NMFS REPORT ON IMPLEMENTATION OF GEAR SWITCHING ALTERNATIVES

The National Marine Fisheries Service (NMFS) provides the following information and advice on considerations related to the timing, administrative complexity, and cost of implementing the Pacific Fishery Management Council's (Council's) June 2022 alternatives[1] for limiting gear switching for northern sablefish in the trawl Individual Fishing Quota (IFQ) sector, as the Council considers selecting a Preliminary Preferred Alternative (PPA) at its November 2022 meeting.

This report builds on and updates information provided to the Sablefish Area Management and Trawl Allocation Attainment Committee (SaMTAAC) in 2019 and 2020[2]. General comments below are followed by a description of tasks anticipated at this time to be necessary for initial implementation and ongoing administration. We discuss some challenges related to each and the estimated relative workload and cost for each action alternative. The No Action alternative is not addressed in this report as it would not require any action to implement.

1. Timing

Once the Council takes final action, we project approximately 18 months to complete the tasks necessary for initial implementation of any action alternative. This includes time needed for any remaining analysis, rulemaking, database modifications (necessary for any modifications to permits and/or the quota share (QS)/quota pound (QP) system), Paperwork Reduction Act (PRA) approval (necessary for any modifications to permits or requests for information from participants). A January 1 implementation date will likely be necessary, due to the timing of QP issuance and the annual nature of the proposed gear-switching endorsement limits. We may also need to obtain funding for database modifications, which could further extend implementation timelines due to the timing of funding cycles.

If the Council selects a preliminary preferred alternative (PPA) in November 2022 and a final preferred alternative (FPA) in April 2023, then pending availability of grants to support any necessary database modifications, the earliest the action could be effective would be January 2025. Post-season QP trading may add a degree of complexity to annual QP reconciliation that will need to be considered and could affect timing of alternatives that deal with QS and/or QP.

[1] Informational Report 1, September 2022
[2] SaMTAAC Agenda Item E.3 NMFS Report, October 2019 and SaMTAAC Agenda Item B and D.1 NMFS Report, April 2020

We emphasize the uncertainty in this projection – while the January 1st at least eighteen months after Council final action is our best estimate at this time, unforeseen needs or complications in the analysis, rulemaking, database programming, or other steps could extend the timeline.

2. Complexity

The gear switching action alternatives all have substantial complexity, varying in degree and nature (e.g., the criteria to qualify for a certain level of future gear switching opportunity, what that level is for qualifying participants, whether/how a participant's opportunity might change in the future, etc.). We recognize that this complexity stems from a desire to achieve diverse and sometimes competing objectives in the Council's Purpose and Need for this action, the SaMTAAC guiding principles, and goals and objectives of the West Coast Groundfish Fishery Management Plan and Amendment 20 for the Trawl Rationalization Program. While complex alternatives may be a means of balancing multiple objectives, they may also be difficult for the public and decision-makers to understand and evaluate.

Complexity also impacts workload and cost. In general, implementation of alternatives that are more complex, and/or those requiring ongoing annual or continuous active tasks by NMFS, will have a higher workload and cost burden than alternatives which are simpler and/or require less or no ongoing administration. In addition, more complex alternatives may also have an increased risk of future new Council and NMFS workload as the potential for "getting something wrong" is higher with more detailed and complex alternatives, which could necessitate revisiting the action by the Council after implementation to consider revisions.

We encourage further consideration of the tradeoffs related to the complexity of the alternatives.

3. Cost

The alternatives have costs to industry and NMFS. NMFS tasks necessary to evaluate, implement, and administer the alternatives are incremental, i.e., subject to cost recovery. Gear switching action will increase the total incremental costs in the IFQ sector. This will result in direct costs to industry when the annual cost recovery fee percentage is less than the limit of three percent of ex-vessel value. Because the annual IFQ cost recovery fee percentage has frequently been at or near three percent, gear switching could increase total incremental costs above that limit, and NMFS would need to cover any excess. This could lead to delays in implementation if sufficient funds are not available to NMFS, and/or a workload conflict with other tasks that support the fishery

As noted above, two general aspects of the alternatives have a significant impact on costs:

Complexity: The more detailed specifications (or "moving parts") within an alternative, the greater the NMFS workload—and therefore cost—associated with analysis, rulemaking, responding to public comments, making the necessary data system changes, and related tasks.

Recurrence: Alternatives in which most of the workload is one-time are likely to have a lower cost compared to those that would require new ongoing tasks by NMFS that would be repeated every year, continuously, or on an ad hoc basis. At this time, Alternative 1 (Gear-Specific Quota Share) appears to fall into the first category (primarily one-time workload), and Alternative 2 (Gear-Specific Quota Pounds) and Alternatives 3 and 4 (Gear Switching Endorsements) would likely fall into the second (with varying degrees of ongoing workload depending on options selected by the Council). Each alternative is discussed in greater detail below.

We recommend the Council consider the complexity and recurrence aspects of each alternative and seek the most efficient approach possible to meet the purpose and need for action and minimize costs to participants and the public.

4. Implementation Tasks and Considerations

The following sections outline the general NMFS tasks that we anticipate will be necessary to implement each of the current action alternatives, and describes any significant issues that we are aware of. We have attempted to list the steps in logical order but some may occur in a different sequence and/or concurrently. This information on tasks and challenges should be considered a preliminary and incomplete view – it represents our best current assessment at this time, but in working through actual implementation we expect to discover new tasks and challenges or other differences from the descriptions below.

All Action Alternatives

Some of the necessary tasks are process steps common to all alternatives (Table 1). We expect workload associated with these tasks to be high for any action alternative.

Table 1. Implementation and administration tasks common to all alternatives

Task	Recurrence
1. Assist in completing analysis and providing information to support Council selection of PPA and FPA (Council staff lead)	One-time
2. Draft regulatory language; coordinate review within NMFS, NOAA General Counsel, etc.	One-time
3. Complete all tasks necessary to comply with other applicable laws and Executive Orders (e.g., PRA)	One-time
4. Develop and publish Proposed Rule	One-time
5. Consider and respond to comments on Proposed Rule	One-time
6. Develop and publish Final Rule	One-time
7. Develop and post Compliance Guide	One-time

Alternative 1. Gear Specific Quota Shares

This alternative would be a one-time conversion of all northern sablefish QS to trawl-only QS and any-gear QS. There would be no change to the total percentage of northern sablefish QS owned. QS owners would receive trawl-only and any-gear QS in proportions determined by Council-specified criteria. Once the initial QS conversion and distribution occurs, gear-specific quota pounds (QP) will be issued annually to quota share accounts (QSA) for each type of QS.

Table 2. General implementation and administration tasks unique to Alternative 1 (Gear-Specific Quota Share)

Task	Recurrence
1. Identify QS owners to be categorized by participant type (apply "individual or collective" approach)	One-time
2. Evaluate QS owners against Council-selected criteria to determine participant type: "gear-switching", "non-gear-switching", or "other"	One-time
3. Create new IFQ QS categories for northern sablefish: trawl-only and any-gear. IFQ database changes required.	One-time
4. For each qualifying QS owner, determine QS eligible for conversion to any-gear, based on participant type and QS owned on control date	One-time
5. Notify QS owners of gear-specific QS allocations	One-time
6. Issue Initial Administrative Determinations (IAD),	One-time
7. Review and respond to IAD appeals, if any	One-time
8. Issue new QS (trawl-only and/or any-gear) to QS accounts based on eligibility determination. Adjust for unreported/joint ownership (i.e., QSA where reported ownership totals to more or less than 100%). Convert AMP QS to trawl-only and any-gear in proportions matching the selected QP Allocation Split option	One-time
9. Track landings by gear type and debit appropriate type of QP. NMFS intends to automatically use trawl-only QP first whenever applicable, then use any-gear QP if necessary trawl-gear landings when the vessel account has both types of QP.	One-time and continuous
10. Monitor new QS and QP categories against accumulation limits.	One-time and continuous

Modifying the current IFQ database to implement this alternative would require redesignating and redistributing the current northern sablefish QS as two new QS types: Sablefish North of 36º N- any-gear QS, and Sablefish North of 36º N- trawl-only QS.

The Northwest Fisheries Science Center's (NWFSC's) Scientific Data Management (SDM) team, responsible for the IFQ database, estimates that Alternative 1 would have a high total startup workload and cost, including for time to code back-end database changes, implement web application changes, validate QP allocation, and test the web application.

A benefit of Alternative 1 is that it has few ongoing costs after initial development and implementation.

We note a risk of delay inherent in this alternative: After evaluating all QS owners against the Council-specified criteria, NMFS would provide QS permit owners with Initial Administrative Determination (IAD) notices on the amount of trawl-only QS they are eligible to receive. QS owners may then appeal the IAD. All new QS allocations must be settled before quota pounds (QP) are issued at the start of a year; therefore, the time required to address appeals could delay implementation and fleetwide issuance of gear-specific QS until January 1, 2026. We do not see any modifications to the alternative that would reduce this risk.

Alternative 2. Gear Specific Quota Pounds

This alternative would annually issue QP as trawl-only or any-gear according to a gear-specific ratio assigned to each QSA that is based on Council-specified criteria; QS would remain unchanged. The ratios may be different for different QSAs. QSAs owned by qualifying gear switching participants would be eligible to receive 100 percent any-gear QP up to the amount of northern sablefish QS owned on the control date (QP for any excess QS would be issued in the standard ratio; definition follows.) For QSAs not owned by qualifying gear-switching participants, all QP will be issued in the standard ratio. The standard ratio will be calculated such that the total amount of any-gear QP issued sector-wide would be 29 percent of the trawl allocation. The standard ratio will be predominantly trawl-only but with some any-gear QP. The standard ratio will be adjusted each year as needed to maintain the overall Council-specified QP Allocation Split Option (71 percent trawl-only and 29 percent any-gear, or some other amount).

There are several aspects of this alternative that appear to require Council clarification on intent and/or confirmation of staff interpretations. In addition, at this time we are unclear on some of the implementation steps and needs related to Alternative 2, and we are less certain of the tasks and issues described here than for the other alternatives. We will provide the Council with updated information and advice to the extent possible at the November meeting.

Table 3. General implementation and administration tasks unique to Alternative 2 (Gear-Specific Quota Pounds)

Task	Recurrence
1. Identify QS owners to be categorized by participant type (apply "individual" or "collective" approach)	One-time
2. Evaluate QS owners against Council-selected criteria to determine qualification as a "gear-switching participant"	One-time
3. Determine "standard ratio" each year (determine total QP eligible as any-gear based on total amount of QS owned by qualifying participants on the control date who have and the Council-specified sector-wide proportion	Annual
4. Determine gear-specific QP ratio for each QS account based on Council-specified factors	Annual
5. Preliminary notification of participant status and gear-specific ratio	Annual
6. Issue IAD to notify QS owners of account ratio determinations	Annual
7. Review and respond to IAD appeals	Annual
8. Distribute gear-specific QP to QSA based on each QSAs gear-specific ratio for that year	Annual
9. Track landings by gear type and debit appropriate QP type. E-ticket system changes needed. NMFS intends to automatically use trawl-only QP first for trawl landings, then any-gear QP if necessary when the vessel account has both QP types.	One-time and continuous
10. Monitor new QP categories against accumulation limits if needed.	Continuous

Alternative 2 would require a new method to calculate and issue two different QP types based on one QS allocation for each QS permit. There currently are no other IFQ species for which this process has been used.

Similar to Alternative 1, the NWFSC SDM team estimates that Alternative 2 would have a high total startup cost and workload, including for time to code back-end database changes, implement web application changes, validate QP allocation, and test the web application.

However, Alternative 2 appears to require the most complex and annually recurring tasks beyond initial implementation compared to the other alternatives. Annual calculation and issuance of two QP types from one QS allocation for each QS account would compound with other annual QS

maintenance and issuance tasks carried out by NMFS WCR Permits and Monitoring Branch and the NWFSC SDM program. In addition, if the sector-wide proportions of trawl-only and any-gear quota pounds is fixed at a constant ratio (for example, 71% trawl-only and 29% any-gear), then at this time we believe that upon expiration of any QSA that does not have the standard ratio, standard ratio and the individual ratio of every other QSA would need to be recalculated for the following year in order to maintain the fixed overall sector proportions. This could present a significant challenge due to the time needed for the ratio reviews/recalculation, notification of QSA owners, issuance of QP, and perhaps other factors. This issue requires further examination and we will provide updated information on whether/how it could impact overall feasibility of Alternative 2 at the November meeting.

As with Alternative 1, issuing new QP allocations would also require IADs and an appeals process. NMFS would notify QS permit owners of any change in their annual Sablefish North QP allocation (i.e., change in the gear-specific ratio assigned to their QSA), and the method used by NMFS to calculate the new QP allocations. The appeals process could delay full implementation of Alternative 2 until January 1, 2026.

Alternative 2 would have the highest burden to initially implement and routinely administer. While recognizing the intent behind Alternative 2 to avoid creating permanent gear-specific quota shares, given the implementation and administration burden and cost NMFS recommends the Council consider Alternative 1 over Alternative 2, if a gear-specific quota approach is preferred over trawl permit endorsements or other mechanisms for limiting gear switching.

Alternatives 3 & 4- Gear Switching Permit Endorsement

These alternatives would create a new gear-switching endorsement issued to qualifying trawl limited entry permits (LEPs) that would allow a specified annual level of gear-switching for each LEP. Qualification for the endorsement and annual gear-switching limits unique to each endorsement would be based on criteria selected by the Council. Vessels registered to a non-endorsed LEP would all have the same an annual vessel gear-switching limit. Options address expiration, transferability, and overages.

The alternatives are addressed together since implementation tasks and issues are expected to be the same for both, despite differences in the qualifying criteria.

Table 4. General implementation and administration tasks unique to Alternatives 3 & 4 (Gear-Switching Endorsements)

Task	Recurrence
1. Determine which permits meet endorsement criteria	One-time
2. Calculate individual limit for each endorsed permit and establish in data system	One-time
3. Preliminary notification of qualifying status and endorsement limits	One-time
4. For Alt. 4, process for designation of a LEP for endorsement by each qualifying vessel owner/group	
5. Issue IADs	One-time
6. Review and respond to IAD appeals, if any	One-time
7. Issue endorsements, associate with trawl LEPs	One-time
8. Develop mechanisms to associate all gear-switched catch with a permit and vessel	One-time
9. Monitor gear-specific catch associated with each endorsed permit to ensure GS limit not exceeded	One-time and continuous
10. Monitor gear-specific catch by vessels registered to permits without a gear-switching endorsement to ensure annual gear-switching limit for vessels not registered to endorsed permit not exceeded	One-time and continuous
11. Develop and utilize process for both parties to acknowledge remaining annual gear-switching limit if permit (or vessel) transferred mid-year	One-time and as-needed
12. Database changes to address quota pound overages, carryover, and/or other quota actions	One-time
13. If endorsements expire, develop and apply process/timeline to retire permits that meet expiration criteria	One-time and as-needed

At its most basic, an endorsement is a straightforward concept and common approach in allocating fishing opportunity. Determining qualifying participants and issuing endorsements are one-time tasks. Alternatives 3 and 4 as presented include additional features or options that add ongoing workload and cost.

Alternatives 3 and 4 would require database changes to store new endorsements, addition of endorsements to the trawl LEP Certificate, and modification of the IFQ database to process fish tickets and provide reporting on landings by LEP by gear type. Changes to the electronic fish ticket system would be required.

Monitoring and enforcement of individual gear switching limits for each endorsed permit would be necessary, including when permits are transferred between vessels within a year. This would require programming and process changes to enable inseason tracking of gear-switched landings of northern sablefish against individual endorsed permit limits. The data system modifications and related tasks would be a new recoverable task prior to implementation. At this time, we have not yet determined how much work would be needed on a continual basis after implementation to accomplish the inseason monitoring against relevant limits.

In addition to tracking gear-switched catch by trawl LEP, tracking gear-switched catch against a standard annual gear-switching limit (for example, 10,000 lbs) *for vessels when they are not registered to an endorsed trawl LEP would be required*. This annual allowance for vessels when not fishing with an endorsed trawl permit introduces a significantly complex programming and process task when combined with the LEP tracking need, especially since a vessel could fish with both an endorsed and non-endorsed LEP in a year. This allowance was, in our understanding, intended to avoid creating regulatory discards for vessels incidentally encountering sablefish when targeting other species with non-trawl gear (an infrequent occurrence), and to maintain a low level of gear-switching opportunity for any participant. In light of the substantial administrative complexity of this feature, we encourage further exploration of its need, benefits, and potential alternatives.

Specifying individual gear-switching limits unique to each endorsement, which we recognize is intended to reflect each qualifying participant's gear-switching history, adds moderate complexity and workload compared to a consistent limit for all endorsements. We encourage the Council to evaluate whether unique endorsement limits are necessary to achieve objectives.

If the Council selects the option in which gear-switching endorsements expire upon addition of a new owner to the trawl LEP ownership, it will be necessary to establish a process for retiring endorsements when the expiration criteria are met. Although trawl LEPs can be bought and sold throughout the fishing year, they are renewed annually and ownership information is collected at that time. The most logical approach to retire endorsements is for that to occur upon renewal of a permit when there is an ownership change that triggers expiration. This is expected to be relatively low workload.

In the case of gear-switching overages, reducing endorsement limits in the following year would be difficult and could be made even more complicated by transfer of permits to different vessels. This added complexity and relatively high workload does not appear necessary on top of the basic enforcement outcome of a notice of violation and fine to achieve an appropriate disincentive to

exceed the gear switching limit. Punitive measures to reduce gear-switching opportunity in the year following an overage do not prevent future overages from occurring, reduce the burden of ongoing enforcement, and are not necessary for any resource conservation purpose. We encourage the Council to consider whether the option to reduce an endorsement's gear-switching limit the following year by the amount of an overage can be eliminated.

Alternatives 3 and 4 might indirectly result in a restriction on the opportunity to harvest stocks other than northern sablefish (e.g., lingcod, rockfish) with non-trawl gear in the IFQ sector, due to this provision: "A vessel that reaches the sablefish gear-switching limit would not be able to gear switch on subsequent trips even if it was targeting non-sablefish species and the chance of sablefish bycatch is extremely low." As there is very little gear-switching for species other than sablefish, this appears to be a low concern at this time.

5. Other Considerations

In addition to the issues of complexity, workload, and cost described above, we encourage consideration of the following items in deliberations on potential action to meet the purpose and need identified by the Council:

Specification of a Preliminary Preferred Alternative
The action alternatives all have multiple options for criteria that would qualify someone for a greater level of future gear-switching opportunity (at least at initial implementation) and what that level is; as well as for features such as expiration, transferability, and overage procedures. Within any alternative identified as PPA, the Council must select from among the options so that there is a single specification of the alternative.

Flexibility, Stability
Alternatives 1 and 2 would create tradeable gear-specific quota and any participant wishing to use non-trawl gear would be allowed to acquire the any-gear quota necessary to do so through purchase of QS or lease of QP (assuming availability), up to existing accumulation limits. These approaches may provide more flexibility for individual participants, while stabilizing the overall potential gear-switching footprint. Alternatives 3 and 4 appear to offer less flexibility within the IFQ sector – a permit either has an endorsement or it doesn't. This is not necessarily a drawback. While permits can be transferred between vessels, it is an administrative hurdle.

Fair and Equitable Allocation
This action would be an allocation of gear-specific opportunity for northern sablefish within the trawl IFQ sector. Magnuson Stevens Act (MSA) National Standard 4 requires that allocations are fair and equitable. We encourage the Council to discuss and articulate how the alternative it selects as PPA meets that standard.

Variations and Contingencies

Management measures should take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches. Variations arise from biological, social, and economic occurrences, as well as from fishing practices. Changing ocean conditions, stock abundance/distribution, and the COVID-19 pandemic and subsequent market and supply disruptions are obvious examples of relevant variations. The Council's recent Fishery Ecosystem Plan Initiative on Climate and Communities, and its Scenario Planning exercise, explored some of these issues and may be informative. As the Council evaluates the best course of action for the long-term future of the trawl IFQ fishery, we encourage consideration of a wide range of possible variations that could affect the fishery and whether/how there is any nexus with gear switching or potential limitation thereof.

6. Relative Administrative Burden and Cost Comparison

While there is a high degree of uncertainty in the estimated time and actual cost to implement any one of the action alternatives, we can surmise with relative confidence the ongoing administrative burden posed by each of the action alternatives. Alternatives that introduce new ongoing tasks will add to the annual administrative burden of the Catch Share Program, such as annually issuing gear-specific quota pounds, or monitoring fixed-gear IFQ landings by individual endorsed permits and vessels and enforcing annual limits. Regardless of any increase in cost recovery fees, new ongoing incremental tasks introduced under alternatives 2, 3 and 4 in their current form would add time and complexity to existing substantial agency workload required to maintain the QS and permits data systems and could reduce the capacity available for other work.

Workload translates to cost, and there would be substantial cost associated with implementation of any action alternative. In relative terms, Alternative 1 is likely to incur a lower total cost than the others because it does not require substantial work beyond initial implementation. Alternative 2 appears to have the highest overall cost, with complex ongoing tasks. Alternatives 3 and 4 are likely to be in the middle.