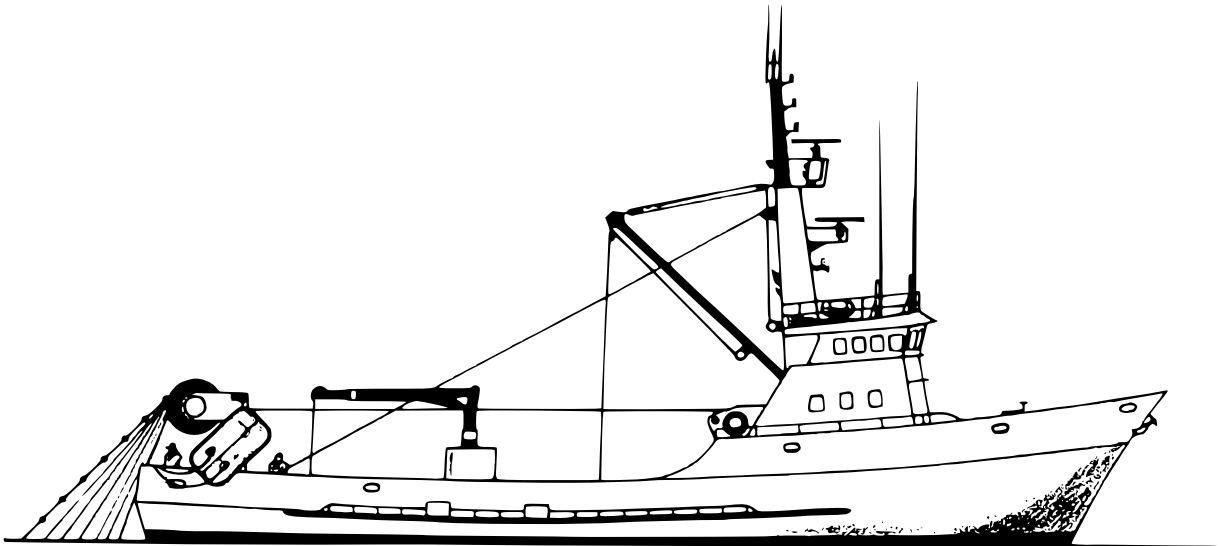


**Bering Sea/ Aleutian Islands Pacific Cod
Limited Access Privilege Program Scoping Paper
for the Trawl Catcher Vessel Sector and Pot Catcher Vessels \geq 60 feet**

September 2019¹



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1 Introduction

The North Pacific Fishery Management Council (Council) has tasked staff with several papers related to Pacific cod management in the Bering Sea and Aleutian Islands (BSAI).² This paper is intended to address two of those information requests. The two proposed actions (as more thoroughly described in the next two sections) consider the development of separate Limited Access Privilege Programs (LAPPs) for the trawl catcher vessel (CV) sector and the pot CV sector for vessels greater than or equal to 60 feet in length in the BSAI Pacific cod fishery. While these management programs may develop separately if the Council continues to consider action for both sectors, the proposals for both sectors are included in this paper because much of the general information on LAPPs and cooperative formation would apply to both sectors. Participation information is provided for each fishery in separate chapters.

This scoping paper, in conjunction with stakeholder input, is intended to provide information that would allow the Council to develop alternatives and options to address its purpose and need statement. The scoping document begins with an explanation of the Council's request related to each sector and a brief description of Federal BSAI Pacific cod management. The key sections that follow include a discussion of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) Section 303A LAPP elements that must be included/considered in a LAPP that can be approved by the Council and Secretary of Commerce (SOC), a summary of elements and characteristics of other cooperative programs in the North Pacific for reference, and questions and context related to the BSAI Pacific cod trawl CV and pot CV sectors specifically, that will be necessary in considering the elements of a LAPP.

1.1 Staff Tasking for the BSAI Trawl CV Sector

The Council tasked staff at its February 2019 meeting with developing a scoping paper that considers methods to rationalize the BSAI Pacific cod trawl CV fishery.³ The Council requested a scoping document instead of a discussion paper because it felt a scoping document indicates that the issue is further along than the discussion paper stage. The Council also stated that a scoping paper signals that the Council has a greater intent to move forward on the issue. At the same time the Council approved development of the scoping document, it encouraged stake holders to begin a parallel process of working to develop approaches to rationalize the BSAI Pacific cod trawl CV fishery that address their concerns.

Specifically, the Council requested that staff address the following issues so they could be incorporated into a comprehensive BSAI cod trawl CV management program:

- allocation of BSAI Pacific cod quota share to BSAI LLP licenses;
- establishing trawl CV cooperative(s) for Pacific cod;
- recognition of historical American Fisheries Act (AFA) cooperative-based cod harvest arrangements since the implementation of pollock cooperatives under the AFA;
- recognition of historical harvest of AFA cod exempt boats;
- recognition of historical harvest of non-AFA boats;
- protections for harvesters, processors, and communities;
- use caps, transfer requirements, and other administrative requirements that apply to quota programs;

² See a Staff Tasking Action Memo from the June 2019 Council meeting for a list of these current BSAI Pacific cod actions.

³ <https://meetings.npfmc.org/CommentReview/DownloadFile?p=68547653-a558-4b6e-8318-70444670bca5.pdf&fileName=C4%20MOTION%20BSAI%20Pcod%20Trawl%20CV%20Scoping%20Document.pdf>

- establishing sideboard limits to protect limited access Gulf of Alaska (GOA) and BSAI fisheries;
- consideration of management changes on CV crew; and
- implications for bycatch management, including halibut savings to benefit the health of halibut resource.

Council's Purpose and Need Statement

Over the last several years, total allowable catch for Pacific cod in the Bering Sea-Aleutian Island has steadily decreased. At the same time, the number of LLP licenses used by trawl CVs to participate in the BSAI non-CDQ trawl Pacific cod fishery has increased. The pace of the fishery has contributed to an increasingly compressed season, resulting in decreased ability to maximize the value of the fishery and negatively impacting all fishery participants (CVs, motherships, shoreside processors, and communities). This race for fish also discourages fishing practices that can minimize bycatch. The potential for continued re-entry of additional entrants could exacerbate these unfavorable conditions and threaten the sustained viability of the fishery. The Council is considering the development of management tools to improve the prosecution of the fishery, including the development of a cooperative-based program, with the intent of promoting safety and increasing the value of the fishery.

The Council also established a control date of February 7th, 2019 that may be used as reference for any future management action to address trawl catcher vessel participation in the BSAI Pacific cod fishery.

1.2 Staff Tasking for the BSAI Pot CV \geq 60 Feet Sector

During its February 2019 meeting the Council also requested a discussion paper specific to the BSAI Pacific cod Pot CV sector using vessels greater than or equal to 60 feet.⁴ That request was more general and requested that staff initiate a discussion paper to consider some form of rationalization or cooperative management structure for the BSAI Pacific cod pot CV sector greater than or equal to 60 feet in length overall. Data presented for this fishery is provided in Section 5 of this paper. The information included provides context for how this proposed action could change the management of the Pacific cod trawl CV and pot CV \geq 60 ft sectors, and any downstream effects this may have on other sectors.

1.3 Brief Summary of Federal BSAI Pacific Cod Management

The following section includes a brief description of the management of the Pacific cod fishery in the BSAI, including an overview of the process of establishing catch limits and sector allocations, seasonal apportionments for non-CDQ sectors, and the Federal licensing requirements for participation.

1.3.1 BSAI Pacific Cod Harvest Specifications and Sector Allocations

The process for establishing Pacific cod catch limits and sector allocations is illustrated in Figure 1-1. Each year, the Council's BSAI groundfish plan team and Scientific and Statistical Committee (SSC) establish an overfishing level (OFL) and acceptable biological catch (ABC) for Pacific cod for the Bering Sea (BS) subarea of the BSAI, and a separate OFL and ABC for the Aleutian Islands (AI) subarea of the BSAI. Before the AI and BS Pacific cod total allowable catches (TACs) are established at a lower level, the Council and NMFS consider social and economic factors, and management uncertainty, as well as two factors that are particularly relevant to BSAI Pacific cod: 1) Pacific cod guideline harvest level (GHL)

⁴ <https://meetings.npfmc.org/CommentReview/DownloadFile?p=e5ee738f-fed5-4352-b43b-072a511fff8d.pdf&fileName=E%20COUNCIL%20MOTION%20on%20Pot%20CV%20Cod.pdf>

fisheries that occur in the State waters of the BSAI, and 2) an overall 2 million mt limit on the maximum amount of TAC that can be specified for all BSAI groundfish.

Pacific cod TACs are specified at reduced levels that take into account the GHL fisheries⁵ so that the combined harvest limits from GHL fisheries and the TACs do not exceed the ABCs specified for the BS or AI. The State manages three GHL fisheries for Pacific cod⁶, two that occur within State waters in the BS and one that occurs within State waters in the AI. Under current State regulations in the BS, the Dutch Harbor Subarea (DHS) GHL fishery for pot gear in the BS is set at 8 percent of the BS ABC with an annual 1 percent increase in that GHL allocation if 90 percent of the GHL allocation is harvested, until it reaches 15 percent of the BS ABC. A second BS GHL fishery began in 2019 allocating approximately 45 mt (10,000 lbs.) to the jig sector in the DHS. In the AI, the GHL fishery was set at 27 percent of the 2018 ABC specified for AI Pacific cod, with annual “step-up” provisions that would increase the amount of the GHL fishery if it was harvested up to at least 90 percent in the previous year. The 2019 AI GHL was increased to 31 percent of the AI Pacific cod ABC. If the GHL fishery continues to be nearly fully harvested it can continue to increase annually by 4 percent up to a maximum of 39 percent of the AI ABC or to a maximum of 6,804 mt (15 million lbs.), whichever is less. Allowable gear in the AI GHL fisheries include trawl, longline, pot, and jig gear.

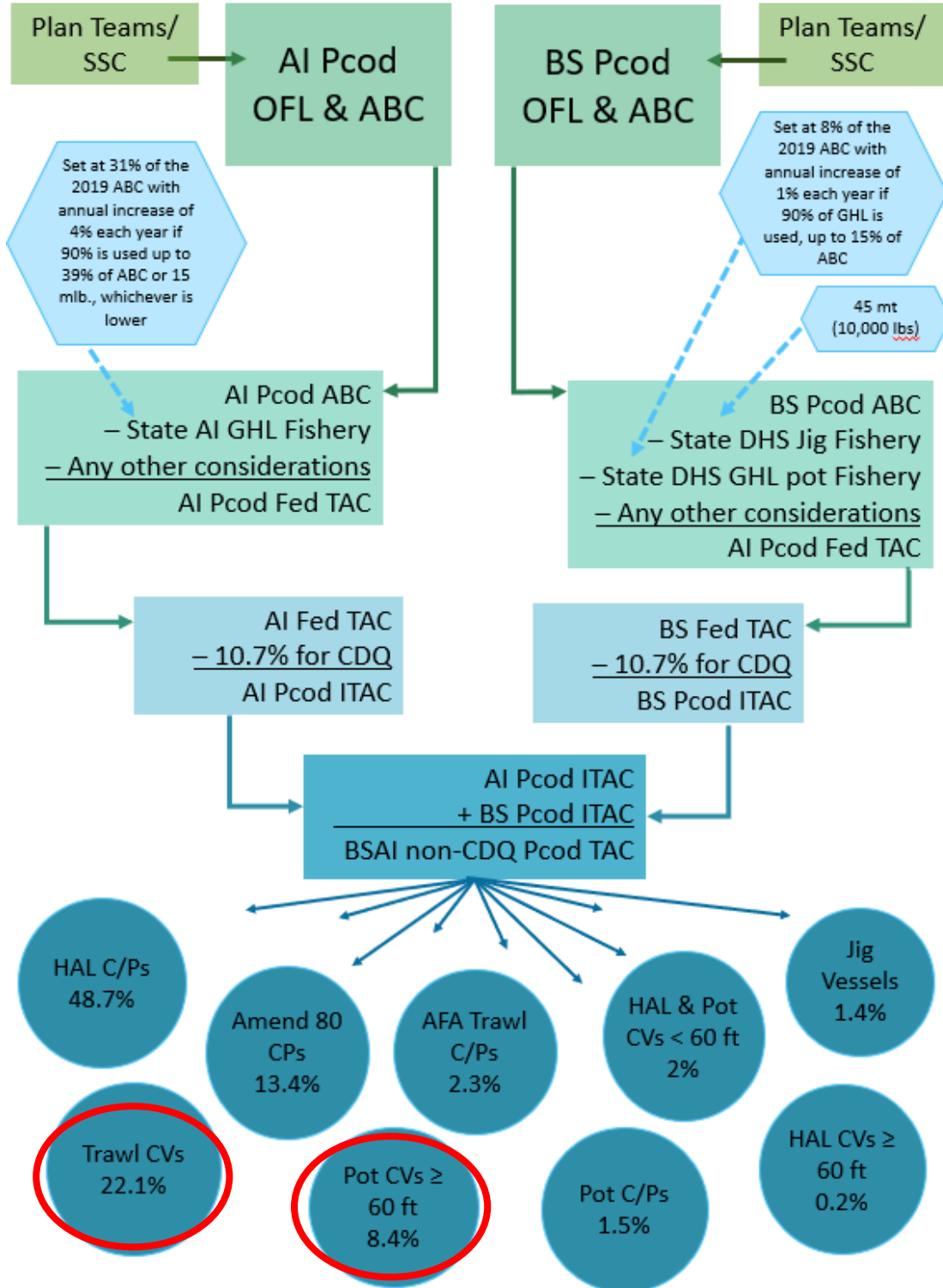
Once the individual AI and BS TACs are established, regulations at § 679.20(a)(7)(i) allocate 10.7 percent of the BS and AI Pacific cod TAC to the CDQ Program. The remaining portion of TAC, after deducting the 10.7 percent allocation for CDQ Program, is the initial total allowable catch (ITAC).

After subtraction of the CDQ allocation from each TAC, NMFS combines the remaining BS and AI ITACs into one BSAI non-CDQ TAC, which is available for harvest by nine non-CDQ fishery sectors. Regulations implemented under BSAI Amendment 85 at § 679.20(a)(7)(ii)(A) define the nine Pacific cod non-CDQ fishery sectors in the BSAI and specify the percentage allocated to each. The non-CDQ fishery sectors are defined by a combination of gear type (e.g., trawl, hook-and-line), operation type (i.e., catcher vessel or catcher/processor), and vessel size categories (e.g., vessels \geq to 60 ft in length overall). Through the annual harvest specifications process, NMFS allocates an amount of the combined BSAI non-CDQ TAC to each of these nine non-CDQ fishery sectors. The nine non-CDQ fishery sectors and the percentage of the combined BSAI non-CDQ TAC allocated to each sector are shown in Figure 1-1 below.

⁵ <http://www.adfg.alaska.gov/FedAidPDFs/FMR18-18.pdf>

⁶ <http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareaaleutianislands.groundfish>

Figure 1-1 BSAI Pacific cod specifications and sector allocations



Notes: SSC= Scientific and Statistical Committee, AI= Aleutian Islands, BS= Bering Sea, Pcod= Pacific cod, OFL= overfishing limit, ABC= acceptable biological catch, GHL= guideline harvest limit, DHS = Dutch Harbor Subarea, TAC= total allowable catch, ITAC= initial total allowable catch, CDQ= community development quota, HAL= hook-and-line, CV= catcher vessel, C/P= catcher processor, AFA= American Fisheries Act, Amend 80= Amendment 80

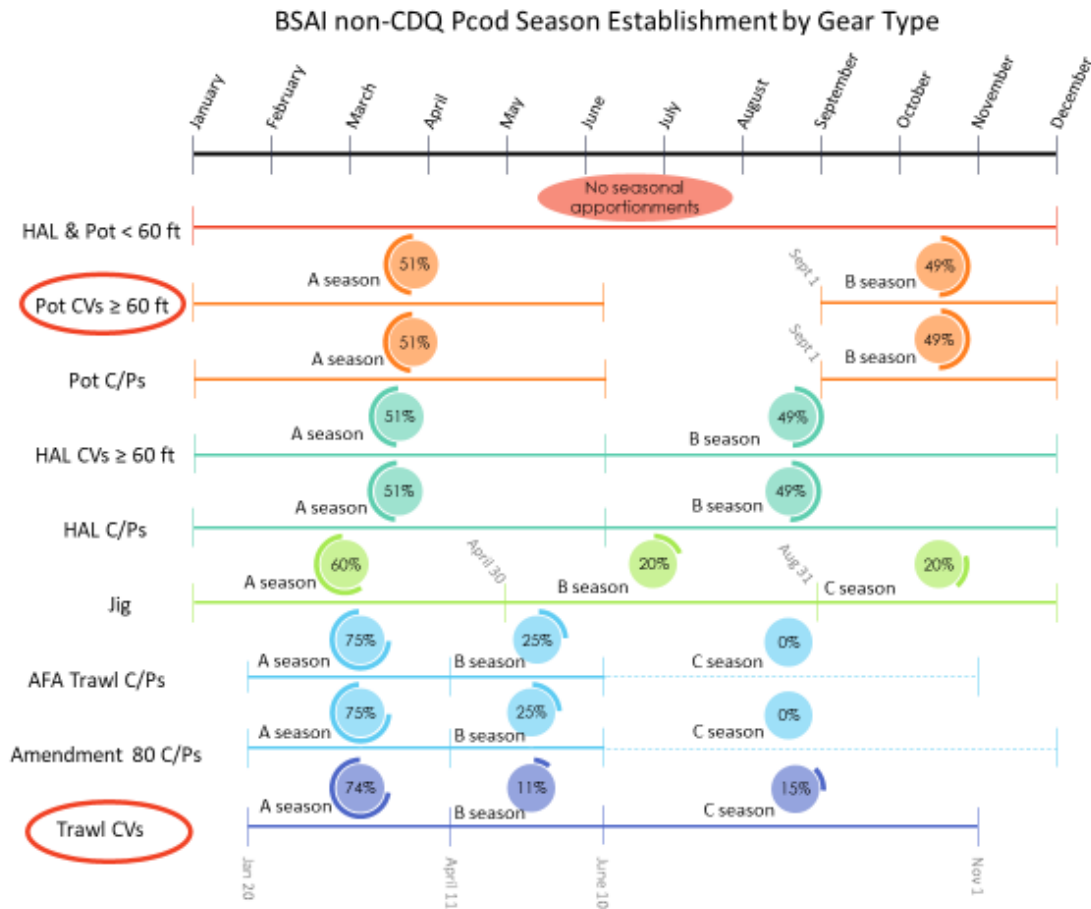
NMFS manages each of the non-CDQ fishery sectors to ensure harvest of Pacific cod does not exceed the overall annual allocation made to each of the non-CDQ fishery sectors. NMFS monitors harvests that occur while vessels are directed fishing for Pacific cod (specifically targeting and retaining Pacific cod above specific threshold levels) and harvests that occur while vessels are directed fishing in other fisheries and incidentally catching Pacific cod (e.g., the incidental catch of Pacific cod in the pollock directed fishery). NMFS allocates exclusive harvest privileges to the non-AFA trawl catcher/processor sector, or the Amendment 80 sector, that is prohibited from being exceeded. For the other eight non-CDQ fishery sectors, NMFS carefully tracks both directed and incidental catch of Pacific cod. NMFS takes appropriate management measures, such as closing directed fishing for a non-CDQ fishery sector, to ensure that total directed fishing and incidental fishing harvests do not exceed that sector's allocation.

An allocation to a non-CDQ fishery sector may be harvested in either the BS or the AI, subject to the non-CDQ Pacific cod TAC specified for the BS or the AI. If the non-CDQ Pacific cod TAC is or will be reached in either the BS or AI, NMFS will prohibit directed fishing for Pacific cod in that subarea for all non-CDQ fishery sectors. The other area will remain open to directed fishing for all sectors as long as Pacific cod TAC is available in that area and the sector has Pacific cod available from their BSAI allocation.

Allocations of Pacific cod to the CDQ Program and to the non-CDQ fishery sectors are further apportioned by seasons. Figure 1-2 demonstrates how those seasons vary by non-CDQ sector. Seasonal apportionments for the trawl CV sector and pot CV vessels ≥ 60 ft LOA are further discussed in Section 4.4 and Section 5.1, respectively.

The allocation of Pacific cod among the CDQ Program and the nine non-CDQ fishery sectors, as well as the seasonal apportionment of those allocations, create a large number of separate sector seasonal allocations. To help ensure the efficient allocation management, NMFS may rollover any unused portion of a seasonal apportionment from any non-CDQ fishery sector (except the jig sector) to that sector's next season during the current fishing year.

Figure 1-2 BSAI non-CDQ Pacific cod seasonal apportionments by gear type



Note: HAL= hook-and-line, CV= catcher vessel, C/P= catcher processor, AFA= American Fisheries Act

1.3.2 License Limitation Program (LLP) Management

As of January 1, 2000, a Federal LLP license has been required for vessels engaged in directed fishing for LLP groundfish species in the BSAI or Gulf of Alaska (GOA) in Federal fisheries.⁷ LLP licenses come with a combination of endorsements that specifies the type of participation the LLP license is authorized. In order to harvest Pacific cod in a BS or AI Federal fishery (including CDQ and non-CDQ) a vessel must hold a valid groundfish LLP license which includes the appropriate maximum length overall (MLOA) for the vessel using the license and the appropriate endorsements. More specifically, the LLP license specifies:

- An endorsement(s) for the sub-area(s) that vessel is authorized to fish (e.g., BS or AI or both)
- An endorsement for mode of operation (i.e. catcher vessel or catcher/processor). Vessels with a CV license may harvest, but not process fish onboard. Vessels with a C/P endorsed license

⁷ There are a few exceptions for the BSAI including vessels that do not exceed 32 ft LOA, vessels that are at least 32 ft LOA but that do not exceed 46 ft LOA that are registered with their CDQ group to harvest CDQ groundfish, vessels that do not exceed 60 ft LOA and are using jig gear (but no more than 5 jig machines, one line per machine, and 15 hooks per line), and certain vessels constructed for and used exclusively in the CDQ fisheries.

may harvest and process fish onboard. A vessel with a C/P LLP license may deliver unprocessed catch as well.

- An endorsement for trawl, non-trawl, or both types of fishing.
- If the vessel’s LLP license has a trawl endorsement, that vessel is also automatically authorized for directed fishing for Pacific cod.
- If the LLP license is non-trawl, the license will also specify whether the vessel has a Pacific cod endorsement (authorizing directed fishing for Pacific cod) and with which gear (hook-and-line or pot gear).
- The LLP groundfish licenses also identify whether the LLP license is associated with the Amendment 80, AFA, and GOA Rockfish Program.
- LLP groundfish licenses also specify whether use of the license is sideboarded in other fisheries (this is discussed more extensively in Section 4.7)

These different types of endorsements create 14 different combinations of LLP licenses that authorize Pacific cod fishing in the BS or AI (Table 1-1). Among those 14 combinations of licenses, some include multiple endorsements. For example, one LLP license is endorsed for both AI trawl CV fishing (which includes the ability for directed fishing for Pacific cod), as well as being authorized as a HAL CV in the AI fishing for Pacific cod. Table 1-1 demonstrates the number of LLP licenses for each category as well as this overlap for license that hold multiple endorsements. This table shows that in 2018, there were a total of 114 LLP licenses with CV trawl endorsements for the BS. Of the 43 LLP licenses with CV trawl endorsement for the AI, 42 of them were also authorized to fish in the BS; demonstrating significant overlap. In addition to overlap in the AI, there is also significant overlap in the LLP licenses with CV trawl endorsement for the BS and those that are AFA derived (98 of the 114 licenses). An Amendment 80 flag is attached to some of the C/P endorsements, such as the AI and BS trawl C/P fisheries. Most of the LLP licenses that are endorsed for CV pot fishing for Pacific cod do not have other endorsements.

Table 1-1 Number of LLP licenses issued in the BSAI by endorsement, 2018

Sector	Sum of AI_C/P_PCOD_HAL2	Sum of BS_C/P_PCOD_HAL2	Sum of AI_C/P_PCOD_POT2	Sum of BS_C/P_PCOD_POT2	Sum of AI_CV_PCOD_HAL2	Sum of BS_CV_PCOD_HAL2	Sum of AI_CV_PCOD_POT2	Sum of BS_CV_PCOD_POT2	Sum of AI_TRAWL_C/P2	Sum of BS_TRAWL_C/P2	Sum of AI_TRAWL_CV2	Sum of BS_TRAWL_CV2	Sum of A802	Sum of AFA
AI_C/P_PCOD_HAL	34													
BS_C/P_PCOD_HAL	34	36												
AI_C/P_PCOD_POT	3	3	5											
BS_C/P_PCOD_POT	3	3	5	8										
AI_CV_PCOD_HAL	0	0	1	1	8									
BS_CV_PCOD_HAL	0	0	1	1	7	8								
AI_CV_PCOD_POT	0	0	0	0	0	0	3							
BS_CV_PCOD_POT	0	0	0	0	0	1	2	49						
AI_TRAWL_C/P	0	0	0	0	0	0	0	0	50					
BS_TRAWL_C/P	0	0	0	0	0	0	0	0	49	58				
AI_TRAWL_CV	0	0	0	0	1	0	0	0	0	0	43			
BS_TRAWL_CV	0	0	0	0	0	0	0	0	0	0	42	114		
A80	0	0	0	0	0	0	0	0	19	26	0	0	26	
AFA	0	0	0	0	0	0	0	0	25	27	42	98	0	128

Source: BSAI Pacific cod allocation review {LLPs (4-29-1)}

2 MSA Elements of a LAPP

When the Council considers development of a LAPP to harvest fish there are both required and discretionary program elements. Section 303A of the MSA defines the required program elements and also provides guidance on discretionary elements of a LAPP.

Any LAPP to harvest fish is considered a permit for the purposes of sections 307 (Prohibited Acts), 308 (Civil Penalties and Permit Sanctions), and 309 (Criminal Offenses). The LAPP permit may be revoked, limited, or modified at any time as allowed by the MSA. Those permits do not confer any right of compensation to the holder of a LAPP privilege. They do not create any right, title, or interest to any fish before the fish is harvested by the holder. A LAPP permit is considered a grant of permission to the holder of the LAPP to engage in activities permitted by the LAPP.

A LAPP permit may only be issued to a United States citizen, a permanent resident alien, or a corporation, partnership, or other entity established under the laws of the United States or any State as long as it meets the eligibility and participation requirements established in the program. Entities other than those described above are prohibited from acquiring a privilege to harvest fish through transfer. They are also prohibited from acquiring LAPP permits by realizing a security interest.

2.1 Required Elements of a LAPP for BSAI Pacific Cod

Section 303A(c) of the MSA defines the required elements of a Council developed LAPP. A summary of that section is provided in this section when it applies to the BSAI Pacific cod fishery to assist the Council in development of the trawl CV and pot CV ≥ 60 ft LAPPs. Some items are excluded when they do not apply. For example, if a fishery is overfished or subject to a rebuilding plan, the LAPP must be structured to assist in the rebuilding plan. Because the BSAI Pacific cod fishery is not overfished or subject to a rebuilding plan, that required provision is not discussed in this section as a required element the Council must consider. The required elements that the Council must address are provided below.

1. If the Council or Secretary determine the fishery has over-capacity, the LAPP must contribute to reducing capacity in the fishery. Under the cooperative programs considered this would be achieved by allowing the cooperatives to determine how to rationally and efficiently harvest the BSAI Pacific cod available to its members.
2. A LAPP must promote fishing safety, fishery conservation and management, and social and economic benefits.
3. A LAPP must require that all fish harvested under the program be processed on vessels of the United States or on United States soil (including any territory of the United States). However, the Secretary may waive this requirement if he/she determines that the fishery has historically processed the fish outside of the United States; and the United States has a seafood safety equivalency agreement with the country where processing will occur. While the waiver is included in the MSA, it does not apply for the BSAI Pacific cod fishery.
4. The goals of the program must be specified. These are typically defined in the Council's Purpose and Need Statement that is developed for the program.
5. The program must include provisions for the regular monitoring and review by the Council and the Secretary of the operations of the program:
 - a. including determining progress in meeting the Program's goals,
 - b. meeting the goals of the MSA, and

- c. any necessary modification of the program to meet those goals, with a formal and detailed review 5 years after the implementation of the program and after the 5-year review the Council must review the Program no less frequently than once every 7 years.
6. The LAPP must include an effective system for enforcement, monitoring, and management of the program, including the use of observers or electronic monitoring systems.
7. The program must include an appeals process for administrative review of the Secretary's decisions regarding initial allocation of limited access privileges. When the National Marine Fisheries Service (NMFS) Restricted Access Management (RAM) issues an initial administrative determination (IAD) on behalf of the Regional Administrator to determine the initial allocation, the potential LAPP permit holder would be able to file an appeal. To fulfill that requirement, NMFS adopted a rule (79 FR 7056, February 6, 2014) at 15 CFR part 906, which designates the National Appeals Office (NAO), a division within NMFS Office of Management and Budget, as adjudicator for appeals in future LAPPs established under section 303A of the MSA. NAO adjudicates IADs, agency actions that directly and adversely affect an appellant. Although not exclusively, NAO proceedings are for appeals of denials of permits or other limited access privileges.
8. The program must provide for the establishment by the Secretary, in consultation with appropriate Federal agencies, an information collection and review process to provide any additional information needed to determine whether any illegal acts of anti-competition, anti-trust, price collusion, or price fixing have occurred among regional fishery associations or persons receiving limited access privileges under the program.
9. Provide for the revocation by the Secretary of limited access privileges held by any person found to have violated the antitrust laws of the United States.
10. The Council must establish a policy and criteria for the transferability of LAPP privileges (through sale or lease), that is consistent with the policies adopted by the Council for the fishery and establish, in coordination with the Secretary, a process for monitoring of transfers (including sales and leases) of limited access privileges.
11. Implementation of a LAPP does not modify, impair, or supersede the operation of any of the antitrust laws. The term 'antitrust laws' as defined in subsection (a) of the first section of the Clayton Act, except that such term includes section 5 of the Federal Trade Commission Act to the extent that such section 5 applies to unfair methods of competition.
12. LAPPs must include the means to identify and assess the management, data collection and analysis, and enforcement programs costs that are directly related to and in support of the program. Up to 3 percent of the exvessel value of the quota share (QS) species allocated under the LAPP must be paid to NMFS by LAPP privilege holders to cover the costs of management, data collection and analysis, and enforcement activities.
13. A LAPP permit is a permit issued for a period of not more than 10 years that:
 - a. will be renewed before the end of that period, unless it has been revoked, limited, or modified;
 - b. will be revoked, limited, or modified if the holder is found by the Secretary, after notice and an opportunity for a hearing under section 554 of title 5, United States Code, to have failed to comply with any term of the plan identified in the plan as cause for revocation,

limitation, or modification of a permit, which may include conservation requirements established under the plan;

- c. may be revoked, limited, or modified if the holder is found by the Secretary, after notice and an opportunity for a hearing under section 554 of title 5, United States Code, to have committed an act prohibited by section 307 of the MSA; and
- d. may be acquired, or reacquired, by participants in the program under a mechanism established by the Council if it has been revoked, limited, or modified.

Allocation

Section 303A(c)(5) defines the allocation criteria under a LAPP. The Council is required to establish procedures to ensure fair and equitable initial allocations. In making those determinations the Council must consider:

1. current and historical harvests;
2. employment in the harvesting and processing sectors;
3. investments in, and dependence upon, the fishery; and
4. the current and historical participation of fishing communities;

The Council must also consider the basic cultural and social framework of the fishery. As part of that consideration it should focus on the development of policies to promote the sustained participation of small owner-operated fishing vessels and fishing communities that depend on the fisheries, including regional or port-specific landing or delivery requirements.

The Council may also include measures to assist entry-level and small vessel owner-operators, captains, crew, and fishing communities through set-asides of harvesting allocations, including providing privileges, which may include set-asides or allocations of harvesting privileges, or economic assistance in the purchase of limited access privileges

Excessive Consolidation

The Council must also consider excessive consolidation in the harvesting and processing sectors to ensure that LAPP permit holders do not acquire an excessive share in the program by:

1. establishing a maximum share, expressed as a percentage of the total limited access privileges, that a limited access privilege holder is permitted to hold, acquire, or use; and
2. establishing any other limitations or measures necessary to prevent an inequitable concentration of limited access privileges.

2.2 Discretionary Provisions of LAPPs for BSAI Pacific Cod

The Council may also consider LAPP provisions for fishing communities. Any fishing privileges that may be granted under a BSAI Pacific cod LAPP that are specific to Fishing Communities will require that the fishing community be eligible to participate in a LAPP to harvest fish under the Council's program by

- a. being located within the management area of the Council;

- b. meeting criteria developed by the Council, approved by the Secretary, and published in the Federal Register;
- c. consisting of residents who conduct commercial or recreational fishing, processing, or fishery-dependent support businesses within the Council's management area; and
- d. developing and submitting a community sustainability plan to the Council and the Secretary that demonstrates how the plan will address the social and economic development needs of coastal communities, including those that have not historically had the resources to participate in the fishery, for approval based on criteria developed by the Council that have been approved by the Secretary and published in the Federal Register.

When developing participation criteria for eligible communities the Council must consider traditional fishing or processing practices in, and dependence on, the fishery, including:

- a. the cultural and social framework relevant to the fishery;
- b. economic barriers to access to fishery;
- c. the existence and severity of projected economic and social impacts associated with implementation of the LAPP on harvesters, captains, crew, processors, and other businesses substantially dependent upon the fishery in the region or sub-region;
- d. the expected effectiveness, operational transparency, and equitability of the community sustainability plan; and
- e. the potential for improving economic conditions in remote coastal communities lacking resources to participate in harvesting or processing activities in the fishery.

Failure to comply with the Program will result in the Secretary denying or revoking LAPP privileges for any person who fails to comply with the requirements of the community sustainability plan. Any limited access privileges denied or revoked under this section may be reallocated to other eligible members of the fishing community.

The Council could also allow for the implementation of Regional Fishery Associations (RFAs). These entities are defined at Section 303A(c)(4). RFAs are allowed to acquire and hold LAPP QS and permits but must not be eligible for an initial allocation of those harvest privileges. Additional information on RFAs is not provided at this time. If the Council wishes to pursue RFAs as part of a LAPP program, additional information would be provided in the future.

The Council may authorize LAPP permits to harvest fish to be held, acquired, used by, or issued under the system to persons who substantially participate in the fishery, including in a specific sector of such fishery, as specified by the Council. In other words, the Council could choose to designate QS for use by specific sectors. For example, AFA and non-AFA, Amendment 80 and non-Amendment 80, mothership and inshore AI and BS, etc.

The Council may also initiate a Limited Access Privilege Assisted Purchase Program as part of the LAPP. The program allows reserves up to 25 percent of any fees collected from a fishery under section 304(d)(2) to be used as an aid in financing the purchase of LAPP privileges in that fishery by fishermen who fish from small vessels and first-time purchase of LAPP privileges in that fishery by entry level fishermen. The Council would be required to recommend criteria that a fisherman must meet to qualify for funding under this provision.

When establishing a LAPP, the Council must consider, but is not required to implement, an auction system or other program to collect royalties for the initial, or any subsequent, distribution of allocations in a LAPP. If that type of program was implemented, revenues generated must be deposited in the Limited Access System Administration Fund.

A summary paper on the design and use of LAPPs was also developed by NMFS (Anderson & Holliday, 2007). The reader is referred to that paper for additional information on issues like shifts in market power, the theory of market-based management techniques, non-history-based allocation methods, etc.

3 Examples of Cooperative Programs

There are various types of LAPPs in use throughout the United States and the World. In part because of the increase in use of fishing cooperatives as a management tool, there is an ever-increasing number of academic papers devoted to fishing cooperatives. Deacon (2019) provides a somewhat detailed bibliography of recent and past works. A brief description of the cooperative programs in the North Pacific are presented in the following sections with a summary table (Table 3-2) following. Understanding the context for the development of these programs as well as the resulting design can help the Council in its consideration of new LAPPs for the BSAI Pacific cod trawl CV and the sector of pot CVs ≥ 60 ft.

3.1 American Fisheries Act

The AFA was developed by Congress and signed into law October 1998. The purpose of the AFA was to tighten U.S. ownership standards for U.S. fishing vessels 100 ft and greater and to address inshore versus offshore allocation disputes that were creating a race for fish within and between sectors. The AFA set allocations and provided for the formation of cooperatives.

The AFA specifies the allocation of the BS pollock TAC for three AFA sectors, after first deducting 10 percent of the BS pollock for the CDQ Program, and a variable amount as an incidental catch allowance for BS pollock taken in other fisheries. The BS pollock directed fishing allowance (DFA) is divided among the inshore sector (50 percent), C/P sector (40 percent), and mothership sector (10 percent). Catch history within each sector was assigned to harvesting vessels using years defined by Congress.

For the offshore sector, the AFA specifies eligible vessels by name. This includes 20 C/Ps that are eligible to participate in the C/P sector. Additionally, the Act lists seven CVs eligible to participate as harvesters in the C/P sector based on their historical participation in the C/P sector. A minimum of 8.5 percent of the C/P sector allocation is available for harvest only by these seven CVs. The AFA further specifies three motherships that are eligible to process the mothership allocation under the AFA and lists 19 CVs which are eligible to fish and deliver that sector's allocation.

For the inshore sector, the AFA does not list the eligible shoreside processors, stationary floating processors, and CVs by name; rather, it stipulates the landing/processing history necessary for eligibility. CVs qualified to harvest a portion of the inshore directed fishing allowance are required to deliver to a qualified inshore processor. Eight inshore processors met the AFA eligibility criteria to participate in the inshore sector, of which six are shoreside processors—UniSea Seafoods, Westward Seafoods, and Alyeska Seafoods in Unalaska/Dutch Harbor; Trident Seafoods in Akutan, Trident Seafoods in Sand Point, and Peter Pan Seafoods in King Cove. The Council is allowed to add qualified processors only if the BSAI TAC increases to at least 110 percent of the 1997 levels. Congress structured the AFA so that these processors could each be linked to a cooperative that CVs would join. The CVs in the cooperative are required to abide by the delivery requirements defined in the cooperative agreement, of which the processor is a member.

Section 210(e) of the AFA sets out excessive harvesting and processing limits for participants to prevent the excessive consolidation of participants and privileges in the AFA Program. This section also established that any entity in which 10 percent or more of the interest is owned or controlled by another individual or entity shall be considered to be the same entity as the other individual or entity. This is referred to as the “AFA 10 percent rule.” The AFA also specified that no particular individual, corporation, or other entity may harvest, through a fishery cooperative or otherwise, a total of more than 17.5 percent of the BS pollock DFA. Excessive share processing caps were established by Council and NMFS at 30 percent of the sum of the Bering Sea pollock DFA. Every year, NMFS publishes this limit in the annual harvest specifications in terms of mt.

The AFA provides generic direction to the Council to develop “measures it deems necessary” to protect other fisheries from adverse impacts of the Act, including the formation of fishery cooperatives. The Council used this direction to establish sideboards to protect harvesters and processors of Bering Sea non-pollock groundfish and crab, as well as non-pollock groundfish and pollock harvested or processed in the GOA.

3.2 Amendment 80

In June of 2006, the Council adopted a LAPP facilitating the formation of harvesting cooperatives and allocating several BSAI non-pollock groundfish species to the non-AFA trawl C/P sector. This program, known as Amendment 80, was implemented in 2008.

Discarding had long been a management concern for this fleet. In the multi-species flatfish fisheries, the lower valued fish (less valuable species, smaller fish, and fish without roe) were discarded, and only the more valuable fish retained. The race for fish exacerbated economic discarding by providing incentives to discard the less valuable fish that used up processing time and limited freezer space. To address these discards, the Council required full retention of Pacific cod, and later, a groundfish retention standard that would mandate an 85 percent minimum retention rate.

To provide the fleet the tools to comply with the groundfish retention standards, the Council developed the Amendment 80. The Amendment 80 program allocates a portion of the TACs for Atka mackerel, Pacific ocean perch, and 3 flatfish species (yellowfin sole, rock sole, and flathead sole), along with an allocation of PSC quota for halibut and crab, to the Amendment 80 sector. In addition, the Amendment 80 fleet is specifically allocated 13.4 percent of the BSAI Pacific cod TAC, after CDQ apportionment. All of the allocations are managed as a hard cap. These allocations are issued annually as quota share to owners of Amendment 80 vessels (or LLP license holders if the vessel is ‘lost’), based on the vessel’s catch history from 1998-2004. To qualify, vessels must have been a non-AFA trawl C/P and have a valid LLP license with a BSAI C/P endorsement and have processed more than 150 mt of groundfish (other than pollock) during the period 1997 through 2002. A total of 28 vessels qualified. Because the program was for C/Ps there was no need to address linkages between harvester and processors for allocated species.

Amendment 80 quota can be fished within a cooperative (comprised of at least 3 separate entities with at least 30 percent of the Amendment 80 vessels) as aggregated cooperative quota. Amendment 80 quota holders who do not form a cooperative arrangement with others are placed in the limited access fishery (BSAI trawl limited access sector) and continue to compete with each other for catch and PSC.

The program establishes GOA groundfish sideboard limits for pollock, Pacific cod, Pacific ocean perch, northern rockfish, and pelagic shelf rockfish, as well as GOA halibut PSC. GOA sideboard restrictions are based on historic participation during 1998-2004. In addition, participation in the GOA flatfish fishery is prohibited for vessels with less than 10 weeks of history in the GOA flatfish fisheries. One vessel is exempt from the GOA halibut PSC sideboard limits, having fished 80 percent of its weeks in the GOA flatfish fisheries from 2000 through 2003.

3.3 BSAI Crab Rationalization Program

A voluntary three-pie cooperative program for crab fisheries of the BSAI was implemented in 2005 and 2006. The BSAI Crab Rationalization Program was designed to address conservation and management issues associated with the derby fishery which had negative impacts on bycatch, discard mortality, and safety. The program issued crab harvesting quota to LLP license holders and captains and crab processing quota shares to shoreside processors demonstrating historical participation. Of the harvest shares, 90 percent are issued as Class A shares that require delivery to a processor holding processor quota, and the other 10 percent as Class B shares that can be delivered to any processor. Three percent of the harvest share pool is allocated to vessel captains and who do not have regional delivery requirements or share-matching requirements. Harvesters may choose to form a cooperative to increase the efficiency associated with harvesting their shares. In addition to economic incentives the program includes regulatory incentives to encourage cooperative participation (e.g. vessel use caps do not apply if the quota share is harvested within a cooperative). Nearly all the crab quota share has been harvested within the cooperatives.

The Crab Rationalization Program also built in measures to protect communities, including a 10 percent direct allocation of the TAC of each stock to the CDQ Program and the ability for CDQ groups to invest in and use non-CDQ Crab Rationalization Program harvester and processor quota. The program also includes regional landing requirements and processing quota transferability restrictions (i.e. a “cooling-off” period and right of first refusal on the sale of processor quota) to encourage processing in communities with history.

Other aspects of the program included defining how quota may be transferred, use caps, required elements of the crab harvesting cooperatives, protections for GOA groundfish fisheries through sideboard limits on some crab participants, an arbitration system to facilitate price formation between harvesters and processors, monitoring requirements, economic data collection, a the establishment of a mandatory cost recovery fee to offset additional management and enforcement costs created by the program, and establishment of a loan program for crab fishing vessel captains and crew members.

It is important to note that the Crab Rationalization Program was developed and implemented under Congressional authority provided at Section 313(j) of the MSA. Language in that section of the MSA is specific to the BSAI crab fisheries and would not apply to the BSAI Pacific cod fishery. Therefore, the Council does not have the authority to develop a program that mirrors the Crab Rationalization Program without Congressional action. For example, the Council may not recommend issuing processing quotas for Pacific cod without being granted additional authority. For the Crab Rationalization Program, the MSA required that the Secretary approve all parts of the Council’s program.

3.4 Central GOA Rockfish Program

In 2003, the U.S. Congress directed the Secretary of Commerce, in consultation with the Council, to establish a pilot program for management of the Pacific ocean perch, northern rockfish, and pelagic shelf rockfish fisheries in the Central GOA.⁸ In response to this directive the Council adopted a share-based management program, under which the TAC is apportioned as exclusive shares to cooperatives and an entry level limited access fishery. The Central GOA rockfish LAPP was first implemented as the Rockfish Pilot Program (from 2007 through 2011) and then as the Rockfish Program for the next 10 years (2011 through 2021).

⁸ Pelagic shelf rockfish included dusky rockfish, dark rockfish, yellowtail rockfish, and widow rockfish. Yellowtail, dark, and widow rockfish make up a very small proportion of the biomass and starting in 2012 a separate TAC was set for dusky rockfish and that species was allocated as a primary species in the Rockfish Program.

The Rockfish Program has some similar characteristics to the proposed LAPP for the BSAI Pacific cod trawl CV sector. For example, catch share history in the Rockfish Program is linked to the LLP license and can be transferred with the sale of the license, as is proposed under the BSAI Pacific cod trawl CV action. Due to this parallel, the description of the program elements goes into more depth than for other LAPPs. Impacts of the program including results of the provisions specifically implemented to achieve programmatic objectives are further evaluated in the Central GOA Rockfish Program Review (NPFMC, 2017).

The Rockfish Program provides separate primary and secondary species allocations to the CV and C/P sectors. Both sectors were allocated each of the primary species. Secondary species were allocated to sectors based, primarily on their historic dependence on the fishery (Table 3-1).

Table 3-1 Central GOA primary and secondary species allocated to the CV and C/P sectors

Primary Species	Secondary Species
Dusky Rockfish	Pacific cod (CV)
Northern Rockfish	Rougeye Rockfish (C/P)
Pacific Ocean Perch	Sablefish (CV and C/P)
	Shortraker Rockfish (C/P)
	Thornyhead Rockfish (CV and C/P)

For the Rockfish Pilot Program, eligibility to receive quota of primary and secondary species was based on targeted legal qualifying landings made during the years 1996 through 2002. A person's primary species allocation was based on best 5 of 7 years of landings during the eligibility period in the Central GOA. The Rockfish Program quota qualification was based on targeted legal landings during the years 2000 through 2006 or fishing in the entry level fishery during 2007, 2008, or 2009. The allocation of QS was based on the best 5 of 7 years from 2000 through 2006, or the number of years fished during the qualifying period for entry level fishery participants that did not qualify for QS based on history from 2000 through 2006.

In order to encourage cooperative formation, the Rockfish Program relaxed cooperative formation requirements that were established under the Pilot Program. The minimum number of LLP licenses with affixed rockfish QS required to form a cooperative was eliminated. However, CQ could only be transferred to a cooperative with a minimum of two LLP licenses. There was no requirement that the LLP licenses are held by different persons. These changes were implemented to encourage cooperative formation by providing greater flexibility to transfer CQ to meet operational demands.

The Rockfish Program includes an entry level fishery to continue to allow access for vessels that were not issued harvesting privileges. During the Pilot Program this included a trawl component as well as a longline (hook-and-line, troll, hand line or jig gear) component. When the Pilot Program transitioned to the Rockfish Program, the trawl entry level fishery was eliminated. Participants using this gear type in the Pilot Program's entry level trawl fishery were issued harvesting privileges and transferred into catch share management whereby 2.5 percent of the allocation was issued to the licenses that participated in the entry level trawl fishery in 2007, 2008, 2009. The entry level longline fishery continues to exist under the Rockfish Program; however, the amount of primary species available to this sub-sector was reduced in the

transition from the Pilot Program, because this amount had not been fully utilized. The program built in a stair-step increase for this sub-sector's allocation if ≥ 90 percent of the allocation is harvested.

Under both the Pilot Program and Rockfish Program, halibut PSC limits are assigned to cooperatives based on the proportion of primary species QS attached to the LLP license. Halibut PSC limits for the Rockfish Program were reduced from historical usage levels to balance the need to provide adequate halibut PSC for use by rockfish cooperatives while recognizing LAPPs could reduce halibut PSC use. From 2000 through 2006 (prior to the Pilot Program being implemented), average halibut PSC mortality averaged 84.7 mt in the C/P sector, and 134.1 mt in the CV sector. The Rockfish Program created a 74.1 mt halibut PSC limit for the C/P sector and a 117.3 mt halibut PSC limit for the CV sector. Those amounts represent a 12.5 percent reduction from the amount of halibut mortality associated with each sector during the 2000 through 2006 qualifying period. The remaining 27.4 mt (16.8 mt from the CV sector and 10.6 mt from the C/P sector) that would otherwise have been allocated is not available for use by any trawl or fixed gear fishery and remains "in the water" to contribute to the halibut biomass.

A Kodiak delivery requirement was included in the Rockfish Program to address concerns raised by processors that the Rockfish Program would provide harvesters an undue competitive advantage and that they could use that potential advantage to deliver outside of the traditional port of Kodiak. As a result, the Rockfish Program includes a requirement that all primary and secondary Rockfish Program species cooperative quota harvested by the CV sector must be delivered to a shorebased processor within the City of Kodiak. In addition to protecting traditional processors, the requirement is intended to protect the fishing community of Kodiak. While the Pilot Program also included a requirement that LLP license holders with quota fishing in the CV sector may only form a cooperative with other CVs and the processor to whom they historically delivered their catch from 1996 through 2000, this requirement was eliminated because the Council determined their program goals could be achieved without that provision.

The Rockfish Program includes other important features. Cooperatives must file a cooperative membership agreement with NMFS, containing a fishing plan, legal contractual obligations of members, and a monitoring program, and must annually report to the Council. Full retention of rockfish primary and secondary species is required to eliminate waste. Use caps for individual vessels (4 percent for CVs, 40 percent for C/Ps) and cooperatives (30 percent for catcher vessel, 60 percent for C/Ps) prevent excessive consolidation of the fleet. Shoreside processors are also subject to use caps (30 percent), unless grandfathered at a higher level based on processing history.

The Rockfish Program includes a series of CV and C/P sideboard restrictions to limit spillover impacts on other fisheries in the GOA. Sideboard limits were established for certain West Yakutat District and the Western GOA fisheries under the Pilot and Rockfish Programs. Rockfish Program sideboards apply to federally permitted vessels fishing in federal waters and waters adjacent to the Central GOA when the harvest of rockfish primary species by that vessel is deducted from the federal TAC. Sideboards limit both the LLP license with rockfish QS assigned to it, and the vessel used to make legal landings of rockfish QS.

Rockfish Program sideboards are in effect from July 1 through July 31. Sideboard measures are in effect only during the month of July when the rockfish fisheries were traditionally open and vessel operators had to choose between fishing in the Central GOA rockfish fisheries and other fisheries that were open to directed fishing.

CVs had small West Yakutat District sideboard limits for Pacific ocean perch and pelagic shelf rockfish under the Pilot program. The sideboard limit was modified to a ban on fishing those species in the West Yakutat District during July. The Central GOA Rockfish Program also prohibited CVs from directed fishing in any target fishery in the deep-water complex in the month of July (except for Central GOA Rockfish). This limitation prohibits CV from directed fishing in the Arrowtooth flounder, deep water

flatfish, and rex sole fisheries from July 1 through July 31. These restrictions were implemented to limit the ability of CVs in these fisheries because they had not historically harvested these species in July. As a result of this sideboard Central GOA Rockfish Program CVs are limited to fishing species in the shallow-water complex during the month of July.

C/P sideboard limits were designed to minimize potential adverse competition on non-Rockfish Program participants and potential conflicts among rockfish C/P cooperatives in the Western GOA and West Yakutat District rockfish fisheries, as well as GOA flatfish harvesters. Sideboard limits were not set for other rockfish species because those species were not traditionally harvested in July, so additional management measures were determined not to be needed. Because the Amendment 80 sideboard limits are set for all GOA species harvested by those vessels, the need for additional sideboard limits beyond the primary rockfish species and halibut PSC was mitigated. Therefore, sideboard limits are imposed for only dusky rockfish, Pacific ocean perch, and northern rockfish.

The Rockfish Program also established a sideboard limit on the amount of halibut PSC that could be used in July. The halibut PSC sideboard limits are based on historical halibut PSC usage during July. Halibut PSC sideboards were established for shallow-water species and the deep-water species complex. The percentage assigned as a sideboard limit was based on the annual average halibut PSC used by vessels with LLP licenses subject to the sideboard limit during July from 2000 through 2006 relative to the total available.

3.5 Pacific Cod Freezer Conservation Cooperative (Voluntary Cooperative)

Each year 48.7 percent of the BSAI non-CDQ Pacific cod TAC is allocated to the hook and line C/P sector (e.g. freezer longline sector) through the annual harvest specifications process. This sector chose to form a non-regulatory voluntary cooperative in order to harvest this allocation. The Freezer Longline Conservation Cooperative (FLCC) is established through private contractual arrangements that divide the hook and line C/P sector's Pacific cod and halibut PSC allocations among the member LLP license holders. Cooperative members each receive a share of the quota for harvest; shares are issued in proportion to historical fishing activity with the LLP license. Cooperative members are free to transfer their quota shares among themselves, and to stack shares on individual vessels.

NMFS implemented monitoring and enforcement provisions as a result of several pieces of legislation passed by Congress and subsequent changes to fishery management regulations, including 1) the 2005 Consolidated Appropriations Act (Pub. L. 108–447), which created a defined class of participants in the BSAI longline C/P subsector; 2) the final rule implementing Amendment 85 to the BSAI FMP (74 FR 56728, November 3, 2009), which allocated a specific quantity of Pacific cod resources in the BSAI to the defined class of longline C/P subsector participants; and 3) the Longline Catcher Processor Subsector Single Fishery Cooperative Act of 2010 (Pub. L. 111–335), which allows BSAI longline CP subsector participants to receive exclusive catch privileges. In combination, these changes created the opportunity for participants in the BSAI longline C/P subsector to form a voluntary fishing cooperative, the FLCC, whose members have a *de facto* catch share program because they effectively control fishing for the longline C/P subsector's allocation of Pacific cod in the BSAI.

Because this cooperative was established through private contractual arrangements and not through Federal regulations guided by the Council, this program is not subject to the MSA LAPP requirements. For instance, this cooperative structure does not include excessive share limits (use caps, vessel caps, or cooperative caps), it does not include community provisions, or requirements for cost recovery. Harvesting and management decisions are generally not public information but determined internally by the cooperative members.

Depending on the cooperative structure the Council wishes to consider for the BSAI Pacific cod trawl CV fishery, there may be some similarities between the voluntary FLCC and the AFA portion of the BSAI Pacific cod trawl CV sector. Given the pre-established coordination between the AFA CV harvesters, there may be non-regulatory options for cooperative structure for this sub-sector. This is discussed further in Section 4.2.

3.6 Tabular Summary of Example Cooperative Programs

The cooperative programs described in Sections 3 are further summarized in Table 3-2. This table allows for a comparison of the program objectives and elements within the management structure of each program. While all LAPPs must comply with MSA LAPP requirements and additional laws, depending on the characteristics of the historical fishery and participation, as well as the problems that the LAPP structure was seeking to address, the Council has often had a different vision for the LAPPs it has recommended to the Secretary of Commerce. Table 3-2 and some of the program summaries were adapted from Fina (2011).

Table 3-2 Summary of cooperative programs in the North Pacific

	Freezer Longline Conservation Cooperative	BSAI crab rationalization	AFA BSAI pollock	Amendment 80 Bering Sea non-pollock groundfish trawl fishery	Central GOA Rockfish Program
Type of allocation	Sector allocation of Pacific cod with Pacific cod LLP license endorsement (Amendment 77 in Dec 2004)	Individual fishing quotas with cooperative option	Cooperatives with limited access option	Cooperatives with limited access option	Cooperatives with entry level fishery
Year implemented	2006 limited participation; by the 2010 B season full participation.	2005-2006 season	1999 and 2000	2008	2007 pilot program & 2012 Rockfish Program
Catalyst for program	Derby fishery Short seasons Overcapitalization Safety	Derby fishery Short seasons Overcapitalization Safety	Allocation dispute between inshore and offshore sectors	Bycatch reduction and individual bycatch accountability	Derby fishery Short seasons Loss of product quality Conflicts with other fisheries (salmon)
Fishing location	BSAI	BSAI	BSAI	BSAI	Central GOA
Program development	Not a Council developed program. Sector developed a voluntary cooperative program	Council program under specific Congressional authority	Congressionally developed program with some Council developed components	Council developed program under MSA authority	Pilot: Congressional mandated program developed by the Council. RP developed by the Council under MSA.
Harvester initial allocation	Determined by members	97% to limited entry LLP license holders; 3% to captains (based on catch histories)	Vessel owners (based on catch histories)	Vessel owners (based on catch histories)	LLP holders (based on catch histories of the LLP license)
Processor component	N/A	Processor QS and price arbitration	Severable processor/cooperative associations	N/A	Pilot: Non-severable processor/cooperative association based on landings history; RP Kodiak landing requirement.
Gear type	Longline	Pot	Trawl	Trawl	Trawl
Number of area/species allocations	N/A	9 allocations	2 allocations	10 allocations plus; 5 bycatch allocations	8 allocations plus; 1 bycatch allocation
Number of vessels in season prior to program implementation	38	167 BS <i>C. opilio</i> ; 251 Bristol Bay red king crab; 20 AI golden king crab.	113 CVs 38 C/Ps	22	25 CVs 6 C/Ps
Number of vessels in most recent season	28	63 BS <i>C. opilio</i> ; 55 Bristol Bay red king crab; 3 AI golden king crab.	81 CVs 15 CPs	20	26 CVs 4 C/Ps

Summary of cooperative programs in the North Pacific continued

	Freezer Longline Conservation Cooperative	BSAI crab rationalization	AFA BSAI pollock	Amendment 80 Bering Sea non-pollock groundfish trawl fishery	Central GOA Rockfish Program
Observers	100% and At-Sea scales or 200%	100% C/P 20% - 50% CVs (varies by fishery)	200% C/P 100% CVs	200%	200% C/Ps 100% CVs
Cap on individual share holdings/use	N/A	1% - 10% (varies by fishery)	17.5%	30% of aggregate quota	4% CVs 40% C/Ps
Vessel use caps	N/A	None in cooperative; 2% - 20% of outside cooperative (varies by fishery)	17.5%	20% of aggregate quota	60% for C/Ps 8% for CVs
Cooperative use cap	N/A	None	None	None	30% for CVs
Processing cap	N/A	30% of processor shares by fishery	30%	N/A	30%
Share classes	N/A	Operation type (CV/C/P) and owner share/crew share	Operation type (CV shoreside/C/P/ CV mothership)	None	Operation type (CV/C/P)
Owner-on-board/active participation requirements	N/A	Active participation requirement for crew shares	None	None	None
Eligibility to acquire shares	N/A	Sea time requirement for all shares; active participation requirements for crew shares	None	None	None
Community provisions	N/A	2-year port-specific landing requirement; regional landing requirements; community right of first refusal on processor quota	None	None	Kodiak delivery requirement for CVs
Elements to improve entry opportunities	N/A	Crew share QS requires active participation for acquisition and retention; loan program	None	None	Set-aside Entry Level Longline
Subject to Cost Recovery	No	Yes	Yes	Yes	Yes

4 BSAI Trawl CV Sector LAPP

This section highlights context and issues relevant to the Council's consideration of a BSAI Pacific cod trawl CV sector LAPP. Each sub-section first includes a bulleted list of outstanding decision points or topics of consideration, that the Council will need to consider in designing a LAPP for this fishery. Some of these decision points may translate into alternatives or options in the development of a LAPP; some may highlight areas that would benefit from additional public input. The sub-sections also include relevant context for understanding these decision points within the scope of a potential BSAI Pacific cod trawl CV sector LAPP, including statistics on recent participation.

The sections included address the bulleted elements and direction from the Council's February 2019 motion, as well as highlighting requirements and discretionary elements of a LAPP stated in MSA and summarized in Section 2.

4.1 Program Objectives

Topics of Council consideration:

- **Any clarification/ expanded description of the issues with the status quo fisheries?**
- **Any specific goals for this LAPP that could be used to measure the program's success?**

MSA specifies the types of conditions where the creation of a LAPP may be warranted and dictates that the goals of the program must be specified (Section 2). Based on experience with past LAPPs, the more specific the Council can be in articulating its vision for the fishery through stated objectives, the more effective a review of a program can be in its MSA-required 5 and 7-year review cycle. Specific objectives allow for a better understanding of whether the proper information is being collected to evaluate those objectives and makes the review process less subjective. Moreover, clearly defined objectives allow future Councils to understand any unintended consequence that may arise from the management shift and if proposed amendments fit within the original stated objectives.

For instance, Table 3-2 summarizes the catalysts in the development of existing cooperative programs; not all of these LAPPs were developed for the same reasons. For example, despite the short seasons and derby-like conditions, overcapitalization was not a prominent factor in the creation of the Central GOA Rockfish Program in the way that it was for the BSAI Crab Rationalization Program. Although coordination among harvesters has increased in the Central GOA Rockfish Program, minimal consolidation occurred after the LAPP was developed (NPFMC, 2017).

The Council's purpose and need statement (Section 1.1) and previous public testimony has highlighted some of the conditions in the BSAI Pacific cod trawl CV sector that have led to the present consideration of a change in management, including:

- a decline in Pacific cod TAC,
- an increase in the number of LLP licenses used by this sector and the risk of additional entrants,
- length of the fishery has compressed in recent years,
- inability to maximize the value of the fishery,
- high bycatch, and
- safety.

The Council and the public may consider whether this list comprehensively details the issues present in the current fishery. In addition to the issues discussed in the purpose and need, the Council may consider whether to include a more specific list of programmatic objectives.

4.2 Cooperative Structure

Topics of Council consideration:

- **If a cooperative structure is used, would the cooperative formation be voluntary or prescribed in regulations?**
- **Would the Council allow for/ encourage the formation of an AFA and non-AFA cooperative?**
- **Would there be any restrictions on the number of cooperatives that may form (min or max)?**
- **Would there be any restrictions on the percent of share history that may be required to form a cooperative?**
- **Would cooperative membership be mandatory in order to participate in this fishery?**
- **Would there be any mechanism for the transfer of quota between cooperatives?**

The Council's February 2019 motion suggests that under the proposed program, Pacific cod catch history could be assigned to an LLP license based on the qualification criteria selected and that allocation could be harvested under a cooperative structure. The regulatory definition for "cooperative" is somewhat different for each program specified in Section 3; however, in essence, a cooperative is a group of quota holders who have chosen to pool their allocated or acquired harvesting privileges allowing them to coordinate their harvest (and the terms of harvest) without official regulatory transfers within the cooperative. Typically, once a cooperative is formed, the harvesting privileges are issued directly to the cooperative based on member allocations. Cooperative arrangements are based on private contracts negotiated to sub-allocate harvesting privileges within the group and rely on civil litigations to uphold the terms of the contracts (National Research Council, 1999). Thus, under a cooperative structure, Pacific cod trawl CV catch history would be pooled within the cooperative, from a NMFS perspective, allowing its members to make internal decision about how that allocation is harvested by agreement among the members of the cooperative.

Cooperatives may form outside of regulatory action or within a structure defined in regulations. For instance, as described in Section 3.5, the FLCC did not form based on a specific Council action. This group is not technically considered a LAPP and therefore does not follow the same structure or requirements of LAPPs. Conversely, all other example cooperative programs from Section 3 were formed after Council action. Provided below is an expanded description of the voluntary cooperative approach and the Council defined cooperative approach.

In addition to the structural cooperative considerations in this section, Section 4.5 includes considerations of potential harvesting cooperative and processor linkages.

4.2.1 Voluntary Cooperative

As introduced in Section 3.5, the best example of a voluntary cooperative in the North Pacific is the FLCC. Each year 48.7 percent of the BSAI Pacific cod is allocated to the freezer longline C/P sector through the annual harvest specifications process. Since 2006, most of the holders of HAL C/P LLP licenses endorsed for BSAI Pacific cod have been members of the FLCC. Through private negotiations

and a federally funded buyback loan in 2007, midway through 2010 (B-season), the FLCC had 100 percent participation and began fishing as a voluntary cooperative under management contracts facilitated by the group. FLCC members each receive a share of the sector's allocation for harvest; shares are issued in proportion to historical fishing activity associated with each LLP. FLCC members are free to exchange their shares among themselves, and to stack shares on individual vessels. Compliance with the agreement is monitored by SeaState, Inc., and there are heavy financial penalties for non-compliance. Dissolution of the cooperative requires the agreement of an 85 percent supermajority of LLP license holders.

This example may be relevant to the AFA component of the BSAI Pacific cod trawl CV sector in particular because AFA vessels within the trawl CV sector are already members of AFA cooperatives. This pre-established structure may help facilitate the formation of a voluntary cooperative for that component of the sector's Pacific cod allocation⁹. The voluntary cooperative structure could be designed around the AFA cooperatives or could be implemented as a single cooperative (or an inter-cooperative agreement) as developed for the pollock fishery. This structure would require that the trawl CV sector allocation be divided between AFA and non-AFA vessels/LLP licenses. That division of catch history would allow the AFA participants to assign their portion of the history to a voluntary cooperative.

Given their diversity in operations, owners and operators of non-AFA vessels/LLP licenses may have more difficulty in forming a voluntary cooperative. The non-AFA sector is comprised of a diverse group of vessel owners and LLP license holders that includes Amendment 80 firms, AFA firms, Central GOA Rockfish Program participants, and firms that are not members of any cooperative (see Section 4.7.2).

4.2.2 Cooperative Structure Defined in Regulation

Most of the cooperative programs that exist in the North Pacific had some level of Council guidance in their development and include some regulatory requirements. For instance, regulations may require an annual application detailing membership in order for NMFS to issue harvesting shares directly to the cooperative and ensure compliance with any cooperative use caps or min/ max requirements on membership. The Council can consider whether there will be regulatory restrictions on the number of cooperatives that may form (i.e. a minimum or maximum) or the percent of shareholders that must join in order to be eligible, or the Council may choose not to include participation requirements. The Council may also consider whether cooperative membership would be mandatory or if it would allow option *not* to join a cooperative.

4.2.2.1 Number of Cooperatives

The Council could recommend rules that would define the number of cooperatives that could be formed. One option would be to have a single cooperative that would be open to all LLP license holders that have Pacific cod catch history assigned to their LLP license based on the qualification criteria selected. This method may make transferability simpler, as the fleet would not have to deal inter-cooperative transfers. However, it could also be challenging for the whole sector's fleet to agree on terms under one cooperative, and if cooperative membership is required, it may create a situation where some members would have more bargaining power because of when they joined. Other options would be to allow more than one cooperative to form (either a determined number or with no limit). For example, there could be an AFA and non-AFA cooperative. The Council could also allow more than one non-AFA cooperative. Based on concerns expressed during the recent Pacific cod mothership action, the Council could also structure the cooperatives around CVs that deliver their catch to inshore processing plants or motherships (discussed more in Section 4.5).

⁹ AFA CVs can operator in an open access pollock fishery when changing cooperatives.

4.2.2.2 Percent of QS Holders that Must Join

Setting the percentage of eligible members that must agree to form a cooperative is an important issue in terms of agreement and bargaining power. The AFA requires that owners of 80 percent of eligible CVs must agree to join a cooperative before it can form. The 80 percent rule was implemented to help ensure that bargaining power within the cooperative was not given to too few members. Requiring too many potential members to join could increase the bargaining power of the last persons to join to meet the minimum required percentage. After the minimum is met, the bargaining power of additional entrants could be reduced and they could be forced to accept the terms agreed to by the other members, which may or may not place them at a disadvantage.

Not requiring all potential members to join a cooperative could mean that some individuals may elect to remain in an open access portion of the fishery. However, there would likely be substantial incentives for them to join a cooperative if the alternative is to compete with all vessels that can fish in the open access. This would include both persons who had Pacific cod catch history assigned to their LLP license but opted not to join cooperative and also those who hold a BSAI trawl license that did not have Pacific cod catch history (or had a very small amount) assigned to their LLP license. The competition for a potentially small amount of quota would create an incentive for all LLP license holders with catch history to join a cooperative.

4.3 Allocation Decisions

Topics of Council consideration:

- **What criteria will be used to determine initial allocation?**
 - **Which years will be used to establish history?**
 - **Would participation include just targeted catch or targeted and incidental catch?**
 - **How to assign catch history to LLP licenses when more than one LLP license was assigned to the CV at the time the fish were harvested?**
 - **How to assign catch history in the event of internal AFA cooperative leasing?**

This section provides context for a discussion of harvesting privilege allocations and highlights historical participation and other important nuances of participation for the Council to consider. Section 303A(c)(5) of MSA states the Council is required to establish procedures to ensure fair and equitable initial allocations, while specifically considering 1) current and historical harvests; 2) employment in the harvesting and processing sectors; 3) investments in, and dependence upon, the fishery; and 4) the current and historical participation of fishing communities..

4.3.1 Harvest and Participation Data

The Council's February 2019 motion did not indicate which dates an allocation decision may be based around, except for establishing a control date of February 7th, 2019. Thus, analysts have chosen to provide participation from the longest reliable time period; 2003 through 2018. The years back to 2003 were included because consistent data only reaches back to 2003, when the current Catch Accounting System (CAS) was implemented. Information through 2018 is included as the last year of complete fishing data¹⁰. The information provided does not signal the Council's intent to rely on these specific years for allocation decisions, which can be further honed with Council direction. In addition, only BSAI

¹⁰ Data through February 7, 2019 could be included based on the Council's control date but was not provided in this document.

Pacific cod catch that is deducted from the trawl CV sector allocation is included in the tables. That means that Pacific cod catches attributed to State of Alaska fisheries, CDQ fisheries, and other federal fisheries sectors are excluded. Also, all landed catch (including catch from the parallel fishery¹¹) is included. This means at-sea discards are excluded. However, as noted in Table 4-1, since the implementation of the improved retention/improved utilization (IR/IU) program in 1998, discards of Pacific cod in the BSAI have been very low for AFA trawl CVs, non-AFA trawl CVs, and pot CVs and will not substantially impact the potential allocations of history to LLP licenses.

Table 4-1 Annual percent of BSAI Pacific cod discarded for AFA trawl CVs, non-AFA trawl CVs, and pot CVs

CV group	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
AFA trawl CVs	0.6%	0.7%	0.3%	0.8%	1.3%	0.1%	0.6%	0.6%	0.2%	0.1%	0.2%	0.4%	0.0%	0.3%	0.4%	0.3%
Non-AFA CVs	1.1%	0.3%	0.3%	0.8%	1.1%	0.0%	1.7%	0.2%	0.3%	1.0%	0.6%	0.4%	1.0%	0.3%	4.5%	1.1%
Pot CVs	0.9%	0.3%	0.4%	0.5%	0.4%	1.0%	0.1%	0.0%	0.0%	0.1%	0.1%	0.3%	0.1%	0.1%	0.0%	0.3%

Source: AKFIN summary of CAS data (BSAI_PCOD_R_D(7-9-2019))

Catches with no LLP license associated with the harvest (the LLP license field was blank) are also excluded from subsequent participation tables. In most cases these were landings by vessels in the AI and some were made by vessels that had used an AI transferable endorsement. This raises the issue of how to treat catch that does not have an associated LLP license or is associated with an LLP license that does not have a trawl endorsement for the AI but is using a transferable AI endorsement. In the latter case, the Council will need to determine if the catch history for Pacific cod should be attached to the transferable AI endorsement. Assigning the catch to the LLP license could result in it being assigned a license that does not have a trawl endorsement for either AI or BS if the endorsement is transferred. In total, between 2003 and 2018, there were 39 vessels associated with landings where the LLP license field was blank (Table 4-2). Over 93 percent of the catch with no LLP license was reported in the AI. If only the 2010 through 2018 period is considered, 15 vessels were associated with catch where there was no LLP license number reported. Over 75 percent of that catch was from the AI.

Table 4-2 Targeted Pacific cod catch reported with the LLP license field blank

Weight/Vessels	2003	2004	2005	2006	2007	2008	2009	2010	2012	2015	2016	2017	2018	Total
AI														
Weight (mt)	6,073	2,060	506	1,561	712	550	738	828	225		*		1,190	14,682
Vessels	15	7	4	10	12	10	9	5	3		2		6	30
BS														
Weight (mt)	140	*	*							*	*	*	*	1,037
Vessels	6	2	1						1	1	1	1		11
Total														
Total Weight (mt)	6,213	*	*	1,561	712	550	738	828	*	*	409	*	1,190	15,718
Total Vessels	19	9	5	10	12	10	9	5	4	1	3	1	6	39

Source: AKFIN summary of CAS data (BSAI_TRW_LLP_PCODLANDINGS(5_16_2019))

4.3.2 Historical Dependence

Several tables are provided in this section to allow the Council to consider various allocation options and their potential impacts. Tables were generated to show AFA versus non-AFA catch, the number of AFA vessels that were replaced, AFA sideboard exempt and non-exempt catch, AI vs BS catch, and directed fishing versus incidental catch.

4.3.2.1 AFA and Non-AFA

The first grouping of catch data provided shows the targeted Pacific cod catch by LLP licenses associated with AFA and non-AFA vessels (Table 4-3). Annual data are presented. Data are not grouped by year combinations because the Council has not identified alternatives and options. Summing the annual catch data allows the reader to create combinations of years and calculate percentages that could be assigned to

¹¹ See Section 4.9.4 for further information on parallel fishery activity.

AFA and non-AFA LLP licenses. However, it is not possible from the data provided to determine the number of LLP licenses that may be assigned catch history if various combinations of years are used.

Table 4-3 shows that from 2003 through 2018 the non-AFA vessels harvested between approximately 5 percent and 25 percent of the BSAI targeted Pacific cod from the trawl CV sector allocation. Since 2010 these vessels have always harvested at least 15 percent of the sector’s catch. From 2003 through 2018 a total of 18 LLP licenses were used on 20 non-AFA vessels. A total of 94 LLP licenses were used on AFA vessels over that period and the annual number used ranged from a low of 37 in 2010 to a high of 63 in 2003. Variation in the number of vessels and LLP licenses that were active in the fishery during a year is driven by many factors including prices, TACs, other fishing opportunities, and various management measures considered to limit participation in the BSAI Pacific cod fishery.

Table 4-3 Targeted trawl CV sector BSAI Pacific cod landings 2003 through 2018

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
Non-AFA																	
Landed Catch (mt)	3,173	1,661	1,547	1,568	1,714	3,755	3,776	4,219	7,695	7,066	6,832	6,136	7,874	7,000	6,642	6,868	77,526
Landed Catch (%)	9.4%	4.7%	5.1%	5.1%	6.0%	13.6%	15.0%	17.0%	22.2%	17.4%	17.5%	15.7%	24.8%	16.9%	17.9%	21.1%	14.6%
LLP Licenses	7	6	6	6	9	9	6	7	12	10	11	6	7	9	12	13	18
Vessels	7	6	6	6	8	9	6	7	12	10	11	6	7	9	12	12	20
Processing Plants	6	7	7	8	10	11	8	7	8	8	7	5	7	8	12	14	36
AFA																	
Landed Catch (mt)	30,577	33,424	28,834	29,312	26,724	23,785	21,390	20,540	26,928	33,467	32,142	32,985	23,825	34,307	30,445	25,651	454,338
Landed Catch (%)	90.6%	95.3%	94.9%	94.9%	94.0%	86.4%	85.0%	83.0%	77.8%	82.6%	82.5%	84.3%	75.2%	83.1%	82.1%	78.9%	85.4%
LLP Licenses	64	65	57	52	51	54	42	38	39	48	45	47	45	51	52	53	94
Vessels	63	62	53	48	49	52	40	37	38	44	42	42	40	47	48	48	82
Processing Plants	10	12	11	10	11	12	8	7	11	10	10	9	8	14	14	14	35
Total																	
Total Landed Catch (mt)	33,750	35,086	30,381	30,880	28,439	27,540	25,166	24,759	34,622	40,533	38,974	39,122	31,698	41,308	37,087	32,519	531,863
Total Landed Catch (%)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Total LLP Licenses	71	71	63	58	60	63	48	45	51	58	56	53	52	60	64	66	109
Total Vessels	70	68	59	54	57	61	46	44	50	54	53	48	47	56	60	60	102
Total Processing Plants	10	13	12	11	12	14	10	8	13	11	12	10	11	17	17	19	41

Source: AKFIN summary of CAS data (BSAI_TRW_LLP_PCODLANDINGS(5_16_2019))

Although vessels were originally named in the AFA, the Coast Guard Act of 2010 provided the opportunity for the replacement, removal, and consolidation of fishing vessels eligible to participate in the BSAI AFA inshore pollock CV fishery. Some of those vessels reported targeted fishing for Pacific cod. When vessels are replaced, the LLP licenses associated with the vessels may be transferred to the replacement vessel or it could be transferred to a different vessel. If the Pacific cod catch history is associated with the LLP license used to harvest the Pacific cod, that catch history and any QS that may result will be assigned to the LLP license. Table 4-4 shows the vessels that were in an inshore cooperative but not actively fishing every year from 2005 through 2019. These vessels were replaced or are replacement vessels. Vessels with a star in the left-hand column indicates they were associated with BSAI Pacific cod landings from the trawl CV sector. It appears that all the LLP licenses of replaced vessels with Pacific cod history were transferred to active AFA vessels that may or may not have Pacific cod history of their own.

Table 4-4 AFA CV vessels that did not hold an AFA inshore permit (white cells) all years from 2005 through 2019

Pacific cod	Vessel	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Years
	AJ																11
	ALASKAN COMMAND																8
*	ALASKAN DEFENDER																4
	AMERICAN CHALLENGER																14
*	ARCTIC RAM																7
*	BERING DEFENDER																8
	BLUE FOX																9
	DEFENDER																4
	DONA MARTITA																7
*	EXODUS EXPLORER																5
	GUN-MAR																11
	HAZEL LORRAINE																8
*	INTREPID EXPLORER																6
*	MARGUN																13
	MARGUN																2
	MORNING STAR																14
	MORNING STAR																13
*	MS AMY																10
	NORDIC EXPLORER																8
	NORTHERN DEFENDER																2
*	NORTHERN RAM																6
	PACIFIC KNIGHT																8
	PACIFIC MONARCH																7
*	PATRICIA L																5
*	PEGGY JO																13
	POSEIDON																10
	PREDATOR																14
*	TRACY ANNE																9

Source: <https://www.fisheries.noaa.gov/alaska/commercial-fishing/permits-and-licenses-issued-alaska>

The AFA inshore inter-cooperative reports provide more detail on the transfer of AFA catch history. For example, using the 2018 report, it describes how over the course of 2018 three vessel consolidations occurred. The Peggy Jo was replaced by the Arctic Wind which is an existing AFA CV. The Arctic Wind now holds both its and the Peggy Jo's catch histories as well as the LLP license. The Peggy Jo is shown exiting the AFA sector that year in Table 4-4. The Leslie Lee, an existing AFA CV replaced the Predator and now holds both vessels' catch histories and the LLP license. The Predator did not report targeted Pacific cod landings. The American Challenger was replaced by the existing AFA vessel the Forum Star. Their catch histories were combined as well. The MarGun, a dual qualified mothership and inshore sector CV was declared a total loss and was replaced by a vessel named the MarGun that was not previously an AFA vessel and the LLP license with Pacific cod catch history was moved to the new vessel.

Another facet of AFA trawl CVs is that some AFA CVs were subject to BSAI Pacific cod sideboards while other AFA trawl CVs were exempt from these sideboard limits. A sideboard is a catch limitation designed to prevent the recipients of a LAPP from using the flexibility and exclusive privileges granted under the LAPP to expand into other fisheries at levels that exceed their historic participation. When developing Amendments 61/61/13/8 that implemented AFA, the Council recommended that certain AFA CVs that have relatively small pollock fishing histories and that showed significant economic dependence on BSAI Pacific cod be exempt from BSAI Pacific cod sideboards. For AFA CVs to receive an exemption from BSAI Pacific cod sideboards, they had to have made 30 or more legal landings of BSAI Pacific cod in the BSAI directed fishery for Pacific cod from 1995 to 1997, averaged annual BS pollock landings less than 1,700 mt from 1995 to 1997, and be less than 125 ft in length. In addition, the Council recommended that all AFA CVs with mothership (MS) endorsements be exempt from Pacific cod sideboard measures after March 1 of each year. Of the 112 permitted AFA CVs that were initially

permitted, 10 were exempt from the BSAI Pacific cod sideboard limits under the landings and vessel size criteria, as are the 19 vessels that are members of the MS sector, after March 1 of each fishing year (Northern Economics, Inc., 2017). The remaining 83 AFA CVs are subject to BSAI Pacific cod sideboard limits. Pacific cod harvest caught by exempt AFA CVs as a percentage of the Pacific cod harvest of all AFA CVs has ranged from a low of 30 percent in 2003 to a high of 36 percent in 2011, and overall shows a slight increasing trend (Northern Economics, Inc., 2017). Based on the 2019 LLP license file, there were nine active LLP licenses with an AFA CV BSAI Pacific cod exempt flag and 90 active LLP licenses with an AFA endorsement without a BSAI Pacific cod exempt flag.

Table 4-5 breaks out the target catch of BSAI Pacific cod by trawl CVs classes of vessel. As part of its motion the Council requested that this discussion paper provide information on historical harvest by AFA cod exempt vessels, AFA cod non-exempt vessels, and non-AFA vessels. The information provided is similar to Table 4-3 except it provides a breakout of the AFA sector by whether vessels were Pacific cod exempt.

Table 4-5 Trawl CV sector targeted Pacific cod catch by non-AFA, AFA BSAI Pacific cod exempt, and BSAI Pacific cod non-exempt vessels

Trawl CVs	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
Metric Tons																	
Non-AFA	3,173	1,661	1,547	1,568	1,714	3,755	3,776	4,219	7,695	7,066	6,832	6,136	7,874	7,000	6,642	6,868	77,526
AFA non-BSAI Pacific cod exempt	23,561	24,179	20,676	21,429	20,272	18,452	14,372	13,349	17,005	22,025	22,260	23,641	15,008	24,128	23,087	21,219	324,666
AFA Pacific cod exempt	7,016	9,245	8,157	7,882	6,452	5,333	7,018	7,191	9,923	11,442	9,882	9,344	8,816	10,180	7,358	4,432	129,672
Grand Total	33,750	35,086	30,381	30,880	28,439	27,540	25,166	24,759	34,622	40,533	38,974	39,122	31,698	41,308	37,087	32,519	531,863
Percentage																	
Non-AFA	9.4%	4.7%	5.1%	5.1%	6.0%	13.6%	15.0%	17.0%	22.2%	17.4%	17.5%	15.7%	24.8%	16.9%	17.9%	21.1%	14.6%
AFA BSAI Pacific cod non-exempt	69.8%	68.9%	68.1%	69.4%	71.3%	67.0%	57.1%	53.9%	49.1%	54.3%	57.1%	60.4%	47.3%	58.4%	62.3%	65.3%	61.0%
AFA Pacific cod exempt	20.8%	26.4%	26.9%	25.5%	22.7%	19.4%	27.9%	29.0%	28.7%	28.2%	25.4%	23.9%	27.8%	24.6%	19.8%	13.6%	24.4%
Grand Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: AKFIN summary of CAS data (BSAI_TRW_LLP_PCODLANDINGS(5_16_2019))

The AFA BSAI Pacific cod exempt vessels averaged over 14 percent of the sectors target Pacific cod catch. Annually, they harvested between 13 percent and 29 percent of the total. The smallest percentage was in the most recent year data are provided (2018). This is likely a result of the increased fishing effort by other sectors to harvest a declining TAC.

4.3.2.2 Targeted and Incidental Pacific Cod

Pacific cod allocations under a LAPP could be based on either historical targeted landings of Pacific cod or total landings of Pacific cod. Table 4-6 shows the annual amount of BSAI Pacific cod reported in the CAS data as being caught in the Pacific cod target fishery or other target fisheries and the total amount of Pacific cod harvested that is deducted from the BSAI trawl CV sector allocation. From 2003-2018, incidental catch of Pacific cod ranged from about 7 percent to about 15 percent of the total Pacific cod catch, with an average of 11 percent. The incidental catch of Pacific cod average was 4.2 mt, with a range of 3 mt to over 6 mt annually. Section 4.1.6.3 provides a brief discussion of issues associated with management of incidental catch of Pacific cod.

Table 4-6 Targeted and incidental catch of Pacific cod in BSAI by trawl CV sector

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
Pacific Cod																	
Landed Catch (mt)	33,750	35,086	30,381	30,880	28,439	27,540	25,166	24,759	34,622	40,533	38,974	39,122	31,698	41,308	37,087	32,519	531,863
Landed Catch (%)	90.8%	90.7%	86.6%	89.1%	91.0%	89.5%	87.3%	89.7%	87.1%	86.3%	89.4%	92.5%	84.3%	91.8%	86.8%	89.1%	88.9%
LLP Licenses	71	71	63	58	60	63	48	45	51	58	56	53	52	60	64	66	109
Vessels	70	68	59	54	57	61	46	44	50	54	53	48	47	56	60	60	102
Processing Plants	10	13	12	11	12	14	10	8	13	11	12	10	11	17	17	19	41
Other Species																	
Landed Catch (mt)	3,439	3,610	4,705	3,791	2,806	3,226	3,663	2,853	5,124	6,453	4,635	3,151	5,898	3,710	5,656	3,967	66,687
Landed Catch (%)	9.2%	9.3%	13.4%	10.9%	9.0%	10.5%	12.7%	10.3%	12.9%	13.7%	10.6%	7.5%	15.7%	8.2%	13.2%	10.9%	11.1%
LLP Licenses	95	94	95	90	94	93	93	94	92	95	93	96	96	99	97	98	115
Vessels	91	92	91	87	91	90	90	91	89	92	88	90	89	92	91	89	107
Processing Plants	12	14	12	13	11	13	11	12	11	11	11	11	16	18	16	19	38
Total																	
Landed Catch (mt)	37,189	38,695	35,086	34,670	31,244	30,766	28,830	27,612	39,746	46,987	43,609	42,273	37,596	45,017	42,742	36,486	598,550
Landed Catch (%)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
LLP Licenses	112	109	109	106	110	109	107	103	107	109	107	104	105	107	107	109	130
Vessels	107	105	104	101	105	104	102	99	104	104	101	98	98	100	101	99	124
Processing Plants	17	19	18	16	16	20	15	13	17	16	16	15	20	22	21	23	50

Source: AKFIN summary of CAS data (BSAI_TRW_LLP_PCODLANDINGS(5_16_2019))

If the Council considers basing the LAPP allocation on targeted Pacific cod catch, the targeted Pacific cod catch history would be assigned to LLP licenses. Trawl vessels that hold a valid LLP license to use trawl gear in the BSAI could still harvest Pacific cod as incidental catch in other fisheries, but they would not be allowed to harvest Pacific cod in the directed fishery. Table 4-6 shows that 21 of the 130 total LLP licenses used to harvest Pacific cod from 2003 through 2018 were only associated with incidental catches of Pacific cod from the BSAI. These 21 LLP license holders with no targeted Pacific cod catch would not qualify for quota if the allocation was based on targeted Pacific cod landings. These LLP license holders may or may not be allowed to harvest Pacific cod assigned to a cooperative. That would be a policy decision and would require those LLP license holders to be members of the cooperative when they are fishing that cooperative's quota. This is necessary to allow NMFS to accurately account for each cooperative's harvest.

LLP license holders with no quota may be allowed to harvest Pacific cod assigned to LLP licenses that do not join a cooperative, if the program includes a limited access component that is comprised of all quota that is not assigned to a cooperative. Those fish could then be harvested by any LLP license holder that has a BS and/or AI trawl endorsement on their LLP license. However, allowing a limited access fishery complicates management and may create a smaller fishery with an intense race to harvest the quota, if it is ever opened to directed fishing. The potential to compete with non-qualified LLP license holders would create an incentive for anyone with more than a minimal amount of quota assigned to their LLP license to join a cooperative.

4.3.2.3 BS and AI

The LAPP could be structured to treat the BS and AI areas as a single allocation or issue separate quota for each area that must be harvested (and perhaps delivered) within the area the quota is designated. Because the trawl CV sector allocation may be harvested in either the BS or the AI under the status quo, the Council may wish to continue to allow that flexibility under a LAPP. In that case a cooperative's quota may be harvested in either the BS or AI if both Pacific cod fisheries are open to directed fishing. If the non-CDQ Pacific cod TAC is or will be reached in either the BS or AI, NMFS will prohibit directed fishing for Pacific cod in that subarea for all non-CDQ fishery sectors. Any unfished cooperative quota would need to be fished in the area that remains open to Pacific cod directed fishing.

Table 4-7 Trawl CV sector harvests of targeted BSAI Pacific cod in the BS and AI, 2003 through 2018

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
AI																	
Landed Catch (mt)	11,128	11,378	7,466	8,210	12,895	13,945	14,319	12,188	7,535	6,739	5,120	4,554	*	5,573	2,539	4,064	130,390
Landed Catch (%)	33.0%	32.4%	24.6%	26.6%	45.3%	50.6%	56.9%	49.2%	21.8%	16.6%	13.1%	11.6%	*	13.5%	6.8%	12.5%	24.5%
LLP Licenses	17	14	12	15	21	21	17	19	14	14	7	6	4	9	5	10	32
Vessels	17	14	12	15	21	21	17	19	14	14	7	6	4	9	5	9	39
Processing Plants	7	6	5	5	9	9	6	5	4	6	3	3	2	3	3	5	26
BS																	
Landed Catch (mt)	22,622	23,707	22,915	22,670	15,544	13,595	10,847	12,570	27,088	33,795	33,854	34,568	*	35,734	34,548	28,454	401,473
Landed Catch (%)	67.0%	67.6%	75.4%	73.4%	54.7%	49.4%	43.1%	50.8%	78.2%	83.4%	86.9%	88.4%	*	86.5%	93.2%	87.5%	75.5%
LLP Licenses	64	62	59	54	51	49	34	30	48	53	52	51	52	56	62	63	107
Vessels	62	59	55	50	49	47	32	29	47	50	50	46	47	52	58	58	101
Processing Plants	9	9	10	10	9	11	7	5	11	9	10	9	11	17	17	18	33
Total																	
Total Landed Catch (mt)	33,750	35,086	30,381	30,880	28,439	27,540	25,166	24,759	34,622	40,533	38,974	39,122	31,698	41,308	37,087	32,519	531,863
Total Landed Catch (%)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Total LLP Licenses	71	71	63	58	60	63	48	45	51	58	56	53	52	60	64	66	109
Total Vessels	70	68	59	54	57	61	46	44	50	54	53	48	47	56	60	60	102
Total Processing Plants	10	13	12	11	12	14	10	8	13	11	12	10	11	17	17	19	41

Source: AKFIN summary of CAS data (BSAI_TRW_LLP_PCODLANDINGS(5_16_2019))

4.3.3 Stacking LLP Licenses

Because more than one LLP license may be assigned to a vessel, the Council should define options for assigning catch history to LLP licenses when more than one LLP license was assigned to the CV at the time the fish were harvested. There are a variety of reasons a vessel may be assigned to more than one

LLP license. For example, the two LLP licenses have a different suite of endorsements that provide the vessel operator greater flexibility in how the vessel is used. This section describes three different methods the Council could consider when assigning catch history to an LLP license when there were more than one on the vessel.

First, if only one of the LLP licenses is endorsed for the area fished or gear used to make the catch, all the catch is assigned to that LLP license. That would be appropriate since it is the only LLP license on that vessels that allowed for the legal harvest of the fish.

Second, if two valid LLP licenses were used to make the harvest in the area the owner of the vessel used to make the landings may choose which LLP license to assign the catch history. This option gives more power to the vessel owner versus the LLP license holder if the ownership of the LLP license changes or the LLP license holder was not the owner of the vessel when the landings were made. To illustrate these issues two examples are provided. In the first case a person owns a vessel and has two LLP licenses on the vessel. The vessel owner sells one of the LLP licenses to another firm. When the catch history is assigned to the LLP license the vessel owner could assign all of the catch history to the LLP license it still owns. The buyer of the LLP license would not receive any catch history associated with the LLP license when it was held by previous owner. In the second case, a person does not own the LLP license but uses it on their vessel to operate in the Pacific cod trawl fishery. If they had two licenses and both had a BS endorsement (they used the leased LLP license to fish in the AI) the vessel owner could apply all their BS Pacific cod catch to the LLP license it owns and only the AI catch would be applied to the LLP license they leased.

The third option would be to divide the catch history equally between the qualified stacked LLP licenses. In this case neither the vessel owner nor the LLP license holder would have the authority to determine how the history is divided. NMFS would assign the history equally to each LLP license. If there were two LLP licenses, each would receive half of the qualifying catch history. This method would be easiest for NMFS to implement, because it could be done using only catch data without applications from the vessel owners.

While the stacking of LLP licenses and the distribution of catch history does not apply in most cases, it is an important decision to the individuals and firms that are subject to the decision. Table 4-8 provides a summary of the catch and participation by number of LLP licenses associated with the catch.

Table 4-8 BSAI non-CDQ targeted trawl CV Pacific cod catch by number of LLP licenses associated with the catch.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
1 LLP license												
Pacific cod (mt)	27,685	25,223	25,527	34,598	39,371	37,703	38,061	27,175	37,781	33,871	31,333	358,328
Pacific cod (%)	98.6%	97.4%	99.8%	99.9%	96.5%	96.7%	97.3%	85.6%	90.6%	90.0%	93.0%	94.8%
2 LLP licenses												
Pacific cod (mt)	405	681	60	24	1,426	1,271	1,060	4,566	3,935	3,770	2,376	19,575
Pacific cod (%)	1.4%	2.6%	0.2%	0.1%	3.5%	3.3%	2.7%	14.4%	9.4%	10.0%	7.0%	5.2%
Vessels	2	2	1	1	3	2	5	5	4	4	6	10
LLP licenses	4	4	2	2	6	4	10	10	8	8	12	21
Total (mt)	28,090	25,904	25,587	34,622	40,797	38,974	39,122	31,741	41,716	37,641	33,709	377,904

Source: AKFIN summary of CAS data

4.3.4 Pacific Cod Transfers with AFA Cooperatives

An issue that has been identified during preliminary discussions of the cooperative program is how to address Pacific cod transfers that have occurred within AFA cooperatives. AFA cooperatives are allowed to harvest up to a given amount of Pacific cod as defined by their sideboard limits which are based on members Pacific cod history used to determine the sideboards. Once in the cooperative, the cooperative

members may determine how to harvest the available Pacific cod. Those decisions have resulted in cooperative members leasing Pacific cod to facilitate the efficient harvest. Under a cooperative program where Pacific cod catch history is assigned to an LLP license those transfers have long term implications relative to who is assigned catch history under a new LAPP.

In determining how to address this issue, the Council should consider that limited quantitative information can be provided. Staff does not have access to cooperative contracts or individual contracts that provide information on the terms and conditions of transfers that have occurred. The data available only indicates how much catch was associated with an LLP license or a vessel. The data does not provide any information on how the cooperative determined how much Pacific cod the member would be allowed to harvest.

Double counting catch to credit both the person leasing the cooperative quota and the person harvesting the quota would likely be a contentious issue and staff does not have data to provide the additional information that is needed. The lack of quantitative information means that the cooperatives would either need to provide additional, comprehensive information to the analysts on the structure and use of transfers within the cooperative or the cooperative would need to address the issue internally after Pacific cod allocations are made.

If the AFA sector wanted to move forward with allowing catch history to be double counted, it could negatively impact persons that did not lease within the AFA sector and non-AFA sector participants. Both groups would have the same catch history, but the entire amount of catch history would be inflated, resulting in a decrease of their allocation. To resolve the issue for the non-AFA sector, the Council could consider splitting the BSAI Pacific cod sector allocation between the AFA/non-AFA sectors prior to adjusting AFA catch history. Depending on the structure of the split between the two sectors, this could protect the non-AFA vessels from lease compensation adjustments. AFA firms that had not leased Pacific cod could still be negatively impacted, if they are unable to negotiate an agreement to protect themselves.

4.4 Seasonal Allocations

Topics of Council consideration:

- **Would seasonal allocations change/ be necessary under a LAPP?**
- **Are there any expected Steller sea lion implications if it is a directed fishing allocation that could be harvested any time during the year? Most of the directed fishing is currently taken in the A season and the LAPP may spread out the A season harvest.**

Allocations of Pacific cod to the CDQ Program and to the non-CDQ fishery sectors are apportioned by seasons. The trawl CV sector allocation is apportioned among three seasons that correspond to the early (A-season), middle (B-season), and late (C-season) portions of the year.

- A-season runs from January 20 – April 1 and is allocated 74 percent of the sector allocation.
- B-season runs from April 1 – June 10 and is allocated 11 percent of the sector allocation.
- C-season runs from June 10 – November 1 and is allocated 15 percent of the sector allocation.

Tables provided throughout the document have included catch from all three seasons because the Council's purpose and need statement did not specify that the LAPP would be limited to only the A-season or the A-season and B-season. Further breakouts of the data could be provided if that is the intent of the Council.

This section focuses on the catch by season to show participation levels. Table 4-9 shows that about 88 percent of the BSAI Pacific cod catch in the non-CDQ Pacific cod trawl CV Pacific cod target fishery was taken in the A season from 2003 through 2018. On an annual basis the catch ranged from over 99 percent to about 80 percent. Indicating that the majority of the catch is always taken in the A season. The data also indicates that small amounts are taken in the C season, with an average of over 2 percent reported.

Table 4-9 BSAI Pacific cod catch in the non-CDQ Pacific cod trawl CV Pacific cod target fishery by season, 2003 through 2018.

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
A Season																	
Pacific cod (mt)	32,202	32,050	27,564	27,965	24,685	24,696	22,621	25,466	31,865	33,865	33,512	35,097	28,532	36,953	34,805	27,637	479,515
Pacific cod (%)	80.58%	86.14%	89.15%	86.21%	84.68%	87.92%	87.33%	99.53%	92.03%	83.01%	85.98%	89.71%	89.89%	88.58%	92.47%	81.99%	87.57%
Vessels	75	67	62	54	52	59	49	48	47	52	49	46	47	53	57	61	118
B Season																	
Pacific cod (mt)	5,375	2,516	3,058	c	4,364	3,358	c	c	1,962	6,318	4,146	3,687	1,415	3,044	2,745	c	55,422
Pacific cod (%)	13.45%	6.76%	9.89%	c	14.97%	11.95%	c	c	5.67%	15.49%	10.64%	9.42%	4.46%	7.30%	7.29%	c	10.12%
Vessels	53	42	35	41	49	50	31	2	31	33	21	16	18	27	27	33	100
C Season																	
Pacific cod (mt)	2,387	2,641	298	c	101	37	c	c	796	614	1,317	338	1,794	1,719	91	c	12,647
Pacific cod (%)	5.97%	7.10%	0.96%	c	0.35%	0.13%	c	c	2.30%	1.51%	3.38%	0.86%	5.65%	4.12%	0.24%	c	2.31%
Vessels	15	16	3	2	4	6	1	1	4	7	3	3	4	4	8	2	37
Annual Total																	
Pacific cod (mt)	39,963	37,207	30,920	32,440	29,150	28,090	25,904	25,587	34,622	40,797	38,974	39,122	31,741	41,716	37,641	33,709	547,585
Pacific cod (%)	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Vessels	86	78	64	57	64	65	54	48	50	55	53	48	48	56	61	65	123

Source: AKFIN summary of CAS data

While there are modest amounts of Pacific cod taken in the B and C seasons, adjustments in the amounts allowed should take into consideration Steller sea lion protection measures. Table 5 to 50 CFR 679 define protection areas for Steller sea lions in the in the Pacific cod fishery. Likely any change to the season dates or percentages could trigger a consultation, but the level of change will likely determine if it is a formal or informal consultation.

4.5 Processors and Communities Considerations

Topics of Council consideration:

- **Should the Council include options to promote sustained participation of processors and/or communities participating in the BSAI Pacific cod fishery?**
- **If options are to promote sustained participation, what approach should be utilized?**
- **What amount of BSAI Pacific cod is necessary for sustained participation of processors and communities?**
- **If processor and/or community approaches are used to promote sustained participation, should options be included to prevent stranded BSAI Pacific?**

As the Council begins developing alternatives and options for trawl CV sector LAPP, the Council is required to consider a variety of factors, including promotion of sustained participation for processors and communities among others. As noted in Section 2.2, the Council is required to establish procedures to ensure fair and equitable initial allocations, including consideration of

- (i) current and historical harvests
- (ii) employment in the harvesting and processing sectors
- (iii) investments in, and dependence, upon the fishery; and
- (iv) current and historical participation of fishing communities.

As stated in MSA (see Section 2.1), the Council must also consider the basic cultural and social framework of the fishery in allocating harvest privileges. As part of that consideration it should focus on the development of policies to promote the sustained participation of small owner-operated fishing vessels and fishing communities that depend on the fisheries, including regional or port-specific landing or delivery requirements.

In addition, the MSA at §303A(c)(5)(C) requires the Council, where necessary and appropriate, to include measures to assist entry level and small vessel owner-operators, captains, crew, and fishing communities through set asides of harvest allocation or economic assistance in the purchase of shares.

Based on these MSA requirements and guidance, this section begins a discussion of port and regional delivery activity, considers provisions that may protect historical processor and community relationships with the BSAI Pacific cod fishery, and examples specifically for the AI shoreside processor sustainability. Note that throughout this section the community activities discussed, and the provisions suggested to promote community engagement refers to the community’s relationship with BSAI Pacific cod trawl CV processing. While communities may also have an association to this fishery through other avenues (e.g. homeporting trawl CV vessels, the home community of captain/ crew, vessel owners, business associates, support service communities, etc.), the community interactions discussed in this section are specific to the community benefits and impacts (e.g. tax revenue and economic activity) associated with the sustained landings and processing of BSAI Pacific cod.

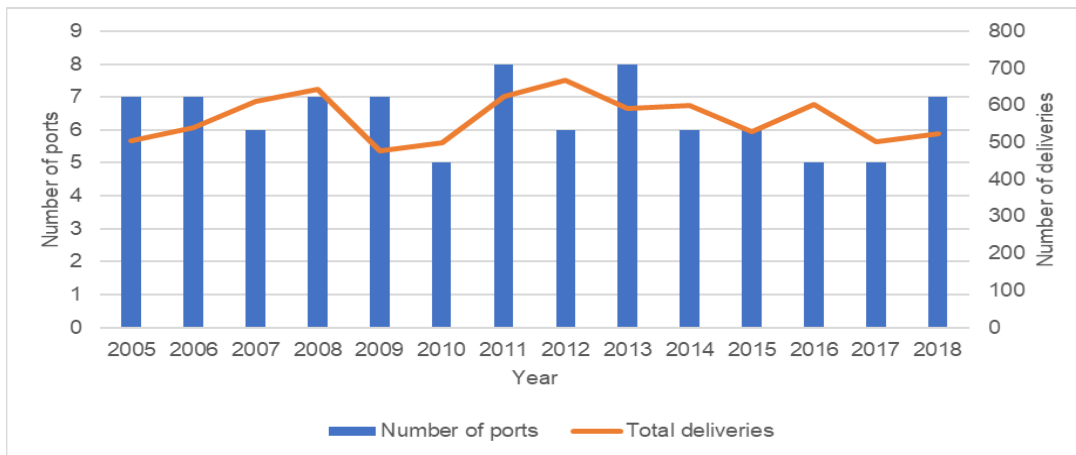
4.5.1 Port/Region Activity

The ports that have received deliveries of trawl CV Pacific cod from the BSAI between 2005 through 2018 include:

- Adak
- Akutan
- Dutch Harbor/Unalaska
- King Cove
- Sand Point
- Anchorage

Figure 4-1 and Table 4-10 provide additional general information the number of ports and total number of deliveries of the targeted BSAI Pacific cod by the trawl CV sector from 2005 through 2018.

Figure 4-1 Total number of deliveries of targeted BSAI Pacific cod and total number of ports of delivery for the trawl CV sector from 2005 through 2018



Source: AKFIN, May 2019

Figure originates from Excel file Tables and Figures for BSAI cod Allocation Review June 2019

Table 4-10 Total number of deliveries of targeted BSAI Pacific cod and total number of ports of delivery for the trawl CV sector from 2005 through 2018

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Number of ports	7	7	6	7	7	5	8	6	8	6	6	5	5	7
Total deliveries	505	539	611	644	478	498	625	667	592	600	529	603	502	522

Source: AKFIN, May 2019

Table originates from Excel file Tables and Figures for BSAI cod Allocation Review June 2019

This paper does not provide data on individual ports or regions receiving Pacific cod landings due to confidentiality concerns. Most of the ports receiving BSAI Pacific cod only have one processor and providing data at that level is prohibited. If aggregations of data were provided by region, it could limit the Council’s options to specific regions in the future. Once additional direction is provided by the Council, information can be aggregated to provide some information if the Council wishes to consider regional or port specific landings requirements to protect communities and processors.

4.5.2 Processor and Community Considerations

In considering whether allocations of BSAI Pacific cod to the trawl CV sector give adequate consideration to current and historical participation of fishing communities and processing sectors, the following sections provide a brief overview of different approaches the Council could consider to provide for processor and community program participation that are dependent on the BSAI Pacific cod fishery. These concepts are not mutually exclusive. For instance, the Council may include more concrete connections, such as a cooperative/ processor linkage or direct allocation of some of the harvester privileges to processors. The Council may also consider connections such as regional or port specific landing requirements to address community interests.

The Council is also directed to consider procedures to prevent excessive geographic consolidation in the harvesting and processing sectors as part of its efforts to consider the cultural and social framework of the fishery. Overall, these provisions are intended to ensure the Council considers historic community interests in the fisheries, but not to a level that leads to excessive geographic consolidation. In addition to the potential for processing share caps (see Section 4.6), regionalization or port of landings requirements could be ways to ensure diversity in processing continues.

4.5.2.1 Cooperative/ Processor Linkages

One approach that could be utilized to promote sustained participation for historical processors is a cooperative/ processor association. For example, in the Central GOA Rockfish Program, the CV cooperative may only form if a “rockfish processor” is an “associate” of the rockfish cooperative and is designated on the application for cooperative quota. In the Central GOA Rockfish Program, a processor is any shoreside processor with a Federal processor permit that receives groundfish harvested under the authority of a rockfish cooperative quota permit. In order to receive rockfish cooperative quota, the shorebased processor must be located within the boundaries of the City of Kodiak. Depending on the goals for the trawl CV management program, the Council might consider a similar structure of cooperative/processor associations to provide protections for both processors and communities. This approach would likely be more applicable if the Council envisioned a unique processor linkage to each active shoreside and offshore processor. For example, under a single or two cooperative approach (AFA/non-AFA or inshore/offshore cooperatives), a cooperative/ processor linkage approach would likely not work since there are more than two shoreside and offshore processors active in the BSAI Pacific cod fishery.

4.5.2.2 Allocation of Harvest Shares to Processors

Another approach for promoting sustained participation of processors and impacts to those communities where shoreside processors are located is to allocate harvest shares to processors. Under this approach, the Council would select a fixed percentage of the trawl CV harvest share pool for allocation to harvesters

based on their qualifying harvest history, with the remainder allocated to processors based on their qualifying processing history. Under this approach, allocations of BSAI Pacific cod and PSC would be divided between the two groups at a prescribed percentage. The processor port of the harvest share pool would be allocated to eligible processors based on individual processing histories in the target BSAI Pacific cod fishery during qualifying years. Processors would be responsible for contracting out the harvest of their allocation.

4.5.2.3 Limiting Deliveries to C/Ps Acting as a Mothership

The Council took final action in April 2019 to limit the number of C/Ps that may take directed non-CDQ BSAI Pacific cod deliveries from trawl CVs. It is assumed those are the only C/Ps that would be allowed to take cooperative deliveries of Pacific cod under this action, without further direction by the Council. The Council could consider additional limitations on which trawl CVs could deliver to those C/Ps as part of the proposed LAPP. Limitations could be structured to ensure that the longer season under a cooperative structure could not be utilized to increase deliveries to C/Ps. Examples of provisions that could be considered are:

- allowing only CVs that have delivered to C/Ps acting as a mothership in the past to deliver cooperative quota to a qualified C/P, and
- limit the amount of cooperative quota that can be delivered to the C/P acting as a mothership to the amount of cooperative quota the CV brought into the cooperative.

The Council and industry could develop other options to consider, without reopening the action the Council just approved in April 2019. The goal would be to protect shorebased processors and communities from increasing proportions of the BS or AI Pacific cod landings being delivered to C/Ps acting as a mothership.

4.5.2.4 Regionalization

The Council may wish to consider requiring that a percentage of the trawl CV allocation be delivered to a specified geographic region. This approach could be an effective method for addressing ongoing challenges by providing stability for CVs harvesting AI Pacific cod, AI shoreplant operations, and AI fishing communities dependent on AI Pacific cod harvesting and shoreside processing activity.

This approach was taken in the Crab Rationalization Program where the regional delivery requirements for harvesting quota share and processing quota share were implemented to help preserve the historic geographic distribution of landings and resultant fishery revenues in fishery-dependent economies. Two regional designations (North- requiring landings north of 56° 20' north latitude and South- requiring landings in any other area) were created in most Crab Rationalization Program fisheries, with a Western delivery requirement (requiring landings west of 174° W. longitude) for some quota in one of the crab fisheries. For example, to provide AI community protections, the Council could consider requiring a defined percentage of the sectors BSAI Pacific cod harvested quota be landed in a community adjacent to the AI waters west of 170° W. longitude.

A potential challenge with this approach is that a regional requirement could create a situation requiring delivery of Pacific cod to one processor, which could exceed the Council's authority granted under the MSA. For example, if Adak was the only operational shoreside processor in the AI region, then harvesters would be required to deliver their Pacific cod to that one shoreside processor which could be considered a harvester/processor linkage that could exceed the Council's authority. The Crab Rationalization program's Northern and Western regionalization requirements currently result in the delivery of crab to only one processor in each region; however, the authority for the Crab Rationalization Program and the regional delivery requirement were authorized by Congress.

4.5.2.5 Port of Landings Requirements

Port of landings requirements may be an effective tool for providing sustained participation for shoreside processors and their associated communities, but this approach may create a similar requirement that harvesters deliver Pacific cod to a specific processor if there is only one processor at the port. For example, since there is only one shoreside processor operating in Adak, a port specific delivery requirement to the port of Adak could be beyond the Council's authority granted under the MSA. A port of landings requirements may be effective and implementable in ports with multiple processors like Unalaska/Dutch Harbor. However, in many areas of the BSAI, a port of landing requirement may require additional authority from Congress to implement. In addition, trawl CVs that are required to deliver to a single shoreside processor could lose market power, which could be reflected in the ex-vessel value they receive for deliveries.

4.5.3 AI Pacific Cod Shoreside Sustainability

During the June 2019 meeting, the Council requested a discussion of trawl CV harvests and deliveries in the AI Pacific cod fishery and the set-aside provisions established in Amendment 113. Below is a summary of Amendment 113 and different approaches the Council could utilize to provide processor and community protections that are specific to AI shoreplants and communities.

4.5.3.1 Amendment 113

In October 2015, the Council recommended a management measure (Amendment 113) to provide stability to AI shoreplant operations and the communities dependent on shoreside processing activity. The amendment modified the management of the BSAI Pacific cod fishery to set aside a portion of the AI Pacific cod TAC for harvest by CVs directed fishing for AI Pacific cod and delivering their catch for processing to a shoreside processor located on land west of 170° W longitude in the AI ("AI shoreplant") The Secretary approved the Council's recommendation, which had an effective date of November 23, 2016. Under Amendment 113, the harvest set-aside applies only if specific notification and performance requirements are met, and only during the first few months of the fishing year. This harvest set-aside was intended to provide the opportunity for vessels delivering onshore, AI shoreplants, and the communities where AI shoreplants are located to receive benefits from a portion of the AI Pacific cod fishery. The notification and performance requirements preserve an opportunity for the complete harvest of the BSAI Pacific cod resource if the set-aside is not fully harvested or if AI shoreplants are unable to accept deliveries of Pacific cod in any given fishing season.

The first full year the AI Pacific cod set-aside could have applied was 2017, but neither the City of Adak nor the City of Atka provided NMFS with notice of intent to process AI Pacific cod by late 2016, as required by the regulations implementing Amendment 113. As a result, the AI Pacific cod set-aside did not apply in 2017. For 2018 and 2019, the City of Adak provided NMFS with timely notice and AI Pacific cod set aside was utilized. In 2018 and 2019, NMFS announced that the 5,000 mt AI set aside had not been fully landed by March 15th and therefore the AI set-aside would not apply for the remainder of the year. The amount of the 5,000 mt AI set-aside that was delivered to the AI shoreplant in 2018 and 2019 cannot be reported using Federal or State data due to confidentiality restrictions.¹²

On March 21, 2019, the U.S. District Court for the District of Columbia (Court) ruled that NMFS failed to demonstrate that the rule implementing Amendment 113 satisfied the requisite standards for such regulatory measures set forth by the MSA. Specifically, the Court found NMFS had not demonstrated the rule implementing Amendment 113 was reasonably calculated to promote conservation consistent with

¹² Golden Harvest Alaska Seafood, LLC in a public comment letter to the NPFMC in April 2018 noted that "landings from the Federal fishery were 4,010 mt; or about 80 percent of the AI CV Harvest Set Aside." <http://comments.npfmc.org/CommentReview/DownloadFile?p=48236946-a5e9-42fa-977a-b723217e1a66.pdf&fileName=GHAS%20to%20NPFMC%20033018.pdf>

National Standard 4, and that NMFS could not show consistency with National Standard 8 because in the Court's view the rule allocates fishery resources to two particular communities. The Court vacated the rule implementing Amendment 113 and remanded the rule to NFMS for reconsideration consistent with the Court's opinion. Therefore, at present Amendment 113 has no force or effect of law.

4.5.3.2 AI Pacific Cod Port-specific or Regional Landing Requirement

The Council could develop alternatives and options that include setting aside a portion of the BSAI Pacific cod trawl CV allocation for a port-specific or regional landing requirement, if designed in such a way as to avoid exceeding the authority granted under the MSA. A port-specific or regional landing requirement would ensure that a predetermined percentage of the sector's QS would be delivered to defined AI shoreplants as allowed under the MSA.

One shortcoming of a port-specific landing requirement could be its rigidity given the potential for changes in the number of shoreside processors and their associated ports in the AI in the future. In contrast, a regional landing requirement to shoreside processors located on land west of 170° W. longitude would allow more flexibility for AI shoreside processors changes. For example, if in the future, Atka expands its existing processing capacity to include Pacific cod, a regional delivery requirement is broad enough to include Atka since the port is west of 170° W. longitude.

In utilizing a port-specific or regional landing set aside for the AI shoreside processors, there are likely several different elements that the Council should consider.

- The first element the Council should consider if it develops a regional landing requirement is the percentage or the amount of Pacific cod quota that a cooperative would be required to set aside for delivery to AI shoreside processors. As a reference point, Amendment 113 set aside an amount equal to the lesser of either the AI directed fishing allowance (DFA)¹³ or 5,000 mt.
- Another factor the Council should consider is whether the set aside is specific to a season or the entire fishing year. A specific A-season set aside delivery period could concentrate the set-aside during the winter Pacific cod fishery when the fish are aggregated which allows greater harvest efficiency by trawl vessels but forces trawl CVs to a narrow regulatory delivery window which could limit flexibility for both harvesters and processors. Extending the set aside for the entire fishing year could provide greater flexibility for both trawl CVs and AI shoreside processors to work cooperatively to maximize benefits while reducing costs for both harvesters and shoreside processors.
- A third decision the Council would need to consider in developing an AI set aside is whether a Pacific cod delivery requirement is specific to BS or AI Pacific cod TAC. Nearly all the Pacific cod delivered to AI shoreside processors in the past has been from the AI

The Council could also consider including options for a cooperative to deliver Pacific cod to non-AI shoreside processors in the event there are no AI shoreside processors at the beginning of the fishing season to process the AI set aside or insufficient shoreside processing capacity to process all the AI set aside. Since the AI currently has only one shoreside processor that can process large amounts of AI Pacific cod, an AI Pacific cod set aside requirement that does not have some ability to allow for a cooperative to deliver their Pacific cod to other processors in the event of no operational AI shoreside processors or limited operational capacity could result in all or some of the set aside to remain unharvested. One potential option would be to utilize the approach in Amendment 113 which required notification of the intent to process and a performance standard. The notification element required the City of Adak or the City of Atka to notify NMFS by November 1 of the intent to process non-CDQ

¹³ The AI subarea directed fishing allowance is the TAC minus the ICA and CDQ allowance.

directed AI Pacific cod in the upcoming year. If the cities had failed to notify NMFS of the intent to process AI Pacific cod, then the set aside would be suspended for the upcoming year and the cooperative could deliver BSAI Pacific cod to any processor. The performance standard for AI shoreplants required that the processor receive 1,000 mt or more of the set aside prior to February 28th otherwise the set aside would be suspended for the remainder of the year thus allowing a cooperative the flexibility to deliver their Pacific cod harvest to any processor. The Council's intent for including a notification process and a performance standard for AI shoreplants was to address the potential for unharvested AI Pacific cod while also providing for the sustained participation of AI shoreside processing activity and remote fishing communities in the AI.

Another approach for addressing the absence of a reliable shoreside processor for the AI Pacific cod set aside would be the development of a contractually defined exemption similar to the Western AI gold king crab (WAG) fishery (Amendment 37). In the WAG fishery, a portion of the harvesting quota is designated for delivery and processing west of 174° W. longitude. To address the potential lack of processing capacity for the portion of harvesting quota designated for delivery and processing west of 174° W. longitude, the Council developed, and NMFS implemented an exemption to the regional landing requirement. Eligible participants can submit an application to NMFS at any time during the crab fishery. Once the application is completed, NMFS exempts the WAG quota from the west regional delivery for the remainder of the crab fishing year. Signatories include identified quota shareholders, processor quota shareholders, and municipalities who are eligible to apply for an exemption. This approach provides the flexibility necessary for eligible contract signatories to request an exemption at any point during the crab fishing year. This same approach could be utilized to accommodate the potential situations where there is no operational AI shoreside processor if an AI set aside requirement is include in a trawl CV LAPP.

4.5.3.3 Allocation of Harvester Quota to AI Shoreplants

Another option is for the Council to assign annual harvester shares to the AI shoreplants. Under this approach, AI shoreplants could be allocated a set percentage of the non-CDQ BSAI Pacific cod trawl CV sector allocation. The Council would need to determine the appropriate percentage of the sector allocation to allocate to the shoreplant(s). Through an allocation of harvesting quota to processors:

- Harvesting quota would only be allocated during years when the AI shoreplant(s) notify NMFS that they will be operating.
- Harvesting quota could only be delivered to AI shoreplants that are issued QS, unless the AI shoreplants agree to CVs delivering the fish elsewhere.
- The shoreplants would likely lease the catch shares resulting from their harvesting quota to trawl CVs to harvest the catch shares.

One issue that would need to be addressed under this structure is how the harvesting quota would be divided up among shoreplants if a new shoreplant was built in the AI in addition to the existing shoreplant in Adak. In that case, the Council will need to develop an allocation formula that is not based on history, since the new shoreplants will not have had history in the fishery. This issue will likely be contentious and if more shoreplants enter the fishery it could lead to requests for ever increasing percentages of the BSAI trawl CV sector allocation being assigned to the AI shoreside processors.

4.5.3.4 An AI Regional Fishing Association

Another approach for promoting sustained participation for communities would be to develop a regional fishing association (RFA) whose board of directors includes representation from communities in the AI west of 170° longitude that have a processor that notifies NMFS they intend to process Pacific cod the following year. The MSA defines an RFA and the requirements for one to form in Section 303A(c)(4). To be eligible to participate in a LAPP to harvest fish, a regional fishery association must

- be located within the management area of the relevant Council;
- meet criteria developed by the relevant Council, approved by the Secretary, and published in the **Federal Register**;
- be a voluntary association with established by-laws and operating procedures;
- consist of participants in the fishery who hold QS that are designated for use in the specific area covered by the regional fishery association, including... processing or fishing communities;
- not be eligible to receive an initial allocation of a limited access privilege but may acquire such privileges after the initial allocation, and may hold the annual fishing privileges of any limited access privileges it holds or the annual fishing privileges that members contribute; and
- develop and submit a regional fishery association plan to the Council and the Secretary for approval based on criteria developed by the Council that have been approved by the Secretary and published in the Federal Register.

If members fail to comply with the plan the Secretary “shall” deny or revoke limited access privileges granted. This provides NMFS and the Council a continued oversight role in the process.

As stated in the MSA, an RFA is not eligible to be initially allocated harvesting privileges, thus if the Council pursues this option and established RFAs, it may allow this AI community organization to buy in to a Pacific cod trawl CV LAPP. Catch history could be acquired through purchases or donations from existing LLP license holders that are allocated harvesting privileges. Those harvesting shares could be held by the RFA which would determine internally determine who would harvest these shares and where they would be processed. Thus, this option provides more annually flexibility for adjustments based on the number of processors available. However, it also runs the risk of providing no regional benefits if the RFA cannot afford to acquire harvesting quota and may also lead to contagious decisions about who would be harvesting the allocation.

4.6 Ownership and Use Caps

Topics of Council consideration:

- **How will the Council address the MSA requirement for excessive share caps?**
 - **At what percentage of the harvesting pool should an ownership cap be set?**
 - **How should partial holdings be evaluated (e.g. individually and collectively)?**
 - **Should those with higher levels of participation be “grandfathered in” at that allocation?**
- **Should there be a vessel use cap, limiting the amount an individual vessel can harvest in a year?**
 - **If so, what level should the vessel cap be set?**
- **Should there be cooperative ownership/ use caps, limiting the amount of harvesting privileges a cooperative can hold overall or use in a year?**
- **Should there be processing use caps, limiting the amount of harvesting privileges that can be processed at one plant?**

→ Is the Council concerned about BSAI trawl CV fishing opportunities consolidating onto AFA vessels?

Along with the assignment of Pacific cod trawl CV catch history to LLP licenses, the proposed action could incentivize the stacking of LLP licenses on vessels, transfer of quota within the cooperative to more efficient vessels, and the consolidation of ownership to promote the efficient harvest of that Pacific cod catch history. Given this motivation for consolidation of harvesting privileges, all LAPPs must consider excessive share provisions as part of the program.

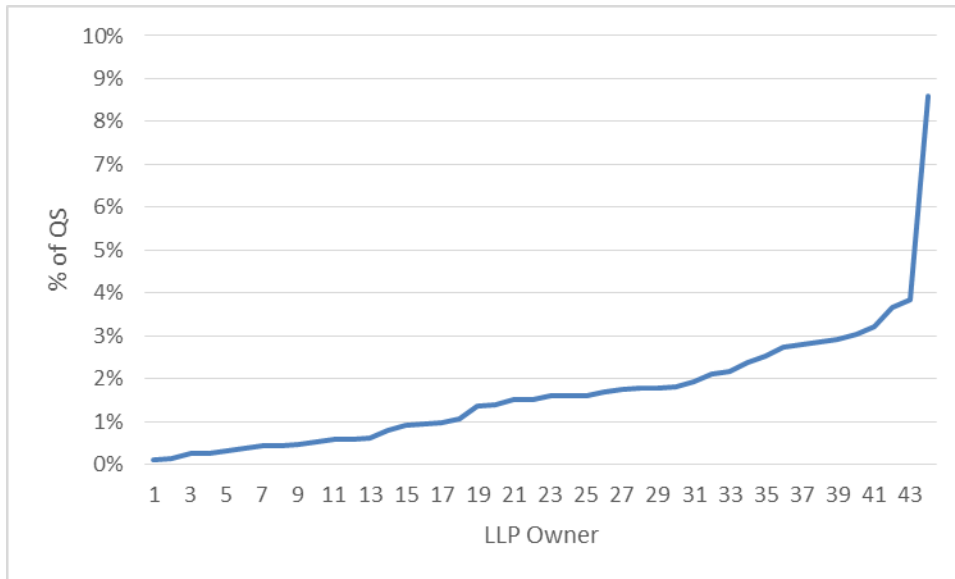
If it is appropriate to establish excessive share caps for the program, the Council must define how these caps are calculated and applied. An ownership cap is generally applied as a percentage of the total pool of quota that an individual may hold and/ or acquire. Many programs have “grandfather provisions” that allow participants that have been operating at higher rate of participation continue to operate at that level, while ownership caps bar them from acquiring additional harvesting privileges and further exceeding the caps.

In the sablefish and halibut IFQ Program, ownership caps are typically calculated by summing all of the QS units or IFQ pounds held by that person and their percentage of direct or indirect ownership in any entity that holds QS or IFQ. This method of determining when a cap is reached is often referred to as the “individual and collective” rule. The way the calculation works for individuals, for example, is that an individual who holds 100 pounds of IFQ and has a 5 percent interest in a company that holds 100 pounds of IFQ, the amount of IFQ that person would be considered to hold for use cap calculation is 100 pounds (their personal holdings) plus 5 pounds (5 percent of 100 pounds - their ownership interest in that company) for a total 105 pounds.

In the Crab Rationalization Program, NMFS accounted for both harvesting and processing shares, so the accounting method is somewhat different. For a corporation, partnership, or other non-individual entity that holds QS or IFQ and also holds PQS or IPQ, NMFS uses a 10 percent threshold rule. In this case, the use cap is equal to all of the QS or IFQ held by that person and all of the QS or IFQ held by any entity in which that non-individual has a 10 percent or greater direct or indirect ownership interest. For example, a corporation that holds 100 pounds of IFQ and has a 15 percent interest in a company that holds 100 pounds of IFQ, would be considered to hold 200 pounds of IFQ for use cap calculation. If that same non-individual held 9 percent of a company that holds 100 pounds of IFQ, none of that IFQ would count against the firm’s cap.

To provide information for the proposed trawl CV Pacific cod LAPP, the targeted BSAI Pacific cod catch by LLP holder was aggregated for the years 2012 through 2018. The four addresses with the most and least catch (greater than zero) were averaged. The results are reported in Figure 4-2. The four addresses associated with LLP licenses that were reported to have been assigned the most catch averaged 8.6 percent of the sector’s catch (or over 34 percent in total). The address associated with the fifth greatest catch was 3.8 percent. This provides some context on appropriate ownership caps depending on the Council’s goals and objectives. For example, if the ownership cap was set at 4 percent and the four firms above the cap were grandfathered in at their historical level, about 20 firms could hold all of the QS.

Figure 4-2 Percentage (2012 through 2018) of targeted BSAI CV trawl Pacific cod associated with LLP licenses with the same mailing address



Note: The four smallest and largest amounts were averaged to protect confidential information.

In addition to the ownership caps described in this section, persons are currently limited to holding 10 groundfish LLP licenses unless they were grandfathered to hold more at the time of the initial allocation. A person that was grandfathered to hold more than 10 groundfish LLP licenses may not acquire a new LLP license unless the new LLP license would not result in the person holding more than ten LLP licenses after the transaction is complete. An LLP license may be transferred only once per calendar year.

The Council may also consider establishing a vessel use cap, a cooperative ownership and/ or use cap, and processor use caps. A vessel use cap restricts the pounds that can be consolidated and harvested on one vessel during the year. This is a measure the Council may consider if it wanted to limit the level of consolidation that could occur or as a provision to protect captain/crew employment. As demonstrated in Table 3-2, not all cooperative programs include this type of provision (they are included in AFA, Amendment 80 and the Rockfish Program, not applicable for vessels in the Crab Rationalization Program if they are part of cooperative). Further analysis would need to be done to evaluate the distribution of harvest across the trawl CV sector in order to understand what would define minimum number of vessels that would be required to fish within the cooperatives to harvest the entire allocation.

A cooperative ownership cap would restrict the amount of harvesting privileges that could be associated with a cooperative (the converse of a requirement that a certain percent of the total harvesting privileges would be needed to establish a cooperatives; as described in Section 4.2.2.2). A cooperative use cap would restrict the amount of harvesting privileges that could be fished by one cooperative. The Rockfish Program includes a CV cooperative use cap which limits both how much a CV cooperative may hold or use of primary rockfish species cooperative quota in that program.

Processing caps exist for the Crab Rationalization Program, AFA and the Rockfish Program. This type of cap would restrict how much of the harvesting privileges may be received or processed at a processor. For example, a rockfish processor may not receive or process an amount of sablefish harvested with CQ assigned to the CV sector greater than 30.0 percent of sablefish CQ issued to the catcher vessel sector during a calendar year (see Table 3-2 for the details for each program).

In addition to consolidation at the firm-level, the proposed action may incentivize consolidation of LLP licenses at the sector level (i.e. AFA versus non-AFA). As demonstrated in Table 3 and Table 1-1, the majority of BSAI Pacific cod harvested in the trawl CV sector is routinely harvested by AFA vessels. Without specific Council action, consolidation may result in non-AFA LLP licenses being purchased and stacked onto AFA vessels, along with AFA-derived LLP licenses. While the non-AFA LLP license with Pacific cod catch history could always be separated and transferred for use by a non-AFA vessel, this type of consolidation could diminish entry opportunities for non-AFA vessels to participate in this sector of fishing. The Council should determine whether this is a concern.

If there is a concern, future analysis could examine ways to prevent this type of consolidation. For example, the Council may consider separating the AFA and non-AFA Pacific cod trawl CV allocations while still developing a similar LAPP for both sub-sectors or the Council could consider prohibiting AFA vessels from using non-AFA trawl LLP licenses that have Pacific cod trawl CV catch history assigned.

4.7 Sideboard Limits

Topics of Council consideration:

- **Should any new sideboard limits be established?**
 - **If so, would there be any exemptions?**
- **Should existing BSAI Pacific cod sideboard limits be eliminated?**

As explained in Section 4.3.2.1, sideboards have been established in some of the North Pacific LAPPs to prevent those receiving harvesting privileges from using the flexibility granted by this allocation to expand into other fisheries at levels that exceed their historic participation. The AFA program is the only BSAI groundfish LAPP that has established CV sideboard limits. The Central GOA Rockfish Program established CV sideboards for rockfish species in the Western GOA and West Yakutat District that apply during July. The Crab Rationalization Program also established groundfish sideboards for CVs. The CV sideboard limits that have been developed for previous LAPPs as well as the potential need for sideboard limits as part of the proposed Pacific cod programs are discussed in this section.

4.7.1 AFA Sideboards

The final rule implementing the AFA established several species sideboard limits for vessels that are authorized to harvest pollock in the Bering Sea. These sideboard limits were established to protect the interests of fishermen and processors who do not directly benefit from the AFA from those fishermen and processors who received exclusive harvesting and processing privileges under the AFA. Historically, some of these sideboard limits have been implemented through directed fishing closures in regulation when the size of the sideboard limit would not support a directed fishery while other sideboard limits that were open to directed fishing were implemented through the annual harvest specifications process.

Regulations to streamline and simplify NMFS's management of AFA groundfish sideboard limits were published under 84 FR 2723, which became effective on March 11, 2019. After passage of the AFA, NMFS was required to calculate numerous sideboard limits as part of the annual BSAI and GOA harvest specifications process and publish those limits in the **Federal Register**. Simultaneously, NMFS would prohibit directed fishing for the majority of the groundfish species subject to these sideboard limits because most sideboard limits are too small each year to support directed fishing. Rather than continue this annual process of calculating all sideboard limits and then closing most of the groundfish species with sideboard limits to directed fishing, the Council approved and the Secretary implemented a rule (referred to here as the "Small Sideboard action") to prohibit directed fishing by non-exempt AFA vessels for those groundfish species and species groups subject to sideboard limits that had not been opened to

directed fishing and that are not expected to be opened to directed fishing in the foreseeable future. As part of the rule NMFS ceased calculating and publishing the relevant sideboard limits in the BSAI and GOA groundfish harvest specifications.

4.7.1.1 AFA Sideboards in the BSAI

The analysis developed for the Small Sideboard action indicated that in the BSAI only the Pacific cod trawl gear CV sector allocation sideboard and the yellowfin sole sideboard fisheries would not be affected by the proposed action (Table 4-11) (NPFMC, 2018). If the Council implements a BSAI Pacific cod trawl CV LAPP, as suggested in the proposed action, the AFA sideboards for the BSAI Pacific cod trawl CV fishery may no longer be necessary.

The BSAI yellowfin sole fishery is discussed in more detail in Section 4.7.3. All other BSAI non-pollock fisheries would continue to be closed to fishing by AFA CVs due to the implementation of the Small Sideboard action.

Table 4-11 AFA sideboard limits open for directed fishing along with their AFA CV BSAI sideboard ratios, 2011-2017 average sideboard limits (mt), and 2017 sideboard limit (mt)

Target species and gear	Area/Season	Sideboard ratio ¹	2017 TAC ³ (mt)	2017 sideboard limit (mt)	Average sideboard limit (2011-2017) (mt)
Pacific cod trawl gear CV	BSAI Jan 20 - Apr 1	0.8609	34,962	30,099	31,309
	BSAI Apr 1 - Jun 10	0.8609	5,197	4,474	4,654
	BSAI Jun 10 - Nov 1	0.8609	7,087	6,101	6,346
Yellowfin sole ²	All	0.0647	154,000	no sideboard limit	no sideboard limit

Source: NMFS

¹Determined using a ratio of 1995 to 1997 AFA CV catch to 1995 to 1997 TAC

²The sideboard limit for BSAI yellow fin sole is suspended when the initial TAC is equal to or greater than 125,000 mt in order to allow AFA sectors the potential to expand their harvest in the yellow fin sole fishery in periods of diminished availability of pollock (§ 679.64(a)(1)(v) and § 679.64(b)(6)).

³All Pacific ocean perch, and BSAI Atka mackerel, flathead sole, Pacific cod, and rock sole are multiplied by the remainder of the TAC of that species after the subtraction of the CDQ reserve under § 679.20(b)(1)(ii)(C).

4.7.1.2 AFA Sideboards in the GOA

Many of the GOA sideboard fisheries would continue to be closed to directed fishing in regulation as a result of the Small Sideboard’s action. The fisheries in the GOA for which NMFS would continue to calculate sideboard limits are shown in Table 4-12. All remaining GOA directed fishing would be closed to GOA non-exempt AFA CVs by regulation. The 16 GOA exempt AFA CVs would continue to be allowed to fish in any GOA fishery that was open to directed fishing by CVs not subject to sideboard limits, unless the Council determines that it is necessary to place sideboard limits on these vessels as part of this Pacific cod action. The AFA action determined that it was not necessary because these were heavily dependent on the GOA and had limited amount of BSAI pollock history.

Table 4-12 AFA sideboard limits open for directed fishing along with their AFA CV GOA sideboard ratios, 2017 TACs, 2017 sideboard limits, and 2011-2017 average sideboard limits

Target Species	Apportionments by season/gear	Area/component	Sideboard ratio ¹	2017 TACs (mt)	2017 sideboard limit (mt)	Average sideboard limit 2011-2017 (mt)
Pollock	A Season Jan 20 - Mar 10	Shumagin (610)	0.6047	2,232	1,350	2,537
		Chirikof (620)	0.1167	34,549	4,032	2,946
		Kodiak (630)	0.2028	11,014	2,234	1,730
	B Season Mar 10 - May 31	Shumagin (610)	0.6047	2,232	1,350	2,537
		Chirikof (620)	0.1167	39,420	4,600	3,505
		Kodiak (630)	0.2028	6,143	1,246	759
	C Season Aug 25 - Oct 1	Shumagin (610)	0.6047	19,569	11,834	8,398
		Chirikof (620)	0.1167	12,341	1,440	1,256
		Kodiak (630)	0.2028	15,886	3,222	2,701
	D Season Oct 1 - Nov 1	Shumagin (610)	0.6047	19,569	11,834	7,492
Chirikof (620)		0.1167	12,341	1,440	1,678	
Kodiak (630)		0.2028	15,886	3,222	2,565	
Annual	WYK (640)	0.3495	7,492	2,618	1,760	
	SEO (650)	0.3495	9,920	3,467	3,333	
Pacific cod	A Season Jan 1 - Jun 10	W	0.1331	15,242	2,029	1,926
		C	0.0692	19,881	1,376	1,637
	B Season Sept 1 - Dec 31	W	0.1331	10,161	1,352	1,283
		C	0.0692	13,254	917	1,091
Shallow-water flatfish	Annual	W	0.0156	13,250	207	187
		C	0.0587	19,306	1,133	1,046
Deep-water flatfish	Annual	C	0.0647	3,454	223	202
		E	0.0128	5,582	71	68
Rexsole	Annual	C	0.0384	4,930	171	222
Arrowtooth flounder	Annual	C	0.028	75,000	2,100	1,920
Flathead sole	Annual	C	0.0213	15,400	328	296
Pacific ocean perch	Annual	C	0.0748	16,671	1,247	1,015
		E	0.0466	4,568	213	167
Northern Rockfish	Annual	C	0.0277	3,354	93	93

Source: NMFS

¹Determined using a ratio of 1995 to 1997 AFA CV catch to 1995 to 1997 TAC

4.7.2 Non-AFA CV Sideboards

LLP licenses assigned to non-AFA vessels that have reported BSAI Pacific cod landings when operating as a CV are varied in their attributes. Some of the LLP licenses are owned by Amendment 80 firms while others are owned by persons not affiliated with any BSAI LAPP. A summary of those LLP licenses used by non-AFA vessels are presented in Table 4-13. The LLP holder name, LLP number, and ownership information are not reported. There is a total of 18 of those LLP licenses, only 15 have been used to harvest BSAI Pacific cod as a trawl CV since 2008. LLP licenses 8, 12, and 16 in Table 4-13 are the LLP licenses not used during that more recent period. One firm owns or controls 6 of the 18 LLP licenses.

To summarize, these LLP licenses may be used on vessels that range from under 60 ft LOA to almost 300 ft LOA. Six of the 18 LLP licenses do not have an endorsement to fish in either the Central GOA or Western GOA. None of the LLP licenses have an endorsement for the Eastern GOA. Because the GOA appears to be the most likely area to need sideboard protections, if the Council determines they are necessary at all, the 12 LLP licenses endorsed to fish in either the Central GOA or Western GOA are examined more closely.

- One LLP license is only endorsed to fish in the Western GOA (trawl only).
- Three LLP licenses are endorsed to only fish in the Central GOA (trawl only).
 - Two are C/P designated LLP licenses owned by the same company.
 - One is subject to Rockfish Program sideboards (apply during July, when rockfish were traditionally fished in the Central GOA, to certain rockfish species in the West Yakutat District and Western GOA).

- The other has BSAI yellowfin sole endorsement to deliver to a MS.
 - The third is a CV endorsed LLP license that has >60 AI transferable endorsement.
- Eight LLP licenses are endorsed for both GOA areas
 - Three have CV Rockfish Program sideboard limitations (CV Rockfish Program sideboard limits apply during July to dusky rockfish and Pacific ocean perch in the West Yakutat District).
 - One has a Crab Program GOA sideboard limit, except for pollock and Pacific cod
 - Two have not been used in the BSAI Pacific cod fishery since 2008.
 - One is a C/P that is subject to Rockfish Program sideboard limits
 - One is <60' LOA and has a Western GOA Pacific cod pot endorsement and a linked crab LLP license.

Table 4-13 LLP licenses used on non-AFA vessels to make BSAI Pacific cod trawl CV landings from 2003 through 2018

GF LLP	Crab LLP	LLP		MLOA	AI	BS	CG	WG	PCOD	YSOL		RP Sideboard			RP Quota		AI	
		Address	Type							BSAI	Crab Sideboards	CV	CP	CV	CP	A80	<60	>60
1		1	CV	<110	N	T	N	T	N	Y	N	N	N	N	N	N	N	Y
2	2C	2	CV	<110	N		Non-T; T	Non-T; T	Non-T; T	N	GOA-except plck & cod	N	N	N	N	N	N	N
3		1	C/P	<150	T	T	N	N	N	Y	N	N	N	N	N	N	N	N
4		1	C/P	<200	T	T	T	N	N	Y	N	N	N	N	N	N	N	N
5		1	C/P	>200	T	T	T	T	N	Y	N	N	Y	N	N	N	N	N
6		1	CV	<100	N	T	N	N	N	N	N	N	N	N	N	N	N	Y
7		3	CV	<110	N	T	T	T	N	N	N	Y	N	Y	N	N	N	N
8		4	CV	<60	N		Non-T; T	Non-T; T	Non-T; T	WG CV Pot	N	N	N	N	N	N	N	Y
9		5	C/P	<200	Non-T; T	Non-T; T	N	N	N	Y	N	N	N	N	N	N	N	N
10		1	C/P	<200	Non-T; T	N	N	N	N	N	N	N	N	N	N	N	N	N
11	11C	6	CV	<60	N		Non-T; T	Non-T; T	Non-T; T	WG CV Pot	N	N	N	N	N	N	N	N
12		7	CV	<100	Non-T; T	N	Non-T	Non-T; T	CV HAL (CG & AI)	N	N	N	N	N	N	N	N	N
13		8	CV	<125	N	T	T	T	N	N	N	Y	N	Y	N	N	N	Y
14		9	CV	<110	N	T	T	N	N	N	N	N	N	N	N	N	N	Y
15	15C	10	CV	<125	N	T	N	N	N	Y	GOA Sideboarded	N	N	N	N	N	N	N
16		11	C/P	<125	N	T	N	N	N	N	N	N	N	N	N	N	Y	N
17		12	CV	<110	N	T	T	T	N	N	N	Y	N	Y	N	N	N	N
18		1	C/P	>200	N	T	T	N	N	N	N	N	Y	N	Y	Y	Y	N

T = Trawl; Non-T = non-trawl

If the Council determines that sideboard limits are appropriate for the non-AFA trawl CVs in GOA fisheries, additional data will need to be collected on these LLP licenses in terms of their relative dependence on the BSAI versus GOA. In the BSAI they accounted for about 11 percent of the targeted Pacific cod catch by CVs.

The Crab Rationalization Program sideboard limits that are open to directed fishing in the GOA after the Small Sideboards action was implemented are listed in Table 4-14. Neither of the two non-AFA vessels subject to Crab Program sideboard limits have a Western GOA or Central GOA pot endorsement for Pacific cod and would be prohibited from participating in those fisheries.

Table 4-14 Crab Rationalization Program sideboards (non-AFA vessels) that open to directed fishing

Target species and gear	Area/Season	Area/component/gear	Sideboard ratio ¹	2017 TACs (mt)	2017 sideboard limit (mt)	Average sideboard limit (2011-2017) (mt)
Pacific cod ²	A Season - Jan 1 -Jun 10	WG Pot CV	0.0997	15,242	1520	1,456
		WG Pot C/P	0.0078	15,242	119	114
		CG Pot CV	0.0474	19,881	942	1,117
		CGPot C/P	0.0136	19,881	270	320
	B Season - Sep 1 - Dec 31	WG Pot CV	0.0997	10,161	1013	970
		WG Pot C/P	0.0078	10,161	79	76
		CG Pot CV	0.0474	13,254	628	745
		CGPot C/P	0.0136	13,254	180	214

Source: NMFS

¹Ratio of 1996-2000 non-AFA crab vessel catch to 1996-2000 total harvest.

²Prior to 2012, Pacific cod was apportioned only by as inshore and offshore, so sideboard limits were not included in this table for 2011.

4.7.3 BSAI Yellowfin Sole

AFA also includes CV sideboards for participation in the BSAI yellowfin sole (trawl limited access) fishery.¹⁴ An AFA CV sideboard ratio of 0.0647 is set for years in which the initial total allowable catch (ITAC) falls below a 125,000 mt threshold (Table 4-11). This prevents the AFA CV sector from exceeding a harvest level based on historical catch by this sector in years when the yellowfin sole TAC is relatively low. Since the Amendment 80 sector is secure in its allocation of yellowfin sole, this relaxation of the sideboard in years where the TAC is relatively high, is meant to facilitate a directed fishing opportunity for these AFA vessels, which is not in competition with the Amendment 80 allocation. The AFA CV sideboards apply to CVs delivering to motherships as well as any AFA CVs that were to deliver shoreside.

However, the BSAI yellowfin sole fishery has essentially operated as an offshore fishery; including C/Ps and CVs that deliver to motherships. CVs that participate in the fishery and deliver to motherships must have an endorsement on their LLP license to operate. BSAI Amendment 116 limited the number of LLP licenses with a yellowfin sole mothership endorsement to eight. Two of those LLP licenses are associated with AFA CVs and are subject to the AFA BSAI yellowfin sole sideboard limit regulations. The other six are not associated with AFA vessels.

Under the proposed Pacific cod trawl CV LAPP, the Council may choose to keep the AFA CV yellowfin sole sideboard limits in place as the reason for these sideboards have not changed. Again, this sideboard is only applied in years when the BSAI yellowfin sole TAC is less than 125,000 mt. Since 2008, the yellowfin sole ITAC has been higher than 125,000 mt, so yellowfin sole sideboard limits have not been applied for AFA vessels.

The Council may also consider if implementation of a Pacific cod trawl CV LAPP would necessitate yellowfin sole sideboards for the non-AFA sector. For instance, if the six non-AFA vessels that have a yellowfin sole mothership endorsement received Pacific cod harvesting privileges and leased them to their cooperative, perhaps they could use that opportunity to expand their effort in the yellowfin sole fishery. While the BSAI yellowfin sole fishery has essentially been an offshore fishery, if a shoreside or stationary floating processor market ever developed for yellowfin sole, it may open this fishery to additional non-AFA trawl CV vessels that may or may not have benefited from a Pacific cod trawl CV LAPP. CVs may deliver BSAI yellowfin sole to shorebased or stationary floating processors without being subject to the LLP yellowfin sole mothership endorsement requirement. Any CV with a trawl endorsed BS and/or AI LLP license may delivery yellowfin sole to a shorebased or stationary floating processor. If the Council is not concerned about future growth in shoreside or stationary floating

¹⁴ AFA also includes sideboards for AFA CP operating in the BSAI yellowfin sole fishery; however, these sideboards are less relevant to this discussion.

processor deliveries, and/or growth in non-AFA sector delivering to motherships since LLP mothership endorsements are necessary, then the Council may choose not to include yellowfin sole sideboard limits for the non-AFA trawl CVs at this time. Using a pattern similar to AFA sideboards, if the Council chooses to set sideboard limits for non-AFA CVs under the proposed action, it might choose to only apply the sideboard limit when the ITAC is less than 125,000 mt.

4.8 Impacts to Captains and Crew

Topics of Council consideration:

- **Will the program include any regulatory provisions to mitigate negative impacts on captains and crew?**
- **Will the program include economic data collection on captains and crew?**

This section considers potential impacts on captain and crew from the development of LAPPs in a general sense, highlights examples of tools that have been used to mitigate negative impacts in other LAPPs, and includes some preliminary discussion on captain and crew considerations for a BSAI Pacific cod trawl CV fishery LAPP. As the Council hones a set of alternatives and options, future analysis should more directly consider expected impacts for captains and crew of historical vessels within the nuances of the BSAI Pacific cod trawl CV fishery.

4.8.1 Captains and Crew Effects Due to LAPP Implementation

The shift in management to a rationalized fishery can impact participating captains and crew in several ways. For captain and crew that remain in the fishery, the nature of the position can change, sometimes in positive ways. For instance, implementation of other Council-designed LAPPs, such as the halibut and sablefish IFQ Program and the BSAI Crab Rationalization Program, have resulted in longer fishing seasons that operate at a slower pace, with higher catches per vessel. This can produce benefits for captains and crew such as increased safety and more career stability including certainty in access and schedule, allowing crew to plan better.

Introduction of LAPP management can also change the basis of crew compensation. For crew that remain in the fishery this shift can be financially beneficial - depending on which metrics are examined. Analysis of the BSAI Crab Rationalization Program demonstrated substantially greater average/ median earnings for crew since implementation, but overall a lower percent of gross exvessel revenue has been directed toward crew compensation given the introduction of new administrative costs and quota leasing costs (NPFMC, 2012a).

The assignment of harvesting privileges through an IFQ- or cooperative- based LAPP can also motivate consolidation of harvesting privileges, particularly if a goal of the program is to address an overcapitalized fleet. While LAPP management can provide efficiency gains for the fleet overall, this shift in management can also create negative spillover impacts for captains and crew that were not assigned harvesting privileges and must now seek opportunity elsewhere. Moreover, limited access programs that assign harvesting privileges often increase the barriers to entry in a fishery and change the routes to upward mobility within the fishery.

4.8.2 Examples of Captain and Crew Provisions in Other Programs

MSA states that the Council may also include measures to assist entry-level and small vessel owner-operators, captains, crew, and fishing communities through set-asides of harvesting allocations, including providing privileges, which may include set-asides or allocations of harvesting privileges, or economic assistance in the purchase of limited access privileges. As stated, the measures to assist captains and crew are not prescribed in MSA and thus, LAPPs previously developed by the Council have used a variety of

approaches and placed varying degrees of emphasis on mitigating captain and crew impacts. The level of regulatory involvement and types of measures considered depends primarily on the nature of the fishery pre-rationalization (for instance, is it more owner-operated operations or comprised of more large-scale businesses) and the Council and stakeholders' vision for the fishery moving forward.

As previously compared in Table 3-2 and expanded on below, the Council has relied on several types of regulatory mechanisms in past programs designed to address impacts on captains and crew. In addition to the cooperative programs highlighted in Section 3, the following section includes provisions used in the Halibut and Sablefish IFQ fishery as an example of a program with a greater variety of measures designed to mitigate negative captain and crew impacts. Not all the following mechanisms may be appropriate for a BSAI Pacific cod trawl CV fishery LAPP. The following are intended to highlight the breadth of regulatory measures that have been used in the past to mitigate negative impacts on captains and crew.

- **Active participation requirements** – To ensure program benefits accrue to active participants, such as captains and crew rather than absentee owners, the Halibut and Sablefish IFQ fishery and Crab Rationalization Program both include requirements to demonstrate past and/ or current participation on board a vessel. Requirements vary; as one of the original objectives of the Halibut and Sablefish IFQ Program was to assure that these two fisheries are dominated by owner/operator operations (NFPMC/ NMFS, 2016), the requirements are relatively more restrictive in this program. The Halibut and Sablefish IFQ fishery requires CV quota holders to be onboard the vessel (with exceptions for initial issues and some leasing arrangements). For both programs, obtaining quota by transfer requires a demonstration of at least 150 days of past crew experience.
- **Crew shares** – While the majority of harvesting quota in the Crab Rationalization Program was issued to LLP license holders based on the licenses' history, the Crab Rationalization Program also issued 3 percent of the initial allocation of harvesting quota to eligible captains in order to protect captains' historical interests in the program fisheries. These "C shares" have more restrictive requirements on demonstrating active participation and can be revoked if those requirements are not met.
- **Vessel use caps** - Limits on how many pounds of quota a vessel can harvest in a year have been established for the Halibut and Sablefish IFQ fishery, Amendment 80, and the CGOA Rockfish Program (differentiated between CV limits and C/Ps limits). These restrictions limit the amount of total vessel consolidation that can occur. Without alternative opportunities, consolidation can lead to a decrease in the availability of captain and crew job, thus this type of provisions may prevent the displacement of some captain and crew in these fisheries.
- **Cooperative use caps** – Limits on the amount of quota that a cooperative may hold, or harvest have also been in places for CV cooperatives in the CGOA Rockfish Program. These restrictions ensure there are multiple cooperative that form (at least 4) and also limits consolidation.
- **Lending authority for loans through NMFS Fisheries Finance Program** – The Halibut and Sablefish IFQ fishery and Crab Rationalization Programs include low interest loan opportunity through a Federal Program. This program is designed assist eligible captains and crew in purchasing quota or cover the cost of construction or reconstruction of fishing vessels.
- **Tracking information on captains and crew** – The CR and Amendment 80 programs include economic data collections (Economic Data Reports; EDRs) to assess the economic impacts of a program on captains and crew. For instance, in the Crab Rationalization Program the Council continues to be focused on high lease rates of annual harvesting privileges, the amount of the lease rate that is charged against crew compensation, and the percent of gross revenue that is attributed to crew compensation. The Council tracks information on lease rates and crew

compensation in the industry's annual EDRs, which has been presented in the Crab Economic SAFE report as well as receiving information on lease rates directly from cooperative representatives during the annual cooperative report. These data have also been used to show program impacts through Crab Rationalization Program and Amendment 80 program reviews.

Non-regulatory methods (cooperative-led action) can also promote captain and crew benefits. For instance, the industry involved in the Crab Rationalization Program has created a right of first offer program to help facilitate the transfer of owner quota (non-C share quota) to active participants through their cooperative contracts. In the Halibut and Sablefish IFQ fishery, some crew members have unionized to advocate for crew interests.

4.8.3 Captain and Crew Considerations for the BSAI Pacific Cod Trawl CV Sector

The expectation of any negative impacts on captains and crew generally depends on the amount of consolidation that occurs and the alternative opportunities available to these two stakeholder groups. Thus, for the BSAI Pacific cod trawl CV fishery, future analysis can more thoroughly examine the likelihood of consolidation due to the proposed action as well as the diversification and opportunities for these vessels outside of the Pacific cod trawl CV fishery. For instance, if an AFA vessel is allocated Pacific cod trawl CV catch history in addition to their ability to access BSAI pollock, it may be that their catch history of Pacific cod is caught by a different vessel, but this frees that captain and crew to focus on pollock. In this scenario, although consolidation may happen the captain and crew may not be disadvantaged in the shift in Pacific cod management. Moreover, although the purpose and need statement (Section 1.1) mentioned an increase in the number of LLP licenses active in the Pacific cod fishery it is not clear the level of concern associated with current overcapitalization versus the risk of additional participation.

Any assessment of captain and crew impacts in the BSAI Pacific cod trawl CV sector will be stunted by the lack of data on crew residency, employment, and earnings. This precludes any rigorous evaluation of the changes in crew employment and earning and additional dimension of community impacts due to the implementation of a proposed program without a retrospective data collection of the conditions prior to implementation. Economic data for captains and crew have been collected for the GOA Economic Data Reports (EDRs), which included some vessels/ captains/ crew that also participated in the BSAI. These data have been referenced in past social impact analyses for the BSAI (e.g. NPFMC, 2019a); however, this analysis noted the lack of complete information was a substantive obstacle to a comprehensive analysis of the human dimensions of the fishery and the community footprint of potential social impacts associated with the proposed management actions. The Council may consider whether a BSAI Pacific cod trawl CV LAPP would include requiring economic data reporting, and if so, whether this would include captain and crew data. One limitation with implementing a reporting requirement after a program is implemented is that it will not be possible to compare changes in the captain and crew data before and after implementation of the program.

Generally, the BSAI Pacific cod trawl CV fishery is not considered an entry-level sector; however, the proposed action is likely to exacerbate the cost of entry. Under the status quo, participating in this fishery requires a trawl vessel capable of operating in the BSAI and an LLP license with the endorsements for these sub areas and trawl fishing, most of which are AFA derived (see Table 1-1). Layering harvesting privileges onto an already valuable LLP license, will further drive up the cost of access. Moreover, many of the LLP license provide opportunities to participate in other groundfish fisheries and may inflate the cost to participate in these fisheries as well.

4.9 Bycatch/PSC Management

Topics of Council consideration:

- **What amount of halibut and crab PSC should be apportioned to a trawl CV sector LAPP?**
- **Will halibut and crab PSC be further apportioned to cooperatives under the proposed LAPP?**
 - **If so, how should PSC be apportioned by cooperative?**

50 CFR 679.21(b)(2) and (e)(5) authorizes NMFS, after consulting with the Council, to establish seasonal apportionments of halibut and crab PSC amounts for the BSAI trawl limited access fisheries in order to maximize the ability of the fleet to harvest the available groundfish TAC and to minimize bycatch. The factors to be considered are (1) seasonal distribution of prohibited species, (2) seasonal distribution of target groundfish species relative to prohibited species distribution, (3) PSC bycatch needs on a seasonal basis relevant to prohibited species biomass and expected catches of target groundfish species, (4) expected variations in bycatch rates throughout the year, (5) expected changes in directed groundfish fishing seasons, (6) expected start of fishing effort, and (7) economic effects of establishing seasonal prohibited species apportionments on segments of the target groundfish industry. Based on these criteria, the Council recommends and NMFS approves the seasonal PSC apportionments to maximize harvest among fisheries and seasons while minimizing bycatch of PSC.

The Council's February 2019 motion requested this paper include implications for bycatch management including halibut savings to benefit the health of the halibut resource. In general, there is the potential that development of BSAI Pacific cod LAPPs will reduce their halibut PSC. Participants with exclusive shares could have time to be more selective in targeting their allocation and thereby potentially reduce their halibut PSC. This reduction in halibut PSC usage and bycatch rates from LAPPs is apparent in the Amendment 80 Program and the Central GOA Rockfish Program. In the Amendment 80 program review (NPFMC, 2014), halibut PSC and bycatch rate in the Amendment 80 fisheries has declined since implementation of Amendment 80 program in 2008. In the Central GOA Rockfish Program Review (NPFMC, 2017), halibut PSC and bycatch rates have also declined under the Pilot Program and the Rockfish Program. Halibut rates before the Pilot Program ranged from 1.5 to 3.0 kg of halibut per metric ton of total groundfish basis species. After the Pilot Program was implemented the rates decreased to about 0.25 kg of halibut per metric ton of total groundfish basis species each year. This indicates that the structure of the LAPP allowed harvesters to implement fishing strategies to reduce halibut PSC rates. In addition to the inherent reductions in PSC that may be attainable through cooperative management, the Council can always consider building in alternatives that specifically target PSC reductions.

4.9.1 Halibut PSC

The annual halibut PSC limit for the BSAI is set at 3,515 mt. That limit is allocated to the following BSAI fishing sectors based on regulations at 50 CFR 679.21(b)(1).

- 315 mt (9.0 percent) as the PSQ reserve for use by the groundfish CDQ program,
- 1,745 mt (49.6 percent) for the Amendment 80 sector,
- 745 mt (21.2 percent) for the BSAI trawl limited access sector, and
- 710 mt (20.2 percent) for the BSAI non-trawl sector.

Halibut PSC assigned to the trawl limited access sector is further divided by fishery, with 391 mt (52.5 percent) of the sector allocation designated for use in the BSAI Pacific cod fishery (see Table 4-15). This limit is shared by the BSAI Pacific cod trawl CV sector and the BSAI Pacific cod AFA trawl C/P sector.

Table 4-15 Final 2019 halibut PSC allowance (mt) for the BSAI trawl limited access sector

BSAI trawl limited access fisheries	Halibut (mt)
Yellowfin sole	150
Rockfish (April 15-Dec 31)	4
Pacific cod	391
Pollock/Atka mackerel/other species	200

Source: Annual specifications (2019)

At present, the halibut discard mortality rate (DMR) assigned to pelagic trawl gear is 100 percent of the halibut caught. CVs using non-pelagic trawl gear are assigned a DMR of 59 percent. The DMR estimation methodology underwent revisions in 2016 and the new methodology was first used to modify DMRs in 2017 on a two-year cycle (81 FR 87863, December 6, 2016). The DMR for CVs using non-pelagic trawl gear decreased to 59 percent from 60 percent in 2019 using the revised methodology to calculate halibut mortality. Revising the DMR setting methodology is intended to improve estimation accuracy, transparency, and transferability in the methodology used for calculating DMRs.

Beginning in January 2020, new regulations will allow halibut bycatch to be sorted on the deck of trawl C/Ps and motherships when operating in the non-pollock groundfish fisheries off Alaska. Vessels choosing to participate in this voluntary program will be required to meet new catch handling and monitoring requirements in order to ensure the accurate accounting of halibut sorted on deck and returned to sea. Haul specific DMRs will be estimated for each vessel that chooses to deck sort halibut using methods detailed in the halibut deck sorting proposed rule (50 CFR 679, April 16th, 2019).

The Council is also currently considering a halibut abundance based management (ABM) strategy to formulate annual halibut PSC limits in the BSAI that would fluctuate based on estimated halibut abundance. Under an ABM approach, halibut PSC would be set annually based on the results of one or more survey's conducted by NMFS and/or the International Pacific Halibut Commission ([BSAI Halibut Abundance-based Management of PSC Limits – North Pacific Fishery Management Council](#)). Depending on the direction the Council pursues on this action, the change in methodology could impact the way halibut PSC limits are calculated or applied under a BSAI Pacific cod trawl CV LAPP. The Council is scheduled to receive their initial review of the halibut ABM action at its October 2019 meeting.

4.9.2 Crab PSC

Red king crab (Zone 1), *C. opilio* (COBLZ), and *C. bairdi* (Zone 1 and Zone 2) PSC limits are established for the trawl limited access sector (see Table 4-16). Like for halibut, crab PSC limits are further divided by groundfish directed fishery. The yellowfin sole fishery is apportioned most of the crab PSC limit, followed by Pacific cod.

Table 4-16 Final 2019 crab PSC allowances (animals) for the BSAI trawl limited access sector

BSAI trawl limited access fisheries	Red king crab (Zone 1)	<i>C. opilio</i> (COBLZ)	<i>C. bairdi</i> (Zone 1)	<i>C. bairdi</i> (Zone 2)
Yellowfin sole	23,338	3,224,126	346,228	1,185,500
Rockfish (April 15-Dec 31)		5,326		1,000
Pacific cod	2,954	137,426	60,000	49,999
Pollock/Atka mackerel/other species	197	53,265	5,000	5,000

Source: Annual specification (2019)

4.9.3 PSC Apportionment Issues

Should the Council move forward with the development of a LAPP for Pacific cod trawl CVs, it could consider apportioning the cooperatives their own portion of halibut and crab PSC limits based on member Pacific cod allocations. Apportioning PSC along with a target species is typical in other Council-developed LAPPs. Having sector-level PSC rates could continue the incentives to race-for-fish, because shared PSC could become a constraining factor on the cooperatives' ability to catch their Pacific cod harvest privileges. With each cooperative getting their own allocation of halibut and crab PSC allowance, the cooperatives no longer would be concerned with the PSC of other vessels outside the cooperatives closing their cooperative fishery prematurely. Moreover, it may create more direct personal incentive to keep PSC rates low, as this would allow cooperatives the ability to continuing harvesting Pacific cod. However, apportioning transferable PSC allocations to the cooperative level would require these vessels to be the full coverage category in the Observer Program (see further discussion in Section 4.10.2).

There are two primary issues that need to be addressed based on previous Council direction in developing a LAPP. The first is the amount of PSC species that would be apportioned to the trawl CV sector for use in the LAPP. The second is defining how the available PSC would be apportioned to cooperatives.

Looking at the first issue, the Council would need to define how much crab and halibut PSC would be available for the Pacific cod trawl CV sector. Two approaches are considered. The first PSC allocation approach would be to allocate a portion of the BSAI trawl limited access PSC based on the amount of Pacific cod allocated to the trawl CV and AFA C/P sectors. Because the trawl CV sector is allocated 22.1 percent of the available Pacific cod and the AFA C/Ps are allocated 2.3 percent of the available Pacific cod, the trawl CV sector is allocated 90.57 percent of the combined trawl CV and AFA C/P sector allocation for Pacific cod and the AFA C/Ps are allocated the remaining 9.43 percent.

Thus for halibut PSC, if the 391 mt of halibut PSC allowance assigned to the trawl limited access sector for Pacific cod targets were divided, it would result in the trawl CV sector being apportioned about 354 mt of halibut PSC and the AFA C/P sector being apportioned 37 mt. A primary drawback of this approach is that it assumes the trawl CV sector and AFA C/P sector harvest the same proportion of Pacific cod in the Pacific cod target fishery. However, 2003 through 2018 about 60 percent of the Pacific cod harvested by AFA C/Ps was taken in the pollock target fishery. Midwater pollock target catches accrue to the pollock/Atka mackerel/other species halibut PSC or crab PSC limits and reaching those limits does not close directed fishing using pelagic trawl gear. Because the AFA C/Ps use more of their Pacific cod allocation as incidental catch in other target fisheries, that sector would be relatively better off with regards to the halibut PSC apportionment since they would receive more halibut PSC than they have historically used since 2008 in their Pacific cod target fishery (see Table 4-17). Halibut PSC allocations under this approach may be sufficient for the trawl CV sector to harvest their allocation of BSAI Pacific cod. However, depending on the years selected for Pacific cod allocations, future BSAI Pacific cod TACs, unexpectedly high catch rates of halibut PSC, this apportionment could be more constraining to the target catch of BSAI Pacific cod in the trawl CV sector in some years.

Another approach the Council could utilize is to base the apportionment of crab and halibut PSC on the relative amount of Pacific cod used in the Pacific cod *target* fishery. Under this approach, the AFA C/P sector accounted for 3 percent of the combined trawl CV and AFA C/P target BSAI Pacific cod catch from 2003 through 2018. The trawl CV sector accounted for 97 percent. The AFA C/P sector Pacific cod usage is even lower if some of the early years during the 2003 through 2018 period are excluded since some of the early years accounted for as much as 8 percent in a year (see Table 4-17). A 3 percent apportionment means that the AFA trawl C/Ps would be allocated less than 12 mt of halibut to support their Pacific cod fishery. A summary of the halibut PSC usage in the Pacific cod target fisheries are reported in Table 4-17.

Table 4-17 Reported halibut mortality (mt) in the non-CDQ BSAI Pacific cod target fishery by trawl limited access sector vessels

Year	Reported Halibut mortality (mt)			Percent of Total	
	Trawl CV	AFA C/P	Total	Trawl CV	AFA C/P
2004	443	12	455	97%	3%
2005	596	54	650	92%	8%
2006	586	34	620	95%	5%
2007	427	25	452	94%	6%
2008	291	2	293	99%	1%
2009	181	2	183	99%	1%
2010	255	1	256	100%	0%
2011	238	2	240	99%	1%
2012	429	0	429	100%	0%
2013	309	1	310	100%	0%
2014	281	8	289	97%	3%
2015	236	4	240	98%	2%
2016	294	10	304	97%	3%
2017	221	17	238	93%	7%
2018	205	10	215	95%	5%

Source: AFA C/P - Pollock Conservation Cooperative Reports; Trawl CV - AKFIN, May 2019. Sector_PSC (4-16-19)

In recent years the crab PSC in the Pacific cod BSAI trawl limited access sector has been well below the sector's limits. As a result, it does not appear that minor changes in the apportionment of the trawl limited access sector crab PSC limit among the trawl CV sector and the AFA trawl C/Ps will have as great an impact compared to halibut. The recent crab PSC for the two trawl sectors in the BSAI Pacific cod sector are reported in Table 4-18 and Table 4-19.

Table 4-18 Reported crab PSC in the trawl CV non-CDQ BSAI Pacific cod target fishery

Species	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Red King crab	467	2,963	22	25	1,249	475	437	2,109	316	2	587	60	585	361	200
C. bairdi	44,927	57,138	56,284	28,355	34,632	6,778	21,714	12,206	8,035	6,313	8,304	10,247	11,069	9,201	1,945
C. opilio PSC (COBLZ)	86	59	12	89	349	251	14	42	0	321	2,291	71	5	0	0
Other C. opilio	4,924	6,485	18,274	8,406	17,657	8,144	4,003	5,702	5,902	4,814	1,640	1,072	30	701	760

Source: AKFIN, May 2019. Sector_PSC (4-16-19)

Table 4-19 Reported crab PSC in the AFA trawl C/P non-CDQ BSAI Pacific cod target fishery

Species	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Red King crab	385	75	7	21	60	0	25	51	0	0	0	0	13	0	0
C. bairdi	1,218	919	2,803	1,360	324	79	5	380	0	80	1,016	30	0	148	148
C. opilio PSC (COBLZ)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other C. opilio	89	116	996	681	0	0	0	0	0	0	207	0	15	0	0

Source: AKFIN, May 2019. Sector_PSC (4-16-19)

The second issue that needs to be addressed is how to apportion the available PSC to the LLP license holders and ultimately the cooperatives that form. The most common approach for allocating PSC to cooperatives is to allocate the PSC in proportion to the target species allocated to a cooperative. In this case it would be BSAI Pacific cod. For example, if an LLP license was allocated 2 percent of the BSAI Pacific cod available under the LAPP, the license would also be apportioned 2 percent of the available halibut and crab PSC available under the LAPP. This approach has been used in other LAPP programs

because it does not reward or penalize harvesters for past PSC usage rates in the Pacific cod fishery. Each LLP license holder would be assigned the same percentage of each PSC species apportioned to the program at the same percentage as their BSAI Pacific cod apportionment. Previous Councils had considered allocating PSC based on the amount of PSC that was used to harvest the target catch or some inverse relation to that amount, but determined that allocating PSC at the same rate as the directed fishery species better met their objectives of a simple approach that did not reward fishing behavior that is contrary to its goals.

4.9.4 Groundfish Bycatch

In developing a Pacific cod trawl CV LAPP, the Council may need to consider both groundfish bycatch in the Pacific cod fishery as well as Pacific cod bycatch in other groundfish fisheries. General tools to address groundfish bycatch related to a Pacific cod LAPP include sideboards discussed in Section 4.7, maximum retainable amounts (MRAs) of groundfish harvested incidentally to Pacific cod (or if needed, the MRAs of Pacific cod harvested incidentally to other groundfish fisheries), and if the Council allocates Pacific cod by target catch, by establishing an incidental catch amount (ICA) to account for the harvest of Pacific cod for other directed fisheries.

Based on the structure of the LAPP (e.g. if allocations are based on targeted Pacific cod catch) and the intrinsic Pacific cod bycatch rates in other BSAI trawl CV fisheries, NMFS would need to determine the appropriate ICA amount that would be deducted from the sector allocation before the cooperative allocations are distributed. The amount of the ICA will likely be determined on an annual basis and established as an amount of Pacific cod in metric tons, not as a percentage of the trawl CV sector allocation. Setting the ICA in metric tons annually provides inseason management the flexibility to adjust the ICA based on the changes in BSAI groundfish TACs and expected incidental catch rates in trawl CV fisheries.

With a BSAI Pacific cod trawl CV LAPP, an ICA may be necessary to account for Pacific cod caught outside the LAPP in the BSAI Pacific cod parallel fishery by trawl CVs that do not have an LLP or Federal Fisheries Permit (FFP) designated on the vessel. This has not been an issue because since 2010, 37 trawl CVs have participated in the BSAI Pacific cod parallel fishery from 2010 through 2019, all of which had an LLP with the appropriate endorsements during this period. The amount of targeted Pacific cod that was harvested from the parallel fishery that are not confidential ranged from 153 mt in 2011 to 1,009 mt in 2010. As a percent of total targeted BSAI Pacific cod harvested by all trawl CVs, the parallel fishery accounted for less than 0.5 percent in 2011 to 4.08 percent in 2010. If the Council moves forward with a trawl CV LAPP, catch by cooperative CVs participating in the BSAI Pacific cod parallel fishery would be accounted for via the cooperative's Pacific cod allocation. As for the harvest of BSAI Pacific cod from the parallel fishery by trawl CVs that do not have an LLP or FFP, likely the most appropriate accounting tool is an ICA, which will likely require some level of coordination with the State in order to fund the ICA appropriately.

This ICA could also account for the MRA amounts of Pacific cod caught in other target fisheries. Table 11 to 50 CFR 679 reports the MRA of Pacific cod as incidental catch in other BSAI directed fisheries (basis species). In all non-Pacific cod directed fisheries the MRA of Pacific cod is set at 20 percent of the basis species. If the Council were to consider modifying the MRA for Pacific cod in the future, the pollock, yellowfin sole, and Atka mackerel fisheries have the greatest amount of Pacific cod incidental catch. However, those fisheries also have relatively large TACs. The pollock TAC being about 7.25 times larger than the Pacific cod TAC. The yellowfin sole TAC in 2018 was about 82 percent of the Pacific cod TAC. The Atka mackerel TAC was about 38 percent of the BSAI Pacific cod TAC. If this issue is a concern it will require additional study after the Council develops alternatives and options.

The Council may also consider whether or not the MRA of other groundfish specific in the Pacific cod trawl CV fishery would be adjusted under a LAPP. There appears to be limited opportunities for qualified

trawl CVs utilizing the benefits of a cooperative program to strategically target incidental catch species. For most groundfish species, the additional flexibility to “top off” early in a fishing trip is not expected to affect most groundfish stocks. For some groundfish species though, the greater flexibility to “top off” for a species in combination with other factors like low OFL, ABC, and TAC relative to high total catch could increase the risk of exceeding the ABC and TAC. However, as noted in Table 11 to 50 CFR 679, the MRAs for these at-risk species in the BSAI are set extremely low to discourage “top off” fishing.

4.10 Management and Enforcement

Topics of Council consideration:

- **Will the Council require cooperative reporting requirements (what would those requirements be)?**
- **Will the Council require Economic Data Reporting (what information would be collected?)**

MSA requires that LAPPs include an effective system for enforcement, monitoring, and management of the program, including the use of observers or electronic monitoring systems. This section describes some of these expectations and provides a placeholder for additional investigation that may be necessary for these topics as a program develops further.

4.10.1 Cost Recovery

Section 304(d)(2) of the MSA authorizes and requires NOAA Fisheries to recover the actual costs directly related to the management, data collection, and enforcement of any LAPP and the Western Alaska CDQ Program up to three percent of ex-vessel gross revenues of species allocated under the program. Recovering costs is a four-step annual process: 1) calculate the incremental costs incurred to manage and enforce the fishery, 2) calculate the total value of the fishery, 3) divide the total costs in step one by the total fishery value in step two to determine the fee percentage, and 4) apply the fee percentage to each permit holder’s catch and invoice each permit holder. If the Council continues to develop a LAPP for the BSAI Pacific cod trawl CV sector it will also be necessary to consider the implementation of cost recovery.

4.10.2 Observer Coverage

Under current monitoring requirements, Pacific cod CVs in the BSAI are in the partial coverage category. Each year, the Annual Deployment Plan (ADP) describes the science-driven method for deployment of observers on vessels in the partial coverage category (50 CFR 679.51(a)) in the Pacific halibut and groundfish fisheries off Alaska. Since 2013, observer coverage rates in the partial coverage category have ranged from approximately 14.8 to 28 percent for trawl CVs and 4 to 16 percent for pot CVs (Table 1-1, NMFS, 2019).

After the implementation of the restructured Observer Program in 2013, NMFS allowed the owners of BSAI trawl CVs in the partial observer coverage category to volunteer on an annual basis for full observer coverage during all times that they participate in BSAI trawl fisheries. Individuals who made this choice were typically owners of AFA catcher vessels that participate in the BSAI limited access Pacific cod trawl fishery to better manage Pacific halibut PSC limits within their cooperatives. In 2016, NMFS published a regulatory amendment to implement this annual request in regulation (81 FR 67113, 30 September 2016).

Under the current Observer Program, CVs participating in LAPPs with transferable PSC allocations are in the full coverage category. Therefore, the proposed BSAI Pacific cod trawl CV LAPP would likely change Observer Program monitoring requirements for this fishery. Depending on the specific elements of a LAPP, a variety of monitoring tools are available including observer coverage and EM for catch

estimation and compliance monitoring. Monitoring requirements would be designed to balance data collection needs with impacts to vessel operations. If the Council continues to develop Pacific cod LAPPs in the BSAI, it will be important to also consider the implications for observer coverage.

4.10.3 Cooperative Reporting Requirements

The Council could include a cooperative reporting requirement where each cooperative could be required to provide an annual report to the Council on the cooperative's activity the previous year. Current cooperative reports include AFA, Amendment 80, Crab Rationalization, and the Central GOA Rockfish Program during the April Council meeting. In requiring these reports, the Council could track the effectiveness of the cooperatives in meeting the Council's intended goals of the cooperative program. Additionally, they are a tool for the cooperatives to provide feedback on the program to the Council. The types of information that could be required are:

- allocations and sub-allocations of Pacific cod,
- sideboard limits and usage,
- retained and discarded catch of Pacific cod,
- cooperative monitoring methods,
- penalties imposed by the cooperative on members, and
- PSC bycatch numbers or amounts.

If the Council includes a cooperative reporting requirement for the trawl CV or pot CV management programs, the Council should provide a clear explanation of the objective of the cooperative reporting requirement to address Paperwork Reduction Act requirements which requires Federal agencies (1) to seek public comment on proposed collections and (2) to submit proposed collections for review and approval by the Office of Management and Budget (OMB). OMB reviews agency information collection requires for approval and disapproval.

4.10.4 Enforcement

Although specifics of the proposed management options are not yet available to determine enforcement issues, the primary enforcement goal is to ensure timely and accurate reporting of catch. This is dependent on quota monitoring, which is best enforced dockside or through fishery data review. Additionally, FMP measures that create dependence on observer data for vessel-level management can contribute to added tensions between onboard observers and vessel operators and managers. As a result, observers may be placed under considerable pressure by vessel crew because of their roles collecting data and reporting violations.

The Enforcement Committee has provided law enforcement precepts intended as general guidance for the Council to consider when developing regulatory programs. Depending on the specific design of the regulatory program, the enforcement tools and strategies used could require a combination of enforcement methods. The enforcement precepts section pertaining to Catch Shares and LAPP's is applicable to the BSAI cod trawl CV LAPP, as well as enforcement precepts sections pertaining to Record Keeping and Reporting, Observers/Electronic Monitoring, Bycatch, PSC, and MRA management measures that will be utilized in the LAPP. Provided in Table 4-20 are the enforcement precept's considerations for just the catch shares/individual fishing quotas/limited access program section.

Table 4-20 Enforcement Precepts for the catch shares/individual fishing quota/limited access program

Advantages from an enforcement perspective	Disadvantages from an enforcement perspective
<p>Industry performs primary management effort while the agency validates and enforces limits.</p> <p>Monitoring of fish landings is effective for verifying reporting by vessels.</p> <p>Observers record catch data, and quotas can be managed on a daily/vessel basis.</p>	<p>Significant comparative analysis is required to cross-check landings against VMS, observer, and electronic monitoring data.</p> <p>Failures of electronic systems (scales or video monitoring systems) require a vessel to cease fishing until repairs can be made.</p> <p>Heavy reliance on observer data to enforce allocated limits of target and prohibited species catch (PSC) may result in scale tampering and observer sample bias, interference, coercion, and harassment.</p> <p>Accompanying regulations, such as sideboards and ownership limitations, can be complex and difficult to enforce.</p> <p>May spread out fishing effort across time and space. Instead of specific fishing seasons to monitor, a fishery may last nearly year-round, over vast areas, and possibly require more enforcement assets for the extended season.</p> <p>Accompanying regulations such as ownership limitations are difficult and resource intensive to enforce.</p> <p>For some high value species, potential for illegal/unaccounted for landings at remote locations is increased.</p>

Source: Enforcement Considerations for NOAA Fisheries and North Pacific Fishery Management Council, December 2015

Enforcement Recommendations for LAPP Development:

- Consider the addition of dockside monitors with authority to conduct hold checks.
- Clearly identify prohibitions against fishing activity when monitoring measures fail.
- Regulations must be strong to protect observers and observer work environments, sample areas, and data.
- Effectiveness of enforcement depends on observers, technologies deployed, and monitoring of landings.
- Consider electronic monitoring technologies (VMS features, sensor, and video) at sea to detect and deter area fished quota violations. VMS is the established, vetted method for documenting vessel location for enforcement purposes.
- If at-sea quota debiting is desired, the use of certified scales, electronic reporting, observers, and video monitoring are necessary to ensure accuracy.
- Consider electronic reporting to provide near real time debiting of quota accounts. Timely quota monitoring benefits enforcement, fishermen, and fisheries managers.

4.10.5 Economic Data Reports

The Council has included EDR requirements as part of its more recent established or proposed catch share programs. EDRs are designed to gather various levels of ownership, revenue, cost, vessel operations, and employment information from vessel owners, vessel operators, processors, permit holders, and/ or leaseholders who participate in several of the catch share programs in the North Pacific fisheries. In general, the purpose of the EDR requirements is to gather information to improve the Council’s ability to

analyze the economic effects of catch share or rationalization programs, to understand the economic performance of participants in these programs, and to help estimate impacts of future issues, problems, or proposed revisions to the programs covered by the EDRs.

Currently, the Council has four EDRs in place:

- 1) BSAI Crab EDR, implemented in 2005 (Crab EDR);
- 2) Trawl Catcher/Processor (CP) EDR implemented in 2007 for Amendment 80, and in 2015 for CPs operating in the GOA groundfish fisheries (A80 EDR);
- 3) BS Chinook salmon bycatch management program EDR for participants in the BS pollock fishery, implemented in 2012 (A91 EDR); and
- 4) GOA trawl EDRs for trawl catcher vessels operating in the GOA.¹⁵

While EDRs are not explicit requirements of MSA, a variety of Federal laws and Executive Orders require the preparation of a written analysis of the economic impacts of proposed fishery conservation and management actions developed by the Council (see NPFMC,2019c for greater specificity on the economic analysis requirements). These data can provide meaningful quantitative economic and sometimes social considerations relevant to fisheries management. The laws, E.O.s, and agency guidelines strongly support the collection of high-quality economic data and the most robust quantitative analysis possible given the data and analytical methods available and the scope and complexity of the particular issue. The Council and its advisory bodies have also supported and requested the use of this type of information in the past. For instance, EDR data has informed program reviews, discussion papers and NEPA analyses for fishery management amendments, and is central in annual EDR reporting documents (e.g. Economic SAFE reports).

Moreover, implementation of a data collection prior to implementation of a LAPP can provide relevant baseline information to assess the impacts of the catch share program on affected harvesters, processors, and communities. An adequate assessment of changes in the economic characteristics of a fisheries can be extremely difficult if baseline information prior to implementation is not available. As exemplified for the Crab EDR, these data may be difficult to retroactively collect.

As described in Section 4.10.3, Federal data collections necessitates meeting specific PRA requirements, consideration of stakeholder burden, and time for OMB approval. In order to generate a continuous data collection that will provide the greatest future utility, while balancing reporting burden, care must be put into establishing the most appropriate questionnaire form from the beginning. Thus, if the Council continues to move forward with the current LAPP proposal, it should not delay in considering whether it will include EDR requirements, and if so what type of information would be important to collect.

5 LAPP for BSAI Pot CV \geq 60 ft Sector

Much of the general information regarding catch share programs described earlier for the trawl CV sector could also apply to the pot CV \geq 60 ft sector. That information is not repeated in this section. Instead this

¹⁵ Based on Council direction, work is currently being done on two EDR-related actions. The first is an amendment package to make specific changes to the EDR Programs such as 1) removing requirements for 3rd party audits, 2) revise data aggregation requirements, and 3) consider revising or removing the GOA EDR requirements due to lack of LAPP implementation. The second action is a more holistic consideration of the EDR framework including the Council's previous intent for EDRs, any duplicity in collection, the need for and challenges of the inconsistencies between program EDRs and the utility of different levels of data aggregation.

section focuses on participation data for the sector and general issues associated with rationalization and cooperative formation that are specific to this sector.

Unlike the proposal for the trawl CV sector, the Council has not yet established a purpose and needs statement for the pot CVs ≥ 60 ft sector or described the conditions that would motivate a change in management. If the Council chooses to move forward in investigating LAPP development for this Pacific cod sector, it should clearly articulate the concerns with the current management regime and the goals/objectives of a LAPP for the pot CVs ≥ 60 ft.

The number of participants in this fishery would make it difficult to form and maintain a non-regulatory voluntary cooperative. The freezer longline sector has successfully formed a voluntary cooperative, in part due to the relatively small number of participants in the BSAI and GOA Pacific cod fisheries all agreeing to the cooperative structure and bylaws. Because the pot CV ≥ 60 ft sector has 50 LLP licenses, all of which were active at some point in the fishery since 2003, and over 30 firms holding those LLP licenses, reaching an agreement that all eligible firms would always abide by is unlikely. This assumption is based on experience in the GOA CV trawl fishery where voluntary cooperatives, with a fleet of approximately this size, work best when the fishery would not be opened to directed fishing without the cooperative structure limiting capacity in a one-day fishery. As a result, this section will focus on a Council developed cooperative structure and not a voluntary cooperative structure, since it would be difficult to reduce the number of eligible LLP licenses by a sufficient number to ensure development of a voluntary cooperative.

5.1 Background

A summary of the BSAI pot CV ≥ 60 ft fishery was provided in the Pacific cod allocation review presented to the Council at its June 2019 meeting (NPFMC, 2019b). The pot CV ≥ 60 ft sector includes all vessels ≥ 60 ft operating as CVs using pot gear to harvest Pacific cod in the BSAI. As of January 1, 2003, pot CVs ≥ 60 ft must have a Pacific cod pot CV endorsement on their LLP license to target BS or AI Pacific cod from the open access fishery with pot gear, unless it is harvested for personal use bait.

The 2019 LLP license dataset indicates there were a total of 49 LLP licenses with a Pacific cod pot CV endorsement for the BS (see Table 1-1). Two of those licenses also had an AI endorsement. One LLP license only had an AI Pacific cod pot endorsement. These are the 50 groundfish LLP licenses that may currently be used for directed fishing for BSAI Pacific cod in the open access pot CV ≥ 60 ft sector.

As illustrated in Figure 1-1, the pot CV ≥ 60 ft sector is allocated 8.4 percent of the BSAI Pacific cod TAC. There are two BSAI Pacific cod seasons for the pot CV ≥ 60 ft sector: A-season which is January 1 to June 10 and B-season which is September 1 to December 31. Typically, the sector has a short A-season closing at the end of January or beginning of February, while the B-season, tends to remain open throughout the season, but on few occasions has closed in October or November.

The sector typically does not harvest all their allocation (see Table 6-5). Since Amendment 85 was implemented (2008), which established the current sector allocations, participants have harvested 73 percent of the sector allocation on average. Unharvested BSAI Pacific cod was reallocated throughout the fishing year to other sectors and has ranged from no reallocation in 2011 to a high of 6,750 mt in 2015. Reallocations were not made from the sector in 2018. That was the first year since 2011 when no Pacific cod was reallocated from the sector. The sector used more of their initial allocation because of the lower TAC and strong Pacific cod prices that increased participation (see Table 5-2 and Table 6-4).

There are no PSC limits for halibut, crab, or salmon for the pot CV ≥ 60 ft sector. Halibut mortality for the sector ranges from a low of less than one mt in most years to a high of slightly over three mt in 2011 (see Table 5-1). This sector had some of the highest crab PSC of all the sectors (see Table 5-1).

Table 5-1 Reported halibut and crab mortality in the trawl CV non-CDQ BSAI Pacific cod target fishery

Species	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Halibut mortality (mt)	2	1.65	1.71	0.21	2.23	0.09	1.20	3.29	2.15	0.61	0.43	0.47	0.70	0.62	0.17
Red King crab	408	2,994	3,652	22,733	20,358	1,437	1,069	7,866	1,834	22,430	19,061	19,875	309	8,716	242,567
C. bairdi	25,294	92,528	211,226	430,990	839,641	267,264	198,074	114,981	43,355	62,215	108,234	148,669	48,736	133,249	154,486
C. opilio PSC (COBLZ)	1,000	7,377	7,120	229,603	51,793	6,520	17,333	258	1	0	0	0	0	1,396	25
Other C. opilio	44,602	76,200	189,097	556,794	235,668	61,927	261,829	41,494	7,363	4,744	29,101	35,710	1,334	27,631	2,579

Source: AKFIN, May 2019. Sector_PSC (4-16-19)

5.2 Fishery Participation

In the federal BSAI Pacific cod target fishery, the number of participating pot CVs ≥ 60 ft has declined since implementation of Amendment 85. Overall, vessel counts in the federal BSAI Pacific cod target fishery has ranged from a low of 23 CVs in 2015 to a high of 54 CVs in 2003. The sector routinely harvests its entire A-season allocation by the end of January or early February thereby closing directed fishing early, while the B-season is a slower fishery which in the past has often resulted in a reallocation of a third of their initial allocation to other sectors. However, in 2018, the sector harvested its entire initial allocation for the first time over the 2005 through 2018 period (see Table 6-5). If the sector does not harvest its allocation in the future the Council may wish to consider potential contingency plans to address unharvested quota.

Table 5-2 provides a summary of the 2003 through 2018 federal open access BSAI Pacific cod pot CV ≥ 60 ft fishery. As stated earlier, there are 50 LLP licenses that can participate in the fishery and all 50 reported some catch over the 2003 through 2018 period. In the most recent years, they delivered their catch to between seven and nine processors. Nearly all its sector allocation is harvested in the BS. The sector only targets Pacific cod and some sablefish IFQ, they do not catch Pacific cod as incidental catch in other groundfish fisheries.

Table 5-2 BSAI Pacific cod catch in the Federal Open Access Pacific cod target fishery by CVs ≥ 60 ft using pot gear, 2003 through 2018

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total	
AI																		
Weight (mt)				*	*												1,282	1,682
LLP Licenses				1	1												3	4
Vessels				4	2												3	8
Processing Plants				2	1												3	5
BS																		
Weight (mt)	14,448	10,568	11,522	*	*	11,227	6,476	11,589	16,404	12,721	12,436	11,136	10,408	11,028	13,725	13,952	191,603	
LLP Licenses	36	39	37	40	42	41	26	30	36	33	33	33	25	27	36	34	49	
Vessels	54	53	45	45	45	41	26	30	33	29	31	31	23	25	34	31	83	
Processing Plants	10	11	10	14	10	10	9	8	9	7	8	8	8	9	8	8	26	
Total																		
Weight (mt)	14,448	10,568	11,522	12,843	11,521	11,227	6,476	11,589	16,404	12,721	12,436	11,136	10,408	11,028	13,725	15,234	193,285	
LLP Licenses	36	39	37	40	42	41	26	30	36	33	33	33	25	27	36	37	50	
Vessels	54	53	45	49	46	41	26	30	33	29	31	31	23	25	34	34	88	
Processing Plants	10	11	10	15	10	10	9	8	9	7	8	8	8	9	8	9	28	

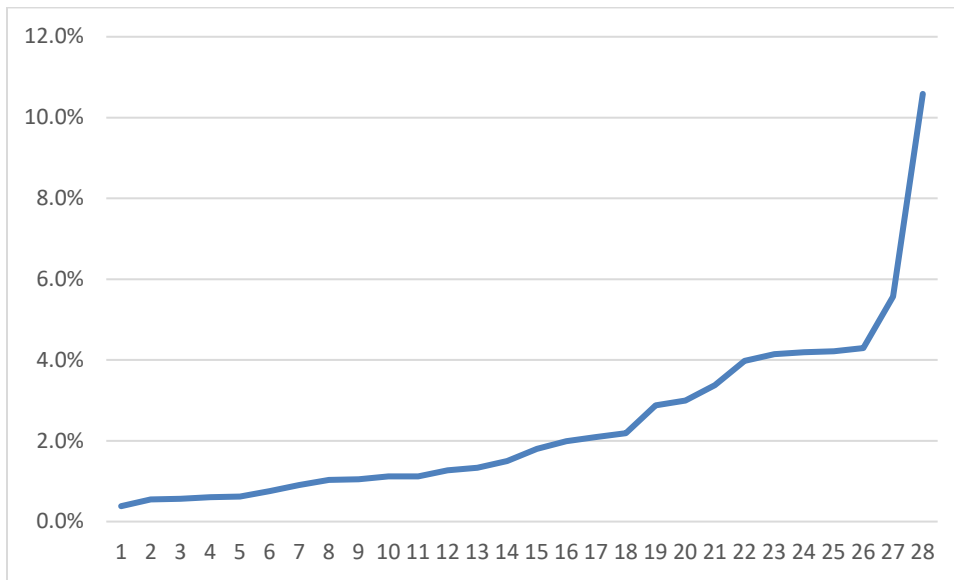
Note: * indicates data was hidden to protect confidential information.

Source: AKFIN summary of CAS data (BSAI_POT_LL_PCODLANDINGS(5_20_2019))

Like the trawl CV sector, if the Council moves forward with pot CV ≥ 60 ft LAPP, catch by non-Federal pot CVs ≥ 60 ft in the BSAI Pacific cod parallel fishery will likely need to be accounted for via an ICA. Since 2010, 16 pot CVs ≥ 60 ft have participated in the BSAI Pacific cod parallel fishery from 2010 through 2019. Only one pot CV ≥ 60 ft participated in the parallel fishery that did not have both an LLP and FFP. The remaining 15 pot CVs ≥ 60 ft had either an LLP or FFP or both. In last three years, four pot CVs ≥ 60 ft participated in the parallel fishery harvested between 253 mt and 765 mt, which accounted for between 2.8 percent and 5.6 percent of the total catch of BSAI Pacific cod for the sector.

Figure 5-1 shows the percentage of pot CV \geq 60 ft targeted Pacific cod catch, by LLP holder address during the 2010 through 2018 fishing years relative to the total catch of the same LLP holders. This information may be useful when considering development of alternatives for ownership and use caps. Catch was aggregated by LLP license holder's address as reported in the 2019 LLP License database. About 0.6 percent of the reported catch did not have an LLP license number listed and was excluded from the calculations. If the Council moves forward with a LAPP for the sector analysts would need to determine how to treat this associated catch. The four smallest and largest reported catches, by address, were averaged to protect confidential data. This was done because persons with knowledge of the fishery may be able to determine which firms are associated with the most or least catch.

Figure 5-1 Percentage of 2010 through 2018 pot CV \geq 60 ft catch of target Pacific cod by LLP holder's address



Note: The four smallest and largest amounts were averaged to protect confidential information.

The reported addresses were associated with between one to five LLP licenses. In general, addresses associated with the most LLP licenses also reported higher catch levels. The addresses associated with the five largest catch histories all accounted for more than 5.5 percent of the sector's catch from 2010 through 2018. The top four averaged just over 10.5 percent of the sector's catch.

5.3 Sideboard Limits

All LLP licenses that have a Pacific cod pot endorsement also have an associated crab LLP license. Crab fisheries are managed under the Crab Rationalization program that established sideboard limits on certain qualified vessels in the GOA fisheries. Sideboard limits were established because the Council understood that rationalizing the BSAI crab fisheries could provide opportunities for fishermen to consolidate their quota and take greater advantage of other fisheries. Thus, the Council established GOA sideboard limits for vessels and LLP licenses that had Bering Sea snow crab history and generated crab quota shares, due to the timing and length of this fishery relative to the groundfish fisheries (NPFMC, 2012b).

GOA Pacific cod sideboard limits for non-AFA crab vessels were based on retained catch of Pacific cod by vessels subject to the limit, divided by the total retained catch of GOA Pacific cod by all groundfish vessels from 1996 through 2000. AFA vessels were already subject to sideboard limits under the AFA program. In contrast, GOA groundfish sideboard limits for non-AFA crab vessels are based on GOA groundfish landings by vessels subject to the sideboard, relative to groundfish landings by all vessels. In addition to the GOA groundfish sideboards for the non-AFA crab vessels, participation in the GOA

Pacific cod fishery is restricted. Vessels that qualified for Bering Sea snow crab quota share must have landed more than 50 mt of groundfish harvested from the GOA between January 1, 1996, and December 31, 2000, in order to qualify to participate in the GOA Pacific cod fishery. This restriction also applies to any vessel named on an LLP license that generated Bering Sea snow crab fishery quota share.

To protect non-AFA crab vessels that demonstrated dependence on the GOA Pacific cod fishery, an exemption from the Pacific cod sideboards was included in the crab rationalization program. The catch history of the exempt vessels was not included in the sideboard calculations. Since their historical catch was not included in the sideboard limits, catch by these vessels does not count towards the sideboard caps, nor are the exempt vessels required to stop fishing when the sideboard limit is reached if the directed fishery is open. Of the 227 non-AFA crab vessels that made a landing of Bering Sea snow crab during the 1996 to 2000 period, 82 vessels are allowed to target GOA Pacific cod, but are limited by GOA Pacific cod sideboards. Of those 82 non-AFA crab vessels restricted by GOA Pacific cod sideboard limits, 76 are CVs. LLP licenses that originated on a qualified non-AFA crab vessel are also subject to the GOA Pacific cod sideboard limits. The 50 LLP licenses in the pot CV \geq 60 ft sector are described below.

The LLP license data file reports the different types of crab sideboards applied to LLP licenses associated with \geq 60 ft pot CV with a Pacific cod endorsement. The Crab Rationalization Program sideboard limits associated with the LLP licenses for the GOA are defined as follows:

- Crab Rationalization GOA Sideboarded; no GOA Pacific cod fishing: Subject to GOA groundfish directed fishery “sideboard” closures; may not engage in directed fishing for Pacific cod in the GOA.
- Crab Rationalization GOA Sideboarded: Subject to GOA groundfish directed fishery “sideboard” closures, including Pacific cod closures.
- Crab Rationalization GOA Sideboarded except Pacific cod: Subject to GOA groundfish directed fishery “sideboard” closures, not including Pacific cod closures.
- No Crab Rationalization Sideboard. Not subject to GOA sideboard limits.

Table 5-3 LLP licenses on pot CVs \geq 60 ft by Pacific cod pot endorsement and Crab Rationalization sideboard limits.

Pcod Endorsements	CR GOA Sideboarded	CR GOA Sideboarded - except Pcod	CR GOA Sideboarded - no GOA Pcod Fishing	No CR Sideboard	Total
AI CV Pot				1	1
AI CV Pot; BS CV Pot				1	1
AI CV Pot; BS CV Pot; WG CV Pot	1				1
BS CV Pot	4			28	32
BS CV Pot; BS CV HAL; CG CV Pot	1				1
BS CV Pot; CG CV Pot	2				2
BS CV Pot; WG CV Pot	6	1	2	1	10
BS CV Pot; WG CV Pot; CG CV Pot		2			2
Total	14	3	2	31	50

Source: LLP license file for 2019
CR= Crab Rationalization

Table 5-3 shows that of the 50 pot CV \geq 60 ft sector LLP licenses, 30 have no Crab Rationalization sideboard, but do not have a GOA pot CV endorsement to fish Pacific cod. These will not need further restrictions on the fishing Pacific cod in the GOA. Two additional LLP licenses are subject to sideboard limits and are not allowed to fish Pacific cod in the GOA. Fourteen LLP licenses are subject to GOA sideboards for Pacific cod. Imposing additional restrictions on these LLP licenses may not be necessary, if the Crab Rationalization sideboard limits are considered to be sufficient. The remaining four LLP licenses are not subject to Crab Rationalization sideboard limits for the GOA. All four have a Western GOA Pacific cod pot endorsement to fish Pacific cod and to two of those four are also endorsed to fish

Pacific cod in the Central GOA with pot gear. The four LLP licenses are held by persons whose reported addresses are in Alaska cities Kenai, Kodiak, Unalaska, and Anchorage.

As part of the GOA Pacific cod sector allocation in 2012, the Council recommended operational and gear specific non-AFA crab sideboards based on participation in the GOA Pacific cod from 1996 through 2000. The Council considered and rejected combining the GOA inshore and offshore non-AFA crab sideboards into a single Central GOA and a single Western GOA sideboard limit. The Council was concerned that combining the inshore and offshore sideboards into a single amount for both catcher processors and CVs sectors could result in one gear or operational type preempting the other in a race for the sideboards. The Council was also concerned that an aggregate sideboard limit could have a negative impact on non-sideboarded vessels since the sideboard limit could be greater than some sector specific allocations.

6 Impacts of Proposed LAPPs on other Sectors

At its June 2019 meeting the Council requested that information be provided in this document relative to the spillover impacts of a trawl CV LAPP and/or pot CV ≥ 60 ft LAPP on other BSAI Pacific cod sectors. This section is provided to address that request. In particular, this section focuses on inseason rollovers of Pacific cod; the funders of rollovers, the receivers of rollovers, the how these redistributions of Pacific cod may affect other sectors under a new management regime. Additional spillover impacts on other sectors are also discussed relative to potential need for sideboards in Section 4.7.

The 2019 BSAI sector allocations of Pacific cod are provided in Table 6-1. This information is provided to show the relative sector allocations before any reallocation of Pacific cod occurs inseason. Sector allocations are established in regulation as a percentage of the total amount of Pacific cod available after deductions are made for the CDQ fishery (see Figure 1-1 for further illustration of this process).

Table 6-1 BSAI non-CDQ Pacific cod sector apportionment and BSAI non-CDQ Pacific cod seasonal allowance for 2019

Sector	BSAI Sector Apportionment (mt)	BSAI Season allowance (mt)		
		A	B	
H&L/pot < 60'	3,109	No seasonal allowance		
H&L CV $\geq 60'$	311	159	152	
H&L CP	75,705	38,610	37,095	
Pot CV $\geq 60'$	13,058	6,660	6,398	
Pot CP	2,332	1,189	1,143	
Sector	BSAI Sector Apportionment (mt)	BSAI Season allowance (mt)		
		A	B	C
Jig vessels	2,186	1,311	437	437
AFA trawl CP	3,591	2,693	898	0
Amendment 80	20,919	15,689	5,230	0
Trawl CV	34,500	25,530	3,795	5,175

Source: NMFS Final Specifications

Note: The sum of the seasonal apportionments may not equal the sector allocation due to rounding.

One concern expressed by stakeholders was the impact rationalization of the trawl CV and pot CV ≥ 60 ft sectors, may have on inseason reallocations of Pacific cod to other sectors. Located on the NMFS website is a reallocation table that provides a detailed summary of the Pacific cod allocations and reallocations from 1995 through 2018 for each sector. Information in that table shows each reallocation that occurred by sector, including the amount each sector funded or received. There is some annual variation by year, but the primary users of rollovers are the <60 ft hook-and-line and pot CV sector vessels. The primary funders of the reallocation are the trawl CV sector, the pot CV ≥ 60 ft sector, and the jig sector. The

detailed information in that appendix shows the total TAC (CDQ is not deducted), the initial sector allocation in metric tons and as a percentage of the non-CDQ TAC, and the sector allocation after reallocation of Pacific cod. Those data are summarized by sector in the series of tables that follows.

Table 6-2 shows the reallocation summary for the HAL/pot CV < 60 ft sector. The sector has received a reallocation of Pacific cod each year since 2004 and the reallocation to the sector has been at least 4,000 mt every year after 2010. In the five most recent years reported in the table, the reallocation amount had ranged from 5,000 mt to 7,500 mt.

Table 6-2 HAL/pot CV <60 ft BSAI Pacific cod sector allocations

Year	Total TAC	Initial Allocation		After Reallocations		
		mt	% of non-CDQ TAC	mt	Change (mt)	% of non-CDQ TAC
1995	250,000	NA	NA	NA		NA
1996	270,000	NA	NA	NA		NA
1997	270,000	NA	NA	NA		NA
1998	210,000	NA	NA	NA		NA
1999	177,000	NA	NA	NA		NA
2000	193,000	1,268	0.7%	1,230	-38	0.7%
2001	188,000	1,235	0.7%	1,235	0	0.7%
2002	200,000	1,314	0.7%	1,314	0	0.7%
2003	207,500	1,363	0.7%	1,363	0	0.7%
2004	215,500	1,416	0.7%	2,961	1,545	1.5%
2005	206,000	1,354	0.7%	2,601	1,247	1.4%
2006	189,768	1,246	0.7%	3,242	1,996	1.9%
2007	170,720	1,121	0.7%	2,928	1,807	1.9%
2008	170,720	3,033	2.0%	5,210	2,177	3.4%
2009	176,540	3,137	2.0%	4,434	1,297	2.8%
2010	168,780	2,998	2.0%	5,509	2,511	3.7%
2011	227,950	4,055	2.0%	9,005	4,950	4.4%
2012	261,000	4,645	2.0%	8,880	4,235	3.8%
2013	260,000	4,627	2.0%	9,177	4,550	4.0%
2014	253,894	4,518	2.0%	12,018	7,500	5.3%
2015	249,422	4,438	2.0%	10,630	6,192	4.8%
2016	251,519	4,476	2.0%	10,674	6,198	4.8%
2017	239,399	4,259	2.0%	9,271	5,012	4.3%
2018	203,831	3,627	2.0%	8,748	5,121	4.8%

Source: Summary of data as developed by NMFS Inseason Management

Table 6-3 shows that from 2003 through 2018, 66 unique CVs reported making Pacific cod landings in the HAL/pot CV <60 ft sector allocation. The number of vessels participating ranged from a low of seven in 2003 to a high of 26 in 2018. On average these vessels harvested 92 percent of the sector's final allocation (after reallocations). This information indicates these vessels are likely dependent on reallocation to the sector. The sector does not have seasonal allowances. Nevertheless, there appears to be a gradual shortening of the initial fishing period when the sector harvests its initial allocation. Prior to 2006, the sector did not have its first closure before April. Between 2006 and 2014, the sector's first closure occurred in March. Since 2014, the sector's first closure is early February. Once the sector has harvested its initial allocation, reallocations from other sectors can open the fishery as early as late April or early May. Another typically period of reallocations that can allow the sector to target BSAI Pacific cod is mid-August to early September. Typically, the fall reallocation is sufficient to allow the fishery to remain open for the remainder of the year.

Table 6-3 HAL/pot CV < 60 ft sector BSAI Pacific cod harvest and final sector allocation 2003 through 2018

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
Reported Harvest (mt)	1,371	2,560	2,119	3,294	3,132	4,297	4,040	5,159	7,563	8,304	8,456	10,293	9,304	10,301	9,880	7,735	97,807
Final Allocation (mt)	1,363	2,961	2,601	3,242	2,928	5,210	4,434	5,509	9,005	8,880	9,177	12,018	10,630	10,674	9,271	8,748	106,651
% harvested	101%	86%	81%	102%	107%	82%	91%	94%	84%	94%	92%	86%	88%	97%	107%	88%	92%
Vessels	7	11	12	16	16	15	15	14	15	19	21	15	21	21	22	26	66

Source: AKFIN summary of CAS data and final allocation for sector.

Table 6-4 shows the initial and final BSAI Pacific cod allocations for the trawl CV sector. Trawl CVs did not have their own allocation until 1997. The current allocation of 22.1 percent of the non-CDQ fishery has been in place since 2008. From 2008 through 2018 between 2,200 mt (2018) and 11,370 mt (2015) have been reallocated away from the sector. Over those 11 years the reallocations away from the sector averaged 5,235 mt. However, in the three most recent years the reallocation has been less than the average. Relatively strong Pacific cod prices and markets as well as a declining TAC may play a role in less Pacific cod being rolled over to other sectors.

Table 6-4 Trawl CV BSAI Pacific cod sector allocations

Year	Total TAC	Initial Allocation		After Reallocations		
		mt	% of non-CDQ TAC	mt	Change (mt)	% of non-CDQ TAC
1995	250,000	NA	NA	NA	NA	NA
1996	270,000	NA	NA	NA	NA	NA
1997	270,000	63,450	26.2%	63,450	0	26.2%
1998	210,000	45,649	24.2%	45,649	0	24.2%
1999	177,000	38,475	24.2%	38,475	0	24.2%
2000	193,000	41,953	24.2%	41,953	0	24.2%
2001	188,000	40,867	24.2%	26,867	-14,000	16.0%
2002	200,000	43,475	24.2%	41,475	-2,000	23.2%
2003	207,500	45,105	24.2%	43,434	-1,671	23.4%
2004	215,500	46,844	24.2%	40,717	-6,127	21.2%
2005	206,000	44,779	24.2%	35,847	-8,932	19.5%
2006	189,768	41,251	24.2%	33,824	-7,427	20.0%
2007	170,720	37,110	24.2%	34,110	-3,000	22.4%
2008	170,720	33,692	22.1%	30,842	-2,850	20.2%
2009	176,540	34,841	22.1%	29,740	-5,101	18.9%
2010	168,780	33,309	22.1%	28,175	-5,134	18.7%
2011	227,950	44,987	22.1%	39,897	-5,090	19.6%
2012	261,000	51,509	22.1%	47,749	-3,760	20.5%
2013	260,000	51,312	22.1%	43,812	-7,500	18.9%
2014	253,894	50,107	22.1%	43,107	-7,000	19.0%
2015	249,422	49,224	22.1%	37,854	-11,370	17.0%
2016	251,519	49,638	22.1%	45,138	-4,500	20.1%
2017	239,399	47,246	22.1%	44,163	-3,083	20.7%
2018	203,831	40,227	22.1%	38,027	-2,200	20.9%

Source: Summary of data as developed by NMFS Inseason Management

Table 6-5 shows the initial and final BSAI Pacific cod allocations for the pot CV \geq 60 ft sector. The sector did not have their own allocation until 2004. The current allocation of 8.4 percent of the non-CDQ fishery has been in place since 2008. Reallocations away from the sector have ranged from 0 mt (2011 and 2018) to 6,750 mt (2015). The average annual amount of Pacific cod rolled over from the sector from 2008 through 2018 was 3,944 mt.

Table 6-5 Pot CV ≥60 ft BSAI Pacific cod sector allocations

Year	Total TAC	Initial Allocation		After Reallocations		
		mt	% of non-CDQ TAC	mt	Change (mt)	% of non-CDQ TAC
1995	250,000	NA	NA	NA	NA	NA
1996	270,000	NA	NA	NA	NA	NA
1997	270,000	NA	NA	NA	NA	NA
1998	210,000	NA	NA	NA	NA	NA
1999	177,000	NA	NA	NA	NA	NA
2000	193,000	NA	NA	NA	NA	NA
2001	188,000	NA	NA	NA	NA	NA
2002	200,000	NA	NA	NA	NA	NA
2003	207,500	NA	NA	NA	NA	NA
2004	215,500	15,174	7.8%	11,735	-3,439	6.1%
2005	206,000	14,502	7.8%	12,828	-1,674	7.0%
2006	189,768	13,354	7.8%	13,880	526	8.2%
2007	170,720	12,006	7.8%	12,129	123	8.0%
2008	170,720	12,737	8.4%	11,422	-1,315	7.5%
2009	176,540	13,173	8.4%	6,373	-6,800	4.0%
2010	168,780	12,591	8.4%	11,576	-1,015	7.7%
2011	227,950	17,030	8.4%	17,030	0	8.4%
2012	261,000	19,509	8.4%	13,209	-6,300	5.7%
2013	260,000	19,434	8.4%	13,434	-6,000	5.8%
2014	253,894	18,976	8.4%	14,476	-4,500	6.4%
2015	249,422	18,641	8.4%	11,891	-6,750	5.3%
2016	251,519	18,798	8.4%	12,098	-6,700	5.4%
2017	239,399	17,889	8.4%	13,889	-4,000	6.5%
2018	203,831	15,235	8.4%	15,235	0	8.4%

Source: Summary of data as developed by NMFS Inseason Management

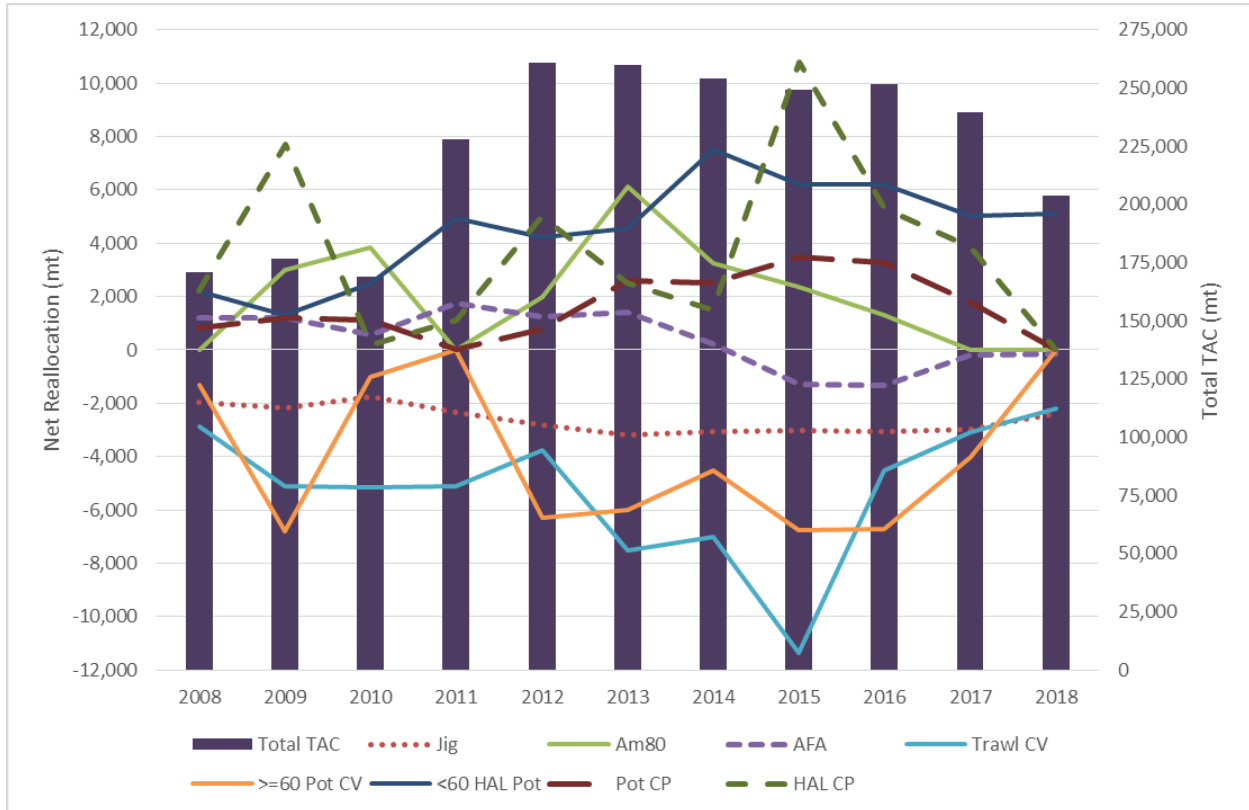
Figure 6-1 provides a summary of the total BSAI Pacific cod TAC and annual reallocations by sector and the total TAC. This figure shows that the primary suppliers of reallocations are the trawl CV, pot CVs ≥ 60 ft, and the jig sector.

Moving to a cooperative structure for the trawl CV sector and the pot CVs ≥ 60 ft sector would be expected to reduce the amount of reallocations from these sectors as well as to change the timing of those reallocations to later in the year. The amount of Pacific cod that may be rolled over from the trawl CV sector and the pot CVs ≥ 60 ft sector in the future could decline since the cooperatives can be more deterministic in their effort in the Pacific cod fishery by cooperating to more efficiently harvest Pacific cod. Because effort can be coordinated under a LAPP, the cooperatives can match effort to the amount of Pacific cod available without exceeding their allocations. Under the current structure NMFS needs to estimate the amount of catch per day based on total effort in the fishery and close the fishery to directed fishing before the sector allocation is fully harvested. The cooperative structure would allow members of the cooperative to harvest more of their allocation through control of individual vessels as opposed to NMFS management of the sector.

Under a LAPP, if there is any Pacific cod available when the cooperatives finish their fishing, it would not be available until the cooperative fishing year ends (November 1 for trawl vessels since the pot B season runs through December 31) or when the cooperative checks out of the fishery. For the trawl sector, reallocations may not be made until November when weather conditions may be worse for smaller vessels trying to use any Pacific cod that is reallocations. For the pot sector roll overs may only occur if the

cooperatives check out of the fishery. Under the current management structure, the timing of reallocations is described in the BSAI Stranded Pacific cod Discussion Paper scheduled for review during the October 2019 Council meeting.

Figure 6-1 Summary of within year changes in BSAI Pacific cod allocations by sector, 2008 through 2018



Source: Summary of data as developed by NMFS Inseason Management

The structure of the LAPP will also impact future reallocations of Pacific cod. If the trawl CV sector is allocated harvesting quota to fund directed fishing and an ICA is established for the incidental catch of Pacific cod in other fisheries, it may increase the likelihood that few reallocations would result from the directed fishery allocation.

In terms of the program’s structure, the Council will need to determine if cooperative quota may be harvested any time while the Pacific cod trawl fishery is open to directed fishing or if the current fishing seasons would still apply to directed fishing. This could mean that all of the harvesting quota could be harvested in any combination of the A, B, or C seasons for trawl vessels and the A and B seasons for pot vessels. It is anticipated that most of the catch would be taken during the A-season when Pacific cod are more aggregated and catch rates are high (this decision point is further discussed in Section 4.4).

Table 6-6 shows the average percentage of non-CDQ trawl CV Pacific cod that was harvested by fishery and season from 2010 through 2018. Information in the table shows that of the Pacific cod harvested in the Pacific cod target fishery (88.5 percent of the Pacific cod target total) the vast majority was harvested in the A season 78.5 percent (or 88.7 percent of the targeted catch). Of the remaining targeted Pacific cod catch, 8.4 percent was taken in the B-season (9.5 percent of the Pacific cod target total) and 1.6 percent was taken in the C season (1.8 percent of the Pacific cod target total).

Table 6-6 Percentage of Pacific cod harvested by trawl CV sector in reported target fishery and trawl CV season, 2010 through 2018

Reported Target	Season			Total
	A	B	C	
Alaska Plaice - BSAI	0.0%	0.0%	0.0%	0.0%
Arrowtooth Flounder	0.0%	0.0%	0.0%	0.0%
Atka Mackerel	0.1%	0.0%	0.3%	0.4%
Flathead Sole	0.0%	0.0%	0.0%	0.0%
Other Species	0.0%	0.0%	0.0%	0.0%
Pacific Cod	78.5%	8.4%	1.6%	88.5%
Pollock - bottom	1.2%	0.2%	0.3%	1.6%
Pollock - midwater	3.6%	0.5%	3.0%	7.0%
Rock Sole - BSAI	0.0%	0.2%	0.0%	0.2%
Rockfish	0.0%	0.0%	0.1%	0.1%
Yellowfin Sole - BSAI	0.6%	0.7%	0.7%	2.1%
Total	84.0%	10.0%	6.0%	100.0%

Source: PSMFC summary of CAS data

As further discussed in Section 4.9.4 a trawl ICA could be established to fund other trawl CV fisheries throughout the year. The ICA could be used by vessels in a cooperative and those vessels that do not qualify or elect to not join a cooperative. The ICA would be set at a level that is expected to be needed to allow the trawl CV sector to harvest their other fisheries including the AFA cooperative allocations and the yellowfin sole fishery. Based on the information provided in Table 6-6, about 12 percent of the sector allocation of Pacific cod was used to support other target fisheries. If an ICA is established for the trawl CV fishery, additional discussion and analysis will be needed to determine if and when any unused ICA could be reallocated to other sectors.

7 Conclusions and Next Steps

After considering the information in the scoping paper and listening to public testimony, the Council could move forward with developing a LAPP for trawl CV sector and/or the pot CV ≥ 60 ft sector. If the Council determines that it lacks sufficient information to proceed with the developing program elements and options, it could make a focused request for information it needs to be brought back at a future meeting, prior to proceeding with formal development of the regulatory package.

The February 2019 motion for the trawl CV sector included a purpose and need statement. The motion made at that meeting for the pot CV ≥ 60 ft sector did not include a purpose and need statement, and thus will be needed if the Council moves forward with development of a LAPP for that sector. With a purpose and need statements developed, the Council could start crafting required and discretionary MSA provisions as components and options. Provisions described in the scoping paper include the LAPP program's cooperative structure, allocation decisions, processors and communities' considerations, ownership and use caps, sideboard limits, captain and crew considerations, bycatch/PSC management, and Inseason management and enforcement considerations. These types of components could apply to a pot CV ≥ 60 ft LAPP as well but will likely need additional contextual evaluation.

To assist the Council in development of the components and options, sections of this document begin with some of the key elements the Council might consider in developing the trawl CV and pot CV ≥ 60 ft LAPPs.

Moving forward, the LAPPs could be developed in conjunction with, or independent of each other. Developing the LAPPs together could result in some efficiencies but may result in slowing the development of one or both LAPPs. In addition, as noted in the scoping paper, each LAPP would likely be unique to the sector with little overlap between sectors. Combining the two programs in the analytical package would likely complicate an already challenging process. Developed independently, each LAPP

could proceed on its own timeline and could allow the Council the flexibility to prioritize development of the LAPPs. Given the early stage of development for both of the programs, staff has not attempted to provide a timeline for development of the two programs. The pace at which the programs move forward will be highly dependent on whether the Council moves forward with the programs, how focused the alternatives and options are for each program, and the priority assigned to developing the programs relative to other issues and workload assigned to the responsible staff.

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