Discussion Paper

Review of Proposed Program for Gulf of Alaska Trawl Bycatch Management

North Pacific Fishery Management Council
October 2015

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1 Introduction

1.1 History of this Action

In recent years, the Council has advanced a number of actions that mandate reductions in prohibited species catch (PSC) limits in Gulf of Alaska (GOA) fisheries. In 2012, the Council established separate Chinook salmon PSC limits in the Western and Central GOA directed pollock fisheries (GOA Amendment 93). In June 2013, the Council recommended a Chinook salmon PSC cap for the GOA non-pollock trawl fisheries; those caps went into effect for the 2015 fishing year (GOA Amendment 97).\(^1\)

Previous to that, at the June 2012 meeting, the Council took final action to reduce halibut PSC limits in the GOA trawl and hook-and-line groundfish fisheries (GOA Amendment 95). That action 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. Chinook salmon and halibut PSC limits are established in Federal regulations, and remain in effect until changed by a subsequent Council action to amend those regulations.

In the course of deliberations on reducing PSC limits in the GOA fisheries, the Council has acknowledged that broader revisions to management measures could aid fleets in achieving PSC reduction goals. The Council began the process of considering potential management revisions 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 the trawl fleet and processors with tools for more effective management of PSC. At that time, the Council limited the action to the Central GOA groundfish trawl fishery. The original Purpose and Need statement was expanded during the February 2013 to include the Western GOA trawl fishery. The current Purpose and Need statement and Council Objectives are provided in Sections 1.3 and 1.4 of this document. Council staff has provided five discussion papers outlining various catch share issues to inform the Council on program elements that could meet its objectives.

The first paper\(^2\) notes that the Magnuson-Stevens Act (MSA) prescribes certain aspects of the development of limited access privilege programs (LAPP), often referred to as catch share programs. Those aspects include: excessive share caps, which cap the percentage of the limited access privileges that may be held by any entity; a directive that the Council consider current and historical harvests in making share allocations; and a further directive to 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 in determining how the elements of the program meet management objectives and MSA National Standards. With respect to these program elements, if, at any time after due consideration, it is determined 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 given the element due consideration and justified its exclusion from the program.

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1 These regulations do 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 subject to closures resulting from attainment of a Chinook PSC limit.
The February 2013 discussion paper focused on the need to create a management environment in which harvesters are better able to avoid PSC and more efficiently use 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 which managed species might be allocated under the program, the Council continues to examine the effect of including (or excluding) a species on the pace of the fishery, and whether allocation would cause more cooperative or strategic fishing behavior.

The Council intends for the program contribute to the stability of volume and timing of landings, in order to allow better planning by processors. Processors’ ability to tailor their production to market demand can increase utilization and wholesale revenues. The allocation of PSC would create an individual incentive for each harvesting entity to obtain the greatest possible value from the use of available PSC. The value in the fishery is derived from catching either target or secondary groundfish species. When total allowable catch (TAC) 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 allocations, an individual vessel’s PSC affects everyone fishing under the shared PSC limit. However, if target species TAC is a constraint, PSC allocations alone (without target species allocations or other program elements that slow the fishery) are unlikely to result in a slower or more coordinated fishing behavior. When target species are limiting – i.e., when TAC is fully harvested in a typical year – a participant with PSC quota faces a choice in determining a level of PSC avoidance. The participant must decide whether harvesting target species more rapidly (using relatively more PSC quota in the process) will increase his or her share of the available target catch sufficiently to justify forgoing future fishing in other target fisheries in the event that PSC limits close those fisheries before the TAC is taken. Target allocations would allow vessels to 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 (including target species catch rates, availability of marketable incidental species, PSC rates, market conditions, and weather) without the risk of other participants depleting the availability of the target species. 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, MRAs have proven to be an effective tool for managing harvests of valuable secondary species that are not open for directed fishing, such as sablefish and some rockfish species. Vessels balance their directed harvests with harvests of MRA limited species. On a given trip within a derby fishery, participants must trade the time spent targeting directed species for time to target MRA species. Participants in a catch share fishery do not experience the same time pressures, so they are better able to harvest up to the MRA for all valuable secondary species. If participants value an MRA species more highly than the allocated directed species, a race may result, wherein participants seek to retain MRA catch before NMFS shifts the secondary species to non-retention status.

The February 2013 discussion paper also considered processor provisions for the program, eligibility to hold quota shares, Alaska state water issues, and described other comparable programs that have considered and applied the MSA’s LAPP provisions to meet similar objectives.
A second discussion paper\(^3\) was presented at the June 2013 Council meeting. That paper focused on four primary topics in addition to a “roadmap” of specific decisions that might be necessary to implement a catch share program. The first topic was a presentation of historic participation data in the Central and Western GOA trawl fisheries, including information about the issued groundfish LLPs that had a GOA trawl endorsement, the number of vessel that reported catch in the GOA trawl fishery (by area), the total metric tons of groundfish harvested by those vessels when using trawl gear, and the trawl gear PSC mortality attributed to those vessels. The paper’s second topic was State waters management, and its interaction with a GOA trawl LAPP. State waters topics 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 the 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 fisheries associations (CFA), port of landing requirements, and regionalization of landings.

A third discussion paper\(^4\) was presented at the October 2013 Council meeting. That paper included a review of eight industry proposals that the Council received at its June 2013 meeting. The Council did not direct staff to rank or select options based on those proposals. Staff also reviewed recent scientific literature on LAPPs, as requested by the SSC. State waters issues were discussed in terms of actions that Federal fisheries could take to help ensure the program would function as intended, without creating conflicting regulations across State and Federal management boundaries. Additional work is ongoing to determine the best method of addressing interactions between State and Federal fisheries; some of those efforts are summarized in this discussion paper (Section 2.8). Finally, the October 2013 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 CFA in a GOA Trawl Bycatch 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\(^5\).

A fourth discussion paper\(^6\) was presented at the Council’s April 2014 meeting. Sections of that paper focused on observer coverage levels, permission to harvest trawl cooperative quota with pot gear (gear conversion), sector allocations, community stability issues, a summary of bycatch reductions in other programs, and updated background data summaries that may aid the Council decision process.

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\(^3\) http://www.npfmc.org/wp-content/PDFdocuments/catch_shares/GOAtrawl/GOATrawlDiscPaper513l.pdf
The fifth and most recent discussion paper was presented at the October 2014 Council meeting. During that meeting the Council reviewed the information provided and approved a suite of alternatives. At that meeting, the Council directed staff to begin an analysis of the impacts. At the December 2014 Council meeting, the Council delayed analysis of the entire package so that it could re-evaluate the overarching approach to bycatch management in the GOA. As a result, the Council tasked staff to develop this paper, which focuses on selected program elements that were identified by Council’s Executive Director at the December 2014 meeting. The Council’s October 2014 motion is included as an appendix to this document (Section 5.1).

1.2 Objectives of this Paper

The Council acknowledged that its October 2014 motion for GOA Trawl Bycatch Management lacks additional elements that are not yet defined, but are necessary to provide a sufficient range of reasonable management alternatives. Aspects of the Council’s alternatives that require further definition were presented in the Executive Director’s report at the December 2014 Council meeting. Those 10 issues, an update on the Community Fishing Association discussions, and additional thoughts on Adaptive Management constructs are the focus of this paper. Staff’s intent is to provide information that the Council may need to finish developing a suite of alternatives that supports the Council’s goals and objectives while meeting NEPA requirements. The additional information provided may also be useful as the Council determines the future direction of the program, and whether the current suite of alternatives should be modified.

1.3 Council’s 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. As it currently stands, the Council’s purpose is to create a management structure that allocates allowable harvest amounts to individuals, cooperatives, or other entities in order to mitigate the impacts of a derby-style fishery, and to create accountability measures when utilizing PSC, target, and secondary species. Given that the Council has delayed this action to provide additional time to reflect on policy objectives, the purpose and need might be altered in October. In that case, the Council should consider amending its Purpose and Need Statement.

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

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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

2 Major Issues Considered

At the December 2014 Council meeting, staff identified issues that require additional discussion based on the alternatives that are currently proposed. Those issues are presented in this section. Refer to the table of contents for a list of issues.

2.1 Updated Information on PSC, Primary Species, and Secondary Species Catch

This section updates information on PSC and the catch of primary and secondary species through 2014. Because of the number of tables needed to cover all of the species identified in the Council’s October 2014 motion, the majority of the tables are provided in a supplemental Microsoft Excel file posted on the NPFMC’s web page for this issue\(^8\). Posting the file online also allows stakeholders to access the data in a format that is easier to modify for their own purposes.

In cases where the Council determined that the sector allocations would be based on programs that are currently in place, additional catch tables are not presented. The Council’s motion indicates that Pacific cod allocations will be based on Amendment 83 allocations. Table 5 of the 2015 GOA final harvest specifications\(^9\) defines those CG and WG allocations. That information is presented below in Table 1. WG CVs would be allocated 27.70% of the WG non-jig Pacific cod TAC for the A season and 10.70% of the WG Pacific cod non-jig TAC in the B season. CG CVs would be allocated 21.14% of the non-jig CG TAC for the A season, and 20.45% of the non-jig CG TAC for the B season.

Table 1 Percentage of the annual area Pacific cod TAC allocated to trawl CVs and CPs

<table>
<thead>
<tr>
<th>Am 83</th>
<th>A season</th>
<th></th>
<th>B season</th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CV</td>
<td>C/P</td>
<td>CV</td>
<td>C/P</td>
<td>CV</td>
</tr>
<tr>
<td>WG</td>
<td>27.70%</td>
<td>0.90%</td>
<td>10.70%</td>
<td>1.50%</td>
<td>38.40%</td>
</tr>
<tr>
<td>CG</td>
<td>21.14%</td>
<td>2.00%</td>
<td>20.45%*</td>
<td>2.19%</td>
<td>41.59%</td>
</tr>
</tbody>
</table>

\(^*\) Accounts for 3.81\% of the annual CG TAC being removed and allocated to the CG Rockfish Program

The Council also indicated that it intends to maintain the allocations associated with the Central GOA Rockfish Program. The primary species allocations to participants in the 2015 Central GOA Rockfish Program are presented in Table 2. Only primary rockfish species are allocated in the CG; those include Pacific Ocean Perch, Northern rockfish, and dusky rockfish. As indicated in the table, the CG TAC is allocated to the CG Rockfish Program after the Incidental Catch Allowance (ICA) and a small allocation to the entry-level longline fishery is deducted from the TAC. The remainder of the TAC is allocated to the Rockfish Program cooperatives.

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\(^9\) http://alaskafisheries.noaa.gov/sustainablefisheries/specs15_16/goatable5.pdf
Secondary species allocations for the 2015 Central GOA Rockfish Program are presented in Table 3. The percentages indicated in the table will be maintained under the proposed GOA Trawl Bycatch Program, and CV catch of rougheye/shortraker rockfish will continue to be managed through a MRA that may not exceed 9.72% of TAC.

CPs’ secondary species will also continue to be allocated based on the percentages listed in Table 3. Pacific cod is not allocated as a percentage and will continue to be managed through a MRA.

Table 3 Central GOA Rockfish Program allocation of secondary species

<table>
<thead>
<tr>
<th></th>
<th>CV Cooperatives</th>
<th>C/P Cooperatives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TAC (2015)</td>
<td>Allocation (mt)</td>
</tr>
<tr>
<td>Pacific cod</td>
<td>45,990</td>
<td>1,752</td>
</tr>
<tr>
<td>Sablefish</td>
<td>4,658</td>
<td>316</td>
</tr>
<tr>
<td>Shortraker rockfish</td>
<td>397</td>
<td>0</td>
</tr>
<tr>
<td>Rougheye rockfish</td>
<td>632</td>
<td>0</td>
</tr>
<tr>
<td>Thornyhead rockfish</td>
<td>875</td>
<td>69</td>
</tr>
</tbody>
</table>

Source: NMFS specifications final rule

Allocations are yet to be determined for all species other than Pacific cod and the species allocated under the Rockfish Program. The Council indicated that it intends to consider three sets of years as the basis for any allocation of these species: 2003 through 2012, 2007 through 2012, and 2008 through 2012. The catch data included in the posted Excel file includes all years from 2003 through 2014. However, percentages of the total catch are only presented for the three sets of years defined by the Council. Data from 2013 and 2014 are included because of the MSA requirement to consider recent participation. It is not provided as a signal that the Council intends to move away from the qualifying years that were identified in the October 2014 motion.

Catch data in the Excel tables are in metric tons, and are based on the reported retained catch of each species. This means the retained catch of a species includes all directed and incidental catch of that species. A second table excludes retained catch when the end product was fish meal. Each table also reports the ABC, TAC, and total catch of the species. The information is then broken down by the percentage of the total catch taken with trawl gear, and the percentage of the retained catch harvested with trawl gear taken by CPs and CVs.

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10 The Council is not limited by the years selected in October, and may consider more recent years if it determines it meets its goals and objectives.
2.1.1 **Allocation Scheme for Prohibited Species Catch**

The Council proposed allocating PSC using the method illustrated in Figure 1. The values in Figure 1 represent status quo limits. Additional PSC reductions would reduce the amounts shown.

**Figure 1** Flow chart showing calculations for proposed PSC limits assigned to LLPs
2.1.2 Pacific Halibut PSC

Based on staff assumptions regarding the proposed allocation process, a percentage of the GOA halibut PSC limit must be assigned to each fishery (area and target species) as shown in Figure 1. The PSC allocation to fisheries that were not prosecuted during the qualifying period will be zero\(^{11}\). 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)\(^ {12}\). 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 from the Central GOA Rockfish Program and from halibut PSC that was not used in earlier seasons to the fifth halibut PSC season – 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 simplifies the allocation of PSC limits. However, it is assumed that the PSC limits would be assigned to the complex target fishery prior to being allocated by species. The data in the Excel files only reports the catch at this level, to reduce the number of tables presented.

The flow chart presented in Figure 1 does not attempt to map how Rockfish Program PSC rollovers will be treated. Treatment of the Rockfish Program and the interaction of its PSC limit 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 Section 2.5 of this paper, but all the issues associated with rollovers are not addressed in 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 the sector's allowance for that fishery (CV or CP). 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, within a sector, must still be multiplied by the percent of the qualifying historical catch of a species that is assigned to each eligible license.

In the Council’s October 2014 motion, Alternative 2 suggests using the allocation structure defined in Figure 1 to determine the percentage of the PSC limit that would be assigned to each fishery within each area. The first step in that process is to define the PSC limit by sector. Based on information presented in October 2014, the percentage of the halibut PSC limit available to CPs and CVs is shown in Table 4. The percentage of the PSC limit for each sector is defined for the three time periods that were preliminarily defined by the Council. Based on that information, between 25% and 29% of the PSC limit would be assigned to the CP sector and 71% to 75% would be assigned to the CV sector.

\(^{11}\) For example, NMFS sets a TAC for sculpin, and the directed fishery not closed on January 20, but catch history for sculpin would not be considered under this PSC allocation scheme.

\(^{12}\) Defined in regulation at §679.21(d)(3)(iii)
Table 4  Percent of the GOA halibut PSC limit assigned to catcher/processors and catcher vessels

<table>
<thead>
<tr>
<th>Years</th>
<th>CP %</th>
<th>CV %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003-2012</td>
<td>28.24</td>
<td>71.76</td>
</tr>
<tr>
<td>2007-2012</td>
<td>25.55</td>
<td>74.45</td>
</tr>
<tr>
<td>2008-2012</td>
<td>26.23</td>
<td>73.77</td>
</tr>
</tbody>
</table>

Source: AKFIN summary of catch accounting data

The amount of halibut PSC quota assigned to each license is equal to the sum of all PSC quota for the directed fisheries in which the license has history. The Council must still define how that halibut PSC can be used in the various directed fisheries and at different times throughout the year.

Table 5 provides estimates of the halibut PSC limits that would result from the proposed reductions, assuming no other changes are made to the PSC regulations (status quo, or status quo with only PSC reductions). However, based on the Alternative 2, the assumption is that after the PSC limit is assigned to a cooperative, it could be used in any fishery or season by the members of the cooperative (Alternative 2, Part 6.b). If that element of the motion is carried forward, it would change the limits presented in Table 5. PSC limits that are assigned to the limited access fishery (not in a cooperative) would still be subject to the seasonal, fishery, and area limits. Without further direction from the Council, it is assumed the seasonal, fishery, and area limits would be calculated by multiplying the total PSC limit available to vessels in the limited access fishery by the status quo seasonal, fishery and area limits. For halibut PSC those percentages are defined in Figure 1.

After the GOA halibut PSC limit is divided between catcher vessels and catcher/processors, a percentage of each sector’s limit is assigned to each area and target fishery. Limits are not calculated by season, because that step is unnecessary to determine the allocations by license when the PSC may be used within a cooperative during any season. Table 6 provides estimates of the percentage of halibut used by the CP sector for each area, directed fishery, and time period. The most recent time period (2008 through 2012) assigns about 4% more of the halibut PSC limit to CG fisheries, relative to the other periods. All periods attribute less than 1% of the halibut PSC limit to the West Yakutat district (WY). WY halibut PSC could be attributed to the CG, distributed proportionally to the CG and WG based on their relative history, or could be dropped altogether.

Applying the percentages in Table 6 to the CP sector-level halibut PSC apportionment (Table 4) enables the estimation of PSC limits for each fishery, area, time period, and potential overall PSC limit reduction. These estimates are summarized in Table 7. Using the time period that goes back to 2003 attributes more of the PSC limit to the rockfish and other fisheries; using the two more recent time periods would assign relatively more of the PSC limit to the flatfish fisheries, since the increase in the deep-water flatfish fishery is greater than the reduction to the shallow-water flatfish fishery. It may not be necessary to maintain CP PSC limits by area, since the cooperative members would not vary by area like they would in the CV sector.
Table 5  
Estimated halibut PSC reductions based on Council’s October motion

<table>
<thead>
<tr>
<th>Status</th>
<th>Quo</th>
<th>10% reduction</th>
<th>15% reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline trawl limit (BTL) for GOA</td>
<td>1,705</td>
<td>1,555</td>
<td>1,479</td>
</tr>
<tr>
<td>Council October 2014 Motion (excludes Rockfish Program PSC)</td>
<td>1,515</td>
<td>1,364</td>
<td>1,288</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Trawl Gear Halibut PSC Limits (metric tons)</th>
<th>Calculation</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shallow-water limit</td>
<td>767</td>
<td>700</td>
</tr>
<tr>
<td>January 20 - April 1 (1st Season)</td>
<td>384</td>
<td>350</td>
</tr>
<tr>
<td>Amendment 80 Sideboard</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Non-exempt AFA CV Sideboard</td>
<td>130</td>
<td>119</td>
</tr>
<tr>
<td>April 1 to July 1 (2nd Season)</td>
<td>85</td>
<td>78</td>
</tr>
<tr>
<td>Amendment 80 Sideboard</td>
<td>32</td>
<td>29</td>
</tr>
<tr>
<td>Non-exempt AFA CV Sideboard</td>
<td>29</td>
<td>26</td>
</tr>
<tr>
<td>July 1 to September 1 (3rd Season)</td>
<td>170</td>
<td>155</td>
</tr>
<tr>
<td>Amendment 80 Sideboard</td>
<td>25</td>
<td>23</td>
</tr>
<tr>
<td>Non-exempt AFA CV Sideboard</td>
<td>58</td>
<td>53</td>
</tr>
<tr>
<td>Rockfish CP Sideboard</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Rockfish CV Sideboards</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>September 1 to October 1 (4th Season)</td>
<td>128</td>
<td>117</td>
</tr>
<tr>
<td>Amendment 80 Sideboard</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>Non-exempt AFA CV Sideboard</td>
<td>44</td>
<td>40</td>
</tr>
<tr>
<td>Deep-water limit</td>
<td>682</td>
<td>622</td>
</tr>
<tr>
<td>January 20 - April 1 (1st Season)</td>
<td>85</td>
<td>78</td>
</tr>
<tr>
<td>Amendment 80 Sideboard</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>Non-exempt AFA CV Sideboard</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>April 1 to July 1 (2nd Season)</td>
<td>256</td>
<td>233</td>
</tr>
<tr>
<td>Amendment 80 Sideboard</td>
<td>183</td>
<td>167</td>
</tr>
<tr>
<td>Non-exempt AFA CV Sideboard</td>
<td>18</td>
<td>16</td>
</tr>
<tr>
<td>July 1 to September 1 (3rd Season)</td>
<td>341</td>
<td>311</td>
</tr>
<tr>
<td>Allocation to Rockfish Program C/Ps</td>
<td>74.1</td>
<td>74.1</td>
</tr>
<tr>
<td>Allocation to Rockfish Program CVs</td>
<td>117.3</td>
<td>117.3</td>
</tr>
<tr>
<td>Rockfish C/P Sideboards</td>
<td>43</td>
<td>39</td>
</tr>
<tr>
<td>Amendment 80 Sideboard</td>
<td>89</td>
<td>81</td>
</tr>
<tr>
<td>Non-exempt AFA CV Sideboard</td>
<td>24</td>
<td>22</td>
</tr>
<tr>
<td>September 1 to October 1 (4th Season)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Amendment 80 Sideboard</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Non-exempt AFA CV Sideboard</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>October 1 through December 31 (5th Season - combined deep and shallow water limit)</td>
<td>256</td>
<td>233</td>
</tr>
<tr>
<td>Amendment 80 Sideboard</td>
<td>102</td>
<td>93</td>
</tr>
<tr>
<td>Shallow-water*</td>
<td>39</td>
<td>35</td>
</tr>
<tr>
<td>Deep-water*</td>
<td>63</td>
<td>58</td>
</tr>
<tr>
<td>Non-exempt AFA CV Sideboard</td>
<td>52</td>
<td>48</td>
</tr>
</tbody>
</table>

* Managed as combined shallow-water and deep-water PSC limits
Table 6  Estimated halibut PSC limit percentages for the CP sector by years, area, and directed fishery

<table>
<thead>
<tr>
<th>Target Fishery</th>
<th>WG</th>
<th>CG</th>
<th>WY</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deep Water Flatfish</td>
<td>5.36%</td>
<td>65.53%</td>
<td>0.00%</td>
<td>70.89%</td>
</tr>
<tr>
<td>Shallow Flatfish</td>
<td>2.82%</td>
<td>12.50%</td>
<td>0.00%</td>
<td>15.32%</td>
</tr>
<tr>
<td>Rockfish</td>
<td>8.57%</td>
<td>1.85%</td>
<td>0.70%</td>
<td>11.12%</td>
</tr>
<tr>
<td>Other</td>
<td>1.58%</td>
<td>1.08%</td>
<td>0.00%</td>
<td>2.67%</td>
</tr>
<tr>
<td>Total</td>
<td>18.33%</td>
<td>80.96%</td>
<td>0.70%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Table 7  Estimated halibut PSC limit (mt) attributed to the CP sector by area and fishery

<table>
<thead>
<tr>
<th>Target Fishery</th>
<th>Status Quo</th>
<th>5% Reduction (1st Year)</th>
<th>10% Reduction</th>
<th>15% Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WG</td>
<td>CG</td>
<td>WY</td>
<td>WG</td>
</tr>
<tr>
<td>Deep Water Flatfish</td>
<td>21</td>
<td>256</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>Shallow Flatfish</td>
<td>11</td>
<td>49</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Rockfish</td>
<td>33</td>
<td>7</td>
<td>3</td>
<td>32</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>4</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>72</td>
<td>316</td>
<td>3</td>
<td>68</td>
</tr>
<tr>
<td>Deep Water Flatfish</td>
<td>35</td>
<td>248</td>
<td>0</td>
<td>34</td>
</tr>
<tr>
<td>Shallow Flatfish</td>
<td>12</td>
<td>41</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>Rockfish</td>
<td>34</td>
<td>7</td>
<td>3</td>
<td>32</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>4</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>300</td>
<td>3</td>
<td>83</td>
</tr>
<tr>
<td>Deep Water Flatfish</td>
<td>39</td>
<td>212</td>
<td>0</td>
<td>37</td>
</tr>
<tr>
<td>Shallow Flatfish</td>
<td>18</td>
<td>52</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>Rockfish</td>
<td>26</td>
<td>21</td>
<td>3</td>
<td>25</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>13</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>91</td>
<td>297</td>
<td>3</td>
<td>86</td>
</tr>
</tbody>
</table>

The proportion of the halibut PSC limit attributed to each CV fishery and area are presented in Table 8. Halibut PSC allocations for the Pacific cod and pollock directed fisheries only appear in the CV table, because those fisheries are only open in the GOA to directed fishing by catcher vessels. Because pollock is primarily harvested using mid-water gear, less than 5% of the GOA halibut PSC limit is attributed to that fishery under any of the options considered. The majority of the halibut PSC limit is attributed to the shallow-water flatfish, Pacific cod, and deep-water flatfish fisheries.
On an area basis, over 95% of CV halibut PSC is attributed to the CG. In the WG, almost all of the halibut is attributed to the Pacific cod fishery, with only small percentages for the pollock, rockfish, and shallow-water flatfish fisheries. Based on these apportionments, the WG CV fleet would need to reduce its usage of halibut PSC in the Pacific cod fishery if those vessels hope to expand their effort into rockfish and flatfish fisheries.

### Table 8 Estimated halibut PSC limits percentages for the CV sector by years, area, and target species

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Deep water flatfish</td>
<td>0.00%</td>
<td>28.03%</td>
<td>0.00%</td>
<td>28.03%</td>
</tr>
<tr>
<td>Other</td>
<td>0.00%</td>
<td>0.02%</td>
<td>0.00%</td>
<td>0.02%</td>
</tr>
<tr>
<td>Pacific cod</td>
<td>4.59%</td>
<td>25.83%</td>
<td>0.00%</td>
<td>30.42%</td>
</tr>
<tr>
<td>Pollock</td>
<td>0.24%</td>
<td>4.48%</td>
<td>0.04%</td>
<td>4.76%</td>
</tr>
<tr>
<td>Rockfish</td>
<td>0.00%</td>
<td>0.06%</td>
<td>0.06%</td>
<td>0.12%</td>
</tr>
<tr>
<td>Shallow water flatfish</td>
<td>0.00%</td>
<td>36.65%</td>
<td>0.00%</td>
<td>36.65%</td>
</tr>
<tr>
<td>Total</td>
<td>4.83%</td>
<td>95.07%</td>
<td>0.10%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Deep water flatfish</td>
<td>0.00%</td>
<td>25.71%</td>
<td>0.00%</td>
<td>25.71%</td>
</tr>
<tr>
<td>Other</td>
<td>0.00%</td>
<td>0.02%</td>
<td>0.00%</td>
<td>0.02%</td>
</tr>
<tr>
<td>Pacific cod</td>
<td>4.24%</td>
<td>26.23%</td>
<td>0.00%</td>
<td>30.48%</td>
</tr>
<tr>
<td>Pollock</td>
<td>0.20%</td>
<td>4.65%</td>
<td>0.03%</td>
<td>4.88%</td>
</tr>
<tr>
<td>Rockfish</td>
<td>0.01%</td>
<td>0.09%</td>
<td>0.06%</td>
<td>0.15%</td>
</tr>
<tr>
<td>Shallow water flatfish</td>
<td>0.00%</td>
<td>38.76%</td>
<td>0.00%</td>
<td>38.76%</td>
</tr>
<tr>
<td>Total</td>
<td>4.45%</td>
<td>95.46%</td>
<td>0.09%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Deep water flatfish</td>
<td>0.00%</td>
<td>22.14%</td>
<td>0.11%</td>
<td>22.25%</td>
</tr>
<tr>
<td>Other</td>
<td>0.00%</td>
<td>0.26%</td>
<td>0.00%</td>
<td>0.26%</td>
</tr>
<tr>
<td>Pacific cod</td>
<td>3.79%</td>
<td>29.82%</td>
<td>0.00%</td>
<td>33.61%</td>
</tr>
<tr>
<td>Pollock</td>
<td>0.13%</td>
<td>3.35%</td>
<td>0.02%</td>
<td>3.50%</td>
</tr>
<tr>
<td>Rockfish</td>
<td>0.00%</td>
<td>4.27%</td>
<td>0.04%</td>
<td>4.31%</td>
</tr>
<tr>
<td>Shallow water flatfish</td>
<td>0.06%</td>
<td>36.00%</td>
<td>0.00%</td>
<td>36.06%</td>
</tr>
<tr>
<td>Total</td>
<td>3.99%</td>
<td>95.84%</td>
<td>0.17%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Source: eLandings data from AKFIN

Table 9 shows the CV sector’s halibut PSC limits in metric tons for each area and fishery, under the Council’s alternatives for years and reductions. Rounding halibut PSC limits to the nearest metric ton, Pacific cod is the only WG fishery that is attributed more than 3 mt of halibut PSC under any set of historical years. Under a 10% or 15% PSC limit reduction in the GOA, the WG would be limited to less than 50 mt of halibut PSC. The CG would be limited to about 950 mt under a 10% reduction and about 900 mt under a 15% reduction.
Table 9  Estimated halibut PSC limit (mt) attributed to catcher vessel sector by area and fishery

<table>
<thead>
<tr>
<th>Target Fishery</th>
<th>Status Quo</th>
<th>5% Reduction (1st Year)</th>
<th>10% Reduction</th>
<th>15% Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WG</td>
<td>CG</td>
<td>WY</td>
<td>WG</td>
</tr>
<tr>
<td>2008-2012</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deep water flatfish</td>
<td>0 313</td>
<td>0 298</td>
<td>0 282</td>
<td>0 266</td>
</tr>
<tr>
<td>Other</td>
<td>0 00</td>
<td>0 00</td>
<td>0 00</td>
<td>0 00</td>
</tr>
<tr>
<td>Pacific cod</td>
<td>51 289</td>
<td>49 274</td>
<td>46 260</td>
<td>44 245</td>
</tr>
<tr>
<td>Pollock</td>
<td>3 50</td>
<td>3 48</td>
<td>2 45</td>
<td>2 43</td>
</tr>
<tr>
<td>Rockfish</td>
<td>0 1</td>
<td>0 1</td>
<td>0 1</td>
<td>0 1</td>
</tr>
<tr>
<td>Shallow water flatfish</td>
<td>0 410</td>
<td>0 389</td>
<td>0 369</td>
<td>0 348</td>
</tr>
<tr>
<td>Total</td>
<td>54 1,062</td>
<td>51 1,009</td>
<td>49 957</td>
<td>46 903</td>
</tr>
<tr>
<td>2007-2012</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deep water flatfish</td>
<td>0 290</td>
<td>0 275</td>
<td>0 261</td>
<td>0 247</td>
</tr>
<tr>
<td>Other</td>
<td>0 00</td>
<td>0 00</td>
<td>0 00</td>
<td>0 00</td>
</tr>
<tr>
<td>Pacific cod</td>
<td>48 296</td>
<td>45 281</td>
<td>43 266</td>
<td>41 252</td>
</tr>
<tr>
<td>Pollock</td>
<td>2 52</td>
<td>2 50</td>
<td>2 47</td>
<td>2 45</td>
</tr>
<tr>
<td>Rockfish</td>
<td>0 1</td>
<td>0 1</td>
<td>0 1</td>
<td>0 1</td>
</tr>
<tr>
<td>Shallow water flatfish</td>
<td>0 437</td>
<td>0 415</td>
<td>0 394</td>
<td>0 372</td>
</tr>
<tr>
<td>Total</td>
<td>50 1,077</td>
<td>48 1,023</td>
<td>45 969</td>
<td>43 915</td>
</tr>
<tr>
<td>2003-2012</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deep water flatfish</td>
<td>0 241</td>
<td>0 229</td>
<td>0 217</td>
<td>0 205</td>
</tr>
<tr>
<td>Other</td>
<td>0 3</td>
<td>0 3</td>
<td>0 3</td>
<td>0 3</td>
</tr>
<tr>
<td>Pacific cod</td>
<td>41 324</td>
<td>39 308</td>
<td>37 292</td>
<td>35 276</td>
</tr>
<tr>
<td>Pollock</td>
<td>1 36</td>
<td>1 35</td>
<td>1 33</td>
<td>1 31</td>
</tr>
<tr>
<td>Rockfish</td>
<td>0 46</td>
<td>0 44</td>
<td>0 42</td>
<td>0 39</td>
</tr>
<tr>
<td>Shallow water flatfish</td>
<td>1 391</td>
<td>1 372</td>
<td>1 352</td>
<td>1 333</td>
</tr>
<tr>
<td>Total</td>
<td>43 1,042</td>
<td>41 990</td>
<td>39 938</td>
<td>37 886</td>
</tr>
</tbody>
</table>

Source: eLandsings data from AKFIN
Note: Excludes catch in the CGOA Rockfish Program

2.1.3 Chinook Salmon PSC

The Council has established separate Chinook salmon PSC limits for the directed groundfish trawl fisheries for non-pollock species that do not fall under the Central GOA Rockfish Program (non-pollock/non-rockfish), in aggregate, and for the directed pollock fishery. The Chinook hard cap for the non-pollock/non-rockfish fisheries are divided between the CP and CV sectors (Table 10 and Table 11).

The overall non-pollock/non-rockfish PSC limit of 7,500 Chinook salmon includes a set-aside of 1,200 fish for use in the Central GOA Rockfish Program, with provisions that allow unused PSC to roll back into the general CV cap later in the year. The PSC limit for the pollock fishery is set only for the CV sector, since there is no directed CP pollock fishery in the GOA. The CV’s pollock fishery Chinook salmon hard cap is divided between the Western GOA and the Central GOA (Table 12).

Catcher/Processor Sector

Because there is no proposed reduction for the CP sector’s Chinook salmon hard cap, the PSC limit of 3,600 fish is divided by area using the three time periods defined in the Council’s October 2014 motion. The two most recent time periods would assign about 81% of the PSC limit to the CG fisheries and 15% to the WG fisheries. Less than 4% has typically been taken in WY. Under the current set of alternatives, the analysts presume that the Chinook salmon PSC in the WY district could be reassigned to the other areas, but any cooperative fishing in the WY district would need to have sufficient PSC available to cover usage in those fisheries. Based on the number of Chinook salmon available to the CP sector, using the years from 2007, cooperatives would need to reassign 115 to 124 salmon from the WY district to the CG and/or WG.
Table 10  Chinook salmon CP PSC limit in non-pollock and non-rockfish program fisheries, by area

<table>
<thead>
<tr>
<th>Years</th>
<th>Percentage</th>
<th>Number of Fish</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>WG</td>
<td>CG</td>
</tr>
<tr>
<td></td>
<td>26.60%</td>
<td>71.15%</td>
</tr>
<tr>
<td>2003-2012</td>
<td>26.60%</td>
<td>71.15%</td>
</tr>
<tr>
<td>2007-2012</td>
<td>15.70%</td>
<td>81.10%</td>
</tr>
<tr>
<td>2008-2012</td>
<td>15.38%</td>
<td>81.19%</td>
</tr>
</tbody>
</table>

Source: eLandings data from AKFIN

Catcher Vessel Sector

Table 11 provides estimates of area-specific Chinook salmon PSC limits for the non-pollock/non-rockfish fisheries. Current regulations do not divide the PSC limit by area, so historic PSC levels during the three proposed historical time periods were used to apportion the PSC limit of 2,700 fish. Note that while the WG PSC limit is relatively small, a cooperative could combine its portion of this limit with its portion of the pollock fishery limit (Table 12) for use in any fishery. Therefore, even though the WG PSC limit generated from the non-pollock/non-rockfish program fisheries is small, the WG would have the ability to fish in the non-pollock/non-rockfish program fishery by using Chinook salmon that were not used in the pollock fishery.

Table 11  Chinook salmon CV PSC limit in non-pollock and non-rockfish program fisheries, by area

<table>
<thead>
<tr>
<th>Years</th>
<th>Percentage</th>
<th>Number of Fish</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>WG</td>
<td>CG</td>
</tr>
<tr>
<td></td>
<td>2.46%</td>
<td>97.42%</td>
</tr>
<tr>
<td>2003-2012</td>
<td>2.46%</td>
<td>97.42%</td>
</tr>
<tr>
<td>2007-2012</td>
<td>1.33%</td>
<td>98.50%</td>
</tr>
<tr>
<td>2008-2012</td>
<td>1.42%</td>
<td>98.40%</td>
</tr>
</tbody>
</table>

Source: eLandings data from AKFIN

Note: The sum of all areas does not equal 2,700 fish for 2003 through 2012 due to rounding

Table 12 shows the status quo and a 25% reduction to the CV Chinook salmon PSC limits in the GOA pollock fisheries, by area. The area distribution of CV Chinook salmon PSC is set in regulation at §679.21(h)(2)(i) for the WG and §679.21(h)(2)(ii) for the CG. Those PSC limits were calculated using the time series 2001 through 2006 and 2008 through 2009, inclusive. The total PSC limit was apportioned between the Western and Central GOA at an equal ratio proportional to the historical pollock TAC for each area and the average Chinook salmon PSC mortality, in numbers of salmon, in each area. There is no Chinook salmon PSC limit for the CV sector’s pollock and non-pollock fisheries in the WY district, as historical effort and PSC has been low in that area. As in the CP sector, a cooperative’s PSC limit would need to cover any Chinook salmon PSC taken in WY. Any Chinook salmon PSC allocation, whether derived from the CG or WG, could be used to cover Chinook salmon PSC that occurs while trawling in WY.

Table 12  Chinook salmon CV PSC limit in GOA pollock fisheries

<table>
<thead>
<tr>
<th></th>
<th>CG</th>
<th>WG</th>
<th>GOA Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status Quo</td>
<td>18,316</td>
<td>6,684</td>
<td>25,000</td>
</tr>
<tr>
<td>25% Reduction</td>
<td>13,737</td>
<td>5,013</td>
<td>18,750</td>
</tr>
</tbody>
</table>

Source: eLandings data from AKFIN
2.2 Allocating PSC to Processors

The Council’s October 2014 motion includes an option to give processors control over 10% to 40% of the GOA PSC that is allocated to catcher vessel licenses and assigned to a cooperative (Alternative 2, Part 6.b). Allocations to an individual processor would be determined according to the amount of PSC assigned to the CV LLP licenses in its cooperative. Processors could assign that pool of PSC incrementally to vessels within the cooperative, under terms established in the approved cooperative contract. Annual contract terms might address when and how processor-held PSC quota can be activated, and how its use promotes vessel-level accountability as well as the cooperative’s plan for monitoring and minimizing PSC, as required under Alternative 2, Part 6.f. The Council could require Inshore cooperatives to include information in their annual reports on how this PSC was allocated. Annual reporting requirements are further discussed in Section 2.3.

The option further states that the PSC allocated to a processor could not be used by CVs in which a processor cooperative-member holds more than a 10% ownership stake, as determined by “individual and collective” rules for determining ownership. So-called individual and collective ownership considers an entity’s direct and indirect ownership in another entity – here, a vessel. The term “individual and collective” was first used in the regulations for the halibut and sablefish IFQ program (§679.42) that established quota share use caps, but the term itself is not defined. The Crab Rationalization Program describes the linkage between processors and harvesting vessels through the term “Affiliation.” The regulations for that program define standards for measuring affiliation at §680.2. In short, processor control over a vessel may exist when a processor has the ability to direct the business operations of the vessel. In addition to direct ownership, a controlling stake in an entity could be the result of a lease arrangement. According to the definition cited above, a processor and a vessel would also be considered affiliated if a third entity (e.g., corporation, association, partnership, joint-stock company, trust, etc.) directly or indirectly owns or controls a 10 percent or greater interest in, or otherwise directs the business operations of, both the processor and the vessel. In the Crab Program, affiliation is determined through an affidavit that is submitted as part of the annual application to receive cooperative quota. The application defines the term “affiliation” according to §680.2, and the applicant indicates whether they are affiliated with any entities that hold crab processing quota and identifies those entities by name, address, and phone number. That information is submitted under penalty of perjury. The information is not routinely audited, but could be investigated by NOAA OLE if there was reason to question its truthfulness. NMFS asks permit or quota share holders that are corporately held to identify who owns the corporation to the individual level, again under penalty of perjury.

For the GOA program, an entity wishing to use a vessel to harvest a portion of a GOA trawl Inshore cooperative’s annual quota could be required to state whether 10 percent or more of the entity that owns the vessel is, itself, owned by the processor associated with the cooperative, if the vessel-owning entity is otherwise “controlled” by the cooperative processor, or if a third entity controls both the processor and the vessel-owning entity. If any of those statements are true, then the vessel and processor are affiliated.

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13 “Indirect interest” is defined as an interest that passes through one or more intermediate entities. “An entity’s percentage of indirect interest in a second entity is equal to the entity’s percentage of direct interest in an intermediate entity multiplied by the intermediate entity’s direct or indirect interest in the second entity.” (§680.2(2))
Though not explicitly stated in the most recent Council motion, previous motions had envisioned that NMFS would hold the processor-controlled PSC quota and would distribute it to the cooperative upon the processor member’s request. The Council may wish to consider whether restricting the amount of processor-controlled PSC quota that can be activated before a certain date in the year would provide the cooperative with a useful tool for addressing program objectives, or whether it would be an unnecessary constraint on a cooperative’s flexible management strategy.

**Defining the Objective of the Option**

In further developing this action, the Council should explicitly state its purpose for considering processor control over a portion of a cooperative’s annual PSC allocation, as it relates to the program’s overall goals and objectives (listed in Section 1.4). Based on the analysts’ interpretation of the Council’s public deliberations, allocating cooperative PSC to processors could serve any, or all, of the following five purposes:

1. Help balance the negotiating power between the harvesting and processing sectors;
2. Place marginally more PSC quota under the control of the entity that is in a position to distribute it in a manner that achieves Council and cooperative objectives;
3. Provide processors an access privilege that could be leveraged to recruit harvest vessels to join their cooperative;
4. Build into the program a mechanism that facilitates the use and effectiveness of intra-cooperative performance incentive plans;
5. Compensate for, or defray, the impact of the capital asset devaluation that processors’ past investments might undergo in the transition from a limited access pulse fishery to a rationalized fishery.

The remainder of this subsection discusses the various rationales for granting processors control over a portion of cooperative PSC quota in greater detail. Program goals and objectives that are consistent with each rationale are identified (paraphrased, as applicable). As a caveat, most of the goals and objectives that are referenced below call for a balance of benefits for both the processing and the harvesting sectors, among other stakeholders. In some cases, a measure that might benefit processors would require a trade-off in harvester benefits.

**1. Balance negotiations.** Allocative actions inevitably affect negotiating dynamics in the ex-vessel market. If CVs are able to deliver their catch to any processing plant, allocating harvest privileges exclusively to LLP license holders could create a favorable situation for harvesters at a cost to processors. Processors competing for deliveries might have to bid up or promise higher ex-vessel prices in order to fill their line capacity. Processors have testified to the Council that their sector has made capital investments to meet peak demand during high-pulse periods in the GOA trawl year; they state that those investments were instrumental in developing GOA groundfish markets. Processors are concerned that they might find themselves overcapitalized for a more moderately paced catch share fishery. Even if

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Note that the October 2014 motion includes initial Inshore cooperative formation requirements that would likely not allow for free delivery to any processing plant, but NOAA GC has cautioned the Council that such a program element would be difficult for the Secretary of Commerce to approve under existing regulatory guidance (see Section 2.2.1 for further explanation of the NOAA GC opinion).
harvesters and processors are formally linked through a cooperative’s contract terms, the harvest sector’s control over groundfish and PSC quota would give vessels greater influence over the timing and delivery of catch which, in turn, could affect ex-vessel prices, variable operating costs, and the flow of economic rents.

Giving processors additional control over a cooperative’s PSC would likely provide that sector with more influence over cooperative vessels’ harvest and delivery plans. PSC has implicit value, as a potential constraint on groundfish harvest. It should be noted, however, that processors have some inherent influence over vessels’ fishing plans, regardless of where the harvest allocation resides. Vessels will always require a delivery market, and their ability to withhold their effort for a better ex-vessel price is limited by the seasonality of fishing, and GOA processors’ well-understood plan to largely switch from groundfish to salmon products in the summer months.

**Applicable Council Goals/Objectives:**
4 – Consider the value of assets and investments in the fishery, and dependence for harvesters, processors, and communities.
5 – Balance the interests of all sectors and provide equitable distribution of benefits and similar opportunities for increased value.
6 – Promote community stability by providing employment opportunities and increasing the economic viability of harvesters and processors.
8 – Allow processors to better plan operational needs as well as identify and exploit new products and markets.

**2. Enhance efficiency in use of PSC quota.** The processor member of a cooperative is in an advantageous position to manage in-season PSC usage and needs within the cooperative. A processor is able to monitor offloads, speak with skippers after each trip about where PSC was encountered, and would have an understanding of PSC levels before observer data is transmitted and revised after NMFS debriefing (either through personal communication or by observing salmon bycatch, which is required to be brought to shore). Vessel operators would undoubtedly be able to communicate similar information amongst themselves – especially under a cooperative structure – but processors have systematic access to near real-time data, and have a private incentive to manage the cooperative’s PSC quota in a manner that increases the fleet’s potential production level in aggregate. For example, the processor would have a good idea of which vessels are the cleanest (in terms of PSC) and most efficient, so this measure might increase overall TAC utilization. In an economic sense, the processor is in a good position to minimize the internal transaction costs involved in managing the cooperative’s PSC. It should be noted, however, that a cooperative manager might fill the same role, to the extent that he or she could access the same quality of timely information; the cooperative manager might use that position and information to serve harvester interests, first.

**Applicable Council Goals/Objectives:**
2 – Increase the ability of the trawl sector to avoid PSC and utilize PSC more efficiently and cooperatively.
7 – Improve the ability of the trawl sector to achieve Optimum Yield.
3. **Facilitate cooperative formation.** If the Council recommends a program without fixed linkages between harvesters and processors—where vessels can co-op with any plant, or change their affiliation from year to year—giving processors control over some cooperative PSC might provide processors with a tool to recruit and retain vessels with harvest quota. While the amount of PSC over which a processor has control would be determined on an annual basis, depending on which LLPs are enrolled in their cooperative, the processor’s choices about how to distribute that quota during the year might affect vessels’ choices about cooperative affiliation in subsequent years. The details of how processor-held PSC quota is distributed would likely be subject to bylaws that are established in the cooperative contract, which is submitted to NMFS but developed independently.

**Applicable Council Goals/Objectives:**

- **4** – Consider the value of assets and investments in the fishery, and dependence for harvesters, processors, and communities.
- **6** – Promote community stability by providing employment opportunities and increasing the economic viability of harvesters and processors.

4. **Facilitate cooperative incentive plans.** Using regulations to place some amount of a cooperative’s PSC under the processor’s control effectively builds in a starting point for the development of intra-cooperative performance-based incentive programs. Developing incentive-based measures without a built-in processor PSC allocation could set up a more contentious process, as contract negotiations would have to start with the question of how much (what percentage) of each LLP’s annual PSC allocation would have to come “off the top” to fund the incentive pool. Giving the processor control over a larger proportion of the PSC quota pool would strengthen the effect that any incentive might have on fleet behavior, as it would increase the likelihood that harvesters would need access to processor-held quota in order to catch their suballocation of groundfish. Performance-based incentives would also have a greater effect on fleet behavior during years in which PSC is likely to be a constraint—for example, in years of high Chinook salmon abundance. Each cooperative could define its own objectives for the use of processor-held PSC, and those objectives could go beyond bycatch minimization. Processors could use the quota to support vessels that stay in the GOA year-round and keep the plant and its employees operating later into the fall; they could encourage vessels to go out fishing at certain times when market values are high or when line capacity is unfilled; they could incentivize vessels to expand into underutilized flatfish targets; or they could reward vessels for maximizing their catch of high-value secondary species (limited by MRAs). Cooperatives could set different objectives for the use of Chinook salmon PSC versus halibut PSC, where one account could be used to encourage bycatch avoidance and the other could be used to encourage enhanced value creation.

**Applicable Council Goals/Objectives:**

- **2** – Increase the ability of the trawl sector to avoid PSC and utilize PSC more efficiently and cooperatively.
- **3** – Reduce bycatch and regulatory discards.
- **6** – Promote community stability by providing employment and entry opportunities and increasing the economic viability of harvesters and processors.
- **7** – Improve the ability of the trawl sector to achieve Optimum Yield, including increased retention, utilization, landings, and value.
- **8** – Increase stability relative to the volume and timing of trawl landings.
14 – Promote active participation by owners of fishing privileges.

5. Compensate processors. As alluded to under the first possible rationale, processors have testified to the Council that their sector has built up capital that was necessary to support the GOA limited access fisheries, but that might be underutilized if the fishery is rationalized. In the context of the current Council motion, which does not contemplate allocating harvest privileges to processors, those stakeholders have proposed several avenues that would guard against economic rent dissipation, to some degree. Those proposals have included fixed harvester-processor cooperative linkages, which is part of the Council’s motion (see Section 2.2.1 and the letter in Section 5.2), and the option discussed in this section. Recall, also, the caveat that direct or indirect forms of “compensation” to the processing sector would have a countervailing effect on the harvest sector.

Applicable Council Goals/Objectives:
4 – Consider the value of assets and investments in the fishery, and dependence for harvesters, processors, and communities.
5 – Balance the interests of all sectors and provide equitable distribution of benefits and similar opportunities for increased value.
6 – Promote community stability by increasing the economic viability of harvesters and processors.

Other Considerations

Effects on processor-owned vessels. This section already noted that the Council’s proposed option would not allow processor-held PSC quota to be used on vessels that are owned by the cooperative’s processor, as determined by the individual and collective rule. The analysts assume that this limitation is intended to prevent preferential treatment of certain vessels by the processor.

Depending on how the option is structured, this limitation might unintentionally disadvantage the vessels that are processor-owned. That could, in turn, adversely impact the skippers and crew on those vessels, who are compensated in relation to their catch. As written, the option would prevent a processor-owned vessel from using up to 40 percent of the PSC quota that came into the cooperative by virtue of its LLP. Such a reduction could significantly reduce that vessel’s harvest opportunity in a PSC-constrained year. By contrast, unaffiliated cooperative vessels, as a group, would have access to additional PSC quota that came into the cooperative due to someone else’s catch history. In effect, this constitutes a transfer of harvest opportunity from one sub-group within the cooperative to another. The cooperative manager could attempt to rectify the situation by reapportioning a compensating amount of the cooperative’s unrestricted PSC to the processor owned vessels. Perhaps a simpler way to avoid inequity while still funding a processor-held PSC account would be to only give the processor control over 10 to 40 percent of the PSC that is associated with LLPs that are not named on a processor-owned vessel. Another approach would be to allow processor-owned vessels to use up to the amount of PSC that was allocated to the cooperative by virtue of their LLPs. In other words, if the processor-owned vessels/LLPs accounted for 60% of the cooperative’s PSC allocation, then they could access up to 60% of the cooperative’s PSC.

The Council might also consider exempting cooperatives that exclusively consist of processor-owned vessels from regulations that result from this option. Whether any such cooperatives would exist will
depend on how the cooperative formation process is structured (i.e., through delivery history, through voluntary affiliation, and whether there can be more than one processor in a cooperative).

Even if there is no direct adverse impact on processor-owned vessels – as might be the case in a year when harvest is not constrained by PSC – preventing processor-owned vessels from accessing a set-aside pool of PSC quota might also eliminate an opportunity to provide those vessels with positive incentives. If, for example, the cooperative contract stipulates that processor-held PSC is distributed based on bycatch performance, the processor-owned vessels would experience additional bycatch performance incentive.

If the Council were to remove the restriction on processor-owned vessels using the processor’s PSC quota, it may be worth including a specific requirement for the cooperative’s annual report to include a breakdown of which vessels received that PSC quota, and why. The Council or NMFS would be able to monitor whether the PSC was distributed equitably, whether it was distributed according to cooperative bylaws, and whether any sub-group of cooperative vessels was obviously disadvantaged.

*Western vs. Central GOA.* The Council could consider including a suboption that would allow the selection of different percentages of processor-held PSC in either GOA regulatory area. For example, the Council could give processors in Central GOA cooperatives control over 20 percent of the cooperative’s PSC quota, but give Western GOA processor control over only 10 percent of PSC quota (or vice versa). Several of the rationales provided earlier in this section would characterize this option as a measure to either help processors recruit or maintain a harvesting fleet, to balance price negotiating positions between harvesters and processors, or to compensate processors for the devaluation of capital as fisheries transition from high-pulse derbies to moderately paced catch share fisheries. Future analysis of the larger GOA Trawl action might reveal that the need to counteract these outcomes is not the same in both areas. For example, Western GOA trawl CVs participate mainly in pollock and Pacific cod fisheries, which might be less likely to spread out over time under a catch share program. Relative to flatfish, the timing of those directed fisheries might still be constrained by pollock roe content, fish aggregation, or the historical movement of that fleet into state fixed-gear fisheries or BSAI fisheries at certain points in the year. In terms of competition among processors for deliveries, analysis might reveal that Western GOA vessels have a much more limited ability to shop their catch to different plants, given the geography of the area. These and other more specific examples might emerge as the Council fully defines its proposed structure for cooperative formation and the flexibility, or lack thereof, in harvester-processor affiliation.

### 2.2.1 “Fixed Linkages” Between Harvesters and Processors in a Cooperative

This discussion paper provides an opportunity for staff to summarize NOAA General Counsel (NOAA GC) feedback on part of the Council’s proposed cooperative formation provisions. At the October 2014 meeting, NOAA GC commented on an element that would create “fixed linkages” between the harvester and processor members of a particular Inshore cooperative. That element would place a given harvester LLPs in a particular cooperative based on its historical landings; the harvester would be linked to the processor to which the vessel(s) named on the LLP delivered the majority of its groundfish during a specific period of years. That element of the program remains part of the Council’s most recent motion (Alternative 2, Part 6.d).
NOAA GC’s comments identified this element as a measure that is substantively identical to a requirement for Inshore cooperatives in the CGOA Rockfish Pilot Program (RPP). In the RPP, harvesters were only allowed to join the cooperative that was associated with the processor to which it delivered the most pounds of rockfish during a designated period. The terms of the cooperative contract between the harvester and the designated processor were not regulated (i.e., subject to private negotiations between the cooperative members). However, because the contract required approval by the RPP cooperative’s processor member, it was “generally expected” that the agreement would include obligations for the member harvesters to deliver certain amounts of catch to the associated processor. NMFS determined that the RPP’s cooperative formation requirement constituted an allocation of onshore processing privileges. Such allocations were authorized under the Consolidated Appropriations Act of 2004, but that legislation expired at the end of 2011. With the exception of the BSAI Crab Rationalization Program, NOAA GC’s position has been that the MSA does not authorize the allocation of onshore processing privileges. This position was most recently reiterated in 2011 with the implementation of the CGOA Rockfish Program (Amendment 88 to the GOA Groundfish FMP), which replaced the RPP. Since then, no new legislation that would affect that legal position has amended the MSA or created special authority for a Fishery Management Council to allocate onshore processing privileges. NOAA GC stated that, absent legislation authorizing the allocation of onshore processing privileges, NOAA would not be able to approve a “fixed linkage” provision if it were submitted by the Council for Secretary of Commerce review. However, NOAA GC went on to state that the Council may continue to include that provision in its suite of alternatives if it thinks that that particular approach is the best way to meet the goals and objectives for the GOA Trawl Bycatch Management Program. NOAA GC has recently reiterated this legal opinion in a letter from Under Secretary of Commerce Sullivan to Congressman Young of Alaska (see Section 5.2).

### 2.3 Annual Cooperative Reports

Alternative 2 (Parts 6 and 7) describe proposed structures for Inshore and CP cooperatives. Cooperatives would be required to submit a written annual report to the Council and NMFS (Parts 6.h and 7.g). The motion states that the Council will develop specific reporting criteria, including required content and the submission deadline. For reference, reporting requirements and deadlines in existing programs are summarized in Section 5.3. The Council was provided with a staff discussion paper on existing cooperative reporting requirements in December 2013. This section does not address the required elements of cooperative contracts in detail. Required elements are currently defined in Parts 6.f and 7.e of Alternative 2. Several aspects of those subparts should remain on the Council’s radar for further consideration. First, relevant to the topic of this section, the deadline for a cooperative to present a signed contract to NMFS could affect the feasibility of different reporting deadlines. Alternative 2 states that, in order to receive cooperative quota based on their individual catch history, harvest license holders must be in a cooperative by November 1 of the year prior to that in which the contract applies. The Council should specify whether the cooperative contract must be signed by November 1, or whether that deadline only requires license holders to register their intent to join a

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16 NMFS successfully defended the position taken in GOA Groundfish FMP Amendment 88 before the District Court for the Western District of Washington in *Trident Seafoods Corp. v. Bryson* (2012 WL 5993216 (W.D. Wash. November 30, 2012)).

cooperative, or a particular cooperative. Second, the motion states that cooperative contracts must be filed with NMFS, but does not explicitly state that NMFS or the Council must approve the contract. The Council should eventually state what level of contract approval, if any, will be required. Third, the Council’s motion includes an option that would require a contract signatory who represents the community (or communities) in which the cooperative’s processor member(s) are located. The Council has not yet defined who 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.

**Required Reporting Elements**

The Council has established cooperatives reporting requirements for the AFA program\(^\text{18}\), the Amendment 80 sector, the Central GOA Rockfish Program, and BSAI crab cooperatives. Cooperative reports are intended to help the Council track the effectiveness of the cooperative and their ability to meet the Council’s management objectives. Cooperative reports are also a tool for participants to provide feedback on the programs. Required elements establish a minimum amount of information to be provided to the public, and the Council has the flexibility to request additional information that might pertain to a management issue of current interest.

The particular reporting elements that the Council requires should be reflective of the overarching program objectives. For instance, the Council may request more detailed PSC or bycatch information if it is considering some form of performance-based quota reallocation. The criteria for the use of Adaptive Management quota (under Alternative 3, Option 2) might also determine what information the Council ultimately requires. The Council might also ask cooperatives to review their own performance in regards to the implementation of their plan to monitor and minimize PSC with vessel-level accountability, which is a required element of the cooperative contract (Alternative 2, Parts 6.f and 7.e).

Reporting requirements must be in compliance with the confidentiality regulations in the MSA. Typically, confidentiality restricts the public release of vessel-level data on catch and effort. However, MSA §402(b)(2)(A) includes an exception to observer data in the North Pacific:

> “Any observer information shall be confidential and shall not be disclosed, except […] as authorized by a fishery management plan or regulations under the authority of the North Pacific Council to allow disclosure to the public of weekly summary bycatch information identified by vessel or for haul-specific bycatch information without vessel identification.”

With the Council’s authorization, NMFS reports weekly vessel-level PSC on its website for certain fully observed programs. If the Council ultimately recommends a program structure that does not include 100 percent observer coverage, it could request that vessel-level bycatch information be submitted by the cooperative voluntarily. Whether or not the Council could make certain program elements or allocations contingent upon voluntary data submission would require a review by the NOAA General Counsel office, which would be looking for a clear request for review by the Council before developing a legal opinion.

\(^{18}\) Additional reports by AFA sector representatives cover Chinook salmon bycatch reduction efforts under their individual incentive plan agreements (IPA), and chum salmon bycatch avoidance under the Inter-Cooperative Agreement (ICA).
The proposed regulations for the program should specify whether a cooperative report would be submitted to the Council or to NMFS. Information submitted directly to the Council is subject to confidentiality restrictions. NMFS would have access to vessel-level catch and PSC information through CAS data. However, a vessel-level cooperative report could supply additional information, such as individual accountability measures. The Council could recommend a two-step process for cooperative report publication, wherein cooperatives submit their report to NMFS and the agency redacts or summarizes confidential data before the document is made public. This process would require additional NMFS staff time, but could allow the Council to request information to which it is not typically able to access. The utility of this additional step would depend on which reporting elements the Council eventually requests as part of the final cooperative program structure.

The following is a list of reporting elements from across existing cooperative-based programs in Alaska\(^\text{19}\). This list may serve as a starting point for the Council to develop specific criteria for the GOA Trawl Bycatch Management program:

**Allocations and transfers**
- Annual allocations to the cooperative;
- Sub-allocations to each vessel;
- Inter-cooperative transfers (permanent and in-season);
- Intra-cooperative transfers (in-season).

**Catch and retention**
- Retained and discarded catch on an area-by-area and a vessel-by-vessel basis;
- Catch of sideboarded species;
- Percent of groundfish retained, and retention rate relative to the aggregate rate among all cooperatives;
- Total landings by cooperative vessels outside of the State of Alaska;
- PSC by species (by season).

**Monitoring and accountability**
- Monitoring methods;
- Vessel-level incentive measures;
- Cooperative actions taken in response to member vessels that exceed catch or bycatch sub-allocations;
- Changes in cooperative management or incentive measures since the previous reporting year.

**Internal performance review**
- Description of how incentive measures affected individual vessels;
- Description of how incentive measures affected PSC levels relative to current levels;
- Estimate of the amount of PSC species avoided (as demonstrated in the AFA’s Intercooperative Agreement Annual Report by movement of fishing effort away from “Salmon Savings Areas” that are established in regulations).

\(^{19}\) A full list of required elements is included in this report under Section 5.3.
**Equity and opportunity measures (voluntarily submitted by BSAI crab cooperatives)**

- Changes in crew compensation;
- Changes in quota share lease rates;
- Changes in the availability of quota share for transfer to active participants and crew members.

Additional elements that are specific to the proposed GOA program might be required. For example:

- The number of LLPs enrolled in the cooperative (as distinct from the number of vessels), and a summary of their area and gear endorsements;
- The number of vessels that were active in landing catch of allocated GOA groundfish species;
- PSC rates (number or weight of Chinook salmon/halibut per metric ton of groundfish), and rate by target fishery;
- Initiatives specific to the GOA that were developed to minimize or avoid PSC (e.g., timing stand-downs, or area-based strategies);
- Information pertaining to the cooperative’s member processor or processors’ distribution criteria for processor-held PSC quota, if that option is selected, and the amount distributed to each cooperative vessel (see Section 2.2);
- Description of intra- and inter-cooperative transfers, and whether those transfers resulted in the harvest of additional groundfish;
- Summary of unforeseen issues that the cooperative addressed during the year, or issues that continue to present a management challenge (providing an avenue for input on the future use of Adaptive Management quota).

The Council may also wish to consider reporting elements that are specific to shoreside processors that are in Inshore cooperatives. For example, the Council might be interested in processor employment metrics (as permitted by confidentiality restrictions), or the number of operating days or throughput volume as compared to previous years. Suggested or required reporting elements could provide the processors an opportunity to speak to how bycatch incentive elements uniquely affect them, as compared to harvesting vessels.

**Timing of Cooperative Reports**

In considering the appropriate reporting deadline, the Council should first determine whether the purpose of the report is to review the cooperative’s actions and outcomes from the preceding year, to look forward to the fishing and bycatch management plan for the upcoming year, or both.

The Council should also consider whether it recommends that implementing regulations require a representative of each cooperative to make an oral report to the Council, and be available to answer questions in that forum. No oral report would be required under the Council’s current motion. Currently, AFA, CGOA Rockfish Program, and Amendment 80 cooperatives give oral presentations of their required written reports at the April Council meeting (see Section 5.3 for deadlines). If the Council requires or formally encourages a voluntary oral report, the submission deadline for the written document would likely be tied to one of the five meetings in the annual Council cycle (October, December, February, April, June).
The timing of the reporting deadline will depend on the purpose and the required content of the written document. If the Council envisions a post hoc review of fishing effort, bycatch performance, and quota management, the timing of the report is somewhat more flexible. The selected reporting date should fall far enough after the December 31 season end-date and deadline for post-delivery transfers of annual allocations to be completed\(^{20}\), and should provide time for cooperative managers and members to confer on any “lessons learned” or cooperative management revisions that emerged from experience in the previous year. Linking the cooperative report to the April meeting schedule has made sense in other trawl cooperative programs, as it avoids overlap with the January 20 opening of the trawl season when fleet managers are heavily tasked. Though most GOA trawl fishing is completed well before the December 31 season end-date, providing an ample time buffer between the end of the season and the reporting deadline should also allow time for NMFS and AKFIN data managers to revise PSC and standard ex-vessel price estimates as is necessary, and as at-sea observers continue to be debriefed.

The downside to receiving cooperative reports relatively later in the year is that it would limit the ability of the Council or NMFS to use the reported information to improve program management in the immediate near-term. While “immediate” is a relative term in the context of the NEPA process, any Council action that is initiated in April on the basis of information from the cooperative report would not likely be implemented until the spring of the following year, meaning that two fishing years would elapse between the time the cooperative identified an issue or opportunity and the time the new regulations become effective for a full season. Requiring cooperative reports to be submitted in February would marginally improve NMFS’s ability to implement a revised regulation in time for the following trawl year, though it would still be done on a compressed schedule.

The Council is considering an Adaptive Management (AM) program as part of this action (Alternative 3, Option 2). The procedures for AM would be established in regulation through the NEPA process, but, once implemented, could provide an avenue for more timely responsive management actions through the quota allocation process. If cooperative reports are framed as an input into the criteria for allocating AM quota, the reports would have additional value if they were provided in December, prior to NMFS’s annual quota allocation process. Cooperatives might not be able to provide all of the required information in December, as post-delivery quota transfers might not yet be completed, but the Council could consider requiring an interim report that addresses general quota use, the performance of bycatch minimization strategies, and proposals for the use of AM quota in the upcoming year. Note that Amendment 80 cooperatives are required to report on flatfish exchanges, cooperative quota transfers, and actual harvest by December 1 of each year (Section 5.3).

The November 1 deadline for an LLP holder to join a cooperative for the following year (Alternative 2, Parts 6.c and 7.c) creates an additional constraint on the timing of any cooperative report with elements that are forward-looking. As noted in the introduction to this section, the Council’s motion is not explicit as to whether a harvester must simply declare which cooperative they will be in, or whether the cooperative contract must be signed and approved. If the Council’s intent is the former, it is possible that cooperative contract negotiations could develop slowly, up until whatever deadline NMFS sets for the

\(^{20}\) This deadline would be established under the Council’s current motion, Alternative 2, Parts 6.i and 7.h)
issuance of annual quota\textsuperscript{21}. The cooperative manager is not likely to be able to put together a report that includes an annual fishing plan and bycatch accountability measures until negotiations are complete.

2.4 **Maximum Retainable Amounts (MRAs)**

The February 2013 discussion paper provided a review of MRAs in the context of the current fishery structure and under a potential move to fishing under cooperative allocations. The paper stated that,

\[I\]n the current limited access derby fisheries, managing harvests of valuable species that are not open for directed fishing through MRAs has proven effective. Vessels balance their directed harvests with harvests of MRA-limited species. This management is effective in derby fisheries, where participants must trade time targeting directed species with time targeting MRA species[...] \[I\]n a catch share fishery, participants who are not subject to time pressures can catch up to the MRA for all MRA species. If participants value MRA species higher than the allocated directed species, a race may result, with participants racing to avoid being shut out of the MRA species.

GOA MRAs are described at §679.20(e)(i) and presented in Table 10 to Part 679. Depending on the species that are allocated to cooperatives, the Council may wish to consider whether the MRAs defined for the GOA remain appropriate if participants are fishing under a cooperative structure. This paper does not attempt to provide an analysis of appropriate MRA levels in the future. Appropriate levels will be highly dependent on which high-value directed and secondary species are allocated under the program. A program that allocates only a few species to cooperatives would be less likely to require MRA modifications. In a case where only pollock and Pacific cod are allocated, in addition to halibut PSC and Chinook salmon PSC, MRAs set for those basis species already relatively low for secondary species such as sablefish and aggregated rockfish\textsuperscript{22} - 1 percent for sablefish, and 5 percent for aggregated rockfish.

The cooperatives are unlikely to be constrained by PSC in those fisheries, so they may not have time to catch up to the MRA for all unallocated species.

Species that are not allocated would be harvested as limited access fisheries. In those cases, vessel operators may race for unallocated high-value fish, unless all the cooperatives agree to a binding harvest strategy for their members and there are no (or very few) trawl vessels operating in the limited access fishery. If not all cooperative members are bound by agreements that limit their harvest of valuable species, then the time pressures associated with harvesting the directed fisheries will largely dictate whether vessels harvest up to the MRA limit when those secondary species could have otherwise been avoided.

The Council has recently considered other changes to MRAs. During its December 2014 meeting, the Council approved a motion to revise MRAs for all skate species from 20 percent of the basis species to 5 percent in all GOA groundfish fisheries. This action was undertaken to prevent skate TACs from being

\textsuperscript{21} NMFS will need to set a deadline that provides a minimum amount of time for its staff, with cooperative contracts in hand, to issue cooperative quota and to determine whether there is enough groundfish and PSC quota available in the limited access fishery for it to open on January 20.

\textsuperscript{22} Means rockfish defined at §679.2 for the Western GOA and Central GOA.
exceeded, as they had been in recent years. Because the skate MRA has recently been reduced, it may be unnecessary to consider further reductions at this time.

At that same meeting, the Council also considered changing the MRA enforcement period for all GOA and BSAI fisheries from the current instantaneous standard (a vessel must be within MRA limits at all times during a fishing trip) to the enforcement at the time of offload. The intent of the proposed change was to increase efficiency and reduce regulatory discards. After reviewing a discussion paper, the Council took no further action, noting the complexity of the change and the potential effect on fishing behavior. At that time, the Council expressed a desire to review MRA enforcement period changes on a case-by-case basis as needed. A change to the MRA enforcement period in the GOA may be appropriate under this action, once additional direction is provided on all the alternatives to be considered.

A discussion of the potential need to modify MRAs for vessels that check out of the Central GOA Rockfish program is provided in the next section. This issue may need to be addressed if Pacific Ocean Perch are not allocated under this program, especially when rex sole is the basis species.

2.5 Interaction with the Central GOA Rockfish Program

GOA groundfish license holders were eligible to receive Rockfish Program quota if their license was used to make targeted legal landings of rockfish primary species during the qualifying years (2000 through 2006), or if they participated in the Rockfish Pilot Program entry level trawl fishery in 2007, 2008, or 2009. The stated intent of the proposed GOA Trawl Bycatch Program motion is that the Rockfish Program allocations would not be altered. To be consistent with that intent, the analysts presume that if a person received quota for the Rockfish Program, that same catch would not be counted toward an allocation for the GOA Trawl Bycatch Program. The data presented in this document (primary species catch, secondary species catch, and PSC) excludes that data to the extent possible.

As the Council considers the GOA Trawl Bycatch Program it will need to consider how the two programs are different, how they overlap, and the impacts that each program will have on the other. Many of these questions cannot be fully addressed until the Council completely defines the alternatives for the GOA Trawl Bycatch Program and a formal analysis is conducted. Rockfish Program cooperatives and the proposed GOA trawl bycatch cooperatives may have similar membership rosters and rules of operation, especially in the Central GOA. The more similar the two programs are, the more that administrative and industry costs for managing two separate programs will be reduced. If the two programs are managed separately then it may be necessary implement clear divisions between the allocations. For example, checking into and out of the two programs might require additional rules in order for inseason management to function properly. One possible alternative is to have a prior-notification process, or a mandatory stand-down time before switching from one Cooperative Quota (CQ) pool to the other. This could be necessary regardless of which primary, secondary, or PSC species are allocated as part of the GOA Trawl Bycatch Program.

Rockfish Program participants are currently required to check-in to a Rockfish Program cooperative before the vessel may fish cooperative quota. The designated representative of the Rockfish Program cooperative must submit the check-in report to NMFS. After approval, the check-in report authorizes a vessel to fish under the CQ permit. Any CQ harvested by that vessel is deducted from the cooperative’s
quota allocation. The designated representative for a Rockfish Program cooperative must submit this documentation for a vessel at least 48 hours prior to the time the vessel begins a CQ fishing trip. The designated cooperative representative must also submit a check-out report for any vessel that is no longer fishing for the cooperative. The check-out report must be submitted within 6 hours after the vessel wishes to stop fishing for the cooperative. A CV is checked out of the fishery at the end of a complete offload. CPs are checked out based on the week-ending date or at the end of a complete offload, whichever comes first. Because the Rockfish Program requires a 48 hour prior notice for a vessel to begin fishing, it may be necessary for a vessel to check out of a cooperative in one program before the 48 hour prior notice of checking into the other cooperative program begins. The actual mechanics of the check-in and check-out may be altered, but it will be imperative for NMFS to clearly distinguish catch that should be deducted from each cooperative.

In the October 2014 discussion paper, NMFS staff indicated that linkages between the two programs could reduce the likelihood of exceeding GOA rockfish TACs and ABCs. The example cited in that paper was the Pacific Ocean Perch (POP) fishery. NMFS staff stated that they have had to increase the Central GOA POP incidental catch allowance (ICA) in recent years in order to prevent the ABC from being exceeded under increased POP bycatch in the yellowfin sole and rex sole fisheries. NMFS staff has not always been able to predict the ICA amount needed, and the ABC has been exceeded periodically. In some years this was due to increased total catch in flatfish fisheries, and in other years it was a result of increased POP bycatch rates in those fisheries. Table 13 shows that the ICA has more than doubled over the past four years. Methods to prevent POP bycatch in these flatfish fisheries from causing the ABC to be exceeded could include a review of MRAs, allocation of POP to trawl cooperatives, or further increasing ICAs as necessary. Increasing the ICA proportionately decreases the Rockfish Program allocations in the Central GOA.

### Table 13 Central GOA Pacific Ocean Perch Incidental Catch Allowance, 2012 through 2014

<table>
<thead>
<tr>
<th>Year</th>
<th>Central GOA POP ICA (mt)</th>
<th>Aggregated Rockfish MRA with Arrowtooth as Basis Species</th>
<th>Aggregated Rockfish MRA with Rex Sole as Basis Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>900</td>
<td>5%</td>
<td>15%</td>
</tr>
<tr>
<td>2013</td>
<td>900</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>1,200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>2,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: GOA Groundfish Specifications Final Rules 2012 through 2015 and Table 10 to §679

In general, to the extent the programs can reduce duplication of management effort by industry and NMFS, total costs to both groups will be decreased. The ultimate structure of the GOA Trawl Bycatch program will determine how closely the two programs can be linked, and the resulting cost savings.

### 2.6 Sideboard Issues

Sideboards are designed to limit the ability of persons granted exclusive harvest privileges (i.e. LAPP participants) to expand their effort in other fisheries beyond historic participation levels at the expense of persons who 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. The Council’s October motion (Alternative 2, Part 12) stated that GOA sideboard limits on allocated GOA Trawl Bycatch Program species would be removed for the Rockfish Program (CV and CP sectors), GOA non-exempt AFA CVs, non-AFA crab vessel, and Amendment 80 vessels (groundfish and halibut PSC). The Council is considering the removal of sideboards that, in essence, protected GOA fisheries from effort spillover from other rationalized fisheries. Those sideboards would no longer be necessary under a GOA program that allocates those groundfish species based on historical catch, because that historical catch was limited by those sideboards. Two other reasons for removing existing sideboards were discussed at the October 2014 meeting. First, sideboards limiting the GOA harvest of AFA vessels would be difficult to monitor within the GOA cooperative structure, because the restrictions on non-exempt AFA vessels are vessel-based, and the GOA cooperatives would be LLP-based. Second, the Council does not wish to limit a cooperative’s potential to benefit from achieving reduced halibut PSC rates and utilizing that PSC to target previously underharvested flatfish TACs.

The Council requested additional discussion of 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), as well as additional information regarding whether CV sideboards are necessary for the BSAI Pacific cod and yellowfin sole fisheries.

The October 2014 discussion paper defined some general regulatory conditions that may provide guidance on whether sideboards are appropriate. Those conditions include:

- When the TAC is, or is expected to be, a constraint and LLP holders who are not part of the LAPP (e.g., fixed gear vessels) and they must compete for catch with LLP holders in the LAPP.
- All constraining TACs are not divided among LLP holders in a LAPP and those in the limited access fishery.
- Insufficient regulatory barriers or cooperative rules are in place to prevent LAPP participants from entering fisheries to an extent that harms other participants in the fishery. Regulatory barriers currently include the groundfish license program and its associated endorsements, TAC sub-allocations, and limitations imposed under various LAPPs.

**GOA Pacific cod**

**Recommendations from October 2014.** When NMFS and Council staff reviewed this issue for the 2014 October meeting they recommended that additional sideboards for the fixed gear Pacific cod fisheries in the GOA not be implemented at this time. That conclusion was based on the understanding that trawl and fixed gear harvests of Pacific cod in the Western and Central GOA are limited by TAC apportionments to gear trawl, pot, hook-and-line, and jig gear. Participation in the Western and Central GOA fixed gear Pacific cod fisheries is also limited by endorsements on groundfish LLPs. NMFS staff also noted that additional sideboards for WY Pacific cod are not recommended because historically there was little effort in that area so the management cost of monitoring a sideboard in EGOA Pacific cod trawl fishery might exceed the benefits that are derived. This paper provides additional information on management issues with the program, but does not draw different conclusions.
**GOA Pacific cod reallocations.** NMFS publishes information[^23] on GOA Pacific cod reallocations that have occurred within a fishing year since 2012, when the most recent Pacific cod allocations were implemented. That information indicates that the WG CV trawl Pacific cod TAC is not typically fully harvested and a portion of the TAC is reallocated to the pot sector. During 2012, 2013, and 2014 at total of 1,550 mt, 2,100 mt, and 900 mt were reallocated away from the trawl CV sector, respectively. The pot gear sector’s allocation was increased by 2,000 mt, 2,000 mt, and 550 mt those years.

The pot gear sector’s allocation in the CG was increased by 2,250 mt in 2012 and 500 mt in 2014. There was no reallocation to the CG pot sector in 2013. A total of 2,750 mt of Pacific cod was reallocated from the trawl CV sector in 2012, and 1,000 mt was reallocated from the sector in 2013. During 2014, there was no reallocation from the trawl sector.

If Pacific cod is allocated to cooperatives and its members are able to efficiently harvest the cooperative’s quota or the cooperative does not check out of the fishery[^24], the amount of Pacific cod reallocated to the pot gear sector may be reduced in the future. In these cases, Pacific cod that was historically reallocated would not be available to the pot gear sector members that are not a part of a trawl cooperative.

**Summary of LLPs.** A summary of the groundfish licenses that have a trawl endorsement for the GOA are presented in Table 14. That table indicates that there are 152 groundfish licenses (CVs and CPs) that have a trawl endorsement for either the WG or CG area. A total of 111 of those license are not endorsed to fish for Pacific cod in the GOA[^25]; 85 of which are designated as CV licenses. Summing the rows with a WG Pacific cod pot endorsement indicates that there are 31 CV groundfish licenses with that endorsement. One license that has a trawl endorsement also has a HAL Pacific cod endorsement in the WG, and one trawl license has a jig endorsement.

Seven licenses have a CV CG Pacific cod pot endorsement. Two licenses have a CG CV HAL endorsement, but one of those licenses also has a CG CV pot endorsement and is included in the seven pot gear endorsed vessels. Any limitations placed on vessels and their associated license that are in a trawl cooperative would be focused on these entities. 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. Effort in the hook-and-line and jig fisheries are even more limited by the trawl licenses with a Pacific cod gear endorsements.

[^24]: It is assumed that a cooperative allocation will only be reallocated when the cooperative checks out of a fishery.
[^25]: One CP license has a “CG CV Trawl” endorsement in the Pacific cod endorsement field.
The 2015 groundfish license database indicates that a total of 81 licenses with a MLOA of 58’ or longer have a WG Pacific cod pot gear endorsement. Since 31 also have a GOA trawl endorsement, the remaining 50 licenses can only be used when fishing non-trawl gear in the GOA and would not benefit from a trawl allocation. Holders of these LLPs are potentially impacted by future reallocations, since less Pacific cod would be available to pot gear endorsement holders after reallocations. It is also possible that some of these LLP licenses could be transferred and used on the vessels holding the 31 groundfish licenses that may 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 and have that catch come off the pot gear limit. If this is a concern, the Council could consider applying the GOA Pacific cod cooperative limits to all licenses associated vessels that have a trawl license assigned to a cooperative. Vessels that are fishing under a purchased Pacific cod pot license could be required to have any catch deducted from their cooperative allocation regardless of which license they are fishing under. Once the cooperative checks out of the fishery, then vessels with a license endorsed to fish in an area with pot gear could utilize that license and the catch would be deducted from the pot gear allocation.

There are 113 CV licenses that have a CG trawl endorsement. Only seven of those licenses are endorsed to fish Pacific cod in the CG with pot gear. An additional 63 licenses have a CG Pacific cod pot gear endorsement, but are only allowed to use non-trawl gear in the GOA. The holders of these licenses could potentially be impacted by the seven licenses that could join a trawl cooperative, if the regulations allowed them to increase effort in the Pacific cod fishery using non-trawl gear. Because of the limited opportunity for vessels with a trawl endorsement to fish Pacific cod with pot 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 LLP licenses with pot gear Pacific cod endorsements.

**Catch data.** Data from the 2008 through 2014 fisheries shows the catch in the Pacific cod target fishery by vessels with a license that has a GOA trawl gear endorsement. Catch using only pot gear is reported. Table 15 also includes information on the number of licenses and vessels used. The far right column shows retained catch in the Pacific cod pot fishery as a percentage of the final allocation. The calculation...
is only presented for the years the most recent Pacific cod allocations were implemented, 2012 through 2014. The calculation may also overstate the actual amount of Pacific cod catch in the pot fishery since the total is all groundfish retained catch in the Pacific cod pot fishery. While it is assumed that a very large percentage of the catch retained is Pacific cod it is not likely 100%.

The catch data indicates that before 2011 almost all of the Pacific cod endorsed licenses were used to fish with pot gear. During this time the Council was considering Pacific cod allocations, which may have impacted the number of vessels and licenses in the fishery. Fewer licenses and vessels were active in the Pacific cod fishery from 2012 through 2014. However, in 2014 the vessels that were active in the WG reported catching a much higher percentage of the final allocation.\textsuperscript{26}

<table>
<thead>
<tr>
<th>Area</th>
<th>Year</th>
<th>Licenses (#)</th>
<th>Vessels (#)</th>
<th>Catch (mt)</th>
<th>Final Allocation (mt)</th>
<th>% of Final Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>WG</td>
<td>2008</td>
<td>32</td>
<td>29</td>
<td>5,239</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2009</td>
<td>30</td>
<td>28</td>
<td>4,755</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>30</td>
<td>27</td>
<td>9,575</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2011</td>
<td>32</td>
<td>29</td>
<td>11,071</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2012</td>
<td>28</td>
<td>26</td>
<td>4,556</td>
<td>9,859</td>
<td>46.2%</td>
</tr>
<tr>
<td></td>
<td>2013</td>
<td>21</td>
<td>19</td>
<td>5,471</td>
<td>9,859</td>
<td>55.5%</td>
</tr>
<tr>
<td></td>
<td>2014</td>
<td>24</td>
<td>22</td>
<td>8,633</td>
<td>9,042</td>
<td>95.5%</td>
</tr>
<tr>
<td>CG</td>
<td>2008</td>
<td>5</td>
<td>5</td>
<td>697</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2009</td>
<td>5</td>
<td>5</td>
<td>531</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>7</td>
<td>7</td>
<td>1,277</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2011</td>
<td>8</td>
<td>7</td>
<td>2,527</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2012</td>
<td>7</td>
<td>6</td>
<td>1,810</td>
<td>14,005</td>
<td>12.9%</td>
</tr>
<tr>
<td></td>
<td>2013</td>
<td>5</td>
<td>5</td>
<td>763</td>
<td>10,073</td>
<td>7.6%</td>
</tr>
<tr>
<td></td>
<td>2014</td>
<td>4</td>
<td>3</td>
<td>872</td>
<td>11,352</td>
<td>7.7%</td>
</tr>
</tbody>
</table>

Source: AKFIN summary of CFEC Fish Ticket data

**Catch Accounting.** Catch accounting is an important component when considering whether additional sideboard limits are necessary. Rules that are developed for catch accounting will determine when a vessel that is harvesting for a cooperative during part of the year and fishes for Pacific cod with pot gear has Pacific cod catch deducted from the cooperative allocation and the Pacific cod pot gear allocation. Previous discussions have noted that sideboards could apply the entire year or only when the traditional trawl fishery was open. If trawl sideboards for Pacific cod were only in effect during the periods when the GOA Pacific cod trawl fishery was open to directed fishing, the sideboard limits would be enforced:

1. from 1200 hours, A.l.t., January 20 through 1200 hour A.l.t., June 10; and
2. from 1200 hours, A.l.t., September 1 through 1200 hours, A.l.t., November 1.

\textsuperscript{26} Once again note that this may overestimate the actual total.
Persons with a non-trawl gear endorsement for Pacific cod could fish before January 20, from June 10 to September 1, and after November 1 using non-trawl gear. This approach assumes that the current seasons will remain in place if target species allocations are issued to cooperatives. In this case, any Pacific cod catch by cooperative member vessels would be deducted from the cooperative’s allocation when the fishery is open. If the Pacific cod fishing seasons are altered after an allocation to cooperatives, then a different catch accounting system may be appropriate. For example, catch would accrue against the cooperative’s allocation until they check out of a fishery. After the cooperative checks out of the GOA fisheries any catch would require appropriate LLP endorsements to fish Pacific cod and would accrue against the allocation for the gear type used to harvest the Pacific cod.

Vessels assigned an LLP that was used to issue quota to a cooperative could utilize gear conversion provisions to fish Pacific cod with fixed gear, but only when the cooperative has not checked out of the GOA fisheries and the cooperative has sufficient quota to cover that catch. Any Pacific cod harvest (fixed or trawl gear) in that circumstance would be deducted from the cooperative’s Pacific cod trawl allocation. However, vessels using pot gear could benefit from reduced halibut PSC mortality to harvest Pacific cod. Vessels with a Pacific cod endorsement for pot gear would be allowed to use that LLP to fish with Pacific cod with pot gear and have the catch deducted from the pot gear allocation during times of the year when fishing for Pacific cod is not open to cooperative members. It is assumed that vessels (license holders) that are not members of a GOA trawl cooperative are still allowed to participate in GOA limited access trawl fisheries, if target and PSC species are available to support the fishery. Because these vessels are not receiving benefits from operating in a LAPP, they are assumed to not be subject to sideboard limits in the Pacific cod fisheries. However, it should be noted that if sideboards in those fisheries are determined to be appropriate, given the potential change in the fishing patterns, vessels that are in the GOA trawl limited access fishery, may have their fishing opportunities decreased in that fishery and may seek additional fishing opportunities fishing in the BSAI or using other gear types in the GOA.

BSAI Limited Access Pacific Cod Fisheries

This discussion is limited to the catcher vessel fishery. Catcher/processors that have fished in the GOA are Amendment 80 vessels and are subject to the Amendment 80 limits established for the BSAI, including Pacific cod.

Summary of LLPs. The License Limitation Program requires that all vessels greater than or equal to 32’ LOA must have valid groundfish license to fish in the BSAI federal and parallel fisheries. Because all GOA trawl vessels are longer than 32’ LOA, they are all required to have a valid license with a trawl endorsement for the BS and/or AI to fish Pacific cod in the BS/AI. The Pacific cod CV trawl fishery does not have an additional Pacific cod endorsement like the pot and hook-and-line fishery. Any catcher vessel that has a trawl endorsement is eligible to harvest Pacific cod from the trawl catcher vessel allocation. Table 16 shows that 48 groundfish licenses that have both a GOA and BS/AI trawl

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27 This must be defined. It would likely be based on licenses and vessels and not fishing companies, since companies may own licenses and vessels that only participate in the non-trawl fisheries.

28 There are also 11 licenses linked to these licenses.
endorsement. Two of the licenses have a maximum LOA of 59’. The remaining licenses are for larger catcher vessels. Most of the licenses (37) are derived from AFA vessels, while 11 are not. This does not imply that only these licenses may be used to allow a vessel to fish in both the GOA and BSAI with trawl gear. Vessels fishing with trawl gear in the GOA that do not have a BSAI trawl gear endorsement may stack licenses on their vessels to have the endorsements to fish in the BSAI with trawl gear. Vessel owners that have or will take advantage of this ability in the future will increase the number of GOA trawl vessels that can fish in the BSAI with trawl gear beyond those listed in Table 16.

Table 16  Groundfish CV licenses with a trawl endorsement for at least one GOA area that also have a BSAI area endorsement for trawl gear

<table>
<thead>
<tr>
<th>AFA</th>
<th>Area Endorsements</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>AI</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>AI &amp; BS</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>BS</td>
<td>11</td>
</tr>
<tr>
<td>Yes</td>
<td>7</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td></td>
</tr>
</tbody>
</table>

Source: RAM LLP database, July 2015

AFA CV Sideboard Limits. AFA vessels and their licenses are subject to Pacific cod trawl gear CV sideboard limits. Those limits allow the AFA CVs to harvest up to 86.09% of the Pacific cod trawl CV allowance. A summary of the 2015 allocations are presented in Table 17.

Table 17  Initial BSAI Pacific cod trawl limited access allocations and AFA sideboard limits for 2015

<table>
<thead>
<tr>
<th>Season</th>
<th>Trawl limited access (mt)</th>
<th>AFA sideboard limit (mt)</th>
<th>Amount not available to AFA vessels (mt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 20 to April 1</td>
<td>36,426</td>
<td>31,359</td>
<td>5,067</td>
</tr>
<tr>
<td>April 1 to June 10</td>
<td>5,415</td>
<td>4,662</td>
<td>753</td>
</tr>
<tr>
<td>June 10 to November 1</td>
<td>7,384</td>
<td>6,357</td>
<td>1,027</td>
</tr>
<tr>
<td>Total</td>
<td>49,225</td>
<td>42,378</td>
<td>6,847</td>
</tr>
</tbody>
</table>

The non-AFA license holders may participate in the fishery at any level as long as it is open to directed fishing, but the AFA sideboard limits grant access to a minimum of 6,847 mt, based on the 2015 TAC. The actual amount of the sideboard limit will vary annually with the Pacific cod TAC.

Rollovers. Because BSAI Pacific cod subdivided among several categories of vessels, regulations include authority for NOAA Fisheries to roll-over TAC that is projected to be unused from one sector to another. Table 18 indicates that over the past five years (2010 through 2014), TAC has been rolled from the trawl CV category for use by other vessel categories. Earlier years have also shown similar patterns. The reallocations of Pacific cod from catcher vessels using trawl gear typically begin during the second half of August. Typically 2 or 3 reallocations are made from the trawl CV allocation from August through the end of the fishing year.

Given that 3,700 mt to 7,500 mt of Pacific cod are reallocated from the trawl CVs annually, it appears that sideboards limiting effort in that fishery would benefit participants in other Pacific cod fisheries more

than the trawl CVs. The primary beneficiaries of roll-overs from the trawl CVs in recent years have included the Amendment 80 cooperatives, AFA CPs, and HAL/pot gear CVs that are less than 60’ LOA.

Table 18  BSAI trawl limited access fishery Pacific cod initial allocations and reallocation, 2010 through 2014

<table>
<thead>
<tr>
<th>Year</th>
<th>Initial Allocation (mt)</th>
<th>Final Allocation (mt)</th>
<th>Reallocation Amount (mt)</th>
<th>% Reallocated</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>33,309</td>
<td>28,175</td>
<td>5,134</td>
<td>15%</td>
</tr>
<tr>
<td>2011</td>
<td>44,987</td>
<td>39,897</td>
<td>5,090</td>
<td>11%</td>
</tr>
<tr>
<td>2012</td>
<td>51,509</td>
<td>47,749</td>
<td>3,760</td>
<td>7%</td>
</tr>
<tr>
<td>2013</td>
<td>51,312</td>
<td>43,812</td>
<td>7,500</td>
<td>15%</td>
</tr>
<tr>
<td>2014</td>
<td>50,107</td>
<td>43,107</td>
<td>7,000</td>
<td>14%</td>
</tr>
</tbody>
</table>

Source: NMFS reallocation reports

Catch Data. From 2012 through 2014, a total of 16 non-AFA and non-Amendment 80 vessels that are associated with GOA groundfish trawl licenses harvested Pacific cod from the BSAI with trawl gear as CVs. Some of these vessels used other licenses in addition to the GOA trawl licenses referenced in Table 16. Two of the licenses were CP-designated licenses that were used as CVs to deliver their catch to vessels acting as a mothership. Both licenses were owned by the same company, so any catch history for the mothership deliveries cannot be separated from the shore-based deliveries; those deliveries to motherships increased in 2014, relative to 2012 and 2013.

In 2014, four GOA Trawl CV licenses were used to deliver BSAI Pacific cod harvested with trawl gear to shore-based processors. Ten licenses were used in 2013, and 12 licenses were used in 2014. The amount of Pacific cod delivered by CVs (including vessels with CP licenses acting as CVs and delivering to offshore processors) was greatest in 2012, at 9,146 mt. That amount decreased to 6,806 mt in 2013, and slightly rebounded to 6,995 mt in 2014. When considering only the non-AFA CVs delivering to shore-based processors, their 2014 catch of Pacific cod catch decreased to roughly 1/3 of 2012 levels. The catch amounts for these vessels is approximately equal to the amount of BSAI trawl Pacific cod that was not subject to AFA sideboard limits. If a sideboard limit for the GOA trawl vessels were to be set at the catch levels in recent years, that limit would not leave any BSAI trawl Pacific cod TAC that is in excess of the AFA and GOA sideboard limits. If both groups harvested up to their sideboard limit, persons who are not in either program would not have a percentage of the TAC that is set aside for their exclusive use.

During the years 2012 through 2014, from 17 to 22 licenses associated with AFA vessels holding a GOA trawl license fished Pacific cod in the BSAI. The catch of these vessels has declined from about 19,500 mt in 2012 to about 14,600 mt in 2014. Additional AFA CVs participate in the BSAI Pacific cod fishery that do not fish in the GOA. The catch of these vessels would increase the total, but all AFA CVs are subject to the AFA Pacific cod sideboard limit in the BSAI.

Based on the information available the BSAI trawl limited access fishery has not been constrained by TAC. Additional effort could potentially flow into the fishery as a result of the GOA program. Any increases in effort will depend on the additional amount of time persons could spend in the BSAI when the Pacific cod fishery is open. This will likely depend on the species that are allocated under the GOA Trawl Bycatch Program and the ability of cooperatives to manage fisheries that are not allocated. If there...
is a single cooperative for each area the cooperative may be more successful in managing unallocated species than if multiple cooperatives are developed for each area.

BSAI Limited Access Yellowfin Sole CV Trawl Fishery

The 2015 BSAI yellowfin sole TAC is divided among the CDQ fishery, BSAI trawl limited access fishery, Amendment 80 fishery, and an ICA. The trawl limited access fishery was allocated 16,165 mt of the TAC in 2015 (10.8% of the total). Table 34 to part 679 provides a description of the annual apportionment of BSAI yellowfin sole between the Amendment 80 and BSAI Trawl Limited Access Sectors. That table shows that there are seven different ITAC levels that may be used to determine the allocations. Different percentages of the ITAC are allocated to each sector depending on the level of the ITAC. When the ITAC goes above a given amount the percentage for the portion of the ITAC above the threshold is decreased for the Amendment 80 sector and increased for the Trawl Limited Access sector. That means that when the ITAC increase above a threshold, both sectors’ allowable catch increases, but the Trawl Limited Access sectors allowable catch increases at a greater rate.

Between nine and 16 vessels have participated in the BSAI trawl limited access sector annually, from 2008 through 2012, including both catcher processors and harvesting vessels delivering to vessels acting as motherships. Utilization of the yellowfin sole TAC by the sector in 2008 through 2012 indicates that the sector harvested less than half of its target allocation during the earlier years; however, this proportion increased in 2011 and 2012, to 75% and 79%, respectively. In 2013 the NMFS prohibited directed fishing for yellowfin sole by vessels participating in the BSAI trawl limited access fishery on November 10. The action was taken to prevent the sector from exceeding its allowable catch. The trawl limited access sector was not closed to directed fishing for BSAI yellowfin sole in 2014.

Only two non-AFA licenses are reported to be associated with the GOA trawl fishery and harvested BSAI yellowfin sole since 2009. These licenses are CP designated licenses that are used as CV and deliver to a vessel acting as a mothership. The same two vessels were discussed for the BSAI cod fishery. These two vessels are operated by a company associated with the Amendment 80 program. Because there are only two vessels and they are operated by the same company, staff is prohibited from reporting catch data.

Under the provisions of the Amendment 80 program, yellowfin sole TAC and prohibited species allowances can be reallocated from the BSAI trawl limited access sector to the Amendment 80 cooperatives during the course of the year. Yellowfin sole was reallocated in 2008 through 2011. In 2008 and 2009, 6,000 mt of yellowfin sole was reallocated; in 2010, 20,000 mt, and in 2011, 2,000 mt of yellowfin sole was reallocated. No reallocations were made after 2011.

Both the CDQ groups and the Amendment 80 cooperatives have the opportunity to increase their initial allocation of yellowfin sole, by exchanging rock sole or flathead sole quota, if there was an ABC surplus for yellowfin sole. The BSAI trawl limited access sector, however, is limited by their allocation based on the initial TAC, since they are not included under the flatfish flexibility program.

30 http://alaskafisheries.noaa.gov/rr/tables/tabl34.pdf
In recent years the AFA catcher vessels have not been limited by sideboards in the yellowfin sole directed fishery; because the TAC for BSAI yellowfin sole has been set above 125,000 mt. If the TAC drops below this level in the future, the AFA catcher vessels may be subject to sideboard limits. It may be appropriate to consider the need for GOA trawl vessel sideboard limits in a similar context. If the TAC falls below a given level it may be appropriate to consider sideboard limits for both AFA and GOA trawl catcher vessels at the same time. In other words, linking the need for sideboard limits for the non-AFA catcher vessels to the same or slightly modified standards that are applied to the AFA CVs. If sideboards are determined to be necessary for AFA CVs, the defined standards could also be applied to the GOA trawl CVs. The AFA and GOA trawl CV could then operate under a single or two separate sideboard limits that are triggered by the same yellowfin sole TAC threshold.

2.7 Gear Modification

Amendment 89 to the Fishery Management Plan for Groundfish of the Gulf of Alaska implemented trawl sweep modification in the CG flatfish fishery. That action requires non-pelagic trawl vessels targeting flatfish in the Central Gulf of Alaska to use devices on trawl sweeps to raise them off the seafloor. Prior to developing that amendment a discussion paper\(^{31}\) (NPFMC, 2011) was presented to the Council. Much of the information on trawl sweep modification for the GOA was taken from Bering Sea flatfish trawl fishery studies in reducing trawl sweep impact effects on *C. bairdi*, *C. opilio*, and red king crabs.

The relevance of that study to crab fisheries in the GOA depends largely on the similarities in sediment type in the Bering Sea and GOA, and between the bottom trawl gear tested in the Bering Sea and those used in the GOA. The sediment in the Bering Sea where the flatfish fishery occurs consists mainly of sand, muddy sand, or gravelly muddy sand (NMFS 2009), and such was the sediment in the areas of the research study. GOA Pacific cod preferred substrate is soft sediment, from mud and clay to sand, while rockfish preferred substrate is relatively rough, variously defined as hard, steep, rocky or uneven bottom on the banks of the outer continental shelf (NPFMC 2010).

The smaller area swept by the sweeps in the GOA indicates that the benefits of sweep modifications would be somewhat smaller than those for Bering Sea fisheries. Since the research on modified gear has been limited to flatfish vessels only, little is known about whether modified sweeps would work well in GOA Pacific cod. The GOA rockfish fisheries have had very little reported *C. bairdi* bycatch (less than 200 crab per year).

Table 19 indicates that reported *C. bairdi* bycatch in the WG flatfish fisheries has also been relatively small after 2011. Mandated gear modification would not be expected to greatly reduce bycatch of GOA *C. bairdi* if the recent reported bycatch levels were to continue to be representative of bycatch into the future.


Much of the information in this discussion paper is based on a letter presented at the December 2010 Council meeting that was written by John Gauvin (Alaska Seafood Cooperative) and Julie Bonney (Alaska Groundfish Data Bank) in consultation with Dr. Craig Rose (NMFS).
One explanation for the variability of crab bycatch across the different areas and target fisheries could be the geographic overlap between the different target fisheries and areas of Tanner crab abundance. Tanner crab abundance is primarily located in the near shore portion of South East Kodiak Island (Central GOA) and in the near shore portion of the Alaska Peninsula (Western GOA). The primary fishery occurring in close proximity to Kodiak Island, other than flatfish fisheries, is the Pacific cod fisheries. The rockfish fishery tends to be located in deeper waters of the GOA along the shelf edge.

Crab bycatch by non-pelagic vessels differs across target fisheries and areas, so a gear modification requirement for non-pelagic gear in the Pacific cod fishery will likely have different levels of success at reducing crab mortality than the previously implemented flatfish sweep modification.

Pacific cod data reported in the Council’s discussion paper suggests a lower bycatch of Tanner crab despite Pacific cod being in close proximity to the Tanner crab grounds. The discussion paper indicated that one explanation could be that the Pacific cod fishery tends to be limited to a few very specific locations that have low Tanner crab abundance (NPFMC 2011). Table 20 shows the estimated number of *C. bairdi* taken as bycatch in the GOA Pacific cod non-pelagic trawl fisheries from 2008 through 2014. The numbers are highly variable ranging from 211 crab in 2011 to 18,676 in 2008. This appears to be the fishery where gear modification could benefit crab stocks, especially in areas where the stocks overlap. In areas where Pacific cod are present and there are few or no crab present, gear modification would provide little benefit to crab stocks.

<table>
<thead>
<tr>
<th>Area</th>
<th>Year 2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>610</td>
<td>5,130</td>
<td>917</td>
<td>1,750</td>
<td>210</td>
<td>2,867</td>
<td>13,128</td>
<td>812</td>
</tr>
<tr>
<td>620</td>
<td>4,264</td>
<td>22</td>
<td>174</td>
<td>0</td>
<td>764</td>
<td>1,909</td>
<td>3,682</td>
</tr>
<tr>
<td>630</td>
<td>9,282</td>
<td>1,434</td>
<td>0</td>
<td>1</td>
<td>1,936</td>
<td>1,378</td>
<td>7,649</td>
</tr>
<tr>
<td>Total</td>
<td>18,676</td>
<td>2,373</td>
<td>1,924</td>
<td>211</td>
<td>5,567</td>
<td>16,415</td>
<td>12,143</td>
</tr>
</tbody>
</table>

Source: NMFS annual crab bycatch reports (car250_psc_crab)

Public testimony at Council meetings in this issue indicated that some GOA trawlers that are fishing non-pelagic gear have already started using pelagic trawl doors for efficiency reasons as well as creating less impact on fish habitat. In the BSAI, some vessels are using bigger foot rope spacing between the bobbins. They have gone from 2 foot spacings to 3 foot through 5 foot spacings to reduce impacts on bottom habitat and crab stocks. Increasing the spacing does not appear to have resulted in decreased target catch (Gauvin, Personal communication). While some vessel operators have implemented gear modification
techniques under the current fishing regulations in the GOA, eliminating the race to harvest the available target species creates and environment that allows harvesters more opportunity to experiment with fishing gear.

2.8 State Waters

State waters management issues were presented to the Council in both the June and October 2013 discussion papers. Information in the June 2013 discussion paper included a description of how existing state waters groundfish fisheries operate; interrelationships between state guideline harvest level (GHL), parallel, and federal management programs; a description of the historic harvest of GOA pollock and Pacific cod with trawl gear in federal and state waters; the potential for establishing restrictions on Federal permits being held by persons fishing in state waters; and Alaska State Constitution limitations on granting exclusive rights or special privileges, such as quota established through catch shares, to persons fishing in state waters.

The October 2013 discussion paper described several potential decision points for the Board of Fisheries (Board) to consider in regard to state waters management, if state waters are to be open to trawl fisheries for which a catch share program is in effect in federal waters. The discussion included various catch accounting options to coordinate with either State GHL or parallel fisheries, and specific issues associated with developing a federal quota program that includes Western Gulf pollock, where historically, the majority of the harvest occurs in state waters, where a federal license is not required (Table 21).

Table 21 GOA trawl harvest (mt) in State and Federal waters, pollock and Pacific cod from 2008 through 2014

| Area Waters | Pollock | | | | | | | Pacific Cod | | | | |
|-------------|---------|----|---|---|---|---|---|-------------|----|---|---|---| |
|              | CG Federal | 21,605 | 14,799 | 34,394 | 50,246 | 56,254 | 70,084 | 116,516 | 12,463 | 5,881 | 14,688 | 10,916 | 12,521 | 12,908 | 13,184 | 4,152 | 1,948 | 1,652 | 2,411 | 5,685 | 5,569 | 6,655 | 4,482 | 1,998 | 1,844 | 2,514 | 6,331 | 5,693 | 6,803 | 7.3% | 2.5% | 10.4% | 4.1% | 10.2% | 2.2% | 2.2% |
|              | State | 10,639 | 8,594 | 10,908 | 5,341 | 12,667 | 11,172 | 9,572 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 329 | 50 | 191 | 103 | 646 | 124 | 148 | 1,998 | 1,844 | 2,514 | 6,331 | 5,693 | 6,803 | 2.5% | 10.4% | 4.1% | 10.2% | 2.2% | 2.2% |
|              | Total | 32,244 | 23,394 | 45,302 | 55,587 | 68,921 | 81,256 | 126,088 | 4,482 | 1,998 | 1,844 | 2,514 | 6,331 | 5,693 | 6,803 | 2.5% | 10.4% | 4.1% | 10.2% | 2.2% | 2.2% |
| State % of Total | 33.0% | 36.7% | 24.1% | 9.6% | 18.4% | 13.7% | 7.6% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |

Currently, trawl fisheries in state waters are managed by the state under a parallel system, in which the state generally applies the same overall management measures imposed on the federal fishery to the adjacent state waters fishery. The Board has regulatory authority to modify parallel rules in state waters, and the fishery is managed through emergency order by ADF&G. Both federal and state waters open at
the same time and close concurrently when the total allowable catch (TAC) for the sector is taken (all vessels stop fishing at the same time). All harvest in the parallel fishery accrues to the federal TAC. Although not required by State regulation, all trawl vessels that participate in the State parallel groundfish fisheries in the GOA have an FFP and LLP, as those vessels also fish in federal waters.

Alternatively, if adjacent federal fisheries are managed under a catch share system under the proposed Council action, fishing would be allowed within a defined season and each vessel could choose when to fish its cooperative quota (or compete in the limited access fishery) within that season. A catch share system relies upon allocations of an amount of TAC and/or PSC to each eligible entity at the beginning of the year, thereby allowing the cooperative to fish when and where it chooses to optimize those allocations and meet the Council’s bycatch management objectives. Concurrent opening and closing of state waters for the parallel season would no longer be possible because each vessel stops fishing at a different time (when the vessel’s cooperative allocation is taken or the limited access fishery allocation is taken); thus, there is no single date on which the parallel fishery would be closed for the entire sector.

The Board has been provided updates on the Council’s efforts toward a new GOA trawl bycatch management program since 2013, and in early 2014 initiated a pollock workgroup, comprised of trawl, seine, jig, processor, and community representatives, to explore whether establishing a state GHL pollock fishery would benefit the State of Alaska and to inform the Board of areas where state and federal regulations may need to be coordinated if the Council proceeds with a trawl bycatch management program. Within the current development of the Council’s program, there are a few primary coordination considerations: 1) how to implement a federal catch share program that allocates cooperative quota and continues to allow trawl vessels to prosecute the pollock and cod fisheries in both state and federal waters, where the fishery currently occurs; 2) how to prevent federally permitted vessels from exceeding their federal apportionments by fishing inside 3 miles under the proposed cooperative program; and 3) how to account for non-federally licensed trawl vessels’ potential harvest and PSC in state waters – noting that no such non-federally licensed vessels currently fish with trawl gear in the GOA.

As discussed in the October 2013 discussion paper, one approach to coordinating State and federal waters management would be through a State GHL pollock fishery. State of Alaska staff presented the Board’s pollock workgroup with this potential approach and its associated advantages and disadvantages. Staff also presented an alternative approach which closely follows the regulatory structure of the current parallel fishery, but includes additional provisions that the Council and Board could consider in order to ensure the intended functionality and intent of the program. The objectives of the alternative approach

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33 State staff reported that the State of Alaska Department of Law found the most feasible proposed catch accounting mechanism associated with a GHL fishery to be in conflict with the Alaska State Constitution’s equal access requirements. The catch accounting structure for a pollock GHL in state waters was proposed such that federally licensed trawl vessels’ catch would accrue to their cooperative’s quota and not to the GHL. The potential for inequity in state waters harvest opportunities arises if federally licensed vessels are able to catch more than non-federally licensed vessels because the former group would have access to cooperative quota, harvestable in state waters, which might exceed the size of the GHL. Alternatively, accounting for federally licensed trawl vessels’ harvest in state waters both against their cooperative quota and the GHL would double-count that harvest and potentially significantly under-harvest the Federal TAC, unless a complex reapportionment to federal participants occurred mid-season. This negates the benefits associated with cooperative management of being able to plan for the fishing year.
proposed by staff are to coordinate with the proposed federal action and facilitate a program that reduces trawl bycatch in both State and federal waters while allowing trawl participants to continue to operate seamlessly from 0-200 nm. Additional objectives of the alternative approach include increased monitoring of trawl vessels (100% observer coverage) in State and federal waters, and the maintenance of an effective catch accounting system to ensure harvest and PSC limits are not exceeded.

In sum, the most recent approach discussed is premised on achieving the objectives of the current motion while retaining the existing parallel fishery management strategy of mirroring federal regulatory actions as closely as possible. To prevent federally permitted vessels from exceeding their federal apportionments by fishing inside 3 miles, the Council would need to adopt regulatory language attached to an FFP that prohibits harvest or PSC beyond the amount allocated to federal license holders, whether in federal or state waters. Staff also considered whether a vessel would opt to surrender its FFP in order to harvest groundfish in excess of its cooperative quota in state waters. Although it is not required by State regulation, all vessels currently using trawl gear in the State parallel fishery also have an FFP, as those vessels fish federal waters at least some part of each year. FFPs are currently issued on a 3-year cycle; each permit is in effect from the date of issuance through the end of the cycle and cannot be surrendered and reissued but one time in the 3-year cycle. Thus, the risk of non-federally licensed vessels fishing in state waters is relatively low because: 1) no vessels have operated this way in the past; 2) it is unlikely a vessel would surrender its FFP to fish only in state waters or attempt to create a business plan around the parallel pollock fishery only; and 3) a vessel must have an FFP to participate in the federal program even if the vessel only wants to lease its quota to other vessels in the cooperative to fish. In addition, the Board could add some provisions to the parallel GOA trawl fisheries to facilitate catch accounting and prevent exceeding a TAC or bycatch amount if it meets the Board’s objectives for state waters (e.g., 100% observer coverage, parallel fishery registration).

To date, the full Board has not considered a formal proposal addressing either approach to coordinate with a federal program presented to the pollock workgroup. Rather, the approaches were drafted to facilitate discussion and provide the Board options for consideration in the future as the Council’s alternatives are further developed. The Board has also not approved a public proposal to establish a pollock GHL fishery; the Board is scheduled to receive pollock-specific proposals at its March 2016 meeting.

2.9 CFA and Adaptive Management

The Council’s October 2014 motion situates the Community Fisheries Association (CFA) and the Adaptive Management constructs as mutually exclusive options under an action alternative (Alternative 3). Under that framework, the Council could select either a CFA or an Adaptive Management program, but not both.

2.9.1 Community Fisheries Associations

This section recounts the most recent Council documents and discussions on the inclusion of a CFA alternative in the GOA Trawl Bycatch Management Program, as well as the options listed in the Council’s October 2014 motion. Beyond that, this section provides an update on stakeholder efforts to aid
in defining a CFA’s structure and purpose, and identifies areas where Council input might provide further clarity for those efforts.

In an October 2014 discussion paper\(^{34}\), staff reviewed a stakeholder proposal on the use of a CFA model to address Council goals and objectives related to sustained participation within fishing communities, minimization of economic impacts on fishing communities and supporting businesses, active participation by license holders, entry level opportunities, and opportunities for bycatch incentives that are additional to those required by regulation. That paper went on to discuss how the proposed CFA construct might fit within the GOA Trawl Bycatch Management Program framework that the Council was considering at that time, wherein pollock, Pacific cod, Chinook salmon PSC, and halibut PSC quotas would be allocated to cooperatives. The paper highlights unresolved issues regarding the level of Council involvement and oversight of a CFA, and how a CFA might sub-allocate harvest privileges to eligible entities. Finally, the paper identifies the benefits and costs of including a CFA to different classes of stakeholders (harvesters, new entrants, communities), as well as outstanding legal questions. In summary, the October 2014 paper interpreted the CFA proposal to be focused on ensuring that fishery stakeholders are not negatively impacted by a Trawl Bycatch Management Program that allocates groundfish, and that the proposal was not exclusively oriented towards providing additional PSC and bycatch minimization tools.

Prior to that, the Council held a CFA workshop at its February 2014 meeting. Invited speakers represented community quota managers from New England and the Pacific Coast, as well as fishery managers from NMFS Greater Atlantic Regional Fisheries Office. A report on the proceedings was presented at the April 2014 meeting\(^{35}\).

The CFA option in the Council’s October 2014 motion (Alternative 3, Option 1) is framed around the MSA definition of “fishing communities” (§303A(c)(3)). Fishing communities can be difficult to define, as they can be either place-based (a town or a region) or interest-based (a gear group or a sector). The MSA states that a fishing community is “a community which is substantially dependent or substantially engaged in the harvest or processing of fishery resources to meet social and economic needs, and includes fishing vessel owners, operators, and crew and […] processors that are based in such a community.” However the broadness of that definition depends the interpretation of the phrase “substantially dependent.” In light of that vagueness, the Council may establish regionally appropriate criteria to determine what entities are substantially dependent, with the only restriction being that the criteria do not discriminate between residents of different states (National Standard 4).

The MSA provides four metrics to define community eligibility to participate in a LAPP “to harvest fish”: (1) the community must be located within the relevant management area of the Council; (2) the community must meet criteria developed by the Council; (3) the community must consist of residents who conduct commercial or recreational fishing, processing, or fishery-dependent support businesses; and (4) the community must develop a community sustainability plan, submitted to the Council and approved by the Secretary of Commerce, that demonstrates how the plan addresses social and economic development needs in the communities. In regards to the fourth metric, the MSA explicitly states that the plan should address social and economic development needs of coastal communities “that have not


historically had the resources to participate in the fishery” (§303A(c)(3)(A)(i)(IV)). The MSA goes on to provide six “participation criteria” for the council to consider (§303A(c)(3)(B)), which are listed below. The MSA does not provide guidance or set parameters on the level of subjectivity in the eligibility requirements. If the Council includes subjective eligibility criteria, NMFS will need to develop a process to decide whether prospective fishing communities meet those requirements. A NOAA Technical Memorandum on the design and use of “fishing community entities” (Stoll and Holiday 2014) suggests that the Council could review applications from entities and make recommendations to NMFS on their eligibility.

**Participation Criteria to be Considered:**

1. Traditional fishing or processing practices in, and dependence on, the fishery;
2. The cultural and social framework relevant to the fishery;
3. Economic barriers to access the fishery;
4. The existence and severity of projected economic and social impacts associated with implementation of limited access privilege programs on harvesters, captains, crew, processors, and other businesses substantially dependent upon the fishery in the region or subregion;
5. The expected effectiveness, operational transparency, and equitability of the community sustainability plan; and
6. The potential for improving economic conditions in remote coastal communities lacking resources to participate in harvesting or processing activities in the fishery.

As the Council proceeds with the development of a CFA option, the definition of eligible communities should be continually refined to meet both the objectives of the program and the requirements of the MSA. The language of the MSA suggests that eligible communities must consist of residents who participate in the fishery or supporting businesses, and that they must be also be “coastal”. A community that is coastal and that has residents who fish, process fish, or work in fishery supporting businesses would seem to meet the MSA requirements for eligibility. However, it is unclear whether those eligibility requirements are met through the fact that an individual who officially resides in a certain community conducts fishery business elsewhere, or if that business (processing or running a fishery-supporting business) must be conducted within their community of residence. Given that no other regional fishery management council has used this MSA provision to create a CFA (or similar) for the purpose of receiving an initial community allocation, the Council has some latitude to establish its own criteria for what constitutes “coastal” and where qualifying “participation” must occur. Based upon the six criteria listed for consideration, it is clear that eligible coastal fishing communities are not limited to those whose residents are currently active in the GOA trawl fishery.

The CFA option, as currently defined by the Council, includes seven elements (paraphrased):

1. An amount of quota for species allocated to CVs (5% to 15%);
2. The number of CFAs to be established (one Gulf-wide CFA, or one in each of the WGOA and CGOA areas);
3. Overarching goals and objectives for a CFA (sustained community participation and entry-level assistance for small operators, skippers, crew, and communities);
4. Community eligibility (based on location, participation, potential for adverse socioeconomic impact, or submission of a “community sustainability plan”);
5. Aspects of a “community sustainability plan” (administrative structure, quota allocation process, and goals/objectives);
6. Annual reporting to the Council and eligible communities;
7. Guidelines that elaborate on how a CFA could be integrated with a groundfish cooperative structure (prohibitions on selling quota, restricting CFA quota use to licenses that are enrolled in a cooperative, compliance with ownership/use caps and other quota restrictions that are part of the general Trawl Bycatch Management Program).

The Council asked the stakeholder groups that developed the CFA proposal to continue work towards defining their ideal of a CFA, as well as the contents and format of a community stability plan. As previously mentioned, the development of a community stability plan is a prerequisite to receiving a community allocation from a LAPP; however, no such plan has been developed under MSA §303A in other regions, and NOAA has not produced strict requirements for what constitutes a plan. The Council’s current set of alternatives lists several requirements for what would be included in a community sustainability plan: description of governance structure; description of quota allocation process; goals and objectives for the CFA and how they will be met; description of how the CFA will sustain community participation in the fishery, provide for new entry, inter-generational transfer, and encourage active participation; and a description of how the plan will address social and economic development needs in GOA coastal communities (Alternative 3, Option 1, Element 5). The Council may consider additional requirements, perhaps related to the NOAA guidance document summarized below. One outstanding task for the Council and stakeholders, going forward, is to define “new entry” and “active participation” in the context of the GOA groundfish trawl fishery.

The Aleutians East Borough (AEB) was recently awarded a Fisheries Innovation Fund grant from the National Fish and Wildlife Foundation (NFWF) to develop a plan for the creation of a CFA and to draft a community sustainability plan. AEB will work with partner organizations listed in the grant proposal including the Gulf of Alaska Coastal Communities Coalition, the Alaska Marine Conservation Council, fisheries leaders, and community stakeholders. The grant will support the formation of a CFA as a legal entity and the drafting of a community sustainability plan that that meets the requirement set forward in the Council’s current set of alternatives. The summary of the award states that funds will also be used to establish a workgroup that facilitates input from community members by holding public meetings and workshops.

NOAA’s 2014 Technical Memorandum, *The Design and Use of Fishing Community and Regional Fishery Association Entities in Limited Access Privilege Programs*, provides some guidance on the development of a community sustainability plan (Stoll and Holiday 2014). The primary functions of a community sustainability plan are to hold entities accountable for what they do with a harvest allocation, to foster an atmosphere of careful planning, and to facilitate program evaluation. The Council has a prerogative to develop requirements that must be met in a community sustainability plan. The memo suggests that requirements not be overly cumbersome to prepare or evaluate, and notes that defining standard plan elements before implementation would reduce costs in the long run. The information in the plan should provide the Council and NMFS a basis on which to evaluate the entity’s alignment with the

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environmental, social, and economic goals in the FMP. The plan also provides the legal basis for the Secretary of Commerce to potentially revoke the entity’s harvest privileges if it does not comply with the agreed upon requirements. The memo includes a sample list of elements that the Council could require to be in a community sustainability plan, and whether those elements address accountability, planning, or both (provided as an appendix in Section 5.4 of this document). The contents and format that satisfies some requirements could be strictly prescribed, while other requirements could be more broadly defined. Suggested plan elements that could be strictly prescribed include a list of the vessels and permits that would be associated with the entity, a statement of the entity’s objectives and how they promote the Council’s goals for the program, participants’ roles and responsibilities, quota management strategy, self-audit schedule, evaluation and reporting methods, and disciplinary process. The Council might require an entity to articulate how its plan benefits the interests of the broader fishing community, but allow the entity more freedom in determining how best to meet that requirement. Finally, the memo suggests that the Council define a timeline for community sustainability plans to be periodically reviewed, amended to improve performance, and resubmitted for Council and NMFS approval.

2.9.2 Adaptive Management

The Council requested that staff continue to think about how adaptive management (AM) could be utilized to help address the goals, objectives, and unforeseen consequences of the proposed GOA Trawl Bycatch Management Program. A discussion paper that focused on AM was presented in October 2014 (see footnote 34). That paper focused on the Pacific Fishery Management Council’s (PFMC) rationale and structure for the AM program that it developed as part of its groundfish trawl catch share program. The paper also included information on PFMC’s public process for allocating the set-aside, and the “lessons learned” from that process.

PFMC’s AM program set aside 10% of all allocated species quota. The 10% set-aside is either distributed annually to the current pool of quota share holders, or is used to promote any of five defined objectives for the program: (1) community stability, (2) processor stability, (3) conservation, (4) unintended or unforeseen consequences of ITQ management, and (5) facilitating new entry. To date PFMC has not identified a need or established a protocol for deploying the set-aside to address the five defined objectives. Each year the set-aside has been reallocated proportionally, or “passed through,” to holders of annual fishing privileges in proportion to their quota share. PFMC’s ITQ program left a number of AM issues to be resolved through trailing actions, including the details of how to utilize the AM set-aside; PFMC felt that some decisions would be better informed after observing the effects of the new program for several years. The NPFMC will need to address many of those same types of issues if it develops an AM program. Among the “lessons learned” that were reported by PFMC stakeholders was the importance of defining a list of potential uses for AM quota and a method for its distribution before the program is implemented. Having taken a wait-and-see approach, some persons consulted for the October 2014

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38 In order to avoid a harsh penalty for a relatively minor infraction – for example, a missed reporting deadline – an entity could protect itself by defining categories of disciplinary measures for more or less substantive requirements. The memo notes that, in the past, some communities reported that they declined to pursue the creation of an entity under the MSA “fishing community” definition because their members were afraid of losing harvest opportunities over minor administrative mistakes. Suggested accountability measures would have to be approved by the Council and NMFS.
A discussion paper portrayed the pass-through of AM quota as having become institutionalized and difficult to change in the case that a need were to arise.

In thinking about how AM could be used in the GOA Trawl Bycatch Management Program, staff considered PSC limits as a starting place. Alternative 2, Part 5 of the Council’s October 2014 motion includes options to reduce the pollock fishery’s existing PSC limits for Chinook salmon by 25%, and the GOA halibut PSC limit by up to 15%. As currently defined, the reduced PSC limit would provide Chinook salmon and/or halibut bycatch savings during years in which the GOA trawl groundfish fisheries would have met or exceeded the reduced PSC limit. In considering options for an AM program, the Council could broaden the objective for all or part of the PSC limit reduction. For example, a percentage of the PSC reduction could be placed in an AM reserve. Because the initial justification for the PSC reduction was to benefit the Chinook salmon and halibut resources, one might assume that the portion of the PSC limit reduction that is placed in the AM reserve would not be available for use by any stakeholder unless it was reassigned by the Council for a specific purpose. This differs from the PFMC program, since that program defaults to passing-through the AM set-side to quota holders, absent any additional Council action.

The NPFMC could define objectives for the set-aside, putting in place a structure to reallocate some or all of the AM PSC quota, if warranted by conditions in the fishery after implementation. For example, in 2015 the non-pollock/non-rockfish program Chinook salmon PSC limit, established through GOA Groundfish FMP Amendment 97, caused an early closure (May 3rd) of the remaining GOA Pacific cod and flatfish trawl fisheries. Given the unforeseen circumstances, the only tool available to the Council and NMFS to reallocate Chinook salmon PSC to the fishery was an Emergency Rule approved by the Secretary of Commerce. An AM PSC limit reserve could have provided the Chinook salmon PSC required to re-open the fisheries, and done so in a manner that had been analyzed for resource and economic impacts before the situation had occurred. In the absence of a valid pre-defined need to utilize the AM PSC limit, that Chinook salmon quota would not be available to trawl vessels. Additional issues that would need to be addressed in creating an AM program include:

- Determining the percentage of the PSC limit reduction that would be available under an AM program;
- Determining eligibility to apply for access to an AM PSC limit;
- Determining the process for stakeholders to submit requests to the Council and/or NMFS for access to an AM PSC limit;
- Determining the process for reviewing those requests, under NOAA Fisheries authority or through Council action;
- Establishing a process for the release of AM PSC, if approved;
- Establishing a structure for use of AM PSC after it is allocated;
- Defining guidelines for the amount of time over which an entity, or class of entities, would have access to a block of AM PSC – e.g., a season, a year, more than one year.

Given that the Council has not yet commented on this concept, the analysts have not fully developed or described all of the associated foreseeable impacts. If the Council views this approach as worthy of further consideration, greater detail will be provided in future analyses.
2.10 Analytical Methods

Past analyses of PSC limit changes have focused on quantitative estimates of the catch and value that would be forgone. The majority of these analyses employed a retrospective approach, estimating the point in previous years at which a lower PSC limit would have closed a fishery. For limited access fisheries with no individual or cooperative quota allocations, analysts have tentatively assumed that fleet behavior would be relatively unchanged under a reduced PSC limit, meaning that vessels would still have an incentive to race to harvest the available TAC and that the impact of a constraining hard cap would be felt at the end of the fishing season. Those analyses provided qualitative discussion of how fleet behavior might change under a reduced hard cap, and how that might affect the estimation of the revenues forgone at the end of the year. However, stakeholders have tended to focus on the projected fishery closure dates that were based on past years, as was the case in 2015 when NMFS took emergency action to allocate additional Chinook salmon PSC to a GOA trawl fishery that had closed under a reduced cap.

In June 2015, the Council received an analysis of alternatives to reduce BSAI halibut PSC limits. The overall BSAI PSC limit is apportioned among several fishing sectors, some of which are managed under limited access and some under LAPPs. The analysis assumed that stakeholders in LAPP fisheries could redistribute their fishing effort in time and space in order to balance a trip’s expected economic benefit with halibut usage. It was assumed that, under a constraining hard cap, stakeholders would first eliminate trips that had the highest bycatch rates, whereas the expected response of a limited access participant would be to fish until the cap is met and forgo harvest that would have occurred later in the year. The analysts used relative bycatch rates to model which fishing trips would not have occurred under a reduced PSC limit for the LAPP fisheries, and estimated forgone revenue accordingly.

Both analytical methods described thus far rely on assumptions that may or may not hold in the real world. As a result, the quantitative estimates of forgone catch and revenue include levels of uncertainty that could be large, and cannot be estimated. Analyzing a GOA Trawl LAPP would have an additional layer of complexity, compared to previous PSC limit reductions. The Council has proposed changing both the PSC limits and the underlying management structure of the fisheries. Because GOA trawl fisheries have at times been constrained by the existing PSC limits, it is possible that lower limits would reduce the gross value of the fisheries in some future years, relative to status quo management. However, the action described in the October 2014 motion provides a cooperative structure that is expected to help stakeholders better avoid PSC by giving them more choice over when and where to trawl. These “tools” are anticipated to offset, in part or completely, the generally assumed reduction in gross revenue associated with the PSC reductions.

In addition to possible changes in the timing and pace of GOA trawl effort, the proposed action alternatives could also alter factors that determine the economic value derived from the fishery. For example, costs associated with cooperative management and more observer coverage would create additional costs associated with fishing under a cooperative. If the program is structured to increase harvesting efficiency, less efficient vessels could be removed from the fishery and their historical share could be harvested by more efficient vessels. Gross revenue could increase if cooperative members are able to harvest a greater percentage of the TAC, by reducing PSC rates in directed fisheries. Longer
fishing seasons could also create a structure where deliveries are timed to match processing capacity, allowing processors employ a more stable work force.

Changes in the factors that drive value would limit the analysts’ ability to provide reliable quantitative estimates of impact based on historical data. The analysts propose that it would be more useful to decision-makers to focus on detailed qualitative descriptions of how management and expected fleet behavior would affect revenues. Analysts would be able to discuss the direction of change in a given metric (e.g., higher or lower revenues or product prices), but would stop short of estimating a net change in the value of the fishery. These descriptions would rely on historical catch and value data, but that data would not be used to model point estimates of forgone revenue under each alternative and option. As stated above, historical data on effort and markets would be reflective of the limited access regime, and not the fishery as it would likely operate under a LAPP. Analysts will also rely on information provided by fishery stakeholders (harvesters, processors, vessel crew, fleet managers, community representatives, and supporting business owners) to develop an understanding of directional changes in key indicators, such as production, employment, and revenue.

2.11 Environmental Impact Statement and Analytical Team Updates

NMFS published a Federal Register Notice (80 FR 40988, July 14, 2015) that noticed its intent to prepare an Environmental Impact Statement (EIS) on the proposed management program for trawl groundfish fisheries in the GOA. An EIS is being considered as the appropriate analytical tool for the current suite of alternatives. The proposed action would create a new management program that could impact resource stakeholders in manners that may be uncertain or unknown, and might result in significant impacts on the human environment that have not been previously analyzed. Those impacts, if they emerge, would be the result of provisions associated with the management of target, secondary, bycatch, and PSC species.

NMFS has initiated a formal scoping process for an EIS through its notice of intent. NMFS and the Council have sought, and will continue to seek, information and input from the public on the range of alternatives to be analyzed, and on the environmental, social, and economic issues that should be considered in an analysis. The final EIS, if that tool is ultimately determined to be appropriate for the selected range of alternatives, will analyze the impacts to the human environment that result from the proposed trawl bycatch management program.

Because of the process that the Council selected for this action last October, limited work has been undertaken to finalize the analytical team, each team member’s role, and individual tasking. The Executive Director and Assistant Regional Administrator will assign staff and other resources to this project as the final suite of alternatives is finalized, and the Council sets the timeline for initial review of the analytical package.
3  List of Preparers

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4  References


5 Appendices

5.1 Gulf of Alaska Trawl Bycatch Management - Final Council motion 10/12/14

The Council initiates analysis of the following alternatives and options for Gulf of Alaska trawl bycatch management, with the existing objectives and purpose and need statement.

ALTERNATIVE 1. No action. Existing management of the Central and Western Gulf of Alaska trawl fisheries under the License Limitation Program.

ALTERNATIVE 2. Gulf of Alaska Trawl Bycatch Management Program for the Western Gulf, Central Gulf and West Yakutat areas. The following elements apply to the program:

1. Observer Coverage and Monitoring
All trawl 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, including those necessary for gear conversion. Full retention of allocated target species is required.

2. Sector eligibility
   Inshore sector: Shoreside processors with an eligible FPP and harvesters with an eligible FFP and LLP endorsed for GOA trawl. 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 defined in Table 31 CFR Part 679 and their replacement vessels, 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.

3. Allocated species (more than one option can be selected)
   Target species:
   Option 1. Pollock (610/620/630/640) and Pacific cod (WG/CG)
   Option 2. WGOA rockfish (northern, dusky, and Pacific ocean perch) and WY rockfish (dusky and Pacific ocean perch)

   Secondary species:
   Option 1. Sablefish (WG, CG, WY). Allocations of CG sablefish under the CG Rockfish Program are maintained.
   Option 2. Thornyhead rockfish, shortraker rockfish, rougheye/blackspotted rockfish, other rockfish (WG, CG). Allocations of CG rockfish under the CG Rockfish Program are maintained.
   Suboption: Big skates and longnose skates
   Option 3. (Mutually exclusive with Options 1 and 2) Cooperative measures are required to manage secondary species under maximum retainable amounts (MRAs), as opposed to cooperative allocations.

   PSC species: Halibut and Chinook salmon
4. **Sector allocations of target and secondary species**

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.

- **Option 1.** Revise the GOA-wide pollock apportionments to 30% (A); 30% (B); 20% (C); 20% (D)
- **Option 2.** Modify the pollock fishery to two seasons: Jan 20 to June 10 and June 10 to Nov 1. (If selected with Option 1, the seasonal split would be 60%/40%).

None of the options change the distribution of GOA pollock among Areas 610, 620, or 630 as established through the specifications process.

**Other target species and secondary species:** Sector allocations would be based on each sector’s retained catch 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
- **Option 2.** Allocate to the CP sector only. The CV sector is prohibited from directed fishing and managed under MRAs.
- **Option 3.** Establish a CV sector allocation of WG rockfish of 2% - 5%. Any unharvested rockfish (by a specified date) is reallocated to the CP cooperatives.

5. **Sector allocations of PSC**

**Chinook salmon:**
The Chinook salmon PSC limit allocated pro rata based on pollock trawl landings is a CV allocation only of:

- **Option 1.** 25,000 (status quo based on Am 93)
- **Option 2.** 18,750 (25% reduction)

Chinook salmon PSC allocated pro rata based on trawl CV and CP non-pollock landings (excluding CG rockfish program for the CV sector) are based on GOA Amendment 97. Any Chinook salmon PSC caught in WY comes off the cooperative’s Chinook salmon PSC limit.

**Halibut:**
The halibut PSC limit allocated pro rata based on CV and CP trawl landings (excluding the CG rockfish program) is:

- **Option 1.** 1,515 (status quo under Am 95 by 2016, with full 15% reduction in place)
- **Option 2.** 1,364 (additional 10% reduction relative to 2016, phased in over a two-year period)
- **Option 3.** 1,288 (additional 15% reduction relative to 2016, phased in over a three-year period)

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
Rockfish Program PSC:
Any Rockfish Program PSC that would roll over for use in other fisheries under the current rules (after the set aside for halibut savings) can be transferred to the Gulf program cooperatives through inter-cooperative transfer.

Gear modification. Option: gear modifications for crab protection.

6. Voluntary inshore cooperative structure

a. Annually allocate species to the cooperative, based on aggregate retained catch histories associated with member vessels’ LLPs during the qualifying years:
   
   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, pollock Chinook salmon PSC cap divided by area and then based on pollock landings; non-pollock Chinook salmon cap divided by area and then based on non-pollock landings (excluding CG rockfish); halibut PSC apportioned by area and then in proportion to target landings associated with cooperative members’ LLPs.] Once in the cooperative, PSC can be used to support any target fisheries within the cooperative at any time (no seasonal PSC apportionments).

   Option: Each processor controls a portion of the annual PSC within a cooperative [options: 10% - 40%]. Each processor would assign the incremental PSC to vessels in the cooperative under the terms of the cooperative agreement. PSC made available by these agreements cannot be used by vessels owned by the processor (a vessel with more than 10% ownership by a processor using individual and collective rules for determining ownership).

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 two 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

If a license has qualifying landings in both regions (WG and CG/WY), initial cooperative formation would be based on the majority of the license’s historical landings to a processor in each region (the license holder would join a cooperative in each region). After the initial cooperative formation period, a license holder can choose to be in one cooperative per region on an annual basis.
e. Each cooperative would be required to have an annual cooperative contract filed with NMFS. Formation of the cooperative would require a cooperative contract signed by (options: 33%, 51%, or 80%) of the license holders eligible for the cooperative and the processor (option: and community in which the processor is located). If a license does not have any qualifying landings, it could still join a cooperative but the license holder does not count toward the cooperative formation threshold. 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.

Option: A processor may be in more than one cooperative.

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. 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.

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.

7. Voluntary catcher processor cooperative structure
   a. Annually allocate species to the cooperative. For an eligible CP, the CP history of the vessel in the qualifying years will be assigned to the LLP on the vessel at the time of implementation of the program. Qualifying years:
   
   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 by area and then based on non-pollock landings (excluding CG rockfish); halibut PSC apportioned by area and then in proportion to target groundfish landings associated with cooperative members’ LLPs.] Once in the cooperative, PSC can be used to support any target fisheries within the cooperative at any time (no seasonal PSC apportionments).
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 1: At least 2 separate entities (using the 10% individual and collective rule) and/or
   Option 2: At least [2 – 4] eligible LLP licenses. An LLP must have associated catch history to count toward the threshold.

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
   - Operational plan for monitoring and minimizing PSC, with vessel level accountability, as part of the annual fishing plan

f. 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.

g. 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.

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

i. No person may hold or use more than the following percentage of allocated target species CP cooperative quota in each region, using the individual and collective rule:
   - Option 1: 30%
   - Option 2: 40%

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

Consolidation limits

Option 1. Harvest use (ownership) 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 individual target species CV cooperative quota, using the individual and collective rule:
   - Suboption 1: 3%
   - Suboption 2: 5%
   - Suboption 3: 7%

Option 2. Vessel use caps are also applicable within the cooperatives. A vessel may not be used to harvest more than the following percentages of individual target species cooperative quota issued to the CV sector:
   - Suboption 1: 3%
   - Suboption 2: 10%
   - Suboption 3: 15%
Option 3. Processor use caps (facility-based) in each region (WG and CG/WY). Processors that exceed these percentages during the qualifying years are grandfathered into the program. No processor shall receive or process more than the following percentage of individual target species issued to the CV sector:

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

Regionalization of target species quota

Target species cooperative 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).

Active participation criteria

To be eligible to purchase a GOA trawl CV license or catch history severed from a license, a person must be eligible to document a fishing vessel in the U.S. (status quo) and must:

Option 1. Hold at least (options: 20% - 30%) ownership of a trawl vessel; or provide documentation of participation as a captain or crew in the GOA trawl groundfish fishery for 150 days (verified by a signature on a fish ticket or crew members’ affidavit) for at least (options: 1, 2, or 4) fishing trips in the GOA groundfish trawl fishery in the most recent two years previous to purchase.
Option 2. Communities do not need to meet the criteria under Option 1.

Suboption (applies to Option 1 or 2):
To retain catch history, a person must be eligible to purchase catch history.

9. Transferability

a. (Annually) Full transferability of cooperative quota, including PSC separately, for annual use 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.

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.)

Allocated species history is severable from a CV trawl license and transferable to another eligible CV trawl license (which, when entered into a cooperative, target species history brings with it a pro rata share of PSC). Transferred history retains the regional delivery designation. PSC cannot be permanently transferred separately from the license.

Option: (Cooling off provision) License transfers (sale) and the severability provisions are prohibited for CV licenses in the first two years of the program.
10. Gear conversion
Pacific cod allocations associated with a trawl CV license may be fished with pot gear; a pot endorsement is not necessary but the license must have the appropriate area endorsement. 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. Similar to status quo, PSC taken with pot gear does not accrue to a PSC limit or cooperative PSC allocation.

11. 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 with an eligible FFP and LLP endorsed for GOA trawl. 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:
- Option 1. 10%
- Option 2. 20%
- Option 3. 30%

12. Sideboards
Sideboards that apply under the Rockfish Program for the CV and CP sectors, GOA non-exempt AFA CV sideboard limits, non-AFA crab vessel groundfish sideboards that apply to GOA trawl, and Amendment 80 groundfish and halibut PSC sideboard limits in the GOA, are removed for species allocated under the GOA trawl bycatch management program.

The Council requests further discussion of 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), as well as further information to consider whether CV sideboards are necessary for the BSAI Pacific cod and yellowfin sole fisheries.

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

14. 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.
**ALTERNATIVE 3.** Gulf of Alaska Trawl Bycatch Management Program (Alternative 2) with a Community Fisheries Association allocation or Adaptive Management Program. *(Options 1 and 2 are mutually exclusive.)*

**Option 1. Community Fisheries Association (CFA).**

Element 1. Allocate 5% - 15% of the fishing quota for all species allocated to CVs under the program to a Community Fishing Association established under §303A(c)(3) of the MSA.

Element 2. Number of CFAs
- Option 1. One GOA CFA
- Option 2. One CFA for the WG and one for the CG

Element 3. Goals and objectives for a Community Fishing Association:
- Provide for the sustained participation of fishing communities and to the extent practicable minimize adverse economic impacts on such communities
- Assist entry-level and small vessel owner-operators, captains, crew and fishing communities

Element 4. Communities eligible for participation via the CFA
- Located in the WG, CG, WY
- Consist of residents who conduct commercial fishing, processing, or fishery-dependent support businesses within the GOA
- A high potential for economic and social impacts associated with a LAPP program on harvesters, captains, crew, processors, and other businesses substantially dependent upon the fishery
- Have submitted a community sustainability plan through the CFA

Element 5. The CFA must provide a community sustainability plan which includes:
- Description of board, governance structure;
- Description of quota allocation process;
- Goals and objectives for the CFA, and explanation of how the CFA intends to meet those goals and objectives;
- Description of how the CFA will meet the goals of sustaining community participation in the fishery, providing for new entry/inter-generational transfer, and encouraging active participation; and
- Description of how the plan will address the social and economic development needs of coastal communities

Element 6. Require an annual report to the Council and communities

Element 7. CFA Cooperative Program Integration
- Annual quota allocated to the CFA may not be sold
- The CFA will operate within the cooperative structure of the main program. Quota leased from the CFA must be utilized on a license and accessed through a cooperative.
- CFA quota will be subject to the same set of rules as other quota in the program such as bycatch management, observer coverage and monitoring, sector allocations, cooperative structure, and gear conversion.
- If selected by the Council, regionalization and port of landing requirements will apply to CFA quota (option: do not apply port of landing requirements)
- Quota leased from a CFA counts toward any vessel and ownership use caps.
Option 2. **Adaptive Management Program.** Set-aside 5% - 15% of fishing quota for all species allocated to CVs under the program for adaptive management.

Element 1. Goals and objectives for adaptive management quota
   - Option 1. Same as those identified in the CFA option; and/or
   - Option 2. a. Community stability
   - b. Processor stability
   - c. Captain and crew entry and advancement
   - d. Conservation measures
   - e. To address other unintended outcomes

Element 2. Process for allocating adaptive management quota
   - The Council shall develop criteria for eligibility, a process for adaptive management proposals to meet the goals and objectives, and a regulatory mechanism for allocating quota to program participants.
   - The Council could allocate any amount up the total adaptive management set-aside to one or more proposals. Unallocated quota will pass through to the annual allocations to cooperatives.

Element 3. Program review and evaluation
   - Entities receiving adaptive management quota shall provide annual reports to the Council and NMFS describing outcomes associated with the use of the quota and progress toward objectives described in their proposal.
   - The Council shall periodically review its adaptive management goals and objectives.
   - The five-year overall program review should evaluate the Council’s effectiveness in achieving its goals and objectives through the use of the adaptive management program and identify potential improvements to the program design.

In addition, Section 3.2 of the October 2014 staff paper outlines regulations that could be removed in conjunction with the proposed GOA trawl bycatch management program. The Council generally agrees there is potential to remove the suggested regulations, and this discussion should continue to be incorporated in the analysis such that the Council can evaluate the impact of removing them under the action alternatives.

The Council directs staff to include a discussion of the effects of the GOA trawl bycatch management program alternatives on the management and implementation of the Central GOA Rockfish Program. At a minimum, this analysis should review the implications on quota allocations, sideboard management, and catch accounting under the Central GOA Rockfish Program.
5.2 Letter from Sullivan to Young (fixed linkage between harvesters and historic processor)

The Honorable Don Young
U.S. House of Representatives
Washington, DC 20515

Dear Representative Young:

Thank you for your letter requesting an explanation of the National Oceanic and Atmospheric Administration (NOAA) General Counsel’s determination that the Magnuson-Stevens Fishery Conservation and Management Act (MSA) does not authorize a fixed linkage between harvesters and their historic processors when structuring fishery cooperatives. You also requested any legislative suggestions on how to expand the authority in the MSA to permit the North Pacific Fishery Management Council (Council) to consider harvester-processor fishery cooperatives based on historic delivery patterns.

NOAA’s longstanding position has been that, with the exception of the Bering Sea and Aleutian Islands Crab Rationalization Program, the MSA does not authorize the agency to allocate onshore processing privileges, which include “fixed linkages” between harvesters and a specific shore-based processor. NOAA General Counsel most recently reiterated the position at the October 2014 North Pacific Fishery Management Council meeting during the Council’s discussion of alternatives for the formation of inshore harvesting cooperatives in the Gulf of Alaska Trawl Bycatch Management Program. The Council was considering a provision to require eligible harvesters to form a cooperative with a processor based on their historical deliveries in order for the cooperative to receive quota share. The provision was substantively identical to a requirement for inshore cooperative formation that was included in the Central Gulf of Alaska Rockfish Pilot Program (Pilot Program). When the Council considered this provision during its development of the Pilot Program, the agency determined the Pilot Program cooperative formation requirement would be an allocation of onshore processing privileges, as it would establish a fixed linkage between harvesters and the specific shore-based processor to which they made historical deliveries. Congress then authorized the Council and NOAA to make such allocations of onshore processing privileges in the Pilot Program by including specific authorization in the Consolidated Appropriations Act of 2004. The specific authority for onshore processing privileges in the Pilot Program expired at the end of 2011.

The Council developed the Central Gulf of Alaska Rockfish Program to replace the Pilot Program. The Rockfish Program, which was implemented as Amendment 88 to the Fishery Management Plan for Gulf of Alaska Groundfish, does not include onshore processing privileges.

In the past, when Congress wanted to authorize onshore processing privileges, Congress has passed specific legislation, such as the American Fisheries Act (AFA) (authorization of harvesting cooperatives that are allocated a percentage of the total allowable catch and form around a particular processor), the Crab Rationalization Program (processor share allocations of crab), and the Rockfish Pilot Program (authorization of AFA style cooperatives).
If Congress wants to authorize onshore processing privileges, including fixed linkages between harvesters and their historic processors, Congress could legislate language for specific fisheries as it has for the AFA or Rockfish Pilot Program. Congress also could provide specific authority to NOAA to manage certain processing activities. For example, Congress could provide NOAA with the authority to require that harvesters deliver to a specific class of processors, or limit the ability of a harvester to receive limited access privileges under Section 303A of the MSA only if they have an established relationship with a specific processor. Finally, Congress could provide broad authority for NOAA to regulate a wide range of activities undertaken by processors. This could potentially require modifications to the definition of “fishing” in Section 3 of the MSA to specify that processing activity can be regulated as fishing, or modifications to the specific required provisions for fishery management plans in Section 303(a) of the MSA to allow the regulation of processors. Because there are a wide range of possible legislative approaches that Congress could choose to use to regulate processors, NOAA could better assist you with technical drafting assistance if we have an improved understanding of your preferred approach.

I look forward to further communication with you and your staff on this issue to provide you with the specific assistance you require. If you have any questions, please contact Amanda Hallberg Greenwell, Director of NOAA’s Office of Legislative and Intergovernmental Affairs, at (202) 482-4981.

Sincerely,

[Signature]

Kathryn D. Sullivan, Ph.D.
Under Secretary of Commerce
for Oceans and Atmosphere
### 5.3 Mandatory and Voluntary Elements of Cooperative Reports

<table>
<thead>
<tr>
<th>Program</th>
<th>Required Information and OMB Approved Voluntary Information</th>
<th>Voluntary information not submitted for OMB approval</th>
<th>Deadline</th>
<th>Recipient</th>
</tr>
</thead>
</table>
| **AFA**            | **Established in 50 CFR §679.61(f) as well as Section 210(a)(1)(B) of the AFA:**  
- Allocation of pollock and sideboard species to cooperative  
- Sub-allocations of pollock and sideboard species on a vessel-by-vessel basis  
- Retained and discarded catch on an area-by-area and vessel-by-vessel basis  
- Method used to monitor fisheries  
- Actions taken by cooperative against members that exceed catch or bycatch  
- The total weight of pollock landed outside the State of Alaska on a vessel-by-vessel basis  
- Number of salmon taken by species and season  
- Each vessel’s number of appearances on the weekly “dirty 20” lists for non-Chinook salmon  | **Voluntary oral presentation at April Council meeting**  
- Catch of Pacific cod by week and over time (in 2004)  
- AFA exempt vessel activity in the GOA  
- Inter-temporal harvest information  | **April 1** of each year  | NPFMC |
| **Amendment 80**   | **Established in 50 CFR §679.5(s)(6)(i):**  
- Actual retained and discarded catch of CQ and GOA sideboard limit, by area and by vessel  
- Method used to monitor fisheries  
- Actions taken by co-ops against members that exceed assigned CQ  
- The percent of groundfish retained by the cooperative relative to aggregate groundfish retained by all Am. 80 co-ops  
- Results from a third party audit on cooperatives annual groundfish retention **From Final Action on Amendment 105 Flatfish Specifications Flexibility in April 2013:**  
  - By Dec. 1st, annually:  
  - Flatfish exchanges  
  - Co-op transfers  
  - Actual harvest  | **Voluntary oral presentation at April Council meeting**  
- Catch information from the Northern Bristol Bay Trawl Area  
- A retrospective indication of Amendment 80 catch capacity  
- Inter-temporal harvest information  | **March 1** of each year  | NMFS |
| **Central GOA Rockfish** | **Established in 50 CFR §679.5(r)(6)(i):**  
- Cooperative’s quota and sideboard limit  
- Cooperative’s retained and discard catch of CQ and sideboard limit by statistical area and vessel-by-vessel basis  
- Method used by cooperative to monitor fisheries  
- Actions taken by cooperative in response to members that exceeded their catch allowance  | **Voluntary oral presentation at April Council meeting**  
- Inter-temporal harvest information  | **December 15** of each year  | NMFS |
| **BSAI Crab**      | **Voluntarily submitted information under approved OMB information collection**  
- Increase availability of QS for transfer to active participants and crew members  
- Decrease high QS lease rates  
- Improve low crew compensation  | **Voluntary oral presentation at December Council meeting**  | **October of each year**  | NPFMC |
## 5.4 Sample Community Sustainability Plan Checklist (Stoll and Holliday 2014)

<table>
<thead>
<tr>
<th>Possible Requirements of a Community Sustainability Plan</th>
<th>Primary objective served</th>
<th>Supplemental material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Membership</td>
<td>✓</td>
<td>NA</td>
</tr>
<tr>
<td>Objectives statement that is consistent with the Council's FMP, supports MSA (especially National Standard S)</td>
<td>✓</td>
<td>NA</td>
</tr>
<tr>
<td>Information about participants, entity (e.g., cooperative, non-profit), and fishing operations</td>
<td>✓</td>
<td>Articles of incorporation</td>
</tr>
<tr>
<td>Roles and responsibilities of all participants (including named liaison to Council and NMFS)</td>
<td>✓</td>
<td>Articles of incorporation: Bylaws</td>
</tr>
<tr>
<td>Explanation of how the entity will benefit the greater community and fit into other types of community development, such as tourism and/or seafood processing</td>
<td>✓</td>
<td>NA</td>
</tr>
<tr>
<td>Evidence of community support from harvesters, processors, and other relevant stakeholders</td>
<td>✓</td>
<td>Letters of recommendation</td>
</tr>
<tr>
<td>Limited access privilege management and reporting strategy</td>
<td>✓</td>
<td>Business plan</td>
</tr>
<tr>
<td>System to sustain participation, attract new entry, and facilitate generational transition and intergenerational transfer of privileges where allowed by the Council</td>
<td>✓</td>
<td>Business plan</td>
</tr>
<tr>
<td>Short-term and medium-term development/business strategy</td>
<td>✓</td>
<td>Business plan</td>
</tr>
<tr>
<td>Metric and system to evaluate both biological/harvest and social/economic achievements</td>
<td>✓</td>
<td>NA</td>
</tr>
<tr>
<td>Regularly scheduled audit to ensure that entity is making progress toward the mission, goals, and objectives</td>
<td>✓</td>
<td>NA</td>
</tr>
<tr>
<td>Standardized system to address violations of the community sustainability plan</td>
<td>✓</td>
<td>NA</td>
</tr>
<tr>
<td>Review process</td>
<td>✓</td>
<td>NA</td>
</tr>
<tr>
<td>Signature stating FC agrees to follow the sustainability plan</td>
<td>✓</td>
<td>NA</td>
</tr>
</tbody>
</table>

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7 The data requirements should be defined at the same time the FMP/Amendment is being developed.