gear could reduce the financial and operational burden on these vessels for a portion of the year, and could serve as an additional incentive to switch to a gear type that is less likely to generate PSC mortality. An exemption from coverage could only apply to trips where no trawl gear is onboard the vessel. NMFS would be effectively assuming that no PSC is taken while pot

fishing, since full observer coverage is necessary for individual vessel accountability of PSC that would accrue to a cooperative's limit.

At this stage, NMFS has only stated that it would continue to consider whether different monitoring tools are needed for cooperative vessels when fishing with pot gear. If vessels utilizing the gear conversion option are held to the same standard as they are when trawling, then the applicable monitoring tools would be those outlined in Table 13 (Section 2.6).

8 Sideboards

Sideboards are designed to limit the ability of persons granted exclusive harvest privileges (LAPPs) to expand their effort in other fisheries beyond historic participation levels at the expense of persons that do not hold similar privileges. Sideboards may be applied to federally permitted vessels fishing in federal waters and parallel fisheries that occur in waters adjacent to the BSAI/GOA. Sideboards may be enforced throughout the entire fishing year (Amendment 80 and AFA) or during defined times of the fishing year (Rockfish Program). The duration of sideboard limits during a year is typically linked to the duration of the harvest privilege associated with the LAPP. Since the proposed GOA Trawl LAPP would cover the entire trawl fishing year, it is assumed that any new sideboard limitations would apply for the entire fishing year for the allocated species. The Council may also determine that new sideboard limits are unnecessary and that some or all of the existing sideboard limits could be eliminated under the proposed management structure.

This discussion paper will consider whether new sideboard limitations are necessary and whether current sideboard limitations in the GOA would still serve their intended purpose after the proposed program is implemented. Many of the sideboards discussed here are predicated on the selection of species allocated under the proposed program. The Council's April motion signaled that pollock (610/620/630/640) and Pacific cod (WG/CG) are the target species most likely to be allocated. PSC species that will be allocated include halibut and Chinook salmon for the GOA areas in which limitations are currently imposed. Additional target species allocations up for consideration in the Central GOA include rex sole, arrowtooth flounder, and deep water flatfish. The additional target species under consideration for the Western GOA are rockfish species. An allocation of West Yakutat District Pacific ocean perch is also being considered.

In addition to target species allocations, the Council is also considering allocating secondary species. These allocations could include the portion of the sablefish trawl TAC that is not allocated under the CGOA Rockfish Program, CGOA skates (big and longnose), thornyhead rockfish, shortraker rockfish, rougheye/blackspotted rockfish, and "other" rockfish.

General conditions can be applied to determine whether specific sideboards warrant further consideration. Table 32outlines the general regulatory/fishery conditions that may indicate whether sideboards are an appropriate management measure. Because some of the conditions are subjective, determining whether sideboards should be retained or implemented is ultimately a policy decision.

Table 32 General conditions that may determine the effectiveness of sideboards

Sideboards may be appropriate if:	• TAC is not allocated in an area • TAC is – or is expected to be – a constraint and LLP holders who are not in the LAPP (e.g., fixed gear vessels) participate in the constrained fishery
Sideboards may be unnecessary if:	• A percentage of the TAC is allocated to LAPP participants in that area, and they are not allowed to exceed their allocation • The TAC is not fully harvested and is not expected to be fully harvested in the future • The TAC is harvested, but could be increased to a level at which it would not be harvested because the current TAC is set below the ABC

8.1 Retention of Existing GOA Sideboards

The Council has developed GOA groundfish sideboard limits for non-exempt AFA catcher vessels, the Central GOA Rockfish Program, Amendment 80 vessels, and non-AFA crab vessels. This section briefly reviews those sideboard measures in the context of the purpose they might still serve if the proposed LAPP was implemented.

Non-exempt AFA CV sideboard limits

Recommendation:
NMFS AKRO SF staff supports eliminating non-exempt AFA CV sideboards for the target and secondary species considered/chosen by the Council for inclusion in the GOA trawl bycatch management program. Allocating target and secondary species to cooperatives would eliminate the need for the AFA CV sideboards. Each applicable cooperative would receive allocations of GOA trawl bycatch management program species and manage those species on behalf of the cooperative/member vessels. Also, the cooperative can be prohibited from exceeding its cooperative quota. The Council should clarify its policies and objectives related to AFA sideboarded LLP groundfish licenses.

Background:
Regulations at 50 CFR 679.64 establish groundfish harvesting and processing sideboard limitations on AFA C/Ps and CVs in the GOA. These sideboard limits are necessary to protect the interests of fishermen and processors who do not directly benefit from the AFA from those fishermen and processors who receive exclusive harvesting and processing privileges under the AFA. Section 679.7(k)(1)(ii) prohibits listed AFA C/Ps from harvesting any species of groundfish in the GOA, so there are not any sideboards established for this vessel category.

AFA CVs that are less than 125 ft (38.1 meters) length overall, have annual landings of pollock in the Bering Sea and Aleutian Islands less than 5,100 mt, and have made at least 40 groundfish landings from 1995 through 1997 are exempt from GOA sideboard limits under § 679.64(b)(2)(ii). Sideboard limits for

non-exempt AFA CVs in the GOA are based on their traditional harvest levels of TAC in groundfish fisheries covered by the FMP. Section 679.64(b)(3)(iii) establishes the groundfish sideboard limitations in the GOA based on the retained catch of non-exempt AFA CVs of each sideboard species from 1995 through 1997 divided by the TAC for that species over the same period.

Non-exempt AFA sideboard limits were developed for AFA CVs that did not meet a required GOA participation threshold. These limits are applied to AFA *vessels*, not to LLPs. Based on the current AFA permit list for CVs, 16 vessels are exempt from the sideboard limits. An additional 28 vessels hold a GOA trawl endorsement and are subject to the limits. Twelve of those 28 non-exempt vessels currently hold LLPs that allow them to trawl only in the CGOA, 8 are allowed to trawl only in the WGOA, and 8 are allowed to trawl in both areas.

Non-exempt AFA CV sideboards are established for each specified species or species category. Table 22 of the 2014 GOA groundfish specifications[63] shows the sideboard limits. In 2014, 69 groundfish sideboard limits were calculated, specified, and incorporated into the Alaska Region catch accounting system (CAS). Most of these sideboard limits are quite small, in proportion to the TAC from which they are derived. Many of the species for which non-exempt AFA CV sideboards are specified are not open to directed fishing, either because an individual TAC is too small to support directed fishing or an individual sideboard amount is too small to support directed fishing (reference GOA specifications Tables 36 and 37).

Sideboard limits for allocated species may not properly function under the proposed program. Setting aside the incongruity that AFA sideboard limits are vessel based and the proposed program is LLP based, the purpose of sideboards is to protect GOA harvesters from AFA vessels that did not have substantial levels of GOA groundfish harvest before the AFA was implemented. The proposed cooperative-based program in the GOA would disperse the non-exempt AFA CV among several GOA groundfish cooperatives. Based on the proposed GOA cooperative structure, non-exempt AFA vessels could be members of approximately 9 different GOA cooperatives. The sideboarded AFA vessels would be co-members with vessel owners that are not subject to AFA sideboards. Vessels operating under AFA sideboards within GOA cooperatives would need to coordinate sideboard harvests with all other non-exempt AFA cooperative members in all other cooperatives to ensure that the sideboard limits are not exceeded. This could be done through the AFA cooperatives, but it may make more sense to shift the responsibility to ensure that these vessels do not harm non-AFA vessels the GOA groundfish cooperatives. If the GOA cooperatives with non-exempt AFA members take responsibility for their member's actions, the need for AFA CV sideboards would likely be eliminated. Should the Council wish to ensure that no individual vessel, LLP, or cooperative holds/harvests an excessive amount of a GOA groundfish species or species complex, implementing caps on quota holdings and use could be an equally effective means to accomplishing that objective. The Council could also review the LLP accumulation cap of 10 LLPs if it is concerned that persons who participate in other LAPPs might use those revenues to purchase LLPs with quota, or to acquire gear/area/species endorsements that would allow them to expand their GOA fishing effort beyond what is determined to be acceptable.

[63] http://alaskafisheries.noaa.gov/sustainablefisheries/specs14_15/goatable22.pdf.

Halibut prohibited species catch (PSC) sideboard limits for the trawl deep-water and shallow-water species fisheries are established for non-exempt AFA CVs in the GOA. These limits are based on the aggregate retained groundfish catch by non-exempt AFA CVs in each PSC target category from 1995 through 1997 divided by the retained catch of all vessels in that fishery from 1995 through 1997 (§ 679.64(b)(4)).

NMFS deducts all targeted or incidental catch of sideboard species made by non-exempt AFA CVs from the sideboard limits specified for a given year. Reaching a sideboard limit can trigger a closure of directed fishing for vessels subject to the non-exempt AFA CV sideboards.
PSC limits for halibut and Chinook salmon will also be assigned to LLPs and allocated to cooperatives under the proposed LAPP. Because use of the PSC species will be determined through the cooperative agreement and the amount allocated to an LLP will be determined by the Council's allocation formula, the layering of PSC sideboards on top of the program's proposed allocation scheme does not appear to add any protections.[64] Sideboard limits would not be set at cooperative levels, so it may be more appropriate to define a structure that cooperatives must follow, rather than continuing sideboard limits that affect a subset of vessels in several different cooperatives.

The GOA trawl bycatch management program discussion paper (April 2014, section 5.1.2.2) notes that under cooperatives in this program it could be possible for non-exempt AFA catcher vessels to purchase additional pollock and Pacific cod quota and (potentially) exceed sideboard limits. The paper also notes that the Council will need to determine its policy for AFA sideboarded licenses and vessels under any catch share program.

GOA Non-AFA Crab Vessel Groundfish Harvest Sideboard Limits

Recommendation:
NMFS AKRO SF staff supports eliminating non-AFA crab vessel sideboards for the target and secondary species considered/chosen by the Council for inclusion in the GOA trawl bycatch management program. Allocating target and secondary species to cooperatives would eliminate the need for sideboards. Each applicable cooperative would receive allocations of GOA trawl bycatch management program species and manage those species on behalf of the cooperative/member vessels. The Council could consider retaining the sideboards for pot catcher vessels, as these have historically been the only non-AFA crab vessel sideboards that are large enough to support a directed fishery.

Background:
Regulations at 50 CFR 680.22 establish groundfish catch limits for vessels with a history of participation in the Bering Sea snow crab fishery to prevent these vessels from using the increased flexibility provided by the Crab Rationalization Program to expand their level of participation in the GOA groundfish fisheries. Sideboard limits restrict these vessels' catch to their collective historical landings in each GOA groundfish fishery (except the fixed-gear sablefish fishery). Sideboard limits also apply to catch made using an LLP license derived from the history of a restricted vessel, even if that LLP license is used on

[64] Most vessels with a trawl allocation only fish pot gear in fixed gear fisheries. Pot gear harvests are not subject to halibut PSC limits, because of the small amount of halibut PSC taken with that gear type.

another vessel. All targeted or incidental catch of sideboard species made by non-AFA crab vessels or associated LLP licenses will be deducted from these sideboard limits.

Non-AFA crab vessel sideboards are established for each specified species or species category. In 2014, this resulted in 76 groundfish sideboard limits being calculated, specified, and incorporated into the CAS. Most of these sideboard limits are quite small, in proportion to the TAC from which they are derived. (see 2014 GOA harvest specifications, Tables 26 and 27). Of the 76 sideboard limits, 74 were closed to directed fishing.

Section 680.22 provides for the management of non-AFA crab vessel sideboards using directed fishing closures in accordance with § 680.22(e)(2) and (3). As part of the GOA harvest specifications, NMFS prohibits directed fishing by non-AFA crab vessels in the GOA for all species and species groups for which sideboard limits are established, except Pacific cod pot CV sector apportionments in the Western and Central GOA. This is because the non-AFA crab vessel sideboards are insufficient to support a directed fishery.

GOA non-AFA crab vessel groundfish harvest sideboard limits were applied to vessels and LLPs that were granted BSAI crab allocations. There are 56 LLPs listed as being subject to these groundfish sideboard limits. Only two of those LLPs are endorsed to use trawl gear in the GOA. One of the LLPs is endorsed to fish with trawl and non-trawl gear in both the Western and Central GOA. That vessel is not sideboarded for pollock or Pacific cod, but it does not have Pacific cod endorsement for any gear type on the LLP. That vessel may only fish pollock or other groundfish within the current sideboard limits. The other LLP is endorsed only for non-trawl gear in the Central GOA, but is endorsed for both trawl and non-trawl gear in the Western GOA. That LLP does not have a trawl Pacific cod endorsement for the GOA, but is endorsed to fish Pacific cod with pot gear in the Western GOA. This second LLP could be used to trawl for pollock in the Western GOA under the sideboard limits. It has not historically participated in any trawl fisheries other than Western GOA pollock.

The discussion above indicates that the GOA non-AFA crab groundfish harvest sideboards are primarily in place to protect fixed gear vessels from other vessels using fixed gear. None of these LLPs can be used to harvest Pacific cod with trawl gear in the GOA. Assuming that pollock is allocated in both the Western and Central GOA, additional protections for those fisheries are not necessary (see Table 32).

Amendment 80 GOA Sideboard Limits

Recommendation:
NMFS AKRO SF staff supports removing/eliminating Amendment 80 sideboards if the Council includes the species subject to Amendment 80 sideboards in the GOA trawl bycatch management program. Each applicable cooperative would receive allocations of GOA trawl bycatch management program species and manage those species on behalf of the cooperative/member vessels. This sideboard removal could extend to the F/V GOLDEN FLEECE as well.

Background:
Regulations at 50 CFR 679.92 establish groundfish harvesting sideboard limits for five groundfish species on all Amendment 80 program vessels, other than the F/V GOLDEN FLEECE, to amounts no greater

than the limits listed in Table 37 to 50 CFR part 679. The F/V GOLDEN FLEECE, may not be used for directed fishing for northern rockfish, pelagic shelf rockfish, pollock, Pacific cod, or Pacific ocean perch in the GOA (§ 679.92(d)(1)(i)).

Groundfish sideboard limits for Amendment 80 Program vessels operating in the GOA are based on their average aggregate harvests from 1998 through 2004. Table 32 of the final 2014 GOA harvest specifications lists the final 2014 sideboard limits for Amendment 80 Program vessels. These limits are based on the final 2014 TACs established by the harvest specifications. NMFS will deduct all targeted or incidental catch of sideboard species made by Amendment 80 Program vessels from these sideboard limits.

The Amendment 80 sideboards limit the amount pollock and Pacific cod that Amendment 80 vessels may harvest in each GOA management area. The sideboard also limits the amount of Pacific ocean perch and dusky rockfish that these vessels may harvest in the Western GOA and West Yakutat district, as well as the harvest of northern rockfish in the Western GOA. In addition, seasonal halibut PSC limits are established for the deep-water and shallow-water complexes. The GOA groundfish harvest specifications establish the annual sideboard amounts. In 2014, this resulted in 14 Amendment 80 groundfish sideboard limits being established and incorporated into the CAS.

Under the proposed program, pollock and Pacific cod would be divided between in the Inshore and Offshore trawl sectors. The offshore sector's harvest limits for these two species will be determined by the sector allocation and the any MRA or incidental catch allowance (ICA) in place during the fishing year. CV LLPs will be allocated a defined percentage of the Inshore TAC that they may collectively assign to Inshore cooperatives. Additional sideboard limits appear to be unnecessary. The remaining Amendment 80 GOA groundfish sideboard limits that apply to the Western GOA and West Yakutat district could be unnecessary if the harvest if those species is limited through sector allocations (or by being allocated to LLPs under this program).

Halibut PSC sideboard limits for Amendment 80 Program vessels in the GOA are established to limit the amount of halibut PSC that may be used by such vessels. These halibut PSC limits are established in the GOA harvest specifications for the shallow-water species and deep-water species fisheries categories. Each category is further apportioned among the five halibut PSC seasons. Halibut will be allocated by LLP and at the sector level (CVs and CPs), so the need for additional halibut sideboards is mitigated.

Central GOA Rockfish Program GOA Sideboard Limits

Recommendation:
NMFS AKRO SF staff supports removing/eliminating RP restrictions and sideboards if the Council includes the Rockfish Program in the GOA trawl LAPP. For more discussion on including the Rockfish Program in the proposed program see Section 3.1. Allocating the rockfish species currently subject to either restrictions or sideboards to GOA trawl bycatch management program cooperatives would eliminate the need for such sideboards. Each applicable cooperative would receive allocations of GOA trawl bycatch management program species and manage those species on behalf of the cooperative/member vessels.

NMFS also recommends clarifying whether modifications to the Rockfish Program sideboards also include the associated seasonal restrictions in place for CVs and C/Ps. NMFS recommends making a clear distinction between sideboards (i.e., limits on catch) and restrictions (i.e. season fishing prohibitions). The Rockfish Program establishes three classes of sideboard provisions: CV groundfish sideboard restrictions, C/P rockfish sideboard restrictions, and C/P opt-out vessel sideboard restrictions. These sideboards are intended to limit the ability of rockfish harvesters to expand into other fisheries.

Background:
CVs participating in the Rockfish Program may not participate in directed fishing for dusky rockfish, Pacific ocean perch, and northern rockfish in the West Yakutat district and Western GOA from July 1 through July 31. These three rockfish fisheries in the West Yakutat district and Western GOA are usually fully harvested in July. Therefore the Rockfish Program sideboarded CVs have not participated in these fisheries. Also, rockfish program sideboarded CVs may not participate in directed fishing for arrowtooth flounder, deep-water flatfish, and rex sole in the GOA from July 1 through July 31 (§ 679.82(d)).

Catcher/processors participating in Rockfish Program cooperatives are restricted by rockfish and halibut PSC limits. These CPs are prohibited from directed fishing for dusky rockfish, Pacific ocean perch, and northern rockfish in the West Yakutat district and Western GOA from July 1 through July 31. Holders of CP-designated LLP licenses that opt-out of participating in a Rockfish Program cooperative may access that portion of each sideboard limit that is not assigned to rockfish cooperatives. GOA harvest specifications table 28 lists the final 2014 Rockfish Program CP sideboard limits in the West Yakutat district and the Western GOA.

Rockfish Program CP sideboard limits for halibut and groundfish are shown in Table 33 and are compared to the total Amendment 80 sideboard limit for those fisheries and PSC categories. As discussed for the other sideboard limits, it is assumed that the proposed program will allocate halibut PSC limits by LLP, and thus additional sideboard limits are unnecessary. The Council is also considering allocating West Yakutat district Pacific ocean perch and Western GOA rockfish. Allocating those species would eliminate the need for sideboard limits for those species, since they could be managed for the entire year using sector allocations, ICAs, and MRAs.

Table 33 Rockfish Program CP sideboard limits for July, compared to annual Amendment 80 sideboard limits

Species Group	Area	Rockfish CP Sideboard Limit (mt)	Amendment 80 C/P Sideboard Limit (mt)	Ratio of Rockfish to Am 80 Sideboards
Deep-Water Halibut PSC	GOA	48	378	0.127
Shallow-Water Halibut PSC	GOA	2	120	0.017
Pacific Ocean Perch	WY	Confidential	1,856	Confidential
Pacific Ocean Perch	WG	1,214	2,385	0.509
Dusky Rockfish	WY	Confidential	1,240	Confidential
Dusky Rockfish	WG	229	242	0.946
Northern Rockfish	WG	970	1,305	0.743

The Rockfish Program deep-water halibut PSC sideboard limit includes all halibut PSC used: (1) during July in the WG and WY District when fishing flatfish **OR** rockfish in the deep-water complex; (2) by cooperatives in the Central GOA **ONLY** when vessels are fishing flatfish in the deep-water complex and are checked-out and not fishing under their cooperative quota permit.

The Rockfish Program shallow-water halibut PSC sideboard limit includes all halibut PSC used during July in the Central GOA, WG, and WY district when fishing flatfish in the shallow-water complex.

The GOA groundfish harvest specifications establish sector level sideboard amounts, which are further divided between Rockfish Program cooperatives (see GOA specifications Table 28). In 2014, this resulted in 11 groundfish sideboard limits being established and incorporated into the CAS.

In addition, the C/P sector is subject to halibut PSC sideboard limits for the trawl deep-water and shallow-water species fisheries from July 1 through July 31. Table 30 of the GOA harvest specifications contains the 2014 Rockfish Program halibut mortality limits for the C/P sector. These limits are further divided between cooperatives and C/Ps opting out of the Rockfish Program. In 2014, this resulted in 6 different halibut PSC sideboards being established for Rockfish Program C/Ps and one for C/Ps that opt-out of the Rockfish Program.

Rockfish Program sideboards limit both the LLP license with rockfish cooperative quota (CQ) assigned to it and the vessel on which the legal landings that underlie the rockfish CQ were made. Sideboard measures are in effect only during the month of July when the Central GOA rockfish fisheries were traditionally open. Sideboard limitations fall into two broad categories: (1) a limit that constrains the amount of harvest in specific regions and fisheries during July; and (2) directed fishery closures that prohibit fishing in specific fisheries and regions during July.

LLP license holders who chose to be voluntarily excluded from the entire Rockfish Program at initial quota issuance are exempted from sideboard restrictions. Some CVs are also exempt from sideboard limits if the vessel (1) is an AFA CV that is not exempt under AFA regulations (AFA sideboards apply);

(2) was voluntarily excluded from the Rockfish Program; and (3) is named on an LLP license that has been voluntarily excluded from the Rockfish Program.

Summary

The discussion provided above indicates that non-AFA GOA crab sideboard limits that apply to fixed gear harvests and Amendment 80 GOA flatfish eligibility limitations should be maintained. All other sideboard limitations could be eliminated since they would no longer function as designed when placed alongside a GOA cooperative structure, or else the competition for those species would addressed through the allocations considered for the proposed GOA Trawl LAPP.

8.2 Creation of Pacific Cod Sideboards for GOA Trawl LAPP Participants

The Council's April motion directs staff to "consider sideboards for or prohibition of directed fishing for Pacific cod in the West Yakutat area with trawl gear."

Recommendation:
NMFS AKRO SF staff does not support this proposal.

Background:
Historically, there has been little total catch of Pacific cod (2003 through 2013 average of 2 mt per year) and no directed fishing for Pacific cod in the West Yakutat district with trawl gear. This is likely due to Pacific cod not aggregating sufficiently for trawling to occur. Thus, there is no relevant reason to establish Pacific cod sideboards or a directed fishing closure for Pacific cod with trawl gear in the West Yakutat management area.

The motion also directs staff to consider sideboards for GOA trawl LAPP participants using fixed gear in Western and/or Central GOA.

Recommendation:
Additional sideboards for the fixed gear Pacific cod fisheries in the Western and Central GOA are not recommended by NMFS AKRO SF staff at this time.

Background:
Trawl and fixed gear harvests of Pacific cod in the Western and Central GOA are limited by TAC apportionments to gear trawl, pot, HAL, and jig gear. Participation in the Western and Central GOA fixed gear Pacific cod fisheries is also limited by endorsements on groundfish LLPs. As shown in Table 4 (Section 2.2.1 on Sector Eligibility), 30 of 31 eligible CV LLPs with a Western GOA Pacific cod pot endorsement also have a Western GOA trawl endorsement (19 of those trawl/pot-cod LLPs have recorded GOA groundfish trawl landings since 2007). Seventeen of those 31 pot endorsed LLPs also have a Central GOA trawl endorsement (13 of the 19 recently active LLPs). Seven CV LLPs have a Pacific cod endorsement to use pot gear in the Central GOA; six of those LLPs are endorsed to trawl in the Central GOA and three are endorsed to trawl in the Western GOA. This provides limited opportunity for the trawl fleet to increase effort in the Pacific cod pot fishery without purchasing LLPs with a Central GOA pot gear endorsement. Only one LLP with a trawl endorsement in the GOA also holds a Pacific cod jig

endorsement (Western GOA jig and trawl). Two LLPs have a Central GOA hook-and-line endorsement; both are endorsed to trawl in the Western GOA, and neither is endorsed to trawl in the Central GOA. No eligible CV LLPs are endorsed for hook-and-line gear in the Western GOA.

Because of the limited opportunity for vessels with a trawl endorsement to fish Pacific cod with fixed gear in the Central GOA it is less apparent that additional Pacific cod sideboards on the trawl fleet are necessary in the Central GOA. The greatest opportunity for expansion would be the purchase of LLPs with fixed gear Pacific cod endorsements. A total of 51 Western GOA LLPs with a MLOA of 58 feet or greater have a pot endorsement for Pacific cod in the Western GOA, but do not have a trawl endorsement for the Western GOA. It is possible that some of these LLP licenses could be transferred and used on the vessels holding the 49 LLPs shown in Table 34 that fish with trawl gear but do not have a Western GOA pot Pacific cod endorsement. The owners of these vessels may wish to harvest Western GOA Pacific cod with pot gear in the future.

Table 34 Summary of CV LLPs with a trawl endorsement sorted by whether the license is endorsed for Western GOA Pacific cod pot fishing

WGOA Pcod Pot Endorsement?	WG Trawl	CG Trawl	BS Trawl	AI Trawl	WG CV PCod Pot	WG CV PCod Jig	CG CV PCod Pot	CG CV PCod HAL	BS CV PCod Pot	AI CV PCod HAL
No	49	81	46	9	0	0	6	1	0	1
Yes	30	17	2	0	31	1	1	1	1	0
Total	79	98	48	9	31	1	7	2	1	1

Source: AKFIN summary of RAM LLP data

The 31 CV LLPs with a Western GOA Pacific cod pot endorsement earned that endorsement based on landings history. Table 35 focuses on the 19 LLPs that made a GOA groundfish trawl landing since 2007, and reports nominal ex-vessel value of total harvest over the entire 2003 through 2013 time period according to the different combinations of WGOA and CGOA Pacific cod endorsement holdings. GOA trawl LLPs with a Western GOA Pacific cod pot endorsement generated about 25 percent of their Western GOA groundfish value using pot gear.[65]

Figure 5 in Section 7.3 described the use of different gear types for harvesting WGOA Pacific cod during the 2013 fishing year. If PSC can be effectively managed through a cooperative structure, vessel operators are anticipated to harvest with trawl gear until their allocation is reached (or PSC rates dictate a switch to pot gear), since profit margins are likely greater in the trawl fishery than in the pot fishery. If they do harvest some of their quota with pot gear, it would slow the pace of the fishery and reduce potential impacts on the Pacific cod fleet that only uses fixed gear.[66]

[65] $15,812,226 / ($42,754887 + $15,812,226 + $4,136,924) = 0.252
[66] Competition for fishing grounds while using pot gear could increase.

Table 35 Total nominal ex-vessel value of harvest by area and gear of recently active CV trawl LLP license holders by Western GOA and Central GOA Pacific cod endorsement types

Harvest area/gear	WG PCod Endorsement	CG Pacific Cod Endorsement			
		None	Pot	Hook-and-line	Hook-and-line; Pot
CG Trawl	None	$401,611,295	$16,121,948		
CG Pot	None	< $100,000	$4,895,771		< $100,000
CG Hook-and-line	None	$4,342,376	< $500,000	< $500,000	< $500,000
WG Trawl	None	$86,116,227	< $100,000	< $100,000	
WG Pot	None	$1,472,277	< $500,000	< $100,000	$1,982,177
WG Hook-and-line	None	< $100,000	< $100,000	< $500,000	
CG Trawl	Pot	$4,002,367			
CG Pot	Pot	< $500,000	< $500,000		
CG Hook-and-line	Pot	$7,482,349	$707,453	$664,894	
WG Trawl	Pot	$42,754,887	< $100,000		
WG Pot	Pot	$15,812,226	< $500,000	< $100,000	
WG Hook-and-line	Pot	$4,136,924		< $500,000	

8.3 Other Central GOA Sideboards

New sideboard limits for the Central GOA do not appear to be necessary. The Council is already considering allocating the CG TAC (or a portion of the TAC) for rex sole, arrowtooth flounder, and deep water flatfish under the proposed program. These fisheries are primarily taken with trawl gear, and in many cases the TAC is not fully harvested (See Table 15 in Section 4). These conditions typically mean that sideboards are unnecessary. Other valuable species in the Central GOA are already allocated under the Rockfish Program. The Rockfish Program limits access to the primary species including northern rockfish, Pacific ocean perch, and dusky rockfish (formerly grouped with pelagic shelf rockfish). Secondary rockfish species include Pacific cod, rougheye rockfish, shortraker rockfish, sablefish, and thornyhead rockfish. The Council could consider merging aspects of these programs in the future, as briefly described in Section 3.1 of this paper.

8.4 Other Western GOA Sideboards

The Council is considering allocating rockfish species in the Western GOA and NMFS is recommending that flatfish also be allocated. No additional sideboards are necessary if these species are allocated. Table 15 in Section 4 shows that Western GOA Pacific ocean perch is almost exclusively harvested by the trawl CP sector. Even though the TAC is fully harvested in some years, the competition for that species does not appear to warrant protection for other historical participants, beyond setting ICAs that allow trawl participants to harvest Pacific cod and pollock and allow fixed gear vessels to harvest Pacific cod. Northern rockfish and dusky rockfish are also taken almost exclusively by the trawl CP sector and do not appear the require sideboard limits. If allocations of the previously discussed rockfish species are made based on historic catch levels, the CP trawl sector will receive the preponderance of the TAC that is allocated. Thornyhead rockfish, shortraker rockfish, and rougheye rockfish are taken as bycatch in fixed gear fisheries and trawl fisheries. The percentage of the TAC that is taken with trawl gear is almost exclusively taken by the trawl CP sector. Directed fishery closures, MRAs, and ICAs appear to be viable options to manage these fisheries, as opposed to implementing sideboard limits. Trawl vessels typically take a small percentage of the sablefish and skate TACs in the Western GOA, and that percentage taken is

almost all taken by CPs. If sablefish are a concern, allocations of that species to the trawl sectors (mainly the CP sector) may be more appropriate that crafting sideboard limits. Each cooperative would be responsible for limiting their catch of sablefish, and the amount allocated would place limits on any expansion of trawl sablefish catch. Typically less than 10 percent of the big skate and longnose skate TAC is taken by trawl vessels. Setting a modest ICA for the trawl sectors should provide sufficient protections for fixed gear fishermen in the Western GOA.

8.5 West Yakutat District

The only species that have a TAC set for the West Yakutat district are pollock, arrowtooth flounder, deep water flatfish, shallow water flatfish, Pacific ocean perch, "other" rockfish, and sablefish. The Council is considering allocating pollock and Pacific ocean perch to cooperatives and NMFS AKRO SF staff is recommending adding dusky rockfish to that list. Those species are almost exclusively harvested with trawl gear and the TACs are close to fully utilized. Sideboards will not be necessary for these species if they are allocated. The remaining species listed above are not harvested by trawl vessels in substantial amounts, and the percentage of the TAC taken is small. Sideboards do not seem necessary to protect other fishery participants. Sablefish could be allocated to cooperatives or managed under an ICA and an MRA. The fixed gear fishery is already protected under the sablefish IFQ program; the remaining competition would be between trawl CVs and CPs for the ICA. The trawl CP sector has harvested over 90 percent of the sablefish taken with trawl gear.

9 Amendment 80 Flatfish

Amendment 80 vessel's participation in GOA flatfish fisheries is limited to those vessels that had historically participated in those fisheries during the Amendment 80 qualifying years. This limitation was implemented to reduce competition within the Amendment 80 sector for GOA flatfish and to reduce negative impacts on the GOA CV fleet.

As part of the Amendment 80 GOA limitations, only the 11 vessels listed in all capital letters in Table 36 may be used to fish in the directed arrowtooth flounder, deep water flatfish, flathead sole, rex sole, and shallow water flatfish fisheries in the GOA and in adjacent waters opened by the State of Alaska for which it adopts a Federal fishing season (parallel fisheries). Some members of the Amendment 80 sector have stated their interest in maintaining this GOA flatfish participation limits.

The owners of all 11 GOA flatfish eligible vessels are members of the Alaska Seafood Cooperative. Maintaining this limitation will prevent the members of the Alaska Seafood Cooperative from negotiating GOA directed flatfish participation levels exclusively with persons who are members of the Alaska Groundfish Cooperative.[67] Therefore, this limitation may be appropriate to maintain.

The RAM LLP database indicates that two of the GOA flatfish eligible vessels do not have a groundfish LLP that is endorsed for trawl or non-trawl gear in either the Western or Central GOA. If catch history is assigned to an LLP using the set of qualifying years that goes back to 2003 and issues quota for flatfish

[67] The O'Hara Corporation has three vessels in the Alaska Seafood Cooperative and one vessel in the Alaska Groundfish Cooperative.

species included in the target fishery list, the Council could choose not to allocate quota for a directed flatfish fishery to LLPs associated with the vessels in Table 36.

Table 36 Amendment 80 vessels and associated LLPs that are eligible to fish in the directed GOA flatfish fisheries

			GOA Endorsements			Rockfish C/P	
LICENSE	MLOA	Original Vessel Name	CG	WG	Pacific cod	Sideboard	Quota
LLG1402	124	VAERDAL	Trawl	Trawl	No	N	N
LLG2028	160	AMERICAN NO I	Trawl	Trawl	No	Y	Y
LLG2138	219	OCEAN PEACE	No	Trawl	No	N	N
LLG2524	124	GOLDEN FLEECE	Trawl	No	No	N	N
LLG2905	124	ALLIANCE	Trawl	Trawl	No	Y	Y
LLG3217	124	DEFENDER	Trawl	Trawl	No	N	N
LLG3662	185	US INTREPID	Trawl	Trawl	No	Y	Y
LLG3714	132	LEGACY/Alaska Endeavor	No	No	No	N	N
LLG3957	185	UNIMAK	Non-trawl; Trawl	No	No	Y	Y
LLG4360	124	OCEAN ALASKA	Trawl	No	No	Y	Y
LLG4692	296	SEAFREEZE ALASKA	No	No	No	N	N

Source: RAM LLP database

The original Amendment 80 vessels and associated licenses that are prohibited from fishing in the directed GOA flatfish fisheries are reported in Table 37. Note that the F/V Legacy is an eligible GOA flatfish vessel and is currently fishing under the F/V Prosperity's groundfish license. That vessel may still participate in the directed GOA flatfish fishery.

Table 37 Amendment 80 vessels and associated licenses that are ineligible to participate in the directed GOA flatfish fisheries

			Original		Current		GOA Endorsements			Rockfish Program C/P	
License	Licensee Name	MLOA	ADFG	Vessel	ADFG	Vessel	CG	WG	PCOD	Sideboards	Quota
LLG1147	O'HARA CORPORATION	166	61081	Constellation	61081	Constellation	N	Trawl	N	N	N
LLG1802	ALASKA LEGACY, LLC	138	41864	Prosperity	48183	Legacy	Non-trawl; Trawl	Non-trawl; Trawl	N	Y	Y
LLG2014	M/V SAVAGE, INC.	230	56964	Seafisher	56964	Seafisher	Trawl	Trawl	N	Y	Y
LLG2080	ALASKA VICTORY, INC.	227	61083	Alaska Victory	61083	Alaska Victory	Trawl	Trawl	N	Y	Y
LLG2082	ALASKA JURIS, INC.	238	54693	Alaska Juris	54693	Alaska Juris	N	Trawl	N	N	N
LLG2083	THE FISHING COMPANY OF ALASKA	215	56965	Alaska Warrior	56965	Alaska Warrior	Trawl	Trawl	N	Y	Y
LLG2084	THE FISHING COMPANY OF ALASKA	228	51926	Alaska Voyger			N	Trawl	N	N	N
LLG2118	THE FISHING COMPANY OF ALASKA	203	57444	Alaska Ranger	57444	Alaska Ranger	N	Trawl	N	N	N
LLG2429	ARICA VESSEL LLC	186	57228	Arica	57228	Arica	N	Trawl	N	N	N
LLG2432	CAPE HORN VESSEL, LLC	158	55921	Cape Horn	55921	Cape Horn	N	N	N	N	N
LLG2785	IQUIQUE U.S., LLC	131	55466	Tremont			N	N	N	N	N
LLG3043	ALASKA SPIRIT, INC.	221	59870	Alaska Spirit	59870	Alaska Spirit	Trawl	Trawl	N	Y	Y
LLG3744	O'HARA CORPORATION	183	36502	Bering Enterprise	55183	Harvester Enterprise	Non-trawl; Trawl	Non-trawl	WG CP POT	N	N
LLG3895	IQUIQUE U.S., LLC	122	63511	Arctic Rose			N	N	N	N	N
LLG3958	REBECCA IRENE VESSEL LLC	140	51873	Rebecca Irene	51873	Rebecca Irene	Trawl	Trawl	N	N	N
LLG4831	O'HARA CORPORATION	132	62472	Jupiter	69038	Jupiter	N	N	N	N	N

Source: RAM LLP database

10 Program Review

The Council is required to undertake a formal and detailed review of the operations of the program, including determining progress in meeting the program and MSA goals and any modification of the program necessary to meet those goals. A formal and detailed review must be completed after 5 years of complete post-implementation data are available. A review is then required not less than once every 7 years, to correspond with Council review of the GOA fishery management plan. Defining the review schedule will depend on the duration of the program. If the Council structures the program's duration like the Rockfish Program, a full analysis and review of the program would be required prior to the program expiring 10 years after the date of implementation. That review would culminate in the Council determining whether to recommend extending the program. Early review of a program can be used to determine that the program is functioning as intended. Periodic reviews can be used to determine whether circumstances have changed in a fishery that would justify amending a management program. As described in the Rockfish Program RIR (p. 192), a comprehensive review often requires extensive staff time, consultants, and Council time. Reviews are important to ensuring the success of management programs, but should be undertaken on a schedule such that the need and utility of the information in the review are likely to outweigh the costs of the review.

Because the details of the proposed program are still being developed, defining the particulars of the review is premature at this time. However, the Council will be presented an initial review of the study that collected social and cultural information from participants in all aspects of the GOA groundfish trawl fishery. The study collected baseline data in 2014 to generate a description of the people in the industry before the approval and implementation of a substantial change in the management of the GOA groundfish trawl fishery. After implementation of the program, the study will be repeated at various intervals. Results from each study can be compared to update the baseline data on the industry and the constituent communities, to better understand any changes or social impacts that have occurred, and to determine if the program is meeting the Council and MSA goals. In addition to the social and cultural survey, the Council is expected to collect economic data about the fishery (focusing on labor and labor compensation) through an economic data collection program that is being developed. Together these data collection instruments and ongoing fishery data collection by the Alaska Regional office of NMFS and the Alaska Observer Program should leave the Council well situated to undertake the required review. If, during its contemplation of the data collection programs, the Council or industry identify any gaps in the information being collected, that information should be identified now or data may not be available to provide more than a qualitative discussion of the issue during the formal program review.

11 Cost Recovery and Loan Program

Part 15 of the Council's April motion discusses a cost recovery fee that would be charged against landings of species that are directly allocated under an LAPP. Section 303A(e) of the MSA states that:

> *—In establishing a limited access privilege program, a Council shall—*
>
> *(1) develop a methodology and the means to identify and assess the management, data collection and analysis, and enforcement programs that are directly related to and in support of the program; and*
>
> *(2) provide, under section 304(d)(2), for a program of fees paid by limited access privilege holders that will cover the costs of management, data collection and analysis, and enforcement activities.*

Section 304(d) of the MSA authorizes and requires the collection of fees for limited access privilege based programs, such as the proposed GOA Trawl Bycatch Management cooperative program. Section 304(d) states that:

> *(1) The Secretary shall by regulation establish the level of any fees which are authorized to be charged pursuant to section 303(b)(1). The Secretary may enter into a cooperative agreement with the States concerned under which the States administer the permit system and the agreement may provide that all or part of the fees collected under the system shall accrue to the States. The level of fees charged under this subsection shall not exceed the administrative costs incurred in issuing the permits.*
>
> *(2)(A) Notwithstanding paragraph (1), the Secretary is authorized and shall collect a fee to recover the actual costs directly related to the management, data collection, and enforcement of any—*
>
> *(i) limited access privilege program; and*
>
> *(ii) community development quota program that allocates a percentage of the total allowable catch of a fishery to such program.*
>
> *(B) Such fee shall not exceed 3 percent of the ex-vessel value of fish harvested under any such program, and shall be collected at either the time of the landing, filing of a landing report, or sale of such fish during a fishing season or in the last quarter of the calendar year in which the fish is harvested.*
>
> *(C)(i) Fees collected under this paragraph shall be in addition to any other fees charged under this Act and shall be deposited in the Limited Access System Administration Fund established under section 305(h)(5)(B).*

The MSA limits the cost recovery fee to a maximum of 3 percent of ex-vessel value derived from species allocated. Species that are not allocated but are harvested in conjunction with the cooperative program are not subject to a cost recovery fee. For example, if arrowtooth flounder or sablefish are not allocated to

cooperatives, the cost recovery fee would not apply to any harvest of those species made by cooperative members. Also, because PSC does not generate an ex-vessel value (it cannot be sold) it is not subject to cost recovery fees.

NOAA Fisheries currently administers several cost recovery fee collection programs in the North Pacific including the halibut/sablefish IFQ cost recovery, BSAI crab cost recovery, and Central GOA Rockfish Program cost recovery. NOAA Fisheries is also developing three additional cost recovery programs for the AFA, Amendment 80, and CDQ fisheries that are currently not subject to cost recovery fees. NOAA Fisheries also administers three fishing capacity reduction program loan repayment fees (AFA inshore, BSAI hook and line catcher/processors, and BSAI crab).

A cost recovery program for a GOA trawl fisheries LAPP could be patterned after the Central GOA Rockfish Program cost recovery program. Differences in the timing of the fisheries and the species allocation would need to be accounted for when developing regulations. An example of the program elements that could be included in a GOA Trawl LAPP is presented in Table 38.

Table 38 Potential cost recovery elements for the proposed GOA Trawl Bycatch Management program

Program Element	GOA Trawl Cooperatives
Who must comply with fee payment requirements?	The person documented on the GOA Cooperative Quota permit as the permit holder at the time of a GOA cooperative quota species landing.
When is the fee liability determined?	NMFS will calculate and announce the fee percentage in an FR Notice by December 1st of the year in which the GOA CQ landings were made.
How is the fee liability determined?	NMFS calculates the GOA CQ species standard ex-vessel price to reflect , as closely as possible by year, the value of the harvest of allocated species. The Regional Administrator will base the ex-vessel fee on GOA standard ex-vessel values on the following types of information: (A) Landed pounds by GOA CQ species; (B) Total ex-vessel value of GOA CQ species; and (C) Price adjustments, including retroactive payments.
When is fee due?	No later than December 31st of the calendar year in which the GOA trawl CQ landings made.
Payment method	Payment must be made to NMFS electronically in U.S. dollars by automated clearing house, credit card, or electronic check drawn on a U.S. bank account.
What species are subject to the fee?	Species have not yet been defined, but will likely include pollock and Pacific cod.

Are additional data collected to determine fees	Ex-vessel and possibly first wholesale volume and value reports by all cooperative member processors. Due November 1st for all allocated species. The processors will be required to estimate the volume and value of allocated species that are anticipated to be delivered during the last two months of the year.
Underpayment of fees	(1) No GOA Trawl CQ holder will receive its entire CQ allocation until the cooperative submits a complete application. A complete application shall include full payment of an applicant's complete GOA Trawl cost recovery fee liability. (2) If a GOA trawl CQ holder fails to submit full payment for GOA trawl cost recovery fee liability by December 31st of the year GOA trawl CQ species were harvested, the Regional Administrator may: (i) At any time thereafter send an Initial Administrative Determination (IAD) to the CQ permit holder stating that the CQ permit holder's estimated fee liability, as indicated by his or her own submitted information, is the GOA trawl cost recovery fee liability due from the CQ permit holder. (ii) Disapprove any application to transfer GOA trawl CQ to or from the CQ permit holder. (3) If a GOA trawl CQ holder fails to submit full payment by December 31st, no CQ permit will be issued to that GOA trawl CQ holder for that calendar year; and no GOA trawl CQ will be issued based on the GOA trawl QS held by the members of that GOA trawl cooperative to any other CQ permit for that calendar year. (4) Upon final agency action determining that a CQ permit holder has not paid his or her GOA trawl cost recovery fee liability, the Regional Administrator may continue to prohibit issuance of a CQ permit for any subsequent calendar years until NMFS receives the unpaid fees. If payment is not received by the 30th day after the final agency action, the agency may pursue collection of the unpaid fees.
Overpayment of fees	Upon issuance of final agency action, payment submitted to NMFS in excess of the GOA trawl cost recovery fee liability determined to be due by the final agency action will be returned to the CQ permit holder unless the permit holder requests the agency to credit the excess amount against the permit holder's future GOA trawl cost recovery fee liability. Payment processing fees may be deducted from any fees returned to the CQ permit holder.
Appeals	A GOA trawl CQ permit holder who receives an IAD for incomplete payment of an GOA trawl species fee liability may appeal the IAD pursuant to 50 CFR 679.43 which defines determinations and appeals for the IFQ program. That same structure will be used for this cost recovery program.
Insufficient Funds	A one-time $25.00 fee may be assessed if the account drawn on to pay cost recovery fee has insufficient funds.

The halibut and sablefish IFQ program currently includes a cost recovery component, which was implemented in 2000. The program requires the payment of up to 3 percent of the ex-vessel value of all IFQ landings to RAM to defer costs of administering the program. Twenty five percent of the fee collections are required to be used to fund a low interest loan program for IFQ purchases.

For the crab program, a payment of up to 3 percent of the ex-vessel value of all IFQ landings is also collected for cost recovery. By statue, fees must be shared equally by the harvesting and processing sectors; by regulation, processors assume the fee liability and remit the fees to the Government. Catcher/processors, who catch and process their catch, do not split the fee; rather, they pay the full amount directly to NOAA Fisheries.

Variation in market prices, allowable harvest of CQ species, and management costs, means that the fee percentage will change each year. The maximum limit of 3 percent of the ex-vessel value cannot be exceeded under the MSA. If management costs exceed three percent of the ex-vessel value of CQ species, those government costs will not be reimbursed by LAPP CQ holders.

At this stage of development in the GOA trawl LAPP, it is not possible to estimate either the management costs that might be expected to be incurred managing the GOA trawl LAPP or the ex-vessel value of CQ species that will be allocated. Further development of the program will be necessary before those estimates can be provided. Because that information is not available it is not possible to estimate if the costs recovery fee will approach the 3 percent limit on ex-vessel value.

12 References

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13 Appendix

C-2 GOA Trawl Bycatch Management
Council motion April 11, 2014

The Council requests that staff provide a paper reviewing the expanded program structure described below and a preliminary evaluation of the combined effects of several primary elements. The paper should continue to evaluate whether and how the elements of this design address the objectives in the Council's purpose and need statement. The intent is to receive feedback characterizing: 1) how the fishery would operate under the new design; 2) how well it may meet the Council's stated objectives; and 3) which decision points are necessary to transform the program structure into alternatives for analysis.

GOA Trawl Bycatch Management Program

1. Bycatch management
The primary objective of this action is to improve incentives for PSC reduction and PSC management, achieved in several ways through this program design.

a. **Reduced PSC**: The Council intends to adopt a program to: (1) minimize Chinook salmon bycatch, and (2) achieve more efficient use of halibut PSC, allowing some efficiency gains to provide additional target fishery opportunity while leaving some halibut PSC savings in the water for conservation and contribution to exploitable biomass.

b. **Cooperative management:** A system of cooperative management is best suited to managing and reducing bycatch (such as, hotspot program, gear modifications, excluder use, incentive plan agreements) while maximizing the value of available target species. Cooperatives are intended to facilitate a flexible, responsive, and coordinated effort among vessels and processors to avoid bycatch through information sharing and formal participation in a bycatch avoidance program.

c. **Gear modification**. Option: gear modifications for crab protection.

2. Observer Coverage
All trawl catcher vessels in the GOA will be in the 100% observer coverage category, whether they participate in the voluntary cooperative structure or the limited access fishery with trawl gear. NMFS will develop monitoring and enforcement provisions necessary to track quota, harvests, and use caps for catcher vessels and catcher processors.

3. Areas
Western Gulf, Central Gulf, West Yakutat

4. Sector eligibility
Inshore sector: Shoreside processors and harvesters that meet the qualifications under the cooperative program. Allocations are based on trawl landings during the qualifying years with a CV trawl LLP or a CP trawl LLP that did not process catch onboard. Any CP LLP not used to process catch offshore during the qualifying years will be converted to a CV LLP at the time of implementation.

Offshore sector: Am 80 vessels, and their replacement vessels, defined in Table 31 CFR Part 679, and their current LLP. Allocations are based on trawl landings during the qualifying years with a CP trawl LLP that processed catch onboard.

5. Allocated species

Target species:
Pollock (610/620/630/640)
Pacific cod (WG/CG)

Additional target species for consideration include:
CGOA flatfish: Rex sole, arrowtooth flounder, and/or deep water flatfish
WGOA rockfish and WY Pacific ocean perch

Secondary species:
Sablefish (that not allocated under the CG Rockfish Program)
CG Skates (big and longnose)
Thornyhead rockfish
Shortraker rockfish
Rougheye/blackspotted rockfish
Other rockfish
Consider whether cooperative measures would be an effective approach to managing secondary species, as opposed to cooperative allocations.

PSC species: Halibut and Chinook salmon

6. Sector allocations of target species, secondary species, and PSC

Allocations to the trawl CV sector for WG and CG Pacific cod (Am 83), CGOA rockfish program (Am 88), and GOA pollock (Am 23) are maintained. Allocations to the trawl CP sector for the CGOA rockfish program are maintained. GOA flatfish eligibility for the trawl CP sector under Am 80 is maintained.

Pollock and Pacific cod:
Pollock and Pacific cod TACs would be allocated to the inshore sector; the offshore sector would receive an incidental catch allowance (ICA) for Pacific cod and pollock and be managed under maximum retainable amounts (MRAs).

Other target species and secondary species: If other target and/or secondary species are allocated under the program, sector allocations would be based on each sector's harvest share from:
Option 1. 2008 – 2012
Option 2. 2007 – 2012
Option 3. 2003 – 2012

In addition to the options based on catch history above, options for establishing WG and WY rockfish sector allocations include:
Option 1. Allocate based on Am 80 sideboards (dusky rockfish would be recalculated based on dusky rockfish harvest only)
Option 2. Allocate to the CP sector only. The CV sector is prohibited from directed fishing and managed under MRAs.

PSC sector allocations:
Chinook salmon PSC apportionments to support the non-pollock trawl CV and CP sectors (excluding CG rockfish program for the CV sector) are based on GOA Amendment 97. The Chinook salmon PSC limit to support the pollock trawl fisheries is a CV allocation only. Any Chinook salmon PSC caught in WY comes off the cooperative's Chinook salmon PSC limit.

Halibut PSC apportionment between the CP and CV sectors will be based on halibut PSC use during:

Option 1. 2008 - 2012
Option 2. 2007 – 2012
Option 3. 2003 - 2012

7. Voluntary inshore cooperative structure

a. Annually allocate target species at the cooperative level, based on aggregate retained catch histories associated with member vessels' LLPs:

   Option 1. 2008 – 2012
   Option 2. 2007 – 2012
   Option 3. 2003 - 2012

b. Apportion halibut PSC and Chinook salmon PSC limits to each cooperative on a pro rata basis relative to target fisheries of GOA trawl vessels in the cooperative [such as, pollock Chinook salmon PSC cap divided based on pollock landings; non-pollock Chinook salmon cap divided based on non-pollock landings (excluding rockfish); halibut PSC apportioned in proportion to target groundfish landings associated with cooperative members' LLPs.] PSC could be further divided based on use in target fisheries or fisheries groupings, prior to being allocated to each cooperative on a pro rata basis. Once in the cooperative, PSC can be used to support any target fisheries within the cooperative.

   Option: Each processor controls a portion of PSC within a cooperative and negotiates terms of access through private agreement. The processor would activate the incremental PSC through NMFS, making it accessible to the cooperative. PSC made available by these agreements cannot be used by processor-owned vessels.

c. Participants can choose to either join a cooperative or operate in a limited access fishery [sector-level, non-transferable target allocations and PSC]. Harvesters would need to be in a cooperative with a processor by November 1 of the previous season to access a transferable allocation.

d. Initial (2 years) cooperative formation (suboption: in the first 2 years of each harvester's participation in a cooperative) would be based on the majority of each license's historical landings (aggregate trawl groundfish deliveries, excluding Central GOA rockfish harvested under a rockfish cooperative quota allocation) to a processor during:
   Option 1. The qualifying years for determining target species allocations
   Option 2. 2011 – 2012, or the two most recent qualifying years they fished

e. Each cooperative would be required to have an annual cooperative contract filed with NMFS. Initial formation of the cooperative would require a cooperative contract signed by (options: 51% - 80%) of the license holders eligible for the cooperative and the processor (option: and community in which the processor is located). Cooperative members shall internally allocate and manage the cooperative's allocation per the cooperative contract.

f. The annual cooperative contract must include:
   - Bylaws and rules for the operation of the cooperative
   - Annual fishing plan

- Operational plan for monitoring and minimizing PSC, with vessel-level accountability, as part of the annual fishing plan
- Clear provisions for how a harvester and processor may dissolve their contract after the cooling off period of two years. If a harvester wants to leave that cooperative and join another cooperative or the limited access sector, they could do so if they meet the requirements of the contract.
- Specification that processor affiliated harvesters cannot participate in price-setting negotiations except as permitted by general anti-trust law.

g. Additional contract elements (such as, bycatch management, active participation, mechanism to facilitate entry, community provisions) may be required to ensure the program is consistent with Council objectives.

h. Full transferability for annual use by other harvesters within the cooperative. Cooperatives can engage in inter-cooperative transfers of annual allocations to other cooperatives on an annual basis. Inter-cooperative transfers must be processed and approved by NMFS. Inshore allocations can only be transferred to and used by inshore cooperatives.

i. Cooperative members are jointly and severally responsible for cooperative vessels harvesting in the aggregate no more than their cooperative's allocation of target species and PSC allowances, as may be adjusted by annual inter-cooperative transfers.

j. Cooperatives will submit a written report annually to the Council and NMFS. Specific criteria for reporting shall be developed by the Council and specified by NMFS as part of the program implementing regulations.

k. Permit post-delivery transfers of annual allocations among cooperatives. All post-delivery transfers must be completed by December 31.

8. Voluntary catcher processor cooperative structure

a. Annually allocate target species at the cooperative level, based on aggregate total catch histories associated with member vessels' LLPs:

Option 1. 2008 – 2012
Option 2. 2007 – 2012
Option 3. 2003 – 2012

b. Apportion halibut PSC and Chinook salmon PSC limits to each cooperative on a pro rata basis relative to target fisheries of vessels in the cooperative [such as, non-pollock Chinook salmon cap divided based on non-pollock landings; halibut PSC apportioned in proportion to target groundfish landings associated with cooperative members' LLPs.] PSC could be further divided based on use in target fisheries or fisheries groupings, prior to being allocated to each cooperative on a pro rata basis. Once in the cooperative, PSC can be used to support any target fisheries within the cooperative.

c. Participants can choose to either join a cooperative or operate in a limited access fishery [sector-level, non-transferable target allocations and PSC]. No later than November 1 of each year, an application must be filed with NMFS by the cooperative with a membership list for the year. In order to operate as a cooperative, membership must be comprised of:

Option: at least 2 separate entities (using the 10% individual and collective rule) and/or
Option: at least [2 – 4] eligible LLP licenses

d. Cooperative members shall internally allocate and manage the cooperative's allocation per the cooperative contract. Cooperatives are intended only to conduct and coordinate harvest activities of the members and are not FCMA cooperatives.

e. The contract would require signatures of all LLP holders in the cooperative. The annual cooperative contract must include:
   - Bylaws and rules for the operation of the cooperative
   - Annual fishing plan
   - An operational plan for monitoring and minimizing PSC, with vessel level accountability, as part of the annual fishing plan
   - Specification that processor affiliated harvesters cannot participate in price setting negotiations except as permitted by general anti-trust law.
   - A cooperative may adopt and enforce fishing practice codes of conduct as part of their membership agreement.

f. Full transferability for annual use by other harvesters within the cooperative. Cooperatives can engage in inter-cooperative transfers of annual allocations to other cooperatives on an annual basis. CP annual cooperative allocations may be transferred to inshore cooperatives; inshore annual cooperative allocations cannot be transferred to CP cooperatives. Inter-cooperative transfers must be processed and approved by NMFS.

g. Cooperative members are jointly and severally responsible for cooperative vessels harvesting in the aggregate no more than their cooperative's allocation of target species, secondary species, and PSC, as may be adjusted by annual inter-cooperative transfers.

h. Cooperatives will submit a written report annually to the Council and NMFS. Specific criteria for reporting shall be developed by the Council and specified by NMFS as part of the program implementing regulations.

i. Permit post-delivery transfers of annual allocations among cooperatives. All post-delivery transfers must be completed by December 31.

9. Fishery dependent community stability (applies to inshore cooperatives)

a. Consolidation limits
   - Vessel caps and limits on the percentage of the total allocation that a person can hold (accessible only through a cooperative).

   Harvester use caps in each region (WG and CG/WY). Harvesters that exceed these percentages are grandfathered into the program. No person may hold or use more than the following percentage of target species CV shares, using the individual and collective rule:
   Option 1. 3%
   Option 2. 5%
   Option 3. 7%

   - Vessel use caps are applicable within the cooperative. A vessel may not be used to harvest more than the following percentages of target species cooperative quota issued to the CV sector:

   Option 1. 3%
   Option 2. 10%
   Option 3. 15%

- Processor use caps

Processor use caps (facility-based) in each region (WG and CG/WY). Processors that exceed these percentages are grandfathered into the program. No processor shall receive or process more than the following percentage of aggregate target species cooperative quota issued to the CV sector:

Option 1. 10%
Option 2. 20%
Option 3. 30%

b. Target species quota would be required to be landed in the region in which it is designated (WG or CG/WY designation) based on historical delivery patterns during the following years:
   Option 1. The qualifying years for determining target species allocations
   Option 2. 2011 - 2012
   Option 3. Target species CG quota that has historically been landed in Kodiak would have a port of landing requirement to be delivered to Kodiak; CG quota not historically landed in Kodiak would be regionalized (WG or WY/CG).

c. Require individuals or entities to meet fishery participation criteria in order to be eligible to purchase an eligible trawl license with associated history.

10. Transferability

a. (Annually) Full transferability for annual use within the cooperative. Cooperatives can engage in inter-cooperative agreements on an annual basis.

b. (Long-term) The LLP is transferable, with the associated history of the target species (which, when entered into a cooperative, brings with it a pro rata share of PSC.)

   Target species history is severable from a CV trawl license and transferable to another eligible CV trawl license (which, when entered into a cooperative, brings with it a pro rata share of PSC). Transferred history retains the regional delivery designation.

11. Gear conversion

Upon further development, the Council could include gear conversion provisions that allow Pacific cod trawl CV allocations to be fished with pot gear, although any harvest would continue to be deducted from the vessel's annual trawl quota account and would not affect the pot gear Pacific cod sector allocations.

12. Limited access trawl fisheries (CV and CP)

If a license holder chooses not to join a cooperative, it may fish in the limited access fishery. Under the limited access fishery, the LLP's historic share of (non-transferable) target species will be fished in a competitive fishery open to all trawl vessels in the sector who are not members of a cooperative. The catcher vessel limited access fishery will be subject to all current regulations and restrictions of the LLP and MRAs.

PSC limits in the limited access fishery will retain status quo apportionments by area, season, and/or fishery. Halibut and Chinook salmon PSC limits are annually apportioned to the limited access fishery on a pro rata basis relative to groundfish catch histories associated with LLPs that are not assigned to a cooperative, as reduced by [options: 10% - 30%].

13. Sideboards

Consider whether sideboards that apply under the Rockfish Program for the CV and CP sectors, non-exempt AFA CV sideboard limits, non-AFA crab vessel groundfish sideboards, and Amendment 80 groundfish and halibut PSC sideboard limits in the GOA should be removed.

Consider sideboards for or prohibition of directed fishing for Pacific cod in the West Yakutat area with trawl gear. Consider sideboards on directed fishing for Pacific cod with pot gear in the WG and CG (harvest that accrues to the Pacific cod pot sector allocations).

14. Program review

Per the Magnuson Stevens Act, a program review would be conducted five years after implementation and every seven years thereafter.

15. Cost recovery and loan program

Per the Magnuson Stevens Act, a cost recovery program would be implemented to recover the incremental agency costs of the program related to data collection, analysis, and enforcement, up to a maximum of 3% of the ex-vessel value from landings of species allocated under the program. Up to 25% of cost recovery fees may be set aside to support a loan program for purchase of shares by fishermen who fish from small vessels and first-time purchases of shares under the program. Loan qualification criteria would need to be defined.

The Council also requests further information on latent trawl licenses and their effect on the proposed cooperative program, to evaluate the need for further recency criteria in the WG and CG trawl CV sectors.