

BSAI Pot Catcher Vessel \geq 60 ft. and Pot Catcher Processor Cooperatives

June 2024¹

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1 Introduction

In June 2023, the North Pacific Fishery Management Council (Council) tasked staff to prepare a discussion paper with information to help the Council address the numerous concerns being encountered by the BSAI Pot catcher vessel \geq 60 ft. (CV) and pot catcher/processor (CP) Pacific cod fisheries and to include data to support development of a cooperative limited access privilege program (LAPP) for these pot sectors. The Council was particularly concerned with multiple issues that are simultaneously negatively impacting the sustained viability and rational prosecution of the fishery for all its participants. These factors include: decreasing Pacific cod TACs, an increase in the number of participating LLP licenses in the CV sector, the potential for additional new participants in both the CV and the CP sectors, a race among existing participants (often in unsafe conditions), resulting in an inability to control bycatch of crab, and increasingly shortened seasons in recent years.

Specifically, the Council requested that staff address the following issues so they could support the development of a cooperative limited access privilege program (LAPP) for these pot sectors:

- Allocation of BSAI Pacific cod quota share to BSAI LLP licenses with a Pacific cod pot gear endorsement
- Consideration of equal shares program for \geq 60 ft. Pot CVs
- Consider issuing quota share to owners of active vessels that do not own an LLP
- How this new program will impact the less than 60 ft. CV fleet and ability for new entrants
- History of crab bycatch by CV and CP fleets for the years 2008 through 2022

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- History of any deliveries to Motherships or CPs acting as Motherships by ≥ 60 ft. Pot CVs for the years 2008 through 2022
- History of deliveries and/or catch by CV and CP fleets in the AI for the years 2008 through 2022
- Crab bycatch management
- Establishing separate ≥ 60 ft. CV and CP cooperative(s) for Pacific cod
- Protections for harvesters, processors, and communities including participation by shoreside processors and communities
- Use caps, transfer requirements, and other administrative requirements that apply to quota programs, including data to support initial range for use and ownership caps
- Establishing sideboards to protect limited access GOA and BSAI fisheries
- Consider impacts of management changes on crew
- Likely monitoring requirements necessary to support a cooperative program that allocates cooperative Pacific cod quota and apportions crab PSC to the cooperative(s) including availability of observers for the CVs to move to the full observer coverage category

This discussion paper is intended to incorporate the information requested in the bullets above into a document that is structured around common LAPP elements and decision points. This format provides the Council the relevant information to draft a purpose and need statement and to begin the process of developing alternatives and options and program elements in an organized and efficient process.

The Council established a control date of June 11, 2023, that may be used as a reference date for any future management action to address Pot CPs and ≥ 60 ft. Pot CVs participation in the BSAI Pacific cod pot sector fishery.

1.1 History of relevant Council actions related to BSAI Pot CV ≥ 60 ft. and Pot CP Pacific cod fisheries

The Council has received numerous requests to address issues related to trends in participation, effort and TACs from participants in the BSAI Pot CV ≥ 60 ft. and Pot CP Pacific cod fisheries. Despite tasking and reviewing multiple analytical documents over numerous meetings, the Council has ultimately taken no action related to these issues (as described in more detail in the following sections).

1.1.1 Action related to BSAI Pacific cod pot CP sector

In December 2018 the Council tasked a discussion paper to track recent and historical participation in the BSAI Pacific cod pot CP sector. In doing so, the Council was responding to public testimony expressing concern about the reduction in season length – particularly the B season (September 1 through December 31) – that is largely the result of reduced Pacific cod ABC and TAC levels. The Council reviewed that discussion paper² at its October 2019 meeting and established the purpose and need statement and

² Available at: <http://meetings.npfmc.org/CommentReview/DownloadFile?p=39504ae2-86c5-4f52-8e76-7780389335da.pdf&fileName=E1%20MOTION%20Pot%20Cod%20CP.pdf>

alternatives.³ Minor modifications were made in December 2020⁴; the substantive change in 2020 was to include Pacific cod TACs and the hook-and-line CP fishery in the first numbered bullet.⁵

Amendment 85 to the Groundfish FMP for the BSAI assigned a portion of the Bering Sea/Aleutian Islands Pacific cod TAC to the pot CP sector with the primary goals of aligning Pacific cod allocations with actual dependency and use and providing stability to all sectors. Major changes have occurred since the implementation of Amendment 85, which has resulted in less stability for the dependent vessels on which the Amendment 85 allocation was based:

- 1. Low crab and Pacific cod TACs and consolidation within the crab and hook-and-line CP fisheries has provided increased flexibility for pot CPs;*
- 2. The TAC for Pacific cod in the BSAI has decreased over the last several years; and*
- 3. The availability of rollovers to the pot CP sector has declined.*

The Council is considering action to eliminate latent capacity in the fishery in order to increase stability for cod dependent pot CPs, to maintain consistently low rates of halibut and crab bycatch, and to ensure that condensed fishing seasons do not result in safety-at-sea concerns.

During the deliberations that led to that purpose and need statement, the Council noted that the BSAI Pacific cod TAC is fully allocated to various gear and operational-type sectors and that the TAC is typically fully harvested. The Council noted that the stability of the sector that had been key to the rationale for Amendment 85 is potentially threatened by a combination of low TACs, reduced availability of rollovers from other BSAI Pacific cod sectors, increased interest in participation by vessels utilizing licenses that had not recently been active, and the resultant reduction in the length of fishing seasons.

In October 2019, the Council requested that NMFS establish a control date to provide notice that participation after that date might not be considered for any future action that would affect participation in the BSAI Pacific cod CP pot sector. The control date was published as December 10, 2019, and noticed in the Federal Register (84 FR 67421). The advanced notice of proposed rulemaking reflected the Council's intent to evaluate participation and effort in the BSAI Pacific cod pot CP sector in response to a public request to consider further limits on access to this fishery. The notice promoted awareness that any participation in the sector after the control date may not ensure continued access to the fishery after that proposed action. The establishment of a control date was intended to discourage speculative entry into the fishery while the Council considered whether and how access to the fishery may be further limited.

The Council received a public review analysis of alternatives that could modify the number of License Limitation Program (LLP) licenses endorsed to fish for BSAI Pacific cod with pot gear as a CP and **selected the No Action alternative**. As a result, the number of LLP licenses that are endorsed for use in the "Pot CP" sector of the BSAI Pacific cod fishery was unchanged (see Table 3-1). The action alternative that was not selected would have removed the endorsement from licenses that were not credited with a minimum amount of commercially retained Pacific cod over a defined qualifying period. That alternative would have reduced the number of remaining endorsements to either four or five licenses depending on the qualifying period selected.

³ Council motion (October 8, 2019) available at: <https://meetings.npfmc.org/CommentReview/DownloadFile?p=84b21d13-42e6-40b1-9ec4-f155b0e43866.pdf&fileName=D4%20MOTION.pdf>.

⁴ Council motion (December 11, 2020) available at: <https://meetings.npfmc.org/CommentReview/DownloadFile?p=8cb076d5-5e78-4e21-ba25-d63db3dfa455.pdf&fileName=C6%20Motion.pdf>.

⁵ The use of the term "latent" in this document is clarified in Section 2.3.

The Council's selection of No Action at that time was based on weighing the benefits and costs of removing license endorsements in the context of the Council's purpose and need statement. The Council determined, on balance, that the challenges facing the sector stem primarily from low TAC levels that would not be affected by the action alternative. The Council determined that potential benefits to the most active participants of removing other licenses did not outweigh the loss of future or continued access for other license holders. The Council also noted that some licenses that could lose the endorsement had been used in the fishery during the considered historical period.

1.1.2 Action related to BSAI Pacific cod pot CV \geq 60 ft. sector

During its February 2019 meeting the Council requested a discussion paper to consider some form of rationalization or cooperative management structure for the BSAI Pacific cod pot CV \geq 60 feet in length overall.⁶ This discussion paper was included in a scoping paper that addressed both the BSAI Pacific cod pot CV sector vessels \geq 60 feet in length as well as a separate motion from the Council requesting information related to the development of a LAPP for the BSAI Pacific cod trawl catcher vessel (CV) sector. The scoping paper discussed both sectors because much of the general information on LAPPs and cooperative formation would apply to either case and was intended to provide a basis that would allow the Council to develop alternatives and options to address its purpose and need statement. Much of the format and scope of information in this current document originated in that scoping paper.

After reviewing the scoping paper at its October 2019 meeting, the Council did not move forward with development of a pot CV \geq 60 feet LAPP. Instead, the Council encouraged the pot sector participants to work together to provide a more inclusive LAPP for all sector participants.

1.2 Summary of Federal BSAI Pacific Cod Management

As a result of implementing BSAI Groundfish FMP Amendment 85 in 2008, Federal regulations at 50 CFR 679.20(a)(7) authorize distinct BSAI Pacific cod allocations of the initial TAC for nine sectors. Before allocating to these sectors, the initial TAC accounts for the amount of available harvest that goes to state-managed GHL fisheries and 10.7% of TAC that is allocated to CDQ groups.

BSAI Pacific cod harvest specifications establish an overfishing level (OFL), ABC, and TAC for the Bering Sea subarea of the BSAI, and a separate OFL, ABC, and TAC for the Aleutian Islands subarea of the BSAI. Before the Pacific cod TACs are established, the Council and NMFS consider social and economic factors, management uncertainty, as well as two factors relevant to BSAI Pacific cod: Pacific cod guideline harvest (GHL) fisheries that occur in the State-waters of the BSAI, and an overall 2 million mt optimum yield limit on the maximum amount of TAC that can be specified for all BSAI groundfish. Pacific cod TACs are specified at levels that account for the GHL fisheries so the combined harvest limits from GHL fisheries and the TACs do not exceed the ABCs specified for the BS or AI.

The State of Alaska has managed a GHL fishery for Pacific cod in State waters in the AI subdistrict (AIS) since 2006 and in the Dutch Harbor Subdistrict (DHS) of the BS since 2014. Pot CVs \geq 60 ft. have had minimal participation in the AI GHL fishery and few have LLP license endorsements for the AI (see Table 3-1). The Dutch Harbor Subdistrict of the Bering Sea area GHL is restricted to vessels less than or equal to 58' LOA using pot with a limit of 60 pots per vessel. Because of these limitations the sectors considered in this paper have participated almost exclusively in the federal Pacific cod fisheries.

⁶ <https://meetings.npfmc.org/CommentReview/DownloadFile?p=e5ee738f-fed5-4352-b43b-072a511fff8d.pdf&fileName=E%20COUNCIL%20MOTION%20on%20Pot%20CV%20Cod.pdf>

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**.

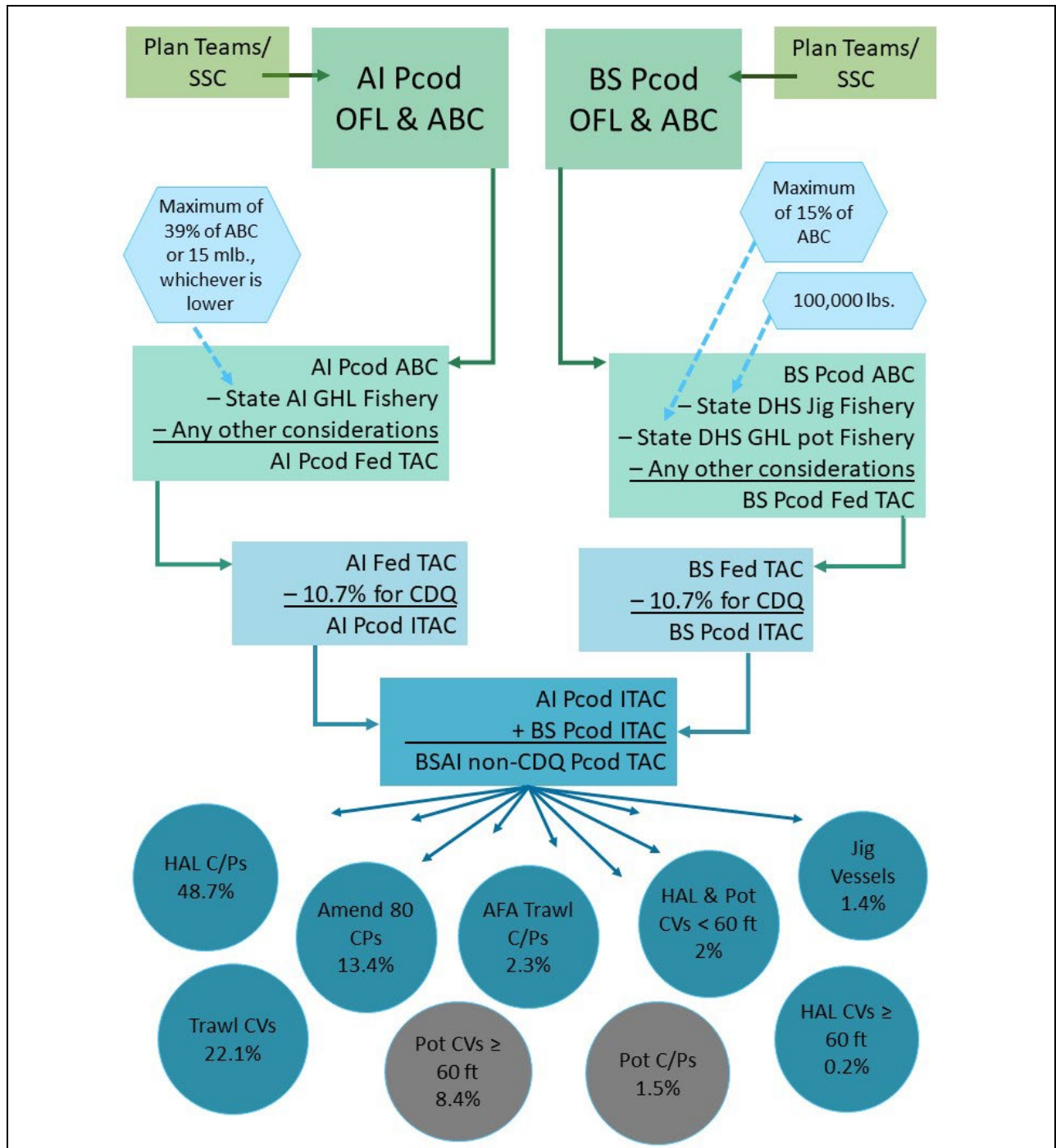


Figure 1-1 BSAI Pacific cod specifications and sector allocations

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

Allocations of Pacific cod to the CDQ Program and to the non-CDQ fishery sectors are further apportioned by seasons. The allocations for the BSAI Pacific cod pot CP and pot CVs over 60 ft sectors are apportioned to two seasons to disperse effort as part of Steller sea lion mitigation measures. The A season is apportioned 51% of annual TAC and opens on January 1 and closes by regulation on June 10 (although the A season usually ends earlier when the full seasonal apportionment is harvested). The B season is apportioned the remaining 49% of the TAC and opens on September 1 and closes by regulation on December 31. The A season historically lasts a shorter amount of time than the B season because there are no reallocations from other sectors in the A season (reallocations are described below). Table 1-1 shows the season closing dates 2010-2023 for the pot CP and pot CVs over 60 ft sectors. A majority of the catch and effort often occurs early in the seasons as seen in Figure 1-2 and Figure 1-3. As of mid-May 2024, there had been no effort in the Pot CP sector and the CV over 60 ft sector has caught 70% of the A season allocation but has not fished since week 15 (the week ending April 14, 2024).

Table 1-1 Season opening and closing dates, by sector (2010-2023)

Year	A season open	Pot CP close	Pot CV ≥ 60 close	B Season open	Pot CP close	Pot CV ≥ 60 Close
2010	1-Jan	23-Feb	28-Jan	1-Sep	23-Sep	15-Nov
2011	1-Jan	24-Jan	21-Jan	1-Sep	23-Oct	24-Oct
2012	1-Jan	23-Jan	20-Jan	1-Sep	31-Dec	31-Dec
2013	1-Jan	28-Jan	22-Jan	1-Sep	31-Dec	31-Dec
2014	1-Jan	26-Jan	24-Jan	1-Sep	31-Dec	31-Dec
2015	1-Jan	4-Feb	10-Jun	1-Sep	31-Dec	31-Dec
2016	1-Jan	29-Jan	10-Jun	1-Sep	18-Oct	31-Dec
				15-Nov	31-Dec	
2017	1-Jan	25-Jan	25-Jan	1-Sep	31-Dec	31-Dec
2018	1-Jan	20-Jan	19-Jan	1-Sep	20-Sep	30-Oct
2019	1-Jan	15-Jan	15-Jan	1-Sep	15-Sep	21-Sep
2020	1-Jan	12-Jan	15-Jan	1-Sep	12-Sep	16-Sep
2021	1-Jan	16-Jan	21-Jan	1-Sep	31-Dec	31-Dec
2022	1-Jan	15-Mar	23-Jan	1-Sep	31-Dec	31-Dec
2023	1-Jan	22-Mar	12-Jan	1-Sep	31-Dec	31-Dec

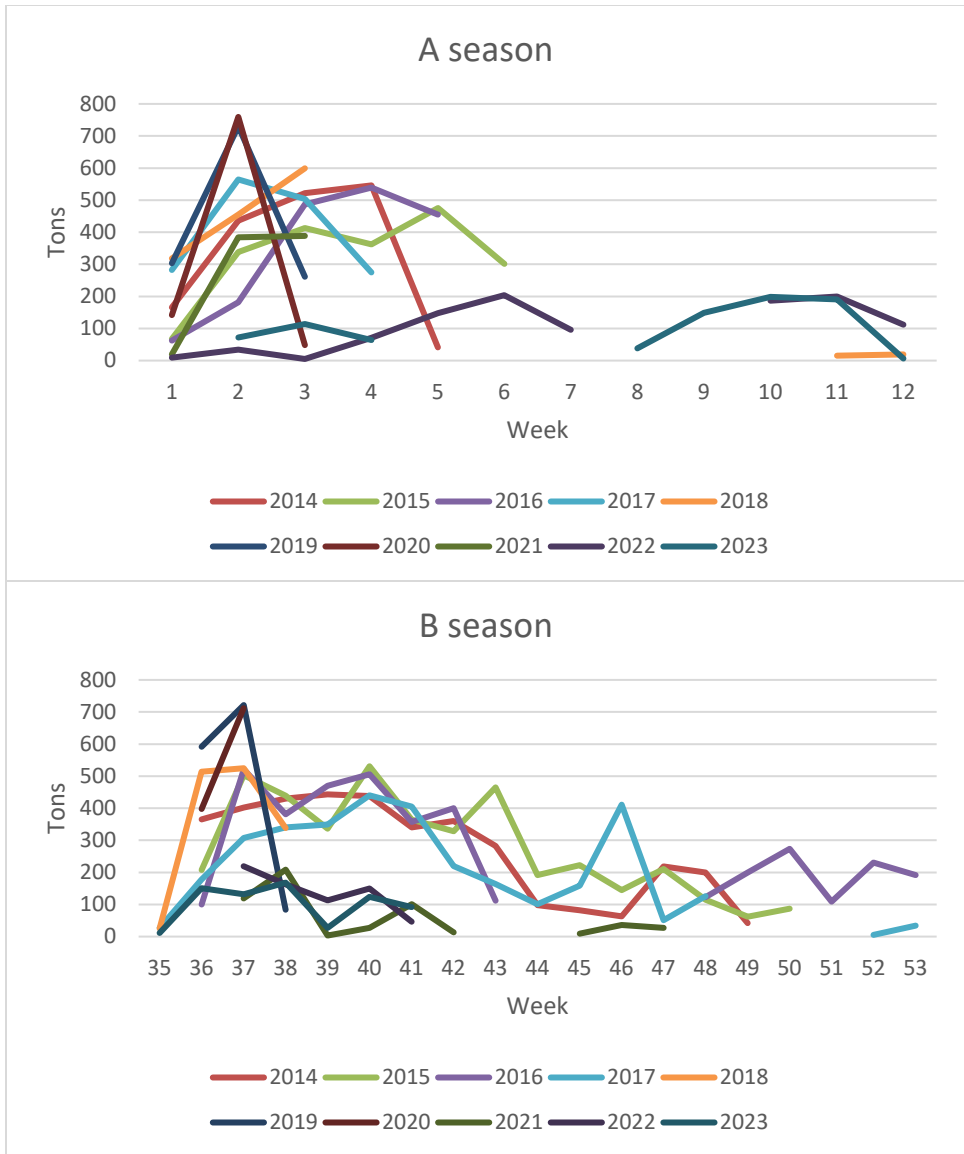


Figure 1-2 Pot CP weekly catch (no 2024 catch as of 5/14/24)

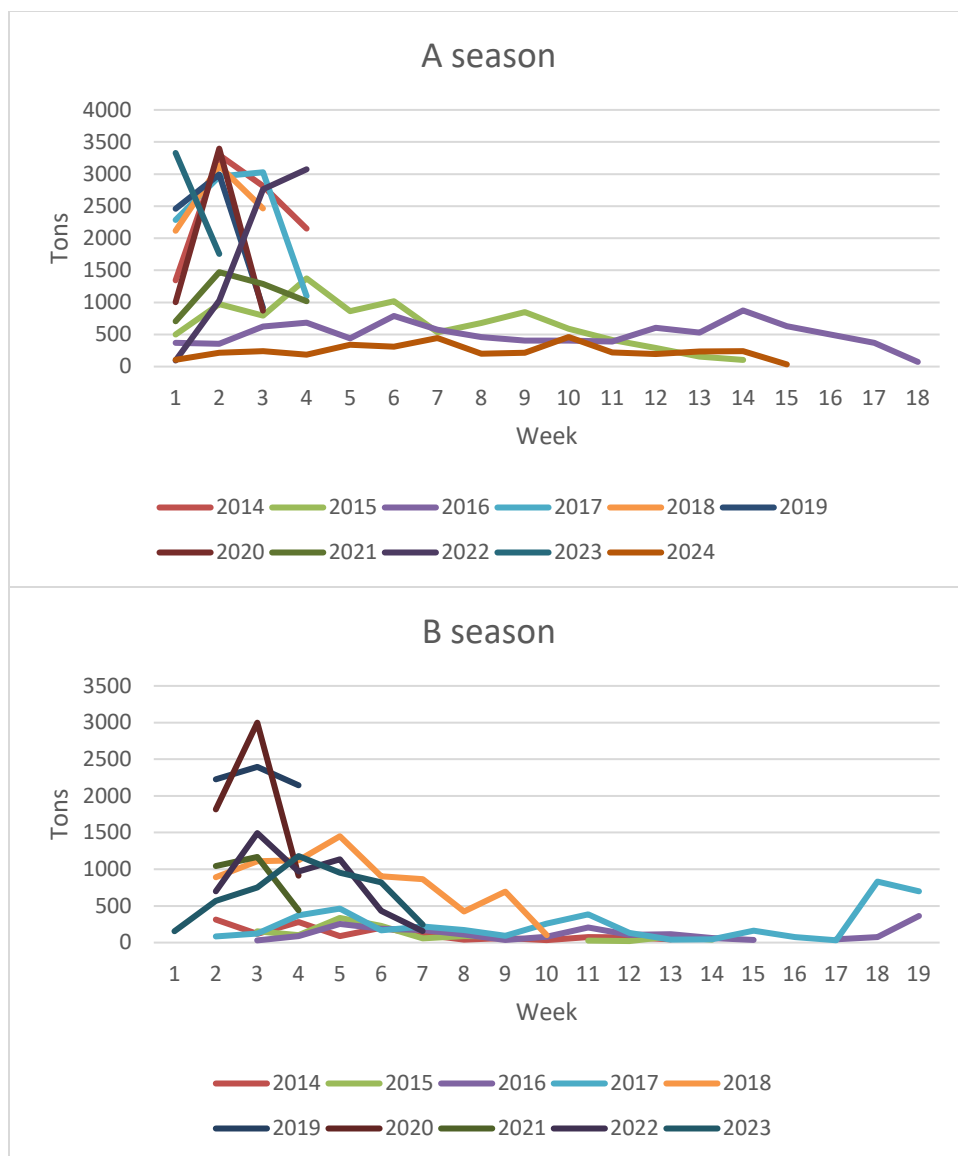


Figure 1-3 Pot CV ≥ 60 weekly catch

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 many separate sector seasonal allocations. To help ensure 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.

Decisions to reallocate BSAI Pacific cod TAC are based on the hierarchy set in Federal regulations at §679.20(a)(7)(iii) and (iv). Reallocation decisions consider the capability of a sector to harvest both their initial Pacific cod allocation and any reallocations they may receive. This means that, while the reallocation hierarchy is the same year-to-year as specified in Federal regulations, the timing and patterns of reallocations among sectors are highly situational. Any reallocation of Pacific cod requires publication in the *Federal Register* before it is effective. This process generally takes about a week.

In the BSAI, most sector’s A season allocations are fully harvested, and if not, any remaining A season allowance rolls over to the next season for that sector. Therefore, reallocations of A season TAC are rare. NMFS tries to reallocate projected amounts of unharvested Pacific cod to sectors that may be able to

harvest these amounts; however, decisions to reallocate Pacific cod are complex and factor in many considerations. The primary consideration is not to reallocate Pacific cod from a sector that may have the capacity to catch their allocation. This means NMFS must first determine a sector’s remaining Pacific cod allocation and the capacity for the sector to catch the remaining amount, and it requires communication with vessel operators and processors. If any vessel operator or processor indicates that they will remain active or become active in the fishery before the end of the year, NMFS will likely be more conservative in leaving amounts of Pacific cod available for that sector. As a result, Pacific cod sometimes remains uncaught at the end of the year because these vessels either do not participate or their actual catch rates are insufficient to catch a sector’s remaining Pacific cod. The pot CP and pot CV \geq 60 ft sectors rarely receive reallocations or have been unable to harvest their initial allocation. Since 2008, reallocations have only occurred in 2014 and 2022 (Table 1-2 Allocations (mt) 2008-2023).

Table 1-2 Allocations (mt) 2008-2023

Year	Pot CPs			Pot CV \geq 60		
	Initial	Final	Reallocations	Initial	Final	Reallocations
2008	2,274	2,274	0	12,737	12,737	0
2009	2,352	2,352	0	13,173	13,173	0
2010	2,248	2,248	0	12,591	12,591	0
2011	3,041	3,041	0	17,030	17,030	0
2012	3,484	3,484	0	19,509	19,509	0
2013	3,470	3,470	0	19,434	19,434	0
2014	3,389	5,889	2,500	18,976	14,476	-4,500
2015	3,329	3,329	0	18,641	18,641	0
2016	3,357	3,357	0	18,798	18,798	0
2017	3,194	3,194	0	17,889	17,889	0
2018	2,720	2,720	0	15,235	15,235	0
2019	2,410	2,410	0	13,499	13,499	0
2020	2,074	2,074	0	11,616	11,616	0
2021	1,667	1,667	0	9,334	9,334	0
2022	2,003	2,003	0	11,216	12,016	800
2023	1,807	1,807	0	10,120	10,120	0
2024	1,752			9,812		

Participation in the Pot CV \geq 60 ft sector peaked at 38 vessels in 2020 but has since declined to 22 vessels participating in 2023 (Table 3-5). Despite relatively stable prices since 2018, overall nominal ex-vessel value has fluctuated from a high of over \$13 million in 2018 to a low of just over \$6 million in 2021 (Table 1-3) Trends in nominal wholesale value for the pot CV \geq 60 ft sector track similarly, with a high of \$34.6 million in 2018 and a low of \$12.3 million in 2021 and provide an estimate of the value for the shoreside processors. Participation in the Pot CP sector has been more consistent, although less robust with only three to eight active vessels in the fishery over the past 10 years (Table 3-7). Nominal wholesale value for the pot CP sector has declined from a high of \$9.7 million in 2015 and has remained below \$5 million since 2019 (Table 1-4).

Table 1-3 BSAI Pacific Cod Value Pot CV ≥ 60 (nominal dollars)

Year	Ex-vessel Price	Ex-vessel Value	Wholesale Value
2014	\$ 0.28	\$ 6,994,507	\$ 16,561,284
2015	\$ 0.27	\$ 6,278,380	\$ 14,458,732
2016	\$ 0.28	\$ 6,916,433	\$ 17,251,901
2017	\$ 0.31	\$ 9,374,054	\$ 23,518,541
2018	\$ 0.40	\$ 13,447,473	\$ 34,601,430
2019	\$ 0.43	\$ 12,697,101	\$ 22,639,314
2020	\$ 0.40	\$ 9,810,287	\$ 17,410,852
2021	\$ 0.39	\$ 6,132,337	\$ 12,330,027
2022	\$ 0.46	\$ 11,974,756	\$ 26,458,319
2023	\$ 0.41	\$ 8,866,057	\$ 19,656,827

Note: 2023 is based on preliminary prices

Table 1-4 BSAI Pacific Cod Wholesale Value (nominal dollars) Pot CP

Year	Wholesale Value
2014	\$ 7,744,227
2015	\$ 9,711,082
2016	\$ 8,450,675
2017	\$ 8,606,787
2018	\$ 5,678,550
2019	\$ 4,848,351
2020	\$ 3,301,094
2021	\$ 2,442,175
2022	\$ 4,363,555
2023	\$ 3,254,930

Note: 2023 is based on preliminary prices

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 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.

MSA Section 3 (Definitions) defines the term “limited access system” to mean a system that limits participation in a fishery to those satisfying certain eligibility criteria or requirements contained in a fishery management plan or associated regulation. The MSA defines the term “limited access privilege” to mean a Federal permit, issued as part of a limited access system to harvest a quantity of fish expressed by a unit or units representing a portion of the total allowable catch of the fishery that may be received or held for exclusive use by a person (includes an individual fishing quota but not include community development quotas as described in section 305(i)). The MSA defines the term "individual fishing quota" to mean a Federal permit under a system to harvest a quantity of fish, expressed by a unit or units representing a percentage of the total allowable catch of a fishery that may be received or held for exclusive use by a person. It does not include community development quotas (CDQ). For the purposes of this section the limited access system will be the proposed cooperative structure the Council is considering. This is often referred to as the limited access privilege program (LAPP). The limited access privilege is the quota shares that are attached to either an LLP license or another permit that would be created. If a cooperative structure is developed, then the quota shares would determine the amount of cooperative quota (CQ) that the holder could annually assign to a cooperative.

2.1 Required and discretionary provisions

Discretionary provisions of an FMP under MSA are defined in Section 303(b). Section 303(b)(6) allows a Council to recommend establishing a limited access system for a fishery to achieve optimum yield if the Council and the Secretary take into account the following:

- (A) present participation in the fishery;
- (B) historical fishing practices in, and dependence on, the fishery;
- (C) the economics of the fishery;
- (D) the capability of fishing vessels used in the fishery to engage in other fisheries;
- (E) the cultural and social framework relevant to the fishery and any affected fishing communities;
- (F) the fair and equitable distribution of access privileges in the fishery; and
- (G) any other relevant considerations.

MSA Section 303A defines required provisions of a LAPP that may be recommended by Councils. Under this provision the Council may submit, and the Secretary may approve, a LAPP for a fishery (that is managed under a limited access system). The limited access privilege (quota shares) granted are considered a permit for the purposes of sections 307 (Prohibited Acts), 308 (Civil Penalties and Permit Sanctions), and 309 (Criminal Offenses). Any limited access privilege may be revoked, limited, or modified at any time under MSA standards, including revocation if the system is found to have jeopardized the sustainability of the stock or the safety of fishermen. The permit holder is not granted any right of compensation if it is revoked, limited, or modified and does not grant any right before the fish is harvested by the holder. It does allow the permit holder to engage in activities permitted by the harvest privilege.

Because the BSAI Pacific cod fisheries are not overfished the requirement to assist in rebuilding the stock does not apply. If the fishery is determined to have over-capacity, the program must contribute to reducing capacity. The program must also promote fishing safety, fishery conservation and management, and social and economic benefits. A limited access privilege permit may be issued for a period of not more than 10 years. The permit will be renewed before the end of that period, unless it has been revoked, limited, or modified under the provisions of the MSA. A person whose permit has been revoked, limited,

or modified must be provided the opportunity for a hearing under section 554 of Title 5, United States Code.

The limited access system is required to define who is eligible to receive and hold limited access privileges. Limited access privileges may only be initially issued or held by a person that is United States citizen, a corporation, partnership, or other entity established under the laws of the United States or any State, or a permanent resident alien, that meets the eligibility and participation requirements. The initial allocation of a limited access privilege to harvest fish must be fair and equitable and consider current and historical harvests, employment in the harvesting and processing sectors, investments/dependence upon the fishery, and the current and historical participation of fishing communities. When developing the program, the Council is required to consider the basic cultural and social framework of the fishery. This includes policies promoting the sustained participation of small owner-operated fishing vessels, fishing communities that depend on the fisheries, and measures to assist, when necessary and appropriate, entry-level and small vessel owner-operators, captains, crew, and fishing communities through set-asides of harvesting allocations or economic assistance in the purchase of limited access privileges.

A Council must establish a policy and criteria for the transferability of limited access privileges (through sale or lease), that is consistent with the policies adopted by the Council for the fishery. The Council and Secretary (NOAA Fisheries) must also establish a process for monitoring transfers (including sales and leases) of limited access privileges.

The fish harvested under the permit must be processed on vessels of the United States or on United States soil. The Council must also specify the goals of the program, provide for the regular monitoring and review of the program by the Council and the Secretary to determine progress in meeting the goals of the program and the MSA, and any develop 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 thereafter to coincide with scheduled Council review of the relevant fishery management plan (but no less frequently than once every 7 years). Any limited access program must include an effective system for enforcement, monitoring, and management of the program, including the use of observers or electronic monitoring systems. An appeals process for administrative review of the Secretary's decisions regarding initial allocation of limited access privileges is required. 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 is required when necessary. Finally, the program must 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.

Limited access privilege holders must not be allowed to acquire an excessive share of the total limited access privileges in the program. To address this requirement the program must establish a maximum share of the fishery, expressed as a percentage of the total limited access privileges, that a limited access privilege holder may hold, acquire, or use; the program must also establish limitations or measures necessary to prevent excessive concentration of limited access privileges.

A limited access privilege program must include a methodology to identify and assess the management, data collection/analysis, and enforcement program costs that are directly related to and in support of the program. The methodology is typically recommended by the agencies that incur these costs. The limited access privilege program must require the payment of fees by limited access privilege holders to cover the costs of management, data collection and analysis, and enforcement activities. The cost recovery fee is limited to 3% of the ex-vessel value of allocated fish harvested under the program.

2.2 Key differences between LAPPs and other catch share programs

Recalling that the MSA (Section 3) defines the term “limited access privilege” to mean “a Federal permit, issued as part of a limited access system to harvest a quantity of fish expressed by a unit or units representing a portion of the total allowable catch of the fishery that may be received or held for exclusive use by a person.” Based on that definition, consider two examples of U.S. fisheries that have many similarities to a LAPP and are types of catch share programs but do not meet the MSA LAPP definition.

The BSAI Hook-and-Line (HAL) CP sector is annually allocated 48.7 percent of the BSAI Pacific cod non-CDQ TAC. The sector allocation is then divided among individuals within the sector by an agreement of eligible sector members and enforced through a civil contract. The sector participants can reach agreement because there are relatively few participants in the sector. The NPFMC proposed and NMFS implemented an amendment to limit the number of LLP licenses that have a BS or AI HAL CP Pacific cod endorsement to harvest that sector’s allocation. That amendment reduced the number of eligible LLP licenses to a number whose owners could form a voluntary cooperative and reach an agreement to divide the available apportionment among its members. Every person holding an LLP license endorsed to participate in the fishery must join the cooperative and agree to abide by the rules established under the civil contract or it is unlikely the voluntary cooperative could function as intended. Based on that structure, NMFS does not issue a “person” a permit that represents the units available for their exclusive use. Because it is an allocation to the BSAI HAL CP sector, NMFS may reallocate the HAL CP sector’s allocation to other sectors or allocate Pacific cod from other sectors to the HAL CP sector if it is projected to go unused to help achieve OY.

The Northeast Multispecies Sector Program was implemented in the Northeast groundfish fishery in 2010 by the New England Fishery Management Council. This fishery occurs primarily off the New England coastal states and targets a diverse group of 13 species, including Atlantic cod, haddock, pollock, yellowtail flounder, etc. Vessels fish primarily with otter trawls, sink gillnets, bottom longline (tub trawls), jigs and handlines. Sectors are designed to be voluntary and self-selecting, and Northeast groundfish fishery participants who do not wish to seek sector membership have the right to continue fishing under the “common pool” system. The Northeast Multispecies Sector Program is not considered a LAPP as defined by the MSA, but it is a type of catch share program. NMFS determined that the Northeast Multispecies Sector Program is not a LAPP because a sector is a voluntary group of vessels that is allocated quotas for certain species managed under the Northeast Multispecies Fishery Management Plan on an annual basis, based on the membership of that sector and their catch histories.⁷ A quota allocated to a sector under the plan is a management restriction on a group of vessels participating in a sector during a given fishing year, not a permit to harvest fish that can be held for exclusive use by a person. Unlike an IFQ fishery, there is no individual vessel allocation made by NOAA Fisheries, nor is there a permanent allocation that could be fished or transferred. Instead, NMFS distributes the annual catch entitlement to each sector based on the catch history of the vessels that join the sector. Any portion of a sector’s annual catch entitlement may be temporarily transferred to another sector on an annual basis at any time during the fishing year. For two weeks following reconciliation of catch at the end of the fishing year, sectors with an annual catch entitlement overage for a stock may transfer annual catch entitlement for the stock up to the amount of the overage. Annual catch entitlement transfer requests must be submitted to, and approved by, NOAA Fisheries. Because NMFS concluded that sectors are not LAPPs or IFQs, the LAPP and IFQ provisions of the MSA, including the requirements that an IFQ program in that area must be approved by a two-thirds majority of eligible permit holders and crew members and that a cost recovery fee program be implemented to cover the costs of management, data

⁷ <https://www.fisheries.noaa.gov/new-england-mid-atlantic/commercial-fishing/sector-management-northeast-multispecies-fishery>

collection and analysis, and enforcement activities, do not apply to the Northeast Multispecies Sector Program.

3 Program Design

This section provides a high level overview of cooperative structures that have been developed for other fisheries, allocation methods, processor and community considerations, ownership and use caps, and limiting spillover into other fisheries. All of these issues must be considered as part of a LAPP.

3.1 Cooperative Structure

Two general types of catch share structures are discussed in this section. Both have been used in the North Pacific to implement a cooperative management style. The first is not a LAPP as defined in the MSA. The second is a LAPP under the MSA. The cooperative structure for the catcher vessel sector could include requirements that a processor is associated with a cooperative, as was done in the PCTC program where processors received a percentage of the harvest shares allocated.

3.1.1 Sector allocation with stakeholder-formed voluntary cooperative

Under this cooperative structure NMFS would annually allocate the sectors their current apportionment of the BSAI Pacific cod fishery. Regulations state that the Pot CP sector would be apportioned 1.5% and the Pot CV \geq 60 ft. would be allocated 8.4% of the non-CDQ BSAI Pacific cod TAC, respectively. This apportionment would not be considered a federal permit, issued as part of a limited access system to harvest a quantity of fish expressed by a unit or units representing a portion of the total allowable catch of the fishery that may be received or held for exclusive use by a person. To form a voluntary cooperative members of each sector must have all members agree to a civil contract defining how the sector's apportionment would be allocated among eligible LLP license holders endorsed to participate in that sector or eligible vessels. Allocations to individuals would also need to define participation in the BS and AI, since some vessels would only hold licenses to allow harvest in one area or the other and if the TAC is taken in their area before they harvest their allocation it could create issues within the cooperative. Other provisions in the contract could include PSC usage limits, groundfish bycatch limits, reporting requirements, bycatch hotspot notification, penalties associated with not meeting the terms of the contract, etc.

In addition to creating Pacific cod LLP license endorsements to address overcapitalization in the sector the Freezer Longline sector took out federal loans to reduce capacity. In 2007, the Freezer Longline Conservation Cooperative (FLCC) organized the first voluntary fishing capacity reduction program in the sector and NMFS implemented regulations for a \$35.7 million fishing capacity reduction loan program for the sector. This initial program removed three fishing vessels and 12 fishing licenses and permits, for a loan amount of \$35 million. All longline CPs harvesting non-pollock groundfish are required to repay the loan. In 2010, NMFS approved a second round of capacity reduction as authorized by the Appropriations Act. On August 27, 2010, the FLCC submitted a Reduction Plan to access \$2.7 million of the remaining funds and removed one additional permit (74 FR 58775). In total the sector voluntarily bought back three vessels and 13 permits/licenses. The combination of the LLP license endorsement amendment and the buyback reduced the participants in the sector to a level that allowed agreement to form the FLCC.

Because the management of the apportionments is based on the sector harvesting the Pacific cod, separate cooperatives would likely need to be formed by the Pot CP and the Pot CV \geq 60 ft. sector. Otherwise, the complexity of determining what harvest should be deducted from which sector's apportionment would be difficult to track and a structure to address transfers between sectors would need to be developed. These elements would be difficult to monitor and costly to implement. Because the program would not be

subject to cost recovery fees, any additional costs to manage the fishery would fall on NOAA Fisheries and the US Coast Guard. The other option would be to combine the two sector’s apportionments and let the cooperative manage the members catch. This option would increase the number of participants that must agree to a single cooperative, which may decrease the likelihood it could form. It would also be expected to increase the complexity of negotiating private contracts to allocate the available TAC among cooperative members.

Based on 2024 LLP license data, there are seven groundfish LLP licenses with a CP pot Pacific cod endorsement for the BS and/or AI; there are 51 LLP licenses with a ≥ 60 ft CV pot endorsement for BS and/or AI Pacific cod. The CP LLP licenses were held by six companies and the CV LLP licenses by 45 companies. The smaller number of outstanding CP licenses may make agreement between the stakeholders more likely in that sector. Getting the 45 companies that hold an eligible CV LLP to agree on a cooperative structure that includes an allocation of the TAC among members may be more difficult.

Table 3-1 Groundfish LLP licenses with a BS or AI pot Pacific cod endorsement

Mode/Pacific cod endorsements on LLP license	LLP Licenses
CP	
AI CP Pot; AI CP HAL; BS CP Pot; BS CP HAL	1
AI CP Pot; AI CP HAL; BS CP Pot; BS CP HAL; WG CP HAL; CG CP HAL	1
AI CP Pot; AI CP HAL; BS CP Pot; BS CP HAL; WG CP HAL; WG CP POT	1
AI CP Pot; AI CV HAL; BS CP Pot; BS CV HAL	1
AI CP Pot; BS CP Pot	1
BS CP Pot	2
CP Total	7
CV	
AI CV Pot	1
AI CV Pot; BS CV Pot	1
AI CV Pot; BS CV Pot; WG CV Pot	1
BS CV Pot	32
BS CV Pot; BS CV HAL; CG CV Pot	1
BS CV Pot; CG CV Pot	3
BS CV Pot; WG CV Pot	10
BS CV Pot; WG CV Pot; CG CV Pot	2
CV Total	51
Total	58

Source: 2024 RAM Groundfish LLP license file.

NMFS would need to determine the level of observer coverage or EM that would be required as described under the monitoring section (Section 7).

3.1.2 Cooperative structure defined in regulation

To establish a cooperative structure in regulation that issues a federal permit to persons that meet the qualification requirements will require the Council to make several decisions. This section provides a starting point for some of the decisions that will be necessary to develop the required regulatory analysis.

3.1.2.1 Allocation of harvest permits and privileges

- Only issue quota to persons meeting U.S. ownership requirements.

- Only issue quota for legal landings.
- Treatment of incidental cod catch in other target fisheries.
- Exclude any CDQ harvest of Pacific cod harvested with pot gear from the calculation.
- Determine if separate ≥ 60 ft. CV and CP pot Pacific cod cooperatives will be established. Note that if a vessel with a CP pot Pacific cod endorsement was used as a catcher vessel and delivered to another processor, CV pot Pacific cod QS would be assigned to a CP pot Pacific cod license.
- Does Pacific cod harvested for personal use bait count towards an allocation? A vessel is not required to have a Pacific cod endorsement on its groundfish LLP license to harvest personal use bait in the BSAI. A vessel is required to have an LLP endorsed with a legal Pacific cod endorsement to harvest bait for commercial sale. What permit would be issued for persons holding an LLP license that does not have pot Pacific cod endorsement for that sector?
- Persons must submit an application for quota shares by a deadline to be determined.
- Recommend the program's duration. The Council has typically selected the option that permits would be issued for 10 years and renewed at the end of that period unless revoked, limited, or modified.
- Define the years for the qualification period and whether all years count in the calculation, or a person can drop years.
- Define what non-CDQ pot gear Pacific cod harvests would qualify. Without further direction from the Council, it is assumed that only directed Pacific cod harvests would be included in the allocation calculation. This assumption was made because NMFS deducts the ICA for the hook-and-line and pot sectors from the aggregate portion of Pacific cod TAC allocated to the hook-and-line and pot sectors. For 2024, an ICA of 500 mt was established based on anticipated incidental catch by these sectors in other fisheries. Note that the Pot CP sector had 4 mt of Pacific cod caught in the IFQ and non-Pacific cod OA fisheries from 2008 through 2023. Almost all the catch was in the BS. The Pot CV ≥ 60 ft sector had 7 mt of Pacific cod catch in the IFQ fisheries with 1 mt from the AI and 6 mt from the BS. One vessel reported a small amount of Pacific cod (measured in pounds) in the State managed sablefish fishery. As discussed later in this document the Council may also wish to consider how reported catches of Pacific cod used for bait should be treated.
- Establish who would qualify for a permit. It could be vessel owners, LLP license holders, crew, processor owners, or other entities. LAPPs developed by the Council since implementation of the LLP have typically assigned the permit (QS) to the LLP license.
- Define any species assigned to the permit. Pacific cod would be the primary species but could also include limits on PSC species (e.g., crab). PSC limits could be divided between participants based on the portion of the Pacific cod allocation assigned to the permit, if included in the program. This would require establishing PSC limits for these sectors since the pot sectors are not currently subject to PSC hard caps.
- Would permits be assigned to an LLP license as was done in several North Pacific LAPPs (i.e., Central GOA Rockfish Program⁸ and Pacific Cod Trawl Cooperative Program (PCTC)⁹)? If so, how should the catch history be assigned when multiple LLP licenses were on the vessel during harvest. In past programs it was divided equally if both LLP licenses were endorsed to legally fish the area (BS or AI). How would a permit be assigned if there was no LLP license assigned to the vessel. Prior to 2021 vessels fishing in the parallel fishery were not required to have a valid LLP license (85 FR 78038). Since the Council requested that staff consider data back to 2008, there will be parallel fishery harvests by vessels that did not have a valid LLP license, but they made legal Pacific cod landings. The Council may wish to consider how those landings should be accounted for under the proposed program. It is also noteworthy that the BSAI Pacific cod

⁸ [NMFS informational webpage for CGOA Rockfish Program](#)

⁹ [NMFS informational webpage for PCTC](#)

endorsement has been in effect since January 1, 2003, and would not have differential impacts on LLP license holders during the 2008 through June 11, 2023, period that was requested to be considered in this discussion paper.

- Would the quota shares issued be designated as AI and BS or just BSAI? There could be different impacts on LLP license holders that only have a BS or AI endorsement and vessel operators that would need to harvest their allocation before an area's TAC was harvested. Recall that the AI and BS have separate TACs that are not divided by sector, so if other sectors harvest the TAC in an area before the pot gear fishermen harvest their allocation, they would be required to harvest any uncaught quota in the remaining open area for which they do not have an area endorsement. This circumstance could lead to unharvested pot cod quota. Since 2020 the BS Pacific Cod fishery has been closed to directed fishing late in the year. November 18, September 17, October 7, and October 16 from 2020 through 2023, respectively. If the BS fall closure trend continues, harvesters would be forced to fish any remaining quota in the AI. The lack of processors in the region, the potentially higher cost of fishing in the area, and the limited number of vessels with an AI endorsement on their LLP license could make harvesting those shares problematic. This issue was considered in the PCTC analysis¹⁰ where it was also a concern. Conditions were somewhat different during those discussions since the Adak plant was open and the primary concern was how the cooperative structure could facilitate harvest in the AI by stacking remaining quota on fewer vessels. Given the current operational conditions in the AI and differences between the AI trawl and pot fleets, this issue would require additional analysis.
- Determine if the entire allocation is based on qualifying harvest (processing) or some portion is based on another allocation methodology (x% of the TAC is allocated as equal shares and define the criteria for receiving those shares).

3.1.2.2 Cooperative formation

- How many permits or permit holders would be required to form a cooperative?
- What happens to QS if a person does not join a cooperative? For example, can one person form a cooperative and treat the allocation like IFQ or if a person does not join a cooperative does the cooperative quota (CQ) resulting from their QS get reallocated to cooperatives that do form?
- What information must the cooperative provide NMFS on an annual basis and by when? This would include the annual application defining membership (LLP licenses and vessels), terms of the cooperative agreement, the submission of any required cost recovery fee submissions, etc.
- What information must be included in a cooperative agreement?
- Who is allowed to join a cooperative and who must a cooperative accept as a member?
- Must a CV cooperative be associated with a processor?
- If more than one cooperative is formed by members of a sector what are the requirements, if any, for an inter-cooperative agreement.

3.1.2.3 Transfer and use provisions

- Would QS need to be assigned to a cooperative before the CQ/IFQ could be fished? This question links back to how many permit holders are needed to form a cooperative and if it is one, is the quota treated like IFQ? If it is treated like IFQ can the annual allocation of fishing privileges be transferred (leased)?
- Eligibility to hold harvest privileges: Would any active participation or owner onboard provisions be required to use the quota in the CV or CP cooperatives?

¹⁰ <https://www.fisheries.noaa.gov/resource/document/final-regulatory-impact-review-environmental-assessment-review-amendment-122>

- Transferability of QS and CQ/IFQ: Typically, QS is transferrable within the program regulations after NMFS approval and CQ may be transferred between cooperative members within the same cooperative without NMFS approval. Transfers of CQ between cooperatives would require NMFS approval.
- Eligibility to acquire privileges: Items to consider are minimum days-at-sea, community organizations, processors or vertically integrated firms, etc.
- Overage/underage provisions could be considered. Management of the provision increases agency costs and program complexity but provides greater flexibility for the cooperative members. If more than one cooperative is formed in a sector and membership changes, it can be difficult to determine which QS holder's CQ allocation should be adjusted the following year.
- Excessive share limits are required to prevent a person from acquiring or using an amount of the quota that is determined to be excessive. The Council and NMFS must determine what is considered excessive on a fishery-by-fishery basis. It is expected that if CP and CV cooperatives are formed, the excessive share percentage for each fishery would be different because of the number of participants. An excessive share for a cooperative with six member companies is very different to that of 45.

3.1.2.4 Monitoring and enforcement

The MSA requires that all LAPPs “include an effective system for enforcement, monitoring, and management of the program, including the use of observers or electronic monitoring systems.” Monitoring of the fishery is described in Section 7. The monitoring program for LAPPs typically requires full coverage. If the program had a sector allocation catch share structure, the Council and NMFS would need to determine if partial coverage would be sufficient for the CV sector. Based on current regulations it is assumed that the CP sector would continue to operate under the full coverage model with at least one Level 2 observer regardless of the cooperative structure implemented (88 FR 77228). Each vessel is currently required to deploy a certified observer to monitor their fishing activity. Pacific cod seasons in the BSAI are often short (see Table 1-1), lasting approximately one to two weeks during the A season (beginning January 1) and the B season (beginning September 1). The fast pace of fishing with pot gear, high sampling workload, and the need for close communication between the captain and observer make the BSAI pot CP sector one of the most difficult fisheries for the Observer Program to sample. If a catch share program resulted in changes to how the fishery is prosecuted, the analysis will consider whether any current observer requirements could be modified.

Another monitoring issue that may be unique to this CV fishery under a LAPP may occur if allocations are made to persons that do not hold a LLP license or a Federal Fisheries Permit (FFP).

3.1.2.5 Appeals

This requirement is included in all LAPPs and the Council's role is relatively limited. NMFS is required to “include an appeals process for administrative review of the Secretary's decisions regarding initial allocation of limited access privileges.” To fulfill that requirement, NMFS implemented regulations (79 FR 7056) at 15 CFR part 906, designating the National Appeals Office (NAO), a division within NMFS Office of Management and Budget, as adjudicator for appeals. A petition must be filed within 45 days after the date the initial administrative determination is issued unless a shorter or longer filing timeframe is explicitly specified in the regulations governing the initial administrative determination. If the industry were to develop a cooperative based catch share program that is not a LAPP, this provision would not apply to allocation appeals.

3.2 Allocations

3.2.1 Harvest and participation data

The MSA states that “the initial allocation of a limited access privilege to harvest fish must be fair and equitable and consider current and historical harvests...”. Figure 3-1 shows the ≥ 60 ft pot CV fleet ranged from a high of 41 vessels participating in the open access fishery in 2008 to a low of 23 vessels in 2021. Data for 2023 is excluded because the Council is only considering data through June 11, 2023. The starting point of 2008 was selected, in part, because that was the first year that sector allocations of non-CDQ BSAI Pacific cod TAC were established for the pot CP sector and the ≥ 60 ft. pot CV sector (72 FR 50788). Pacific cod catch by CVs ≥ 60 ft targeting BSAI Pacific cod ranged from 6,488 mt in 2009 to 16,408 mt in 2011. Fluctuations in the TAC and associated catch can impact a participant’s catch history depending on whether they were most active during low or high TAC years. Data through June 11, 2023, for both the Pot CP and Pot CV sectors considered are provided in Table 3-3 and Table 3-4.

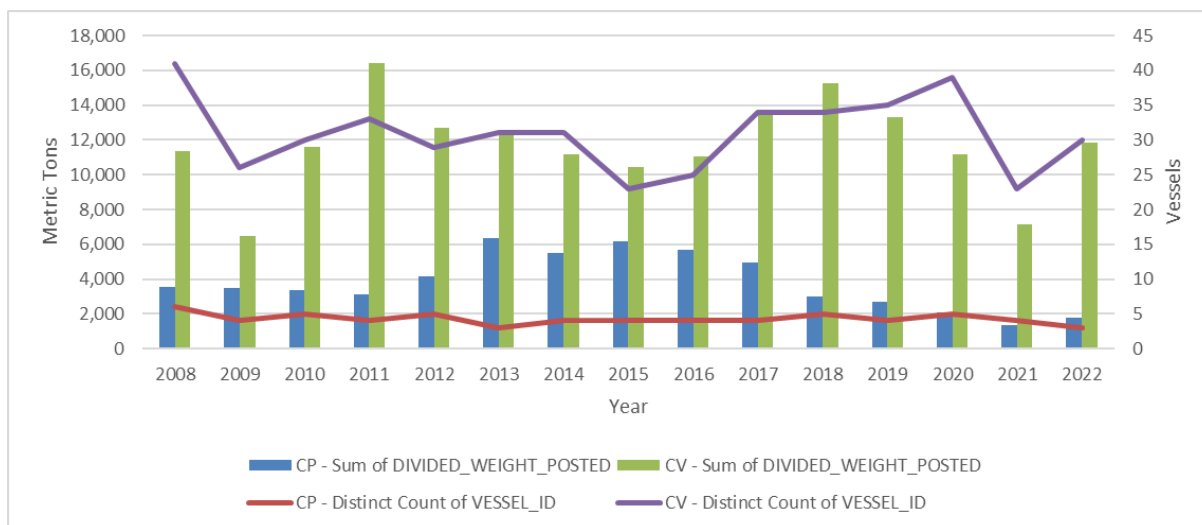


Figure 3-1 Number of ≥ 60 ft. CVs and CPs active in the BSAI pot Pacific cod open access fishery and catch by year, 2008 through 2022 (Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive_FT)

Figure 3-2 shows the number of years vessels were active in the BSAI Pacific cod fishery from 2008 through 2023 (16 fishing years). In general, vessels that were active more years tend to receive a larger allocation. This is not always true as vessels could have participated during a few years but harvested a relatively large percentage of the catch when they did participate.

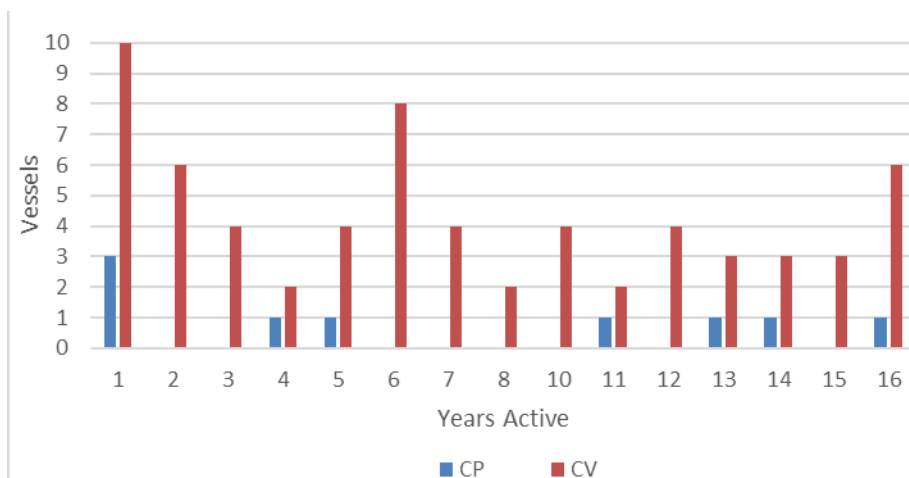


Figure 3-2 Number of years \geq 60 ft Pot CVs and Pot CPs were active in BSAI Pacific cod open access fisheries, 2008 through June 11, 2023. (Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive_FT)

Table 3-2 provides a count of the \geq 60 ft CVs that were active in the BSAI Pacific cod pot fishery by vessel owner’s city from 2008 through June 11, 2023. Owners of most vessels were listed as being from the state of Washington, followed by Alaska, Oregon, and all other states combined. Most of the participants from Washington were from the Seattle MSA. Alaska vessel owners were primarily from Kodiak, Homer, and Anchorage. Oregon vessel owners were more equally divided among cities with each city being home to one or two vessel owners. Other state’s vessel owners had limited participation with a total of four vessels from California, Colorado, Idaho, and Mississippi each being home to one vessel owner.

Table 3-2 Count of CVs that reported catching Pacific cod in the directed open access BSAI Pacific cod ≥ 60 pot gear fishery by vessel owner address, 2008 through June 11, 2023

State/City	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
Anchorage	1		2	1	1	1	1			1			1	1	3	2	5
Homer	1	1	3	4	4	3	3	4	2	3	3	4	5	4	3	2	6
Kenai					1		1			1							2
Kodiak	4	3	4	2		1			2	3	3	2	3	1	3	2	8
Seldovia	1			1	1		1		1	1	1	1	1		1		1
AK Total	7	4	9	8	7	5	6	4	5	9	7	7	10	6	10	6	20
Other States Total	1	0	1	1	1	1	1	1	0	0	2	2	2	1	0	0	4
Beaverton							1										1
Bend													1	1			1
Cascade Locks				1	1	1	1			1	1	1	1				2
Clackamas					1	1	1	1	1	1	1	1	1		1	1	1
Milton Freewater	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Newport	1					1	1			1	1	1	1				1
Portland	1	1	1	1													1
Reedsport	1	1	1	1	1	2	1	1	1	1	1	1	1	1		1	2
Waldport	1	1	1	1	1	1	1	1	1	1	1	1	1				1
OR Total	5	4	4	5	5	7	7	4	4	6	5	5	5	3	2	3	10
Bothell													2	2	3	2	5
Bremerton							1			1	3	2	2	2			3
Edmonds	4	2	1	3	1	1	1	1	1	1	2	2	3	1	1	1	6
Greenbank	1	1															1
Ilwaco															1		1
Issaquah						1	1	1	1	1	1						1
Kenmore									1	1	1						1
Lakewood	1	1		1	1	1				1	1	1	1		1	1	2
Lynwood														1			1
Mill Creek	1			1	1	1	1	1		1	1	1	1	1	2	1	3
Redmond						1	1		1	1	1	1	1				1
Seattle	20	13	15	13	13	14	12	11	12	12	11	11	12	6	8	7	26
Sedro Woolley	1																1
Shoreline	1	1		1													2
Snohomish								1									1
Vancouver												1	1	1	1	1	1
WA Total	28	18	16	19	16	18	17	15	16	19	20	21	22	13	18	13	38
Grand Total	41	26	30	33	29	31	31	23	25	34	34	35	39	23	30	22	65

Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive_FT

Information provided in Table 3-3 and Table 3-4 shows participation in the open access directed Pacific cod pot fishery by sector. Information is broken out by AI, BS, and BSAI total to address the Council’s request that, to the extent possible, the history of catch by the CV and CP fleets for the AI be reported for 2008 through the cut-off date. Participation is shown in terms of Pacific cod catch in metric tons, vessels reporting catch, and the number of Groundfish LLP licenses used in the fishery. In some cases, vessels reporting landings did not have an LLP license number reported in the data. In those instances of blank LLP license numbers, the number of vessels and catch is included in the table. A blank LLP license is excluded from the LLP license counts. For example, in the AI row of the CP table in 2008 there were four vessels and one LLP license. This indicates that only one of the four vessels reporting catch reported an LLP license number in the data. In other cases, a vessel could have more than one LLP license assigned to the vessel. This can result in more LLP licenses being reported than vessels that fished. Confidential data is noted with a “C”.

The data also indicated that one CP LLP license has been used to make deliveries as a CV. Data for this vessel are included in the CV table and not the CP table, since that is how the catch was accounted. That vessel did not report any CP deliveries.

One CV only had pot Pacific cod catch after the Council’s June 11, 2023, cut-off date. This vessel does have a history of participation in the hook-and-line fishery for Pacific cod.

Table 3-3 Pot CV ≥ 60 ft. BSAI Pacific cod catch from Pacific cod directed fishery, 2008 through June 11, 2023

Area Data	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023*	Total
AI																	
Metric Tons											1,302	541	C	C	C		3,355
Vessels											3	3	2	1	1		3
LLP Licenses	-	-	-	-	-	-	-	-	-	-	3	3	2	1	1	-	3
BS																	
Metric Tons	11,362	6,488	11,590	16,408	12,729	12,436	11,170	10,415	11,037	13,725	13,968	12,744	C	C	C	5,085	177,828
Vessels	41	26	30	33	29	31	31	23	25	34	31	33	37	22	29	22	64
Licenses	42	27	31	37	33	33	32	25	27	35	33	33	38	23	29	23	51
Total																	
Metric Tons	11,362	6,488	11,590	16,408	12,729	12,436	11,170	10,415	11,037	13,725	15,270	13,285	11,191	7,138	11,855	5,085	181,183
Vessels	41	26	30	33	29	31	31	23	25	34	34	35	39	23	30	22	65
Licenses	42	27	31	37	33	33	32	25	27	35	36	35	40	24	30	23	52

Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive_FT

Table 3-4 Pot CP BSAI Pacific cod catch from Pacific cod directed fishery, 2008 through June 11, 2023

Area Data	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023*	Total
AI																	
Metric Tons	C	C	C	C							C	C	C	C			3,863
Vessels	4	3	2	1							1	1	1	2			8
Licenses	1	2	2	1							1	1	1	3			5
BS																	
Metric Tons	C	C	C	C	4,178	6,344	5,477	6,171	5,699	4,947	C	C	C	C	1,777	834	54,112
Vessels	2	2	3	4	5	3	4	4	4	4	4	4	4	3	3	2	5
Licenses	2	2	3	4	5	3	4	4	4	4	4	4	4	3	4	3	5
Total																	
Metric Tons	3,513	3,500	3,362	3,102	4,178	6,344	5,477	6,171	5,699	4,947	2,983	2,693	2,059	1,337	1,777	834	57,975
Vessels	6	4	5	4	5	3	4	4	4	4	5	5	5	4	3	2	9
Licenses	3	3	5	4	5	3	4	4	4	4	5	5	5	4	4	3	6

Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive_FT

3.2.1.1 Mothership deliveries

The Council specifically requested that staff provide information on any deliveries to Motherships or CP’s acting as Motherships by ≥ 60 ft. Pot CVs from 2008 through June 11, 2023. Two pot vessels ≥ 60 ft. associated with four different LLP licenses made mothership deliveries (including deliveries to CPs acting as motherships) of Pacific cod in the open access Pacific cod fishery. All those deliveries were harvested from the BS (no AI harvests) in 2008 and accounted for a small proportion of the overall Pacific cod catch by that sector and the catch associated with those vessels and LLP licenses. Due to the limited participation associated with those catch and delivery data, the actual catch amounts cannot be provided under confidentiality rules.

3.2.1.2 Other allocation issues

In regard to historical dependence on the fishery, the Council listed consideration of an “equal shares” program for ≥ 60 ft. CVs among its requested discussion points. Should the Council wish to move forward with the concept of equal shares for ≥ 60 ft. Pot CVs, it will need to determine if the equal shares applies to all or part of the TAC and what is required to be eligible to receive the equal share allocation. If the eligible group is restricted to vessel owners or LLP holders, the allocation formula could be based on equal shares (for all individuals satisfying some minimum requirements), vessel size, catch history, the number of consecutive years of participation in the fishery, or some combination of two or more of these factors. One issue with equal shares is that persons that have a relatively small catch history based on either few years of participation or small amounts of catch when they did participate will have their relative shares increased, and highliners (those who have historically accounted for a disproportionate share of the landings) and fish most years will be brought down to the level of the average fisherman. If the eligible group also includes crew members, it might be difficult to use catch histories for logistical/recordkeeping reasons (turnover rates of crew are high and there may be no records of who was on which boat when catches were taken). Allocations to crew members could be based on either equal shares or the number of years of participation in the fishery or both. If both vessel owners and crew members are considered to receive an initial allocation, it would be necessary to include several of the above categories in the allocation formula. For example: X percent of the total quota could be divided equally among all eligible parties and Y percent could be divided on the basis of catch history.

The following series of tables shows the number of vessels, by sector, and their dependence on the BSAI Pacific cod pot fishery and their diversification in other fisheries. Table 3-5 and Table 3-6 show the information for the ≥ 60 ft. CV sector. Prior to 2021, most CVs generated less than 20 percent of their ex-vessel revenue from Pacific cod. That changed in 2021 as vessels were generating a higher percentage of their ex-vessel revenue from Pacific cod. As shown in the diversification table many of the same vessels also fish for crab and the change may be associated with the decrease in crab revenue after 2020.

The vessels with a relatively large percentage of their income from the Pacific cod fishery would be most negatively impacted by an equal share allocation of some percentage of the sector’s allocation. Vessels with a relatively small percentage of their income from the Pacific cod fishery would tend to benefit from an equal share allocation. The tables show that about 10 percent of the active CVs generated 80 percent or more of their ex-vessel revenue from the BSAI Pacific cod pot fishery.

Table 3-5 Catcher Vessel >60' LOA BSAI Pacific Cod Pot Revenue Percent of Total Revenue, 2014-2023 (number of vessels)

BSAI Pot Pacific Cod Rev as a % of Total	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Average 2014-2023	Annual
<1%	0	4	6	0	0	0	1	0	0	0		1.10
.1-10%	17	10	7	10	3	12	12	7	6	4		8.80
10-20%	7	3	6	11	13	8	10	8	3	2		7.10
20-30%	2	1	2	6	4	7	3	4	3	4		3.60
30-40%	0	0	1	0	2	2	5	1	6	2		1.90
40-50%	0	2	0	0	3	2	0	0	5	1		1.30
50-60%	2	0	0	1	2	0	0	1	1	4		1.10
60-70%	0	1	1	1	2	1	0	0	0	0		0.60
70-80%	0	1	0	0		0	0	0	1	3		0.56
80-90%	0	0	1	1	1	1	0	0	0	1		0.50
90-100%	3	1	0	3	1	2	7	2	5	1		2.50
Grand Total	31	23	24	33	31	35	38	23	30	22		29.00

Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive_FT

Table 3-6 Catcher Vessel >60' LOA BSAI Open Access Pacific Cod Pot Vessels by Categorical Percent of Total Revenue, 2014-2023 (number of vessels)

Rev as a % of Total	BSAI Pacific Cod	BSAI Crab	Sablefish	Halibut
<.1%	1.1	6.2	26.5	26.3
.1-10%	8.8	0.0	0.6	0.1
10-20%	7.1	0.3	0.3	1.1
20-30%	3.6	1.0	0.9	0.3
30-40%	1.9	1.6	0.4	0.5
40-50%	1.3	1.7	0.2	0.7
50-60%	1.1	2.5	0.0	0.0
60-70%	0.6	2.4	0.0	0.0
70-80%	0.6	3.6	0.1	0.0
80-90%	0.5	5.2	0.0	0.0
90-100%	2.5	4.5	0.0	0.0

Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive_FT

Table 3-7 and Table 3-8 show the dependence and diversification information for the CP sector. Like for the CV sector, about half of the CPs generated 20 percent or less of their ex-vessel revenue (estimated ex-vessel) from Pacific cod annually. About 25 percent of the CPs generated 80 percent or more of their ex-vessel revenue from Pacific cod annually. CPs had substantial reliance on crab, but most had very little reliance on halibut or sablefish.

Table 3-7 Catcher Processor BSAI Pacific Cod Pot Revenue Percent of Total Ex-Vessel Revenue, 2014-2023 (number of vessels)

BSAI Pot Pacific Cod Rev as a % of Total											Annual Average 2014-2023
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
<1%	0	0	0	0	0	0	0	1	0	1	0.20
.1-10%	1	0	0	1	2	1	2	1	0	0	0.80
10-20%	2	0	3	1	2	2	1	1	2	0	1.40
20-30%	0	0	0	0	3	0	1	0	1	1	0.60
30-40%	0	3	1	0	0	0	0	0	0	0	0.40
40-50%	0	0	0	1	0	0	0	0	0	0	0.10
50-60%	0	0	1	0	0	0	1	0	0	1	0.30
60-70%	0	1	0	0	0	0	0	0	0	0	0.10
70-80%	1	0	0	0	1	0	0	0	0	0	0.20
80-90%	0	0	0	0	0	0	0	0	0	0	0.00
90-100%	0	0	0	1	0	1	1	1	0	0	0.40
Grand Total	4	4	5	4	8	4	6	4	3	3	4.50

Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive_FT

Table 3-8 Catcher Processor BSAI Open Access Pacific Cod Pot Vessels by Categorical Percent of Total Ex-vessel Revenue, 2014-2023 (number of vessels)

Rev as a % of Total	BSAI Pacific Cod	BSAI Crab	Sablefish	Halibut
<.1%	0.2	2.2	3.6	3.6
.1-10%	0.8	0.0	0.4	0.0
10-20%	1.4	0.1	0.2	0.2
20-30%	0.6	0.1	0.1	0.6
30-40%	0.4	0.0	0.1	0.1
40-50%	0.1	0.1	0.1	0.0
50-60%	0.3	0.1	0.0	0.0
60-70%	0.1	0.4	0.0	0.0
70-80%	0.2	0.4	0.0	0.0
80-90%	0.0	0.7	0.0	0.0
90-100%	0.4	0.4	0.0	0.0

Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive_FT

The Council requested information regarding issuing quota shares to the owners of active vessels who do not own an LLP license. Based on the data provided showing the number of LLP licenses with a BSAI pot Pacific cod endorsement (Table 3-1) and the CV and CP tables showing catch data (Table 3-3 and Table 3-4) it appears that all LLP licenses with a Pacific cod pot gear endorsement for the BSAI have some qualifying catch history associated with them. Those tables show that there are seven CP licenses and 51 CV licenses with Pacific cod pot endorsement in the BSAI for the sectors considered. Catch data indicates that catch history is associated with six CP licenses and 52 CV licenses. Recall that one CP license was used to harvest Pacific cod with pot gear as a CV during the qualifying period.

It is assumed, for this discussion paper, that the term “active vessels” refers to vessels that have made directed Pacific cod landings using pot gear in the open access fishery. It is further assumed that the phrase “do not own an LLP” means that Pacific cod catch was deducted from the sector’s TAC during the qualifying period, but no LLP license was associated with the catch. Either of these assumptions could be modified by the Council if it moves forward with an analysis of the proposed program.

Seven vessels met the criteria (active vessels with no LLP license) defined in the assumptions above. Three were in the CP sector. All CP catch not associated with an LLP license was harvested from the AI sub-area and totaled 2,439 mt. Two CP vessels only reported catch during 2008 and never had an LLP license listed in the data associated with that catch. The third vessel reported catch associated with an LLP license during some of the years considered, but most of its catch was not associated with an LLP license.

Four CVs reported catch that was not associated with an LLP license. All the catch was reported to have been harvested from the BS. Two of the four vessels reported catch on more than one LLP license, one used a single LLP license, and one never reported Pacific cod pot catch associated with an LLP license during the 2008 through June 11, 2023, period. A total of 1,249 mt of pot Pacific cod catch was reported by these four vessels that was not associated with an LLP license.

In the past, the Council has chosen to structure catch history for LAPPs around either LLP licenses or the vessels with which the qualifying fish were caught. It is possible that vessels fishing with leased LLPs made private agreements that catch history would accrue to the license rather than the vessel. Public analysts have no visibility into such agreements. Given the volatility in vessel participation across the Pacific cod and crab fisheries during recent years, a license-based program – as opposed to a vessel-based program – is likely to be more easily implemented and managed. However, that choice could disadvantage certain vessel operators who demonstrated bona fide participation in the fishery but did not own an LLP license with a BS or AI pot cod endorsement.

3.2.1.3 Bait catches and unreported incidental catches

The information reported in this document is based on data reported in the CAS. The analysts’ assumption for data presented in this document is that the catch described in this section would be excluded from the allocation calculations, except for commercially sold bait reported in the CAS. The Council may wish to consider if a different approach to catch that is inconsistently or not reported should be applied.

The incidental catch of Pacific cod occurs in non-groundfish fisheries such as the hook-and-line gear fishery for Pacific halibut or the crab pot gear fisheries. Sufficient data currently are not collected from these fisheries that would allow NMFS to extrapolate useful estimates of incidental catch for purposes of specifying the annual ICA and deducting these amounts from the Pacific cod TAC allocated to vessels using hook-and-line or pot gear as directed fishing allowances. The total IAC amount of Pacific cod in the crab and Pacific halibut fisheries likely exceeds several thousand mt based on (1) anecdotal information on the amount of incidentally caught Pacific cod used as bait in the crab fisheries, (2) the fact that the Pacific halibut fishery during summer months typically occurs in relatively shallow water where Pacific cod are prevalent, and (3) assumptions on amount of gear deployed and incidental catch rates (65 FR 51553). In the absence of the quantitative data needed to estimate incidental Pacific cod harvests in the halibut and crab fisheries, NMFS estimates the ICA based on incidental catch estimated for the non-Pacific cod hook-and-line or pot gear groundfish fisheries and is currently set at 500 mt.

Pacific cod is harvested by some vessel operators for sale as bait or their personal use as bait, often in crab fisheries. An LLP license is not required to have a Pacific cod endorsement for the sector to harvest Pacific cod for personal use bait. A vessel is required to have an LLP license with a Pacific cod endorsement for the sector to harvest bait that is sold. Some bait catches are reported in the CAS but they may be incomplete, especially for personal use. The Council could exclude all personal use bait harvests

from the allocation and treat it as an unknown amount. Bait harvested for commercial sale could be included to the extent it is reported in the CAS database and has been deducted from the sector’s open access apportionment. Table 3-9 provides information on the pounds of Pacific cod harvested with pot gear for use as bait. Personal use bait amounts appear to be related to the size of the crab TACs, with amounts after 2021 being lower than the average. Over the period considered the pounds of personal use bait ranged from a high of 146,476 lbs. in 2010 to a low of 964 lbs. in 2021.

Table 3-9 BSAI Pacific cod harvested with pot gear for use as bait, 2008 through 2023

Year	Sold	Personal Use	Total
2008	60,579	106,815	167,394
2009	121,066	61,870	182,936
2010	235,271	146,476	381,747
2011	61,695	138,880	200,575
2012	20,862	108,543	129,405
2013	128,791	81,900	210,691
2014	61,463	115,532	176,995
2015	66,111	66,182	132,293
2016	76,439	106,438	182,877
2017	28,308	97,778	126,086
2018	54,476	83,050	137,526
2019	18,722	52,634	71,356
2020	30,232	81,472	111,704
2021	31,602	964	32,566
2022	198	9,837	10,035
2023	12,692	8,803	21,495

Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive_FT

3.3 Processor and community considerations

The Council’s motion requesting this paper listed “protections for harvesters, processors, and communities including participation by shoreside processors and communities” as a discussion point. Table 3-10 shows the number of processors that took deliveries from CVs or CPs that processed their own catch from 2008 through 2022. Information cannot be provided at this level of detail for catch or value. The data in this table indicates that CV deliveries of catch and the associated value may only be provided by aggregating all ports except Dutch Harbor/Unalaska because of confidentiality limitations. CP data must be aggregated over all ports to meet confidentiality requirements. Also note that when a firm changes ownership a new Intent to Operate (ITO) code is issued. While that change may not impact the counts on an annual basis it can impact the total counts by port.

Table 3-10 Count of Intent to Operate codes by city that took deliveries of open access BSAI Pacific cod harvested in the directed Pacific cod fishery with pot gear by CV ≥ 60 ft. and CPs

Port	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
CV Deliveries																
Dutch Harbor/Unalaska Total	4	4	3	3	3	3	3	3	3	3	4	3	3	3	3	6
Other Alaska																
Adak											1	1	1			1
Akutan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Anchorage				1		1	1									1
Cold Bay														1	1	1
False Pass								1				1	1	1		2
King Cove	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Kodiak									1	1						1
Sand Point		1											1			1
St Paul	1		1													1
Other Alaska Total	3	3	3	3	2	3	3	3	3	3	3	4	5	4	3	11
Washington Total	3	2	1	2	2	2	2	2	3	2	2	1	1	2	1	5
CV Total	10	9	7	8	7	8	8	8	9	8	9	8	9	9	7	22
CP Deliveries																
Anchorage					1		1	1	1	1	1	1	1	1	1	1
Dutch Harbor/Unalaska Total	1	1	1	1	1											1
Alaska Total	1	1	1	1	2		1	1	1	1	1	1	1	1	1	2
Washington																
Everett	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1
Mill Creek			1	1	1	1	1	1	1	1	1	1	1	1	1	1
Seattle	3	2	2	1	1	1	1	1	1	1	2	1	2	1	1	6
Washington Total	4	3	4	3	3	3	3	3	3	3	4	3	4	3	2	8
CP Total	5	4	5	4	5	3	4	4	4	4	5	4	5	4	3	10

Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive_FT

Table 3-11 shows the metric tons and percentage of Pacific cod CVs delivered by port from 2008 through June 11, 2023. Data available at the time the information was provided did not have a breakout of the 2023 data by port. A breakout of that year’s data will be provided in future analyses if the Council moves forward with a potential action. The general trend is that deliveries to Dutch Harbor/Unalaska have declined over the period from a high of 80% of the total in 2010 to about 15% in the two most recent years for which a breakout is provided. The average over the 2008 through 2022 period is 44% of the total. Declines in deliveries to Dutch Harbor/Unalaska were primarily offset by increased deliveries to other Alaska ports.

Table 3-11 Port of delivery of open access Pacific cod harvested with pot gear by CVs ≥ 60 ft. (mt), 2008 through June 11, 2023

Year	Dutch Harbor/Unalaska		Other Ports		Total
	mt	%	mt	%	
2008	8,086	71%	3,275	29%	11,362
2009	3,689	57%	2,798	43%	6,488
2010	9,272	80%	2,318	20%	11,590
2011	8,528	52%	7,880	48%	16,408
2012	7,283	57%	5,446	43%	12,729
2013	6,918	56%	5,517	44%	12,436
2014	5,685	51%	5,485	49%	11,170
2015	4,295	41%	6,120	59%	10,415
2016	4,181	38%	6,856	62%	11,037
2017	6,843	50%	6,883	50%	13,725
2018	6,274	41%	8,996	59%	15,270
2019	2,494	19%	10,791	81%	13,285
2020	4,046	36%	7,145	64%	11,191
2021	1,126	16%	6,012	84%	7,138
2022	1,783	15%	10,072	85%	11,855
2023*					5,085
Total	80,504	44%	100,680	56%	181,183

Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive_FT

3.4 Ownership and Use Caps

Information on use caps, including data to support the initial range to consider for use and ownership caps was requested. Information is provided to the extent possible for catcher vessels, catcher processors, and processors taking deliveries from catcher vessels. Processors taking deliveries from catcher vessels are grouped as opposed to separate shoreside and motherships discussions because of the limited use of motherships in this fishery during the qualifying period under consideration.

3.4.1 Catcher vessels

Using the CGOA Rockfish Program as an example, the percentage of the QS that a person may hold and the amount of CQ that a person in the catcher vessel sector is permitted to use can be limited.¹¹ It also limits the percentage of CQ a vessel may use. The limits applied to persons and vessels may be different. Vessel caps help ensure that minimum number of vessels are active but can conflict with the objective to allow cooperative members to efficiently harvest their allocation under the cooperative structure. Balancing efficiency with limiting a vessel’s harvest within a cooperative to achieve MSA requirements can be challenging. Figure 3-3 and Figure 3-4 provide information on the catch of Pacific cod by pot CVs ≥ 60 ft in the open access fishery. Figure 3-3 shows the percentage catch from 2008 through June 11, 2023, aggregated at the vessel level, sorted from smallest to largest, grouped by four catcher vessels (five CVs with the least catch were grouped together), and the average of those CVs was calculated. The four CVs that caught the most Pacific cod averaged just over 5% of the sector total. This information may provide a starting point when considering vessel use caps. Figure 3-4 shows the percentage of catch at the firm (person) level. The four largest firms accounted for over 7% of the catch during the period considered. This information may provide a starting point for QS holding caps and CQ use caps. Because the information reported are averages, by definition at least one firm had more catch, and it could be

¹¹ The MSA definition of “person” includes both individuals and other legal entities.

substantially above the average. Also, the Council may wish to consider how to treat any individual or firm whose historical participation was greater than a cap that could be established. The two choices are grandfathering the person above the cap or requiring that they divest of some QS if they are above the holding cap.

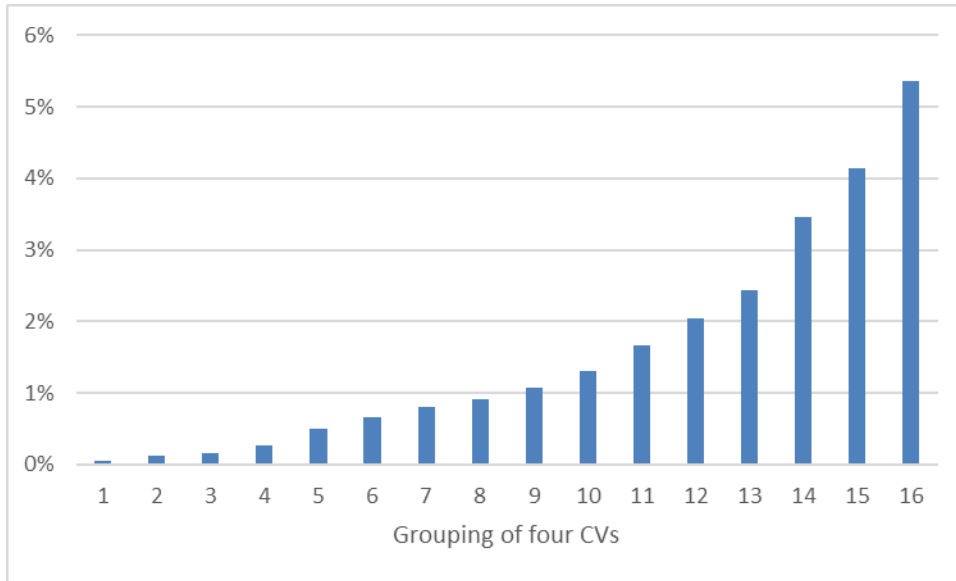


Figure 3-3 Catch by grouping of four catcher vessels as percent of sector's total catch, 2008 through June 11, 2023 (Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive_FT)

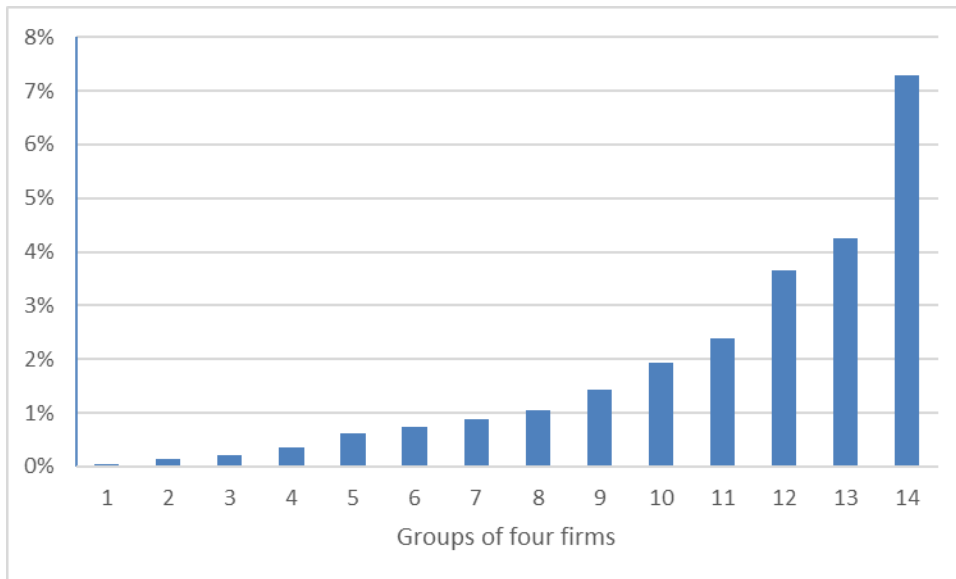


Figure 3-4 Percentage of open access Pacific cod catcher vessel's catch 2008 through June 11, 2023 listed by groupings of four firms (Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive_FT)

3.4.2 Catcher/processors

Limited information can be provided for the catcher processor sector because of the number of participants. The four vessels and firms with the most catch accounted for about 93% of the sector’s total from 2008 through June 11, 2023.

3.4.3 Processors taking CV deliveries

Figure 3-5 shows the percentage of BSAI directed Pacific cod catch by CVs \geq 60 ft using pot gear in the open access fishery by processor taking delivery. Deliveries from 2008 through 2022 were aggregated at the firm level, sorted from smallest to largest, grouped by four processors (six processing firms with the least catch were grouped together), and the average of those processors was calculated. The four processing firms that took the most deliveries averaged just over 17% of the sector total from 2008 through 2022. If that average amount were used to set a processing limit at the firm level, it is worth noting that there is substantial variation in amounts by year. On an annual basis, the four firms taking the most deliveries averaged 16.9% to 24.8%, depending on the year. In some years the processing firm with the most deliveries had amounts well above the average. It is also worth noting that the estimate is at the firm level. The Council has set or considered setting limits at the plant level in some LAPPs and because of changes in processing by location (moved between plants owned by the same firm) and the objective of the use caps, applied the cap only at the firm level.

Changes in the processing sector that are not directly related to the proposed LAPP may also impact consideration of excessive share limits for processors. The Council has the authority to recommend excessive share limits to the SOC. Determining the limits that may ultimately be recommended will require consideration of a variety of factors that balance the opportunities for harvesters to sell into a competitive market with the processing sector’s ability to operate efficiently.

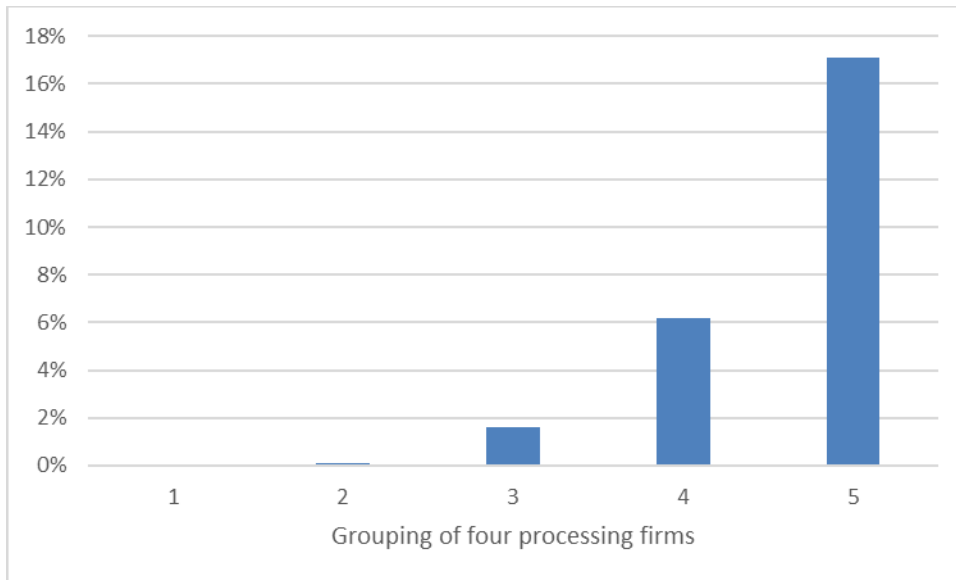


Figure 3-5 Percent of open access directed Pacific cod catch delivered by CVs \geq 60 ft to groupings of four processors 2008 through 2022 (Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive_FT)

3.5 Sideboard limits

When developing a LAPP the Council is required to consider the impact that the program will have on participants in limited access GOA and BSAI fisheries. To protect those participants the Council has often developed sideboard limits and applied them to the LLP license assigned quota and the vessels that had

the LAPPs qualifying catch. Sideboard limits are applied to both since the LLP license may be transferred to different vessels and it could create the opportunity to use the original vessel in other fisheries if less harvest capacity is needed in the pot cod fishery because of the LAPP.

Because many of the groundfish LLP licenses used to fish pot cod are also linked to crab LLP licenses that are part of the Crab Rationalization Program they are already subject to GOA sideboard limits as shown in Table 3-12.¹² The five CP LLP licenses with no sideboard limit for GOA fisheries do not have a Pacific cod or area endorsement for any GOA areas and, therefore, are not permitted to fish in the GOA. All five LLP licenses have a non-trawl endorsement for the BS and three of the five also have an AI non-trawl endorsement.

There are 21 CV LLP licenses that have a GOA area endorsement. Twenty of those licenses that are currently assigned to a vessel and are subject to Crab Rationalization Program sideboard limits for the GOA. One CV LLP license is not currently assigned to a vessel, and it is not subject to a Crab Rationalization Program sideboard limit. Therefore, all LLP licenses, except the one not assigned to a vessel, that have a BS and/or AI Pacific cod pot endorsement are either prohibited from fishing in the GOA under the LLP or are already subject to Crab Rationalization program sideboard limits. All the LLP licenses that are only allowed to fish in the BS and/or AI only have non-trawl endorsements. The Council can consider whether the Crab Rationalization Program sideboard limits are sufficient for the GOA and what non-trawl fishing opportunities would be available in the BSAI that potentially could benefit from sideboard limits. The BSAI non-trawl Federal fishery options for non-trawl vessels are limited by other rationalization programs (i.e., crab and sablefish). In addition, the small (0.2% of the TAC) apportionment of Pacific cod the ≥ 60 ft. HAL sector limits directed fishing opportunities. The BSAI Greenland turbot fishery could be considered as a potential fishery where vessels could enter, but it is currently not fully utilized. The action taken by the Council to allow longline pot gear to be used in the BSAI Greenland turbot fishery may provide opportunities to increase effort in that fishery by vessels directly regulated under this action. Because the use of longline pot gear had been prohibited prior to that action, implementing sideboards, if desired, would require the use of other metrics than historical catch. Analyses developed for the BSAI Greenland turbot action (NPFMC 2022) indicated that the Council was interested in whether a longline pot fishery for Greenland turbot is likely to result in higher levels of incidental Pacific cod catch. If incidental catches of BSAI HAL/Pot ICA increase, it may require NMFS managers to increase the 500 mt ICA as part of the harvest specifications process. Given, that pot gear has been prohibited to harvest Greenland turbot estimating changes in ICA resulting from increased pot catch of Pacific cod and decreased HAL catch of Pacific cod in the directed Greenland turbot fishery is difficult to estimate.

¹² Linked crab and groundfish LLP licenses cannot be severed from each other and must be transferred together.

Table 3-12 Groundfish LLP licenses with a BS or AI pot Pacific cod endorsement by Crab Rationalization imposed sideboard

Mode/Pacific cod endorsements on LLP license	CR GOA Sideboarded	CR GOA Sideboarded - except Pcod	CR GOA Sideboarded - no GOA Pcod Fishing	No Sideboard Limits	Total
CP					
AI CP Pot; AI CP HAL; BS CP Pot; BS CP HAL				1	1
AI CP Pot; AI CP HAL; BS CP Pot; BS CP HAL; WG CP HAL; CG CP HAL	1				1
AI CP Pot; AI CP HAL; BS CP Pot; BS CP HAL; WG CP HAL; WG CP POT	1				1
AI CP Pot; AI CV HAL; BS CP Pot; BS CV HAL				1	1
AI CP Pot; BS CP Pot				1	1
BS CP Pot				2	2
CP Total	2			5	7
CV					
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	3				3
BS CV Pot; WG CV Pot	6	1	2	1	10
BS CV Pot; WG CV Pot; CG CV Pot		2			2
CV Total	15	3	2	31	51
Total	17	3	2	36	58

Source: RAM 2024 Groundfish LLP License file

4 Bycatch and PSC Management

This section addresses two separate but related issues. Bycatch is discussed in terms of non-PSC species caught while directed fishing for Pacific cod in the BSAI with pot gear by CVs ≥ 60 ft. and CPs. Prohibited Species Catch (PSC), a specific type of bycatch, is also discussed. The two types of bycatch are separated because of the different management regulations applied to the two types of bycatch and the way they are typically treated under a LAPP.

4.1 Non-PSC Bycatch and Management

A wide variety of species are taken as bycatch in the BSAI pot cod fishery, often in relatively small amounts with high variability from year-to-year. Table 4-1 shows the mean, standard deviation, maximum, and minimum metric tons of BSAI species taken as bycatch in the pot cod fishery from 2011 through 2023. Only species that averaged more than 0.5 mt per year are included.

When necessary, NOAA Fisheries establishes or modifies an Incidental Catch Allowances (ICA) to account for bycatch in non-target fisheries. For the species listed, the TACs are either relatively large (yellowfin sole - 89 FR 17287 – Table 13) and the ICA is relatively small or the bycatch is small (sablefish). In most instances the species listed have little economic value to the harvester, so the incentive to increase the catch of most species is limited. Harvest behavior can also be addressed through limits on the maximum retainable amounts (MRA) should limits need to be placed on the amount of a species taken relative to the basis species. Each species will need to be considered in more detail, but establishing a LAPP for the pot cod sectors is unlikely to have a significant impact on any of the directed fisheries for any of the species listed.

Table 4-1 Non-PSC Species Bycatch in BSAI Pacific Cod Pot Fisheries 2011 through 2023

Species	Mean	Std. Dev.	Max	Min
Yellowfin Sole	196.4	127.5	458.6	26.2
Sculpin	93.3	32.0	159.2	48.1
Octopus	84.3	105.1	425.2	12.6
Other Species	22.5	16.4	64.6	7.3
Sea star	26.9	64.2	245.3	0.1
BSAI Other Flatfish	9.5	6.0	22.9	0.8
Scypho jellies	3.2	5.1	20.7	0.7
Atka Mackerel	5.6	3.9	15.6	1.9
Snails	4.4	5.4	18.5	0.3
Misc fish	4.5	3.3	12.9	1.1
Pollock	3.8	3.4	11.7	1.6
Misc crabs	1.1	0.9	2.9	0.1
Arrowtooth Flounder	0.9	0.8	2.9	0.1
Other Rockfish	0.9	2.0	7.0	0.0
Sablefish	0.6	0.8	2.6	0.1

Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive_FT

Implementing a LAPP that extends BSAI Pacific cod pot fishery seasons could have Improved Retention/Improved Utilization (IR/IU) implications. IR/IU regulations require persons to retain IR/IU species when the directed Pacific cod fishery is open, with very limited exceptions. When directed fishing is closed persons are required to retain up to maximum retainable amount (MRA) that is typically 20 percent of the basis species. If the pot Pacific cod fisheries are rationalized, directed fishing is expected to remain open longer and potentially never close. Pot fishing is different than trawling in relation to how gear may be utilized as a person approaches their IFQ or cooperative limit. If a person has taken their allocation and still has pots set, they could be forced to rail-dump (dump all contents of the pot without bringing contents onboard the vessel) or exceed their allocation. This could violate IR/IU regulations. Trawlers are assumed to have better information on how much Pacific cod will be in the last tow, using camera and net sounders, and can better judge the tow duration needed to catch up to their allocation. To address these types of situations in other fixed-gear catch share programs (e.g., halibut/sablefish IFQ), the Council has implemented a 10 percent overage/underage provision. Such a provision could provide more flexibility for the fleet to retain unexpected overages in one year and have the amount of the overage deducted from the following year’s allocation. If a person under-harvested their allocation by 10 percent or less, the amount would be added to the next year’s allocation. An overage/underage provision in these fisheries are unlikely to have a substantial impact on the Pacific cod biomass, but would need to be considered in more detail.

4.2 PSC and PSC Management

PSC taken in the directed BSAI Pacific cod pot fishery is presented in Table 4-2 for the years 2008 through 2023. Information is shown for BSAI crab species catch (not the fishery level), halibut mortality, and salmon catch. Crab species represent the most prevalent amounts of PSC usage and are likely of greatest concern in these pot cod fisheries. However, note that 50 CFR 679.21(b)(1)(iii)(B)(5) does not establish a specific halibut PSC limit for the fisheries considered. Salmon PSC is very rare in the pot cod fishery.

Table 4-2 PSC in the BSAI Pacific Cod Pot Directed Fisheries by Sector, 2008 through 2023

Sector/PSC Species	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Avg.
Pot CPs																	
C. bairdi Crab	160.8	94.5	24.1	26.3	18.1	100.7	179.5	217.5	99.1	15.9	19.2	2.8	2.2	3.8	9.8	8.7	61.4
Golden King Crab	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red King Crab	3.6	0.1	0.1	8.5	4.1	51.9	72.6	94.6	13.5	4.0	12.3	1.5	0.0	0.1	0.0	0.0	16.7
C. opilio Crab	125.8	411.4	138.1	20.4	1.5	4.5	24.8	40.2	15.8	41.9	35.9	57.7	52.7	5.2	14.5	3.4	62.1
Blue King Crab	0.0	1.7	34.3	0.0	0.0	0.0	0.0	1.0	3.5	16.2	3.8	3.0	0.0	0.0	0.0	0.0	4.0
Halibut mortality (mt)	1	0	1	1	1	1	1	1	1	0	0	0	0	1	1	0	1
Chinook	Conf.	Conf.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Non-chinook	Conf.	Conf.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pot CVs ≥ 60 ft.																	
C. bairdi Crab	816.6	267.3	198.1	113.2	43.4	62.2	108.3	148.7	48.7	133.2	153.4	26.8	16.6	2.8	25.2	12.7	136.1
Golden King Crab	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.1	0.0	0.0	0.0	0.1
Red King Crab	19.7	1.4	1.1	7.8	1.8	22.4	19.1	19.9	0.3	8.7	240.1	35.0	11.3	205.4	90.7	65.4	46.9
C. opilio Crab	369.3	80.3	279.2	42.1	7.4	4.7	29.1	35.7	1.3	29.2	2.8	1.4	8.7	6.0	1.0	0.2	56.1
Blue King Crab	0.1	0.1	84.9	0.0	0.0	0.0	0.0	0.1	0.0	0.5	0.8	0.0	0.0	0.0	0.0	0.0	5.4
Halibut mortality (mt)	2	0	1	3	2	1	0	0	1	1	0	1	1	2	6	2	1
Chinook	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Non-chinook	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Note: Crab are reported in thousands of animals, halibut mortality in metric tons, and salmon in number of animals

Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive_FT

Crab data from [Pot_Crab_PSC(2-28-24)] and halibut and salmon data from AKFIN PCod Dashboards (<https://reports.psmfc.org/akfin/f?p=501:323:5470586092209:INITIAL>)

BSAI crab PSC hard caps are currently only established for the trawl sectors (50 CFR 679.21(e)). Should the Council wish to recommend crab PSC limits as part of the proposed LAPP, they would need to be established in regulation. The annual and monthly variability of annual crab PSC catch in these fisheries could make it difficult to establish meaningful limits that are not overly constraining. For example, as noted in a previous Council discussion paper, red king crab PSC in the pot cod fishery is highly variable across years and has exhibited a trend of higher PSC during September and, to a lesser extent, October. These dates coincide with the opening of the Pacific cod B season. Available information is useful for understanding the timing of PSC encounter but are not sufficient to make conclusions about the impact on the Bristol Bay red king crab stock (NPFMC 2022b).

Relatively low observer coverage levels may impact the historical PSC estimates relative to future usage if monitoring levels are increased under a LAPP. Wide variation in PSC estimates could be an artifact of lower observer coverage rates in the pot sectors. PSC estimates that rely on a high ratio of unobserved to observed effort are prone to fluctuate if the observed vessels are clustered in low or high PSC encounter time/areas (NPFMC 2022b).¹³ Consideration could also be given to whether the limit would be based on mortality or total catch, recognizing that work has been conducted to improve estimates of discard mortality which is influenced by a number of factors including weather and handling.

5 Vessel Crew Considerations

The Council's motion requested consideration of the potential impact of a LAPP management approach on vessel crew members. This section briefly overviews crew dispositions in the BSAI pot cod sector as it currently exists and highlights points for continued analysis as the program is further developed.

For CVs, a pot cod crew size typically ranges from five to seven. Crew positions include the captain, engineer, cook, and deckhands. The engineer and cook positions also work as deckhands but may receive a higher pay share due to their dual responsibilities. Under status quo management, crew size tends to be larger when fleet fishing effort is high and product prices are high – as in a race for fish with a solid market. Crew sizes are on the low end of the stated range when the expense-to-catch ratio is tighter. Presumably, vessels would minimize crew positions in a rationalized fishery to increase benefits for those who participate; however, it is possible that individual vessels might make different choices to retain the necessary experienced crew for fisheries that temporally connect to the pot cod fishery (e.g., crab). Total crew counts for pot cod CPs range from 16 to 27, with the variation based on the size of the onboard factory. Positions include captain, mate, chief and assistant engineer, cook, deck hands, and factory crew.

Crew members are typically compensated based on a percentage of net earnings. Individual circumstances may vary, but a representative example of revenue sharing might be a 60%/40% split between the “vessel” and the “crew”. Expenses like fuel, bait, provisions, and observer fees may be deducted from the gross revenue before the division is made. Under a catch share program where harvesting quota may be leased, lease fees would likely be part of the “off the top” deduction. Captain shares range from 12-15%, engineer shares range from 6-8%, and deck crew range from 4-7% depending on experience. Some pot cod CPs pay certain positions a fixed daily rate or, in the case of factory workers, combination of a daily rate and a “case rate” that reflects production volume.

Many of the CVs that participate in the BSAI pot cod fishery also fish for crab and/or tender salmon at various points in the year. The number and make-up of the crew that prosecute the pot cod fishery may be influenced by the people needed onboard when other fisheries take place, and it is not obvious that the implementation of a LAPP would change that fact. In some cases, crewing the pot cod A season is a

¹³ <https://meetings.npfmc.org/CommentReview/DownloadFile?p=d26d1383-cd85-4545-b4e7-29d402f414bf.pdf&fileName=D2%20BBRKC%20Discussion%20Paper.pdf>

requirement for crew members who intend to work the opilio and Tanner crab seasons at the start of the calendar year. Similarly, crew who want to work the red king crab fishery in October/November may be expected to fish the pot cod B season.

Vessel count consolidation is always a consideration for a potential LAPP. If, on net, the number of vessels fishing pot cod decreases then fewer crew positions will be available. If fewer vessels are fishing but are harvesting fish leased from other qualifying licenses in an LLP-based program, lease fees could reduce the marginal value of crew labor.

A rationalized fishery might produce relatively positive outcomes on safety at sea, which benefits crew members (see Section 8). Under a LAPP, vessels would have somewhat more flexibility to shift the timing of fishing for better weather and more profitable fishing conditions. Ultimately, though, the timing of the pot cod season will remain somewhat tied to the timing of crab fishing and the availability of processing capacity and demand to buy cod. There is not a scenario where a LAPP would transition this fishery into a dramatically longer fishery than currently exists. On the margin, it is possible that a rationalized fishery would allow more value-added processing, which could improve ex-vessel prices and benefit crew pay downstream. On the whole, market and macroeconomic factors that are suppressing cod prices are likely to dictate the profitability of the fishery more so than the issuance of quota shares.

6 Interaction with other Pacific Cod Sectors

The Council requested consideration of the potential impact of a cooperative program for larger pot cod CVs and CPs on smaller pot cod CVs. The under-60' (U60) CV fleet is part of a separate TAC apportionment under Amendment 85 (see Figure 1-1) but the functioning of that Federal fishery and the DHS state-waters fishery are operationally linked to the sectors that are the subject of this paper in several ways. The Council is also interested in how cooperative allocations might affect, or be affected by, the BSAI Pacific cod shoreside processing sector. This section serves as a general discussion of the dynamics of the BSAI cod fisheries, bottlenecks, the general economic landscape, and how rationalizing additional sectors might fit into that picture. This section is primarily focused on the A Season, which starts on January 1 for non-trawl gear and January 20 for trawl gear.

A prominent factor in the BSAI groundfish fishery in 2024 and the near future is contraction in the shoreside processing market. This is presumably partly responsible for fewer ≥ 60 ft. CVs participating in the 2024 A season. For example, a processing facility in King Cove, AK that historically played a role in BS cod and crab has not operated. Furthermore, due to global market demand conditions, US dollar currency strength, and other trade factors the market for BSAI Pacific cod is viewed by many as soft, so active processors may be demanding less cod volume across all harvesting sectors. If demand is – and remains – lower than in the past, ex-vessel prices would be expected to decrease or fail to keep up with vessel operating costs. This could be the result of not enough processing capacity for the cod volume that the market desires, or processors setting a lower target volume than what a fully harvested TAC across all BSAI cod sectors could produce if fully utilized. The pot cod CP sector is not linked to shoreside processing, and no vessels participated in the 2024 A season. The decrease in CP participation could be viewed as a reflection of general cod market conditions or an accumulation of factors across the fisheries that those vessels historically have in their portfolios (cod, sablefish, and crab).

If shoreside processors are demanding less volume, a “race to fish” or “race to secure a market” could persist under further rationalization. A race to secure a market might involve the timing of fishing, the ability to deliver other species (e.g., crab, pollock), and business ties. It is possible that rationalized cod could be prioritized for delivery due to its predictability or the ability to coordinate deliveries and production. At present, that would be represented by trawl CVs fishing under the newly implemented PCTC program. If the larger pot cod CVs are rationalized, U60 CVs might find it more difficult to secure

a market that is solid enough to warrant the up-front expense of gearing up and crewing a vessel in the Bering Sea. In general, if fewer fish are demanded then vessels could have to compete for markets with lower ex-vessel prices. If ex-vessel prices do not support a fishing trip that is profitable for the vessel and crew, fewer vessels will participate. For the ≥ 60 ft. CVs, rationalizing the fishery may or may not change this dynamic. It is not guaranteed that rationalizing that CV sector will increase ex-vessel prices, or increase them enough to cover additional costs associated with enhanced monitoring or cost recovery. Unrationalized pot vessels would be relatively less well positioned.

It is possible that pot cod vessels could compete with trawl vessels on fish quality, as pot-caught cod historically bring a slightly higher unit price. The analysts cannot predict whether that would be a dispositive factor in a lower-demand market, or whether processors would prioritize volume or trawl vessels that can also feed pollock processing lines if they had to make a choice. In some cases, shoreside processing entities may have a management interest in CVs. In a consolidated fishery, it is reasonable to assume that vessels more closely associated with processors are more likely to get a market.

If rationalized deliveries – trawl or pot – are prioritized due to pre-season agreements and predictability, participating non-rationalized vessels might not find a market until later in the season. For smaller CVs that can fish in the DHS state-waters fishery, a later season could run up against the point in the year when flesh quality is diminished due to spawning. Anecdotally, the analysts understand that there is a point in the spring (~April) where cod deliveries are no longer accepted or ex-vessel prices decline. The state-waters fishery occurs after the Federal fishery has been closed for a week. Further consideration may be needed as to how rationalizing the Federal pot cod fishery affects the season-end date that determines when the DHS fishery opens.

7 Monitoring Requirements

This section is included to address the request in the Council motion for a discussion of the likely monitoring requirements necessary to support a cooperative program that allocates cooperative Pacific cod quota and apports crab PSC to the cooperative(s) including availability of observers for the CVs to move to the full observer coverage category.

Establishing a catch share program creates new demands for enhanced catch accounting, monitoring, and enforcement. Based on the lessons learned from other catch share fisheries, an allocation-based quota fishery must be developed with sufficient safeguards to meet the following objectives:

NMFS must be able to ensure compliance with monitoring regulations governing the fishery: In a rights-based fishery, quota shareholders have a strong incentive to maximize the value of their quota. An effective rights-based quota management program must recognize that economic incentives exist and there could be an increase in activities such as illegal high grading or under-reporting catch. Monitoring, management, and enforcement methods must provide sufficient measures to ensure against them.

There must be a reliable, authoritative record of quota harvested: Management of catch limits to a cooperative are enforced through regulatory provisions that prohibit the cooperative from exceeding its allocations, therefore a source independent and more comprehensive catch monitoring and accounting approach for allocated species is justified. Quota holders could have a financial incentive to under-report certain components of catch. Without a reliable source for independent information, a self-reporting system could be vulnerable to fraud and may, in fact, create incentives for these practices. The catch of target species can be determined using both observer and landings data as allocated groundfish species must be retained, landed, and sold for the vessel owner to receive earnings from the catch. In general, PSC is required to be discarded and PSC often limits the catch of economically valuable target species. The greater the potential to limit the target species catch, the greater the incentive created to not have PSC

identified and estimated. Therefore, independent information collected by observers provides the best available information on PSC.

Harvest and PSC data must be timely and accessible: Management programs that allocate catch and PSC to entities (such as cooperatives) give recipients more specific control over their fisheries. Cooperatives that receive allocations generally are prohibited from exceeding their allocations and if they exceed an allocation, NOAA may initiate an enforcement action against the cooperative. This requires active catch monitoring on the part of cooperatives and increases their need for timely access to information. As such, all concerned parties (NMFS, OLE, and quota holders) must have timely access to data that clearly details the amount of harvested quota, including PSC. To the extent these records are edited, all parties must receive, or have access to, the edited record.

Management programs with transferable PSC allocations to cooperatives require additional monitoring and PSC accounting: PSC monitoring requirements depend on whether NMFS manages PSC limits (caps) for a group of vessels or whether these PSC limits are allocated among specific entities, like cooperatives, within a fishery. Fishery or sector-level PSC limits are managed by NMFS through directed fishing closures in the Federal Register. These closures apply to all vessels participating in the relevant directed fisheries. Any vessel fishing after the closure is in violation of regulations. Whereas PSC allocations that are made to a specific entity, like a cooperative, are enforced through regulatory provisions that prohibit the entity from exceeding its allocation. These entities monitor their PSC allocation and are prohibited from exceeding that allocation. NMFS does not issue fishery closures once these allocations are reached.

In fishery or sector-level PSC limits that are managed by NMFS, estimates of PSC are based on data collected by observers that are placed on a random selection of trips across the fishery. Bycatch rates from observed vessels are used to estimate the bycatch on unobserved vessels. However, from a legal perspective when PSC is allocated to a cooperative, calculated bycatch rates (based on other vessel fishing activities) cannot be used as a basis for enforcing a prohibition against exceeding a PSC allocation. Furthermore, cooperative-based programs could create an opportunity for vessels within a cooperative to collude and could allow them to manipulate their bycatch rates to the degree that NMFS would be prevented from collecting and estimating accurate PSC information. For these reasons, transferable PSC allocations require observer coverage to estimate PSC accurately on all trips.

Observer coverage

The Pot CP sector is in the full coverage category and 100 percent of trips are observed. The fast pace of fishing with single pot gear, high sampling workload, and the need for close communication between the captain and observer make the pot CP sector one of the most difficult fisheries for the Observer Program to sample. The challenging nature of observing this sector and a relatively high rate of observer data deletions led to a requirement for participants to carry a level 2 observer effective December 11, 2023 (88 FR 77228). A Level 2 endorsement is one step below a Lead Level 2 endorsement and can be obtained by an observer after they complete the initial observer certification, sample 60 data collection days, and successfully meet expectations on their most recent cruise (50 CFR 679.53(a)(5)(iv) and (v)). Analysts assume that the pot CP sector would continue to operate under the full coverage model with at least one Level 2 observer regardless of the cooperative structure implemented. While the timing and pace of the fishery may change under a LAPP, it is likely this would make the deployment of observers across the fishery less challenging than the shorter pulse fishery under the current management program (Table 1-1). However, as noted elsewhere in the paper, it is expected that the magnitude of any change in the pace of the fishery would be modest – or at least not extreme – since the fishery will still be constrained by the timing of shoreside processing demand/capacity and the typical desire of pot cod vessels to move into time-adjacent crab fisheries.

The Pot CV \geq 60 ft. sector is in the partial coverage category, with observer coverage rates determined in the annual deployment plan. From 2014-2023, the annual selection rates have ranged from 4%-24% of trips, and realized coverage rates have ranged from 7.7%-23.4% of trips from 2014-2023 (Table 7-1). Generally, catcher vessels that participate in programs with transferable PSC allocations as part of a catch share program are included in the full coverage category and analysts assume the Pot CV \geq 60 ft. sector would move to the full coverage category under a cooperative program that allocates cooperative Pacific cod quota and apportions crab PSC to the cooperative(s). Independent observer data are important under these catch share programs because quota share recipients are prohibited from exceeding any allocation, including, in many cases, transferable PSC allocations. Allocations of exclusive harvest privileges can create increased incentive to misreport as compared to open-access or limited-access fisheries. Transferable PSC allocations also present challenges for accurate accounting because these species are not retained for sale and they represent a potentially costly limitation on the full harvest of the target species. To enforce a prohibition against exceeding a transferable target species or PSC allocation, NMFS must demonstrate that the quota holder had catch amounts that exceeded the allocation.

Table 7-1 Expected observer coverage and realized observer coverage as a percentage of the total number of trips taken in the pot CV stratum (as reported in North Pacific Observer Program Annual Reports).

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Expected coverage	16	24	15	4	16	15	15	18	17.5	17.1
Realized coverage	15.1	23.4	14.7	7.7	15.5	14	15.5	20.5	18.1	17.8

Table 7-2 shows the maximum additional observers that would be required on any single day by month to provide 100% coverage of the Pot CV \geq 60 ft. sector under the existing fishery effort from 2013-2023. Full observer coverage of the Pot CV \geq 60 ft. sector from 2013 through 2023 would have required a maximum of 13 more observers on any single day. Given the effort patterns in the fishery since 2013, most additional observers would be required in January, September and October. However, as mentioned above, the timing and pace of the fishery may change under a LAPP, and this may change the number of additional observers required on any single day, particularly if the fishing effort is distributed over more days than the shorter pulse fishery that often occurs under the current management program (Table 1-1).

Table 7-2 Maximum number of additional observers required on a single day for 100% coverage of existing effort in BSAI pacific cod Pot CV \geq 60 ft. sector

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2013	10	0	0	0	0	0	0	0	3	4	1	3
2014	6	0	0	0	0	0	0	0	3	3	2	2
2015	5	5	3	2	0	0	0	0	3	4	1	1
2016	4	5	4	4	1	0	0	0	4	5	2	3
2017	8	0	0	0	0	0	0	0	4	4	4	3
2018	9	0	0	0	0	0	0	0	7	6	1	0
2019	8	0	0	0	0	0	0	0	9	0	0	2
2020	10	0	0	0	0	0	0	1	11	0	0	1
2021	11	0	0	0	0	0	0	0	8	0	0	0
2022	13	0	0	0	0	0	0	0	8	5	0	0
2023	10	0	0	0	0	0	0	0	6	7	0	0

Observer coverage in the full coverage category is industry-funded through a pay-as-you-go system whereby fishing vessels procure observer services through NMFS-permitted observer service providers.

Observer coverage in the partial coverage category is funded through a system of fees collected under authority of Section 313 of the Magnuson-Stevens Act. The fee is based on the ex-vessel value of groundfish and Pacific halibut and is assessed on landings by vessels not included in the full coverage category. The system of fees fairly and equitably distributes the cost of observer coverage among all vessels and processors in the partial coverage category and is independent of the level of coverage each vessel incurs under the Annual Deployment Plan. Moving the BSAI pacific cod Pot CV \geq 60 ft. sector into full observer coverage would remove these trips from the partial coverage fee collection and require the industry to directly fund full observer coverage through a pay-as-you-go system. Vessels would procure observer services by contracting directly with a permitted observer provider as required at 50 CFR §679.51(d)(1) and would pay the full cost of observer coverage.

ATLAS software and observer data transmission

Given the requirement for timely access to data that clearly details the amount of harvested quota, including PSC, vessels participating in cooperative programs would likely be required to provide a computer that meets minimum specifications for use by an observer. NMFS installs custom software called ATLAS on the vessel's computer and this software application is used by observers to enter their data. The ATLAS software contains business rules that perform many of these quality control and data validation checks automatically, which dramatically increases the quality of the preliminary data. Since 2014 all observer data has been entered into the ATLAS software.

After the observer data are entered into the ATLAS software, it is transmitted to NMFS. Data transmission is an observer duty as defined in the observer sampling manual and is not a requirement in regulation. A vessel or processor is not responsible to ensure an observer completes this duty, however, they can be required to provide the equipment that would allow the observer to perform these duties. Both NMFS and fishery participants need timely and accurate data in quota share programs.

Under cooperative programs, the requirements for observer coverage and other monitoring and enforcement elements, such as electronic reporting, are designed to maximize the quality of data used to estimate catch and bycatch. Estimates of crab PSC and other bycatch species are derived solely from observer data and will accumulate against cooperative allocations and limits. For this reason, it is important that observer data be timely and is as complete and accurate as possible. A vessel that has the appropriate equipment and data service plan is able to facilitate observer data transmission on a daily basis. At-sea data transmission improves the quality of the data by, (1) increasing the timeliness of the data needed for management; (2) improving data quality and reducing the likelihood of data being changed or deleted; (3) enabling inexperienced observers to come up to speed more quickly; and (4) enabling observers to notify NMFS staff of potential compliance concerns, such as harassment or efforts to bias data.

Data transmission that occurs during the trip while the vessel is still at sea allows NMFS to generate catch and bycatch estimates in near-real time. Timely transmission also enables observer data to be available to vessel owners and cooperative managers within two hours after an observer transmits data to NMFS. Under a cooperative program, real-time accounting of crab PSC will be important, especially for the cooperatives that are managing their PSC and tracking vessel-level PSC accounting. Timely information on bycatch would allow the fleet to rapidly respond (both individually and collectively) to high PSC rates so that the catch of prohibited species can be minimized and the industry can more effectively stay within its overall PSC limits. If PSC limits are constraining and the fleet needs to respond, then daily data will enable vessels to modify fishing activity immediately.

If a cooperative program required participating vessels to provide at-sea data transmission to enable observer data to be transmitted during the trip and enable observer communication with NMFS, this would be a new requirement for vessels participating in the Pot CV \geq 60 ft. sector. Vessels participating

in the Pot CP sector already have ATLAS and data transmission capabilities as required by regulation (50 CFR 679.51(e)(1)(iii)(B)).

Shoreside Processors

Under a cooperative program, catch accounting for allocated groundfish would likely take place at the shoreside processing facilities, with the exception of PSC that must be discarded at sea. The catch of allocated species that are landed at the shoreside processing facilities would be required to be sorted by species and weighed on a State of Alaska certified scale that has capabilities to print an unalterable record of the weights. It would be important for NMFS to ensure that adequate measures are in place to facilitate catch accounting. These provisions could be added to regulations or, similar to other rationalized fisheries where catch accounting takes place on shore, NMFS could require that processors operate under an approved Catch Monitoring Control Plan (CMCP). The CMCP would be developed by the processor and approved by NMFS. It would detail a series of performance standards ensuring that all delivered catch is accurately sorted and weighed by species.

8 Safety Considerations

The Council's June 2023 motion cited the potential for "unsafe conditions" due to a race for fish among the reasons to consider cooperative/LAPP management for the BSAI pot cod fishery. Decisions about when to fish may have been driven by racing for a limited TAC (and catch history) over what has sometimes been a short season or the desire to complete the cod season before crab fishing is available, with weather or general safety risk mitigation being a secondary consideration by perceived necessity. Ultimately, decisions that affect crew and vessel safety are the responsibility of the captain, but it is generally acknowledged that management structures create the context for those decisions.

Noting that there is variation in season length across years, the BSAI pot cod fishery is typically short relative to some other rationalized fisheries, and occurs at two specific points in the year. Implementation of a LAPP is not likely to expand the fishing season dramatically – to resemble, say, the halibut/sablefish IFQ program or the Central GOA Rockfish Program – but marginal changes in flexibility could have real positive impacts when vessel captains are making choices about timing on the scale of several days or a week. Fishing location choices are constrained by operational range and the presence of market-size, quality cod. Cooperative management could create circumstances where the pot fleet is better equipped to coordinate the use of grounds that also attract trawl effort after that season opens in late January.

Even under a LAPP, several factors are likely to continue dictating when the fishery occurs (within a range). A primary factor is the timing of the presence of Pacific cod with good flesh quality on the fishing grounds that are accessible to the CV fleet, within the distance range where they can make timely deliveries. The geographical range of the fishery may also be constrained by the willingness of processors to provide tenders, which in turn depends on the profitability of the product in the market. It is possible that a cooperative-based program will enhance the value of catch, but ex-vessel and wholesale prices will continue to be influenced by global market, trade/currency, and macroeconomic forces that are external to how this fishery is managed. A second factor in the timing of fishing is demand from buyers (processors). The BSAI region is experiencing a contraction in processing capacity. The processors that are currently operating might not always be interested in putting Federal pot cod on their lines. Other fisheries that compete for processing capacity around these seasons are pollock, crab, and Pacific cod from other gear/size sectors (e.g., rationalized cod trawl CVs whose delivery amounts and timing might be more predictable for the processor). Finally, pot cod vessels that are dually committed to cod and crab fishing will experience a need to complete cod fishing in time to shift to crab fisheries when they are open (opilio and Tanner crab around the A season, and king crab around the B season).

While cooperative management is often associated with improved safety outcomes, the development period for these programs can paradoxically lead to less safe decisions. The National Transportation Safety Board (NTSB) report on the fatal capsizing and sinking of the F/V Scandies Rose on Dec. 31, 2019, includes the following:

“The Scandies Rose was planning to participate in the BSAI Pacific cod fishery and the BSAI opilio crab fishery directly following the cod delivery. [...] The majority owner of the Scandies Rose said that the vessel didn’t fish for cod consistently from year to year because of the ‘meager paycheck’ associated with the catch. He added that the reason the vessel intended to participate in the 2020 season was because of recent discussions regarding the pot cod fishery changing to a rationalized system. The change would allocate portions of the total allowable catch to specific vessels and organizations. His desire was to get a single cod delivery on record in order establish a catch history, a variable that traditionally factored into the allocation. The majority owner stressed that the plan was to only make a single cod delivery while simultaneously scouting for opilio crab and that the vessel would complete this before the season closed (historically the season was open 2–3 weeks).” (Section 1.9, p.42).¹⁴

While the report referenced above is specific to one tragic, multi-factor incident, the Council may bear in mind that vessel operators’ decisions are highly attuned to both existing and foreseeable management actions. In one case, a vessel determined a need to transit to the Bering Sea on a certain date and in poor weather in order to make a cod delivery for catch history before commencing crab fishing. The Council established a control date for this potential action (June 11, 2023) and, thus, similar decisions related to this program development should not occur. Nevertheless, it serves as an example of vessel operators choosing to fit fishing into certain time periods in order to achieve business objectives. The National Institute for Occupational Safety and Health (NIOSH) participated in the Scandies Rose Marine Board of Investigation hearing with a witness presentation. Under “Fisheries Management Considerations”, NIOSH stated that fishery management policies influence operational decisions related to weather conditions, and that economic pressures generated by management policies or anticipated changes in policies can play an important role in decisions to fish in severe weather conditions.¹⁵

9 Persons Consulted

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¹⁴ NTSB, 2021. Marine Accident Report (MAR) 21/02. Available at: <https://www.nts.gov/investigations/AccidentReports/Reports/MAR2102.pdf>.

¹⁵ NIOSH, 2021. Safety research in the Alaskan commercial fishing industry: Presentation to the US Coast Guard Marine Casualty Hearing, F/V Scandies Rose. Slide 75. Available at: <https://media.defense.gov/2021/Mar/05/2002594519/-1/-1/0/CG%20130%20-%20WITNESS%20PRESENTATION%20-%20DR%20LINCOLN%20AND%20MS%20CASE.PDF>.

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