PRELIMINARY SCOPING OF POTENTIAL LIST OF TRAWL FOLLOW-ON ACTIONS

In November 2025, the Pacific Fishery Management Council (Council, PFMC) completed its second review of the trawl catch share program (2025 Catch Share Program Review). Throughout the process, several potential changes to the program have been raised. Council staff have taken the ideas proposed as well as raised new suggestions and grouped them into bins to support further development of follow-on actions at a later Council meeting. A brief description and consideration of impacts to be analyzed for each item are provided below the table.

Item Number	Sector	Name	Description
T1	IFQ	Observer/Electronic Monitoring (EM) Coverage	Consider changes to the requirement for 100% monitoring (observer and EM) to a lower percentage.
T2	IFQ	Shoreside Monitoring Coverage	Consider reducing or eliminating shoreside catch monitoring requirements
T3	IFQ, MS, CP	Economic Data Collection (EDC) Program	Consider changes to the EDC program, including reductions (e.g., requiring survey every X number of years rather than every year), reducing scope, and elimination of the program
T4	IFQ	Adaptive Management Program (AMP)	Consider changes to the AMP program, including but not limited to issuing AMP to shore-based processors or active participants
T5	MS/IFQ	Mothership (MS) Whiting Utilization	Allow MSCVs to deliver MS whiting quota shoreside
T6	IFQ	Accumulation Limits	Reconsider accumulation limits

T7	MS, CP	Set-Aside Management	Consider alternative methods (e.g., performance standards) for accounting for bycatch in the at-sea whiting fisheries
T8	MS, CP, IFQ	Regulatory Actions	Declaration changes, any regulatory efficiencies
T9	IFQ	IFQ Quota Species	Consider changing the number of IFQ species
T10	MS, CP, IFQ	Cost Recovery	Potential changes to CR program

T1: Observer/EM Coverage

Vessels participating in the shorebased individual fishing quota (IFQ) program (as well as mothership [MS] and catcher/processor [CP] vessels) are required to have 100 percent catch accounting at sea- either through an onboard observer or electronic monitoring (EM). Harvesters and at-sea processors are responsible for arranging and paying for these observers, which are employed by third-party companies. When the program was implemented, the inclusion of 100 percent individual accountability of catch and bycatch was part of the main management goal for Amendment 20. Objective 3 of Amendment 20 was to "promote practices that reduce bycatch and discard mortality and minimize ecological impacts". As noted in the Phase 2 Cost Project (Northern Economic, Inc. and Brannan and Associates, 2024),

> "It was expected that the increased accountability generated through the combination of tradeable allocations and comprehensive monitoring would minimize bycatch and increase the success of species rebuilding (PFMC and NMFS 2010c)…."

Prior to the trawl catch shares program, there was "little direct incentive for individual vessels to do everything possible to avoid take of species for which there are conservation concerns, such as overfished species." (Amendment 20 EIS, PFMC and NMFS 2010). Additionally, the observer coverage was 20 percent (Attachment 1 to Appendix H to Amendment 20 Final Environmental Impact Statement [FEIS]) which created uncertainties around bycatch rates from that observed set of trips.

The 100 percent catch accounting system has contributed to the program attaining its environmental goals and objectives, with discard amounts decreasing (mostly in the bottom trawl fishery) and all discards accounted for in determining total mortality (2025 Catch Share Program Review). Additionally, the number of groundfish stocks considered overfished has dropped from four stocks in 2011 (when the program started) to zero stocks in 2026. The 100 percent catch accounting and the resulting data has allowed for the removal of other restrictions- such as the trawl Rockfish Conservation Area off Oregon and California. Yet, these benefits have come at a financial cost.

The 2025 Catch Share Program Review provided an examination of the direct costs for contracting observers and EM services. Initially, at the start of the program, National Marine Fisheries Service (NMFS) subsidized the monitoring program for both catcher vessels and shorebased processors (discussed below) for the first five years, with subsidies declining from 2011 to 2016, when there were no subsidies issued (Figure 33 of the 2025 Catch Share Review). The daily seaday rate for an onboard observer ranged from $585 to $700 in 2024. Across the various fisheries, catcher vessels' monitoring costs are variable- particularly those activities with a high degree of EM usage. For activities with lower rates of EM adoption (e.g., bottom trawl vessels), average monitoring costs were higher than those with higher EM adoption (e.g., shoreside whiting, see Table 65 from the 2025 Catch Share Review below).

Table 65. Average Monitoring Cost by Catcher Vessel Activity 2020–2023

Catcher Vessel Activity	Average Median Monitoring Cost per Vessel/day ($2023)	Avg. Median Standard Deviation ($2023)	Average Median 25th Percentile ($2023)	Average Median 75th Percentile ($2023)	Average Annual Fleetwide Cost ($2023)	Average Number of Vessels
At-sea Pacific whiting	$83	$93	$46	$230	$125,400	17.3
Shoreside Pacific whiting	$67	$64	$46	$134	$188,938	26.5
DTS trawl	$541	$259	$246	$660	$295,401	39.3
Non-whiting midwater trawl	$118	$131	$53	$461	$151,396	24.8
Non-whiting, non-DTS trawl	$516	$258	$259	$653	$640,905	43.8
Gear Switching	$235	$235	$81	$385	$92,137	10.0

Note: Values represent averages of median-level observer and EM costs for each year between 2020 and 2023. Monitoring costs represent both observer and EM costs, depending on the number and nature of vessels using different monitoring tools.

Source: FISHEyE

In 2025, the Council received the results of the Phase 2 Cost Project which provided an overview of current costs to both industry and administration and options to change the 100 percent monitoring requirements and the potential tradeoffs of those options. Specifically, the report looked at reduced fixed coverage and variable coverage options. The report noted that specific cost estimates to reduced coverage levels would require significant quantitative effort and have considerable uncertainties.

While there could be direct cost savings to industry associated with reduction in coverage, there could be an increase in administrative costs resulting in increased cost recovery fees due to the need for changing estimations of catch and bycatch and any other program changes. Note, the shorebased IFQ sector has been at a 3 percent cost recovery rate for all but two years. This may also require new systems and regulations needed to estimate discard or discard rates for quota-managed stocks and other species. Changes to the coverage rate for onboard observers may also require changes to the EM program.

An additional potential change in costs for industry could occur through changes in the rates for observer companies and the intersection with catch monitors (discussed below in T2). Currently, there is one approved observer company on the West Coast, and if there was a reduction in observer coverage requirements this could result in fees changing to maintain a certain level of business (i.e., resulting in no change to the overall fee even at a reduced coverage rate) or changes to the availability of shoreside catch monitors- resulting in delays of offloads and inefficiencies. Catch monitor availability has become more challenging with the shift to EM in some areas as

historically, the observer was able to act as the catch monitor. However, with EM, there is no onboard observer and therefore a catch monitor has to travel to the area specifically for the offload. As described in the 2025 Catch Share Program Review:

> "Overall, while there are a number of drivers for the costs within the fishery and across years, recent costs may be most affected by difficulties in retention and recruitment of human observers as well as the implementation of the electronic monitoring program. In interviews conducted for PFMC (2024b), observer providers and other contacts described a shifting and unpredictable landscape of observer costs due to high turnover rates and the difficulty of hiring and maintaining observers, particularly in more remote southern port areas, as well as changes to the EM program, which influence providers' expectations about service levels and therefore, seaday rates charged to vessels. Providers discussed a tradeoff whereby increased EM adoption can reduce the pool of observers needed and thereby reduce flexibility, redundancy, and the amount of work to support stable employment. It also increases the need for shorebased catch monitors, which are not necessarily fulltime jobs in some port areas, which can increase turnover. Finally, reductions in the total number of days at sea in the fishery furthermore exacerbate these challenges."

While reductions in coverage rates have the potential to have considerable cost savings for industry, especially with significant reductions in coverage, it could also have negative impacts to compliance, enforceability, and management. Impacts may be mitigated if smaller reductions are made to the coverage rate or incentives for noncompliance are low as noted in the Phase 2 Cost Project. Changes from a fixed to variable rate are more uncertain. Related to management, the Council would need to evaluate the impacts of loss of 100 percent accounting for inseason management, quality of data for catch accounting and use in development of management measures (i.e., closed area or other changes), and as inputs to stock assessments. For example, changes to requirements may potentially impact incentives for recording discards and/or landing bycatch species. As noted above, one of the primary reasons behind the need for 100 percent catch monitoring was to reduce the incentives for discarding. This change in incentive may also necessitate the need to consider the species managed by IFQ (see item T9). Additionally, several Biological Opinions and previous management measures have been founded upon the premise that the program requires 100 percent catch accounting through onboard observers or EM. There could also be biological impacts through the increased level of uncertainty- including accounting for rare events or instances of the "observer effect" in which vessels without an observer fish differently than with an observer onboard.

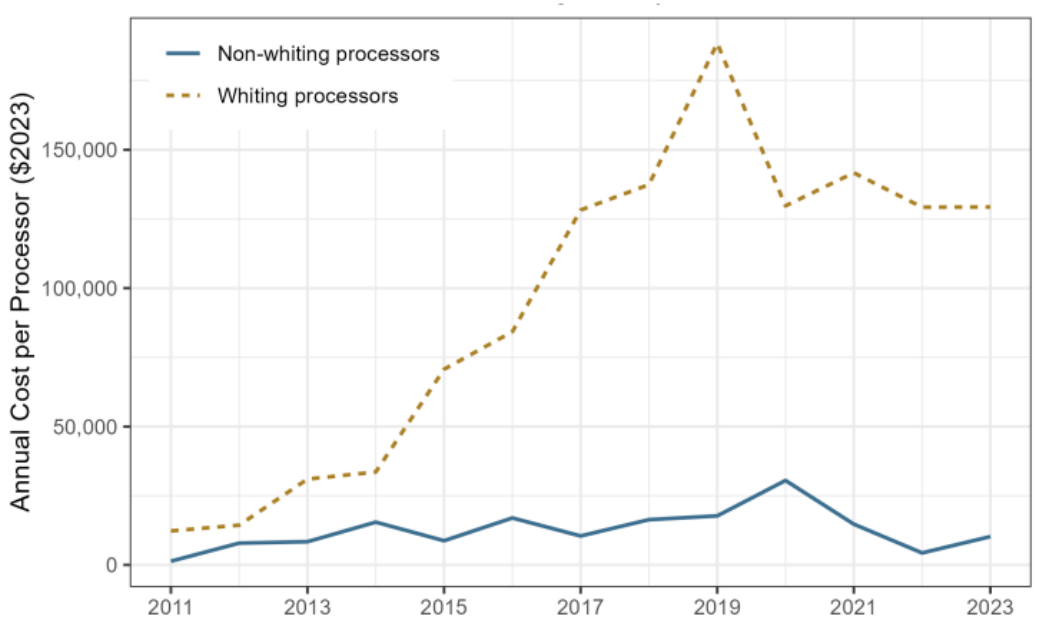
T2: Shoreside Monitoring

Vessels participating in the shorebased IFQ fishery must deliver to a first receiver which requires that all offloads be monitored and fish ticket landings verified by a certified catch monitor. Typically, this monitor is the onboard observer from the vessel, unless that vessel is using EM. Catch monitors are responsible for verifying all shoreside deliveries are accounted for, species are sorted appropriately, and relevant biological samples are taken (i.e., salmon bycatch on EM maximized retention trips).

The 2025 Catch Shares Program Review showed that shoreside monitoring costs for whiting processors are higher than those of non-whiting processors and that costs have been increasing due

to the use of EM and the increased duties associated with catch monitors for EM trips (see Figure 35 from the 2025 Catch Share Program Review below).

Figure 35. Shorebased processor Monitoring Cost by Type



Note: In FISHEyE any vessel that targeted whiting is categorized as a whiting vessel. Any vessel that participated in at least one non-whiting groundfish trawl fishery and did not target whiting is a non-whiting vessel. Whiting and non-whiting processor monitoring costs were found by querying the FISHEyE processor cost database using the terms: "cost category: Shoreside monitoring", "Statistic: median per processor", "Production activities: Groundfish production" and "Processor type: Non-whiting processors and whiting processors".

Source: FISHEyE

Options considered in the Phase 2 Cost Project report included removing the requirement for shoreside monitoring or reducing coverage. In the Phase 2 Cost Project report, the authors note that removing or changing the requirements may "be the most feasible in terms of minimizing negative compliance and biological trade-offs" but would be the least effective in reducing costs to industry. The Phase 2 Cost Project noted that shoreside costs were estimated to be "0.7% of total whiting production gross revenue and 0.4% of total non-whiting production gross revenue" and therefore overall, may not provide much cost savings to industry compared to the benefit provided by catch monitors. It is important to consider that shoreside processors do not pay cost recovery (unless they own and operate a vessel) and therefore there may be additional cost savings to industry through reduced cost recovery fees if there was a reduction in workload (pending any adjustments that would need to occur to deal with sampling, catch accounting, etc.).

Another idea that has been posed by stakeholders is the use of EM for shoreside catch monitoring. While this would allow for continued verification of catch, there would need to be additional considerations made for how to collect any biological samples, particularly genetic samples from salmon. During the most recent catch share review, there were ideas proposed by industry to train staff at processing plants as one example of how to continue to collect this information.

While there could be some cost savings associated with changes to the shoreside monitoring coverage level, there are similar considerations that would need to be made as highlighted above

in the Observer/EM Coverage section (T1). The change from 100 percent catch accounting to something lower (potentially eliminated) would need to consider the potential for incentivizing discards at the dock.

T3: EDC Program Changes

The Economic Data Collection (EDC) program consists of mandatory annual surveys to be completed by Trawl Catch Share Program Participants. There are five current surveys[1] :

1. Mothership Operators
2. Catch Vessel Operators
3. Catcher-Processor Operators
4. First Receivers/Shorebased Processors
5. Quota Share Owners (starting in 2020 based on trawl follow-on actions from the first program review).

As described in the Phase 2 Cost Project:

> "EDC data are used to understand the economic effects of the groundfish catch share program including operating costs, revenues, vessel characteristics, and processing facility characteristics. The EDC program also collects data to evaluate the program's goals of providing for a viable, profitable, and efficient groundfish fishery; increased operational flexibility; minimizing adverse effects from an IFQ program on fishing communities and other fisheries to the extent practical; promoting measurable economic and employment benefits through the harvesting, processing, distribution, and support sectors of the industry. Having the ability to understand whether these goals are being met was an important consideration in the development of the EDC program."

The 2025 Catch Share Review described how participants bear direct costs through cost of time to prepare and subject as well as indirect costs of implementing the program (through cost recovery). In 2022, the average direct cost per respondent ranged from $52.42 (quota share owner survey) to $744.40 (shorebased processor survey) across vessel types and owners (Table 67 of the 2025 Catch Share Program Review).

The Phase 2 Cost Project report provided a summary of EDC costs and potential options to reduce costs relative to status quo. This included:

1. Reduced census (e.g., every other year to align with the biennial specifications process) for IFQ, MS, CP
2. Sample of stratified sectors for IFQ (e.g., select portion of participants each year to survey)
3. Census Active Participants instead of limited entry (LE) permit holders and first receiver site license (FRSL) holders

[1] Surveys can be found at https://www.fisheries.noaa.gov/west-coast/science-data/economic-data-collection-forms and https://www.fisheries.noaa.gov/west-coast/sustainable-fisheries/west-coast-groundfish-trawl-quota-share-owner-survey

The Phase 2 Cost Project report provided a summary of tradeoffs, including data loss and cost to participants and the administration. For example, moving from the current model to another method may reduce costs in the long term, but result in increased costs in the near term due to recoverable costs needed to implement the change. While cost savings could increase with less frequent collection or if moved to a random sampling approach, there is greater potential for data loss and the cost of analysis could rise without census data. Focusing data collection only on active participants could save costs because significant time is currently spent collecting information from permit/license holders who are not active in the catch share program. This idea is also recommended in NMFS Report 1. Industry representatives have also recommended the elimination of the EDC program- which was not examined in the Phase 2 Cost Project Report.

Overall, this item could look at changes to the frequency of collection of EDC and the population of participants required to fill out EDC. An additional option that could be examined with any future alternative is to simplify the amount of data collected by the EDC by adopting the national harmonized cost and earnings survey instrument, which simplifies and standardizes existing survey forms to minimize participant burden, establishes essential cost and revenue elements, and provides for cross-region analysis and comparisons.

T4: AMP

Adapted Management Plan (AMP) is a component of the catch share program where ten percent of the shoreside non-whiting quota shares (QS) and the corresponding quota pounds (QP) is not initially issued to QS holders and is set aside for adaptive management purposes. As noted in the 2025 Catch Share Program Review, "AMP was intended to address five goals: community and processor stability, conservation, unintended/unforeseen consequences, and facilitating new entrants (PFMC & NMFS, 2017). Specifically, the AMP was implemented to meet the Magnuson-Stevens Act (MSA) requirement to "include 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, including providing privileges, which may include set-asides or allocations of harvesting privileges, or economic assistance in the purchase of limited access privileges" MSA §303A(c)(5)(C). Moreover, the goals are supported by initial discussions surrounding the goals of the AMP: "the adaptive management program should be restricted to conservation, unforeseen and unintended consequences, and possibly facilitating new entrants" (PFMC Agenda Items I.5 & I.6, September 2010, Council meeting transcript). Despite these goals, these QPs, to date, have been passed through to QS holders proportionally based on the amount of QS they own (Nayani & Warlick, 2018; PFMC & NMFS, 2017)."

The most recent catch share review provided a summary of the discussions that have occurred about AMP- both in the development of the program and recent discussions (Section 2.9.1 of 2025 Catch Share Program Review). It notes that while changes to the program could cause disruptions, "discussions about the declining performance of the IFQ program warrant revisiting how to more effectively utilize AMP quota to meet its goals."

This item could look at potential changes to the program, including:

- Dissolve the AMP: permanently allocate the AMP quota to the respective QS owners.
- Issue to processors: Shorebased processors were only issued whiting QS at the initial implementation of the IFQ program, unless they owned a vessel/permit with history. Under

this item, AMP quota for non-whiting species could be allocated to processors (Note that "processors" would need to be defined to be a company, first receiver, etc.).

- Issue to active participants: Annually allocate an equal share of AMP quota pounds (QP) to IFQ vessel accounts associated with vessels that actively fished in the IFQ program during the prior fishing year and met some minimum threshold (i.e. number of pounds or number of deliveries) (see Supplemental Informational Report 3, April 2025).

- Auction: Auction the AMP and consider allowing participants to contribute their personal holdings to the auction. The auction would facilitate distribution of AMP quota to active vessels and provide a mechanism for individuals who might not otherwise make their quota available to efficiently lease their quota. As noted in the Catch Share Review, "The Council will consider the use of an auction or royalties as required by the Magnuson-Stevens Act, along with other nonhistory based methods when distributing quota share that may become available after initial allocation. This may include quota created when a stock transitions from overfished to nonoverfished status, quota not used by the adaptive management program, quota forfeited to "use it or lose it" provisions, and any quota that becomes available as a result of the initial or subsequent reviews of the program (Groundfish Fishery Management [FMP] Plan App E, page E-16).

- Deemed value pool: AMP quota would be put into a pool (i.e., not issued at the start of the year) and prices would be set for each quota category. The prices would be set at a level to discourage participants from targeting fish in excess of their quota holdings (quota they lease in or own) but mitigate the risks associated with lightning strikes. When the amount of a fisher's catch is more than the amount of quota held, the fisher would be issued a "deemed value invoice", based on the volume of overage x the deemed value price. The payment will be refunded if the fisher obtains quota on the open market to cover the overage. This system provides additional flexibility to fishers by ensuring that they can continue fishing until they can lease quota from the open market to cover their unexpected catches and may also increase the volume of quota put up for leasing because operations do not have to manage their individual risk in isolation.

T5: Mothership Whiting Utilization

During the previous Catch Shares Review process, issues were identified regarding the whiting sectors, and particularly the Mothership (MS) sector. However, during the development of the follow-on actions, the Council's ad hoc Community Advisory Board (CAB) did not prioritize alternatives related to this issue. In 2018, during the consideration for follow-on actions from the first program review, the Council asked the MS industry to come back with solutions after a request to change the processing cap. The MS sector provided a report on a suite of potential management measures that may help address the broader issue of underutilization of the MS sector allocation (Agenda Item G.4.b, Supplemental Public Comment 2, November 2018). The Council ultimately prioritized the MS utilization issues in 2019. The issue was broadened over time, and in 2021, the Council recommended a suite of changes as follows:

1. Whiting Season Start Date (for all whiting sectors): Move the whiting season start date from May 15th to May 1st. Move all administrative deadlines associated with the season start date to 45 days prior to May 1st.

2. Mothership Processor Obligation: Remove mothership processor obligation from regulation.
3. Mothership Processor Cap: Remove mothership processor cap of 45 percent from regulation.
4. Mothership Processor & Catcher-Processor Permit Transfer: A vessel can be registered to a mothership permit and a catcher-processor permit in the same calendar year. A vessel could have unlimited transfers.

The proposed rule (87 FR 55979) for these regulatory changes was issued on September 13, 2022 and the final rule (87 FR 77000) was issued on December 16, 2022 with changes effective January 17, 2023.

Recent attainment of the MS allocation has averaged 47 percent (2021-2025), with 2025 having the highest attainment percentage since 2016 (*Figure 1*). The 2025 Catch Shares Program Review described trends for the MS sector participants (both MS catcher vessels [MSCVs] and MS processors). While variable cost net revenue (VCNR) and total cost net revenue (TCNR) have increased for MSCVs since prior to catch shares, these indicators declined from 2020 to 2023- which had the lowest observed median VCNR over the time series (2009-2023) due to low revenue. For MS processors, there was a similar trend of decline from 2020 to 2023. Profit margins for the MS sector were estimated at zero percent from 2020-2023.

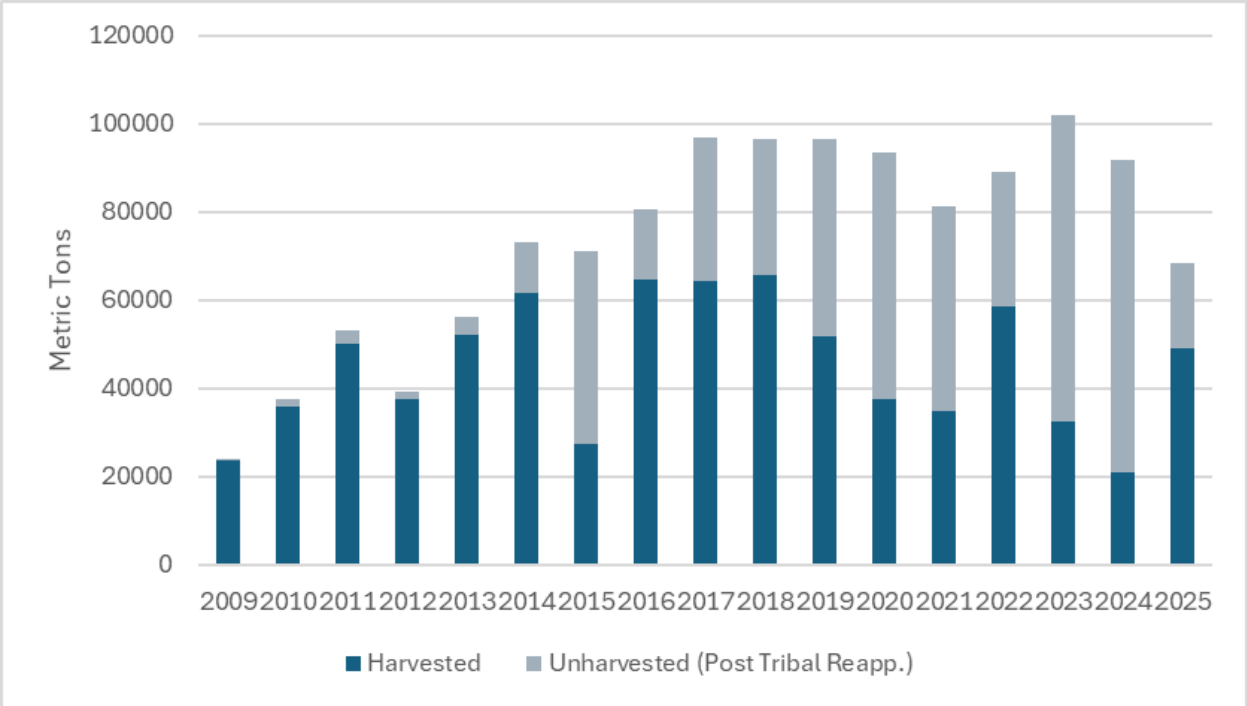


Figure 1. MS Whiting Attainment of Post Reapportionment Allocations (Source: FishEye 2009-2023, PacFIN 2024-2025)

At the public hearings for the most recent catch share review, there were recommendations to look at additional changes for the MS sector to improve attainment and economic performance of the fishery. One idea (which was also brought up in 2019, but without consensus), was to allow a MSCV to deliver whiting shoreside if there was no MS available to process the fish. The fish

would be accounted for under the MS allocation, not the shoreside allocation. While this could provide additional opportunities to MSCVs to deliver whiting, there would need to be considerations on how bycatch would be accounted for, impacts to whiting allocation framework, among other things.

This item could consider this allowance, and any other ideas, that are intended to improve the economic performance of the MS sector.

T6: Shorebased IFQ Accumulation Limits

There are several accumulation limits within the structure of the trawl catch shares program. For the IFQ sector, there are limits for quota share and quota pound usage (i.e. vessel limits) for both individual species and the aggregate non-whiting limit (Table 1). QS and individual bycatch quota (IBQ) limits are evaluated based on individual and collective "own and control" rules which are outlined in 50 CFR 660.140(d)(4). While ownership can be determined through ownership interest forms, "control" can be difficult to monitor and enforce. Additionally, ownership interest is only collected down to a 2 percent level. Vessel limits are assessed on the vessel account level and are calculated as all QPs transferred into a vessel account minus all QPs transferred out.

Table 1. Shorebased IFQ Accumulation Limits

IFQ Category	Annual QP Vessel Limit (%)	QS and IBQ QS Control Limit (%)
Arrowtooth flounder	20.0%	10%
Bocaccio rockfish South of 40° 10' N.	15.4%	13.2%
Canary rockfish	10.0%	4.4%
Chilipepper rockfish South of 40° 10' N.	15.0%	10%
Cowcod South of 40° 10' N.	17.7%	17.7%
Darkblotched rockfish	6.8%	4.5%
Dover sole	3.9%	2.6%
English sole	7.5%	5%
Lingcod North of 40°10' N.	5.3%	2.5%
Lingcod South of 40°10' N.	13.3%	2.5%
Longspine thornyhead North of 34° 27' N.	9.0%	6%
Minor shelf rockfish North of 40° 10' N.	7.5%	5%
Minor shelf rockfish South of 40° 10' N.	13.5%	5%
Minor slope rockfish North of 40° 10' N.	7.5%	9%
Minor slope rockfish South of 40° 10' N.	9.0%	6%
Other flatfish	15.0%	10%
Pacific cod	20.0%	12%
*Pacific halibut (IBQ) North of 40° 10' N.	14.4%	5.4%
Pacific ocean perch North of 40° 10' N.	6.0%	4%
Pacific whiting	15.0%	10%
Petrale sole	4.5%	3%
Sablefish North of 36° N.	4.5%	3%
Sablefish South of 36° N.	15.0%	10%

Shortspine thornyhead	9.0%	6%
Splitnose rockfish South of 40° 10' N.	15.0%	10%
Starry flounder	20.0%	10%
Widow rockfish	8.5%	5.1%
Yelloweye rockfish	11.4%	5.7%
Yellowtail rockfish North of 40° 10' N.	7.5%	5%
Non-whiting Groundfish Species	3.2%	2.7%

With regards to QS control limits, the 2025 Catch Share Review highlighted the following take homes:

- Number of individuals within 90 percent of aggregate non-whiting QS control limit decreased since the last review.
- Number of QS holders over 90 percent of species-level QS limit has decreased from 30 in 2016 to 10 in 2025.

As a part of the first catch share program review, the Council recommended considering changes to the overall non-whiting QS control limit and the weighting calculation. This item has been on the workload and new management measures list since that time pending research from the Northwest Fisheries Science Center. While this research was never published, the preliminary conclusion was that there are limited mechanisms in which excess QS ownership can be used to exert market power and therefore QS limits have limited use. Therefore, the Council may want to consider if this item should remain on the list and if QS limit changes should be considered.

Regarding vessel accumulation limits, the most recent catch share review noted several key takeaways including:

- Annual QP limit trends are similar to previous review, with the number of vessels at 90 percent for widow and Petrale sole increasing.
- Petrale sole, sablefish north, bocaccio rockfish south of 40° 10’ N. lat., chilipepper rockfish south and widow rockfish were the only species where three or more vessels reached 90 percent.

Given that the vessel limit trends are similar to when they were analyzed under the original 5-year review (PFMC, 2017 p. xxiv)), the conclusions drawn in that analysis are unchanged. That report suggested that the data indicate:

> “…that annual vessel-use quota pound limits do not significantly and directly contribute to low attainment (3.1.3(a)). However, these analyses do not assess whether vessel limits lead to conservative fishing practices to avoid constraining species that result in decreased attainment, prevent the development of boutique target fisheries, or discourage harvesters from investing in larger scale operations. Fear of an unanticipated high bycatch event, or “lightning strike,” may change behavior and decrease attainment rates because the consequences are so high. For example, if a lightning strike were to occur, vessel limits may force that vessel out of the groundfish fishery for many years.”

As a part of the follow-on actions, the Council may want to consider revising the accumulation limits. Accumulation limits potentially impact economies to scale, which the 2025 Catch Share Review identified as an issue with regards to the program not meeting its economic goals and

objectives (see Conclusion 2 in the 2025 Catch Share Review). In other words, higher volumes of production per boat will tend to reduce the per pound cost of that production and therefore changing the accumulation limits may result in greater profitability of some vessels and change the way in which economic benefits of the program are distributed across the industry. As one example/consideration, during the most recent hearings, there were discussions on changing the annual vessel limits to allow for vessels to "specialize" in a particular species catch. Additionally, it has been proposed that annual vessel limits may be changed to a routine management measure for the biennial specifications process.

T7: Set-Aside Management

When the Council designed the catch share program (Amendment 20), it recommended that bycatch caps be established for four overfished species taken in the MS and CP at-sea whiting sectors and that the co-ops for these sectors be held responsible for ensuring that their members did not exceed these caps. The amounts of fish available for these caps were specified in the FMP—for darkblotched, Pacific ocean perch, and widow—or determined through the biennial specifications process—for canary. All four stocks were overfished at the time of Amendment 21 and the latter three were considered trawl-dominant stocks and had formal allocations specified in the FMP via formulas. Each at-sea sector was allocated a specific amount with an expectation that the at-sea cooperatives managed their operations to not exceed that value. If they exceeded or were projected to exceed the allocations for these stocks, one of both of the sectors would be closed automatically (50 CFR 660.60(d)(1)(ii)). Each at-sea sector exceeded their initial allocation of darkblotched rockfish at one time (CPs in 2011 and MS in 2014). The 2014 overage resulted in an emergency Council meeting in order to reopen the fishery since the allocation overage was not expected to result in a conservation concern, jeopardize the annual catch limit (ACL), or adversely affect other sectors. To provide more flexibility, reduce the risk of inseason closure, reduce operational costs, and take into account that ACLs for these stocks were generally under attained, the Council moved to using set-asides rather than allocations for the four stocks (and removed the formula for setting the values for darkblotched, widow, and Pacific ocean perch) through Amendment 21-3 and 21-4 to the FMP. By moving to set-aside management, it was posited that it might provide flexibility to the whiting sectors to continue fishing in years were bycatch exceeded those amounts- as long as the harvest specifications were not in jeopardy and there were no impacts to other fisheries or conservation concerns. This was particularly in light of other constraining stocks like sablefish or Chinook salmon that were resulting in co-ops having to prioritize which stocks to avoid and finding it difficult to maximize avoidance of all of them at the same time.

In recent years, there have been several discussions at the Council regarding at-sea set-aside overages and the expectation that the sectors were to stay within those set-asides. However, as noted in Amendment 21 FEIS (PFMC, 2010):

> In the trawl rationalization program, several species/sector combinations are not scheduled to be managed using IFQs or bycatch limits. It is these sector/species combinations where set-asides are necessary and where allocations are not necessarily appropriate. The perspective taken to establish a set-aside is different from the perspective taken for establishing allocations. Since set-asides are not accompanied with a firm and direct management tool, the appropriate amount of fish attributed to a set-aside is best examined as an amount that can reasonably accommodate the incidental amount of fish that a sector

could take. This differs from an allocation where a firm catch level is established that is a direct target, and that target may be lower than historic catch amounts.

An expectation that set-asides would be reviewed and adjusted as needed through the biennial harvest specifications process, with inseason management only if specific criteria are met, is defined at 50 CFR 660.150(c)(2)(i)(B)(1) and 50 CFR660.160(c)(3)(i):"At-sea set-asides of non-whiting groundfish species will be managed on an annual basis unless there is a risk of a harvest specification being exceeded, unforeseen impact on other fisheries, or conservation concerns, in which case inseason action may be taken. Set-asides may be adjusted through the biennial specifications and management measures process as necessary."

Depending on the intent of how the at-sea sectors should account for or manage bycatch, the Council could consider through the trawl follow-on actions whether it wishes to change the means by which access to these stocks is provided to the at-sea sectors. If there is an expectation that the at-sea sectors are to remain within the set-aside values, then another accountability measure should be used to clarify that intent to the sector, the Council, and the public (such as a harvest guideline). As described in Agenda Item C.7, the Washington Department of Fish and Wildlife is proposing a change from an at-sea set-aside to a performance standard metric for the at-sea sectors for canary rockfish as a part of a holistic change in the Council's risk tolerance. This approach, in combination with set-aside management, could be examined for all species with at-sea set-asides noting that the proposal would need to be revised as described in Agenda Item C.7.a, Supplemental NMFS Report 1. If there is not an expectation that the sectors remain within the set-aside and that the set-aside amount is truly intended to be an estimate of the mortality expected to be taken in the fishery, then a set-aside may continue to be appropriate. This decision may differ by species-similar to the rationale used under Amendment 21 to create allocations (rather than set-asides) for the four species discussed above. Additionally, the Council may wish to consider whether the set-asides or other management measure values should be set for the sector as a whole (as currently done for set-asides) or for the individual at-sea co-ops (as was done for the Amendment 21 allocations). When the Council changed from allocations to set-asides for Amendment 21-3 and 21-4, the Council elected to combine the once sector-specific values into a single value like the remainder of the set-asides. With a single set-aside value, there is additional flexibility that may help accommodate significant inter-annual variability in each sector's bycatch for various species.

T8: Regulatory Changes

There are several regulatory or administrative items that the Council could consider, such as those included in NMFS Report 1. Specific ideas that have come up during the trawl catch share review process include:

- Allow vessels to change declaration at sea for vessels fishing midwater rockfish to shoreside whiting, and vice versa.
- Change the fishing year from January 1 to December 31 to May 1 to April 30. The idea behind this item would be to shift the fishing year and quota allowances so that non-whiting quota that is held by whiting vessels to cover bycatch (particularly in the fall) could be made available to non-whiting vessels in the spring. While this could provide additional opportunity in the IFQ sector, there would need to be considerations made on how this

would be accounted for against ACLs (which are set for January 1-December 31) or if the broader groundfish year would need to be reconsidered (i.e., ACLs would shift from January 1 to May 1 start date), which would be a much larger impact and would need to consider impacts to all groundfish fisheries.

T9: IFQ Quota Species

Currently, there are 29 IFQ species/complexes that are managed with quota (see Table X above).[2] However, as noted in the Trawl CS Review, from 2011-2023, only 12 non-whiting stocks have had at least 50 percent attainment in a year. Given most of the low attainment stocks are also considered "trawl dominant" with an allocation scheme of 95 percent trawl, 5 percent non-trawl, these stocks also have a low ACL attainment (see 2025 Intersector Allocation Review).

As noted above, vessels are responsible for 100 percent catch accounting for all IFQ species, including discards. Species without IFQ quota are managed via trip limits as needed (Table 1b (North) and Table 1b (South) to Part 660, Subpart D, Title 50). Under this proposal, the number of IFQ species could be reduced to those that are targeted or key co-occurring species and the remainder would be switched to trip limit management.

Species with limited to no targeting or low attainment, or potentially constraining species could be transitioned to trip limit species as appropriate. On one hand, this may promote more flexibility and the burden of managing complex multispecies portfolios would be reduced for fishers. However, it would likely result in more inseason management (i.e., changing trip limits) and the non-whiting aggregate limits would likely need to be reconsidered. Specifically, if constraining species were considered for this item, it would likely result in additional management and workload inseason compared to a low attainment or rarely encountered species. Finally, QS and QPs are an asset to participants and by shifting to a non-IFQ species, there could be a loss in assets.

If the Council elects to move this idea forward, it is, and will be, important to consider the rationale behind the identification of these stocks as IFQ during the development of Amendment 20:

> "The coverage of species with quota is intended to act as a catch control tool to ensure that management targets are adhered to, that other sectors are not affected by higher than expected catch levels in the trawl fishery, or both. One rationale is that the lack of IFQ coverage (or some other management tool) of some species may lead to a case where trawl vessels target uncovered species in unchecked quantities. However, this is not necessarily the case, especially for those species that may be inaccessible to groundfish gear, or for those species that are constrained by the catch of other species. Implicit in this concept is that not every species in the Pacific Ocean that may be encountered by commercial groundfish vessels has to have catch managed through a catch control tool in order to stay within management targets. Many species may be encountered in such small volumes that their management through IFQ could be unnecessary and lead to administrative costs that are not necessary for successful management of fishing mortality. Species where it may not be necessary to cover catch with quota include infrequently encountered nongroundfish species such as sardines, Ocean Sunfish, and Albacore tuna. However, it may also be unnecessary to cover many groundfish species with quota because the amount of those

[2] Note that through Phase 2, starry flounder will no longer be an IFQ species.

species encountered by trawl vessels is small relative to management targets." (Appendix A to Amendment 20)

Requiring IFQ for every species—especially those rarely caught—can create significant risk for trawl harvesters if there are small amounts of quota available and/or that quota is very expensive to attain. This can occur without offering much conservation benefit (i.e., the stock could be managed sustainably without needing IFQ, or the fishery catches a small proportion of the ACL thus not needing much in the way of management). Rarely encountered species tend to have very small quota allocations and suffer from thin IFQ markets (infrequent trades which make price signals noisy or unknown). Because prices aren't well-established or quota is unavailable, harvesters may have difficulty negotiating a fair price or finding quota to purchase if they need it. While quotas for most species are higher than those that were in place when the IFQ program was implemented, there continues to be a risk (to individuals or to the fleet) if an allocation to the sector or a vessel is of a small size relative to the overall abundance or encounter rate of the stock. In such a case, a single trawler could unintentionally catch enough of that species to exceed the sector's total quota. While this is less likely to happen under current ACLs, an individual vessel could lose future opportunities (until it's out of deficit) or the fleet could be restricted from accessing key grounds (e.g., implementation of a block area closure if needed to prevent exceedance of an ACL).

Removing stocks from IFQ management would need to also consider the impacts to overall catch accounting and associated uncertainty, specifically if the Council were to elect to change the monitoring coverage (T1 and T2), and the impacts of trip limit management versus IFQ management.

T10: Cost Recovery

The Magnuson-Stevens Act requires NMFS to collect fees to recover the costs directly related to the management, data collection and analysis, and enforcement of a limited access privilege program (16 U.S.C. § 1854(d)(2)), also called "cost recovery." This fee is calculated by sector as either the annual ratio of direct program costs (DPC) to total gross ex-vessel value or as 3 percent of the total gross-ex-vessel value that year (whichever is lower). Cost recovery is charged based on landings, so it is generally only paid by active participants. In other words, those participants who own permits or quota but do not fish are not responsible for paying cost recovery.

As noted in the most recent catch share review and the 2026 Cost Recovery Report (Informational Report 1), the shorebased IFQ program has paid the maximum of 3 percent in every year except 2019 and 2021 whereas the CP sector has been less than one percent except for 2014 (first year of collection) and the MS sector fee has varied, but in 2025 and 2026 are at 3 percent.

In consideration of changes to the cost recovery program, this item could look at:

- Expansion of cost recovery to all participants (i.e., include inactive participants currently not paying into the 3 percent).
- Other ways of collection (see Supplemental Informational Report 3, April 2025). For example, other Council's catch share programs pay on a different timeline (e.g., every quarter), which may better align fees with the current fishery.

Packaging

With the exception of gear switching and items that did not get prioritized for the follow-on actions package, the first catch shares follow-on action contained a multitude of items intended to achieve various goals. The Council could elect to move forward all items at once, or split items into various packages as some items may require more analysis due to the complexity or contentiousness of the items (i.e., observer coverage change or AMP) compared to other items.

For example, one package could move forward the trawl gear EFPs and include a small regulatory change. The recommendation is the allowance for a change in declaration at sea for vessels fishing midwater gear between the midwater rockfish and shoreside whiting fisheries, and is present in Agenda Item C.5, NMFS Report 1 and has been brought up by stakeholders.

The Council should also consider bringing forth items currently on the list- B2 (increasing IFQ carryover from 10 percent) and B3 (aggregate non-whiting QS control limits and individual species weighting) if these are still of interest. Depending on the scope of the items being considered, Council staff could bring back additional information on the items prioritized within the broader trawl follow-on package at the next meeting and further ideas for packaging of items. It is possible that some items may have a greater amount of complexity (i.e., reducing observer coverage) or controversy (i.e., AMP) and may be on a longer timeline compared to other items that may be more administrative or have less complex analyses associated.

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