

GEAR SWITCHING ALTERNATIVES ANALYSIS – ANNOTATED OUTLINE

Provided Here:

- A brief outline and discussion of some of the **key challenge areas** in which the analysis will be limited.
- An initial **outline** of the analysis that we will likely produce for the selection of a preferred alternative
- Links to related information that has **already been produced**

Not Comprehensive: What is provided here is not intended to be comprehensive in terms of all the information and topics that will be covered in the analysis but covers some of the main issues that have been identified as of particular interest during the process to date.

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General Approach for Organizing Document

While it is not certain what type of document will be produced with respect to National Environmental Policy Act (NEPA) requirements, the typical NEPA format provides a useful organizational structure for considering Magnuson-Stevens Act (MSA), regulatory impact review, and other analysis requirements.

Key Challenge Areas for the Analysis

While a considerable amount of analysis has been and can be done to inform this action (as discussed below), there are areas in which the analysis will be limited. The following is a brief overview of some of those key challenges.

What period of time should be used as the baseline from which the effects of the alternatives will be assessed?

Because of COVID and recent changes in ACLs, selection of a baseline has become challenging. These challenges are discussed in detail under the description of the “No Action” alternative.

How much gear switching would occur under no action and the action alternatives?

Due to changing conditions in fisheries and markets and limited projection models, making reasonable forecasts of the expected levels of gear switching under the alternatives will be difficult. For the no action alternative, the analysis will discuss reasons that gear switching levels might increase or decrease in the future, relative to baseline conditions. For the action alternatives, the analysis will identify the maximum levels of gear switching possible and reasons that the actual levels of gear switching might fall below those maximums. Scenarios for different future conditions will be used to assess the impact differences between the alternatives.

The degree to which and how the trawl fleet will utilize any additional sablefish QP that is not used by gear switching vessels.

As reflected below in the discussion of the problem, while the Council has identified that an unlimited expansion of gear switching would be harmful to the trawl fishery, there are indications that trawl allocation attainment is both impacted and not impacted by current levels of gear switching. Given the uncertainty about this dynamic, it is also uncertain as to what trawlers will do with any additional QP that is available as a result of a restriction on gear switching. Different scenarios will be used to assess the possibility of different outcomes.

Projecting redistribution of gear switching and trawl activities along the coast.

As was the case for the original Amendment 20 analysis, it is difficult to predict how geographic distributions could change under no action and the impacts of the action alternatives on those distributions. In this regard, the analysis may be limited to a qualitative discussion supported by quantitative information identifying the areas in which trawl and gear switched landings have occurred and the relative importance of those landings in those areas.

The degree of specific port¹ activity and dependence on gear switching and trawl landings.

Information on the geographic distribution of the fishery is limited due to the relatively small number of first receivers and the requirement to maintain confidentiality (i.e. the “rule of three”). In order to provide finer levels of geographic disaggregation, multi-year time periods that include more first receivers are sometimes used, however, this limits our ability to provide information on trends in a port. Therefore, trends and other information must often be presented at higher levels of aggregation (such as a port group or region) from which it is difficult to infer what is happening in the ports with fewer first receivers.

The degree of change to QP prices (sablefish and other species) as a result of the action alternatives.

During the SaMTAAC discussions, there were requests for information on the likely effect of proposed actions on prices of sablefish QP, as well as the QP for other species. Models for making such predictions are limited and because of the uncertainties described above, predictions are difficult. Analysis of effects on prices will likely be qualitative and provided in the context of scenarios.

¹ Specific port level means, for example, Crescent City, rather than the Eureka port area or northern California, of which Crescent City is a part.

Introduction

Proposed Action

To be completed.

Purpose and Need

This action is needed because the Shorebased Individual Fishing Quota (IFQ) Program has under attained most of its allocations since the inception of the program in 2011. The under attainment for some northern stocks may be due to the allowance to use fixed gear to harvest shorebased IFQ, declining trawl vessel participation, and the lack of market and infrastructure. Specifically, participants engaging in gear switching are using northern sablefish quota that may otherwise be used by trawl gears; this may lead to uncertainty in trawl access to sablefish, thereby affecting the development of markets and infrastructure. Working within the guidance and authority provided by the MSA (§303A(c))2 and the Pacific Coast Groundfish Fishery Management Plan (FMP) goals and objectives, the purpose of this action would be to keep northern sablefish gear switching from impeding the attainment of northern IFQ allocations with trawl gear, while considering impacts on current operations and investments.

Under attainment results in the Shoreside IFQ Program being unable to meet Management Goals 2 and 3 of the FMP which respectively seek to maximize the value of the groundfish resource as a whole and to achieve the maximum biological yield of the overall groundfish fishery. Additionally, this action would seek to improve the program towards the goal of Amendment 20 to the FMP, which created the Shorebased IFQ Program, of providing for full utilization of the trawl sector allocation.

Analytical Requirements and Decisional Considerations

NEPA

To be determined once the range of alternatives for analysis are finalized.

MSA and Groundfish FMP Related Considerations

Summary of MSA allocation guidance. (*Location: SaMTAAC Agenda Item E.2, Analysis, [text, October 2019](#)*).

Other MSA relevant analytical requirements. To be provided.

Public Process

Following is a partial description of the process through which this issue was considered and developed. It will be completed for the draft analysis.

Gear switching was identified as an issue of concern during the first review of the trawl catch share program (completed in 2017). Following on that process, the Council appointed the Sablefish Management and Trawl Allocation Attainment Committee (SaMTAAC) in April 2018 and gave it the following charge:

Identifying obstacles to achieving the goals and objectives of the catch share plan related to under attainment of non-sablefish trawl allocations and unharvested sablefish quota pounds (QP) south of 36° N. latitude. As appropriate to overcome identified obstacles, the committee will discuss and develop options, including but not limited to, actions that may modify rules for gear switching by trawl permit holders and QP leasing to vessels using fixed gear, as well as options that may encourage increased utilization of sablefish QPs south of 36° N. latitude.

To address its charge, the Committee met six times: June 2018, October 2018, May 2019, October 2019, January 2020 and April 2020 (the last via webinar). Records for these meetings, including materials considered by the Committee and meeting summaries, are provided on a [“Gear Switching and Trawl Allocation Attainment”](#) webpage on the Council website.

The Committee did its initial scoping work in 2018 that included investigation of up to 24 alternatives suggested during its deliberations (Supplemental Information Report 6, November 2018 and Information Report 2, June 2019).

As part of its deliberations, the Committee adopted the following principles (note: these principles were reported to but not formally adopted by the Council).

- A. We want to ensure there is affordable trawl access to sablefish.
- B. We believe that unlimited catch of sablefish through gear switching is not desirable.
- C. We want to consider impacts on existing operations/investments.
- D. We want to maintain the gear-switching option for trawl operations.
- E. We will consider industry and community impacts and ensure long-term stability.
- F. We will consider the effect on the value of trawl permits.
- G. We want to increase the net economic value of the trawl individual fishing quota fishery.

Principle C, it should be noted, references consideration of impacts to investments related to trawl, fixed gear, and buyer/processor operations.

While the Committee steadily progressed in its work, its process was interrupted by a government shut-down in the winter of 2018/2019.

The Committee’s final report was issued in June 2020 and considered by the Council at its September 2020 meeting. At that time, the Council adopted the above purpose and need statement and committed to following through with a complete consideration of the issue, including both Action and No Action alternatives....(text to be completed, see Table 1 for links to key documents and additional steps in the process).

Table 1. Steps in the consideration of the trawl allocation attainment and gear switching issues, within the Council forum.

Step/Action	Meeting & Agenda Item	Key Documents	Decision Summary
Community Advisory Board (CAB) First Recommends a Control Date for Gear Switching	June 2017 Agenda Item F.2	<ul style="list-style-type: none"> ○ Agenda Item F.2.c, Supplemental CAB Report 	Trawl Catch Shares Review Draft Report and Intersector Allocation Report
Adoption of Gear Switching Control Date and Guidance on Catch Share Review Follow-on Actions	September 2017 Agenda Item E.7	<ul style="list-style-type: none"> ○ Control Date Federal Register Notice ○ Agenda Item E.7.a, CAB Report 1: Community Advisory Board Report on Preliminary Range of Follow-on Actions ○ Agenda Item E.7.a, Supplemental GAP Report 1 	Adoption of Control Date and Other Actions/Guidance Related Follow-on Actions
Council Decides to Create a Committee to Address Issues Related to Gear Switching	March 2018 Agenda Item H.2	<ul style="list-style-type: none"> ○ Agenda Item H.2, Attachment 1: Gear Switching and Trawl Sablefish Area Management—Preliminary Data ○ Agenda Item H.2, Supplemental Attachment 2: Expanded Agenda Item H.2., Attachment 1 Tables 	Trawl Catch Shares - Gear Switching and Trawl Sablefish Area Management
Council Creates the SaMTAAC	April 2018 Agenda Item H.2	<ul style="list-style-type: none"> ○ Agenda Item H.2, Attachment 1: Creation of an ad hoc Committee on Issues Related to Trawl Allocation and Southern Sablefish Attainment 	Membership Appointments and Council Operating Procedures
SaMTAAC Meets Six Times to Develop Alternatives	SaMTAAC Meetings June 2018; Oct 2018; May 2019 Oct 2019; Jan 2020; Apr 2020	Key documents	No related Council decisions.
Final SaMTAAC Report Provided	June 2020 Informational Reports	The SaMTAAC Final Report and an accompanying analysis were provide as informational reports 1 and 2. These informational reports were included in relation to Agenda Item D.1 at the September 2020 Council meeting (see next row).	No related Council decisions.
Council Decision on Whether to Continue SaMTAAC Related Deliberation and Adoption of Purpose and Need Statement	September 2020 Agenda Item D.1	<ul style="list-style-type: none"> ○ D.1, Attachment 1: Preliminary Assessment of Trawl Under-Attainment Issues and SaMTAAC Alternative Qualification Criteria (UPDATED), August 2020 ○ D.1.a, SaMTAAC Report 1 Final Report to The Council 	Gear Switching and Sablefish Area Management Scoping
Council Scheduled to Adopt Range of Alternatives for Analysis (Instead Decides to First Decide on a Level of Gear Switching)	November 2020 Agenda Item G.2	<ul style="list-style-type: none"> ○ Key documents were reproduced for the September 2021 briefing book (see below) 	Gear Switching for Sablefish in the Trawl Catch Share Fishery
Council Decision on Gear Switching Level to Use in Developing Alternatives	April 2021 Agenda Item F.4	<ul style="list-style-type: none"> ● F.4, Attachment 1: Analysis of Gear Switching Levels 	Sablefish Gear Switching – Identify the Gear Switching Level to Use in Developing Alternatives

Step/Action	Meeting & Agenda Item	Key Documents	Decision Summary
Council Selects Range of Alternatives Adopted for Analysis	September 2021 Agenda Item C.5	<ul style="list-style-type: none"> ○ C.5, Attachment 1: SaMTAAC Recommended Alternatives ○ C.5, Attachment 3: Preliminary Analysis of Gear-Switching Alternatives ○ C.5, Attachment 4: Supplement to Preliminary Analysis of Gear Switching Alternatives 	Sablefish Gear Switching
Refine alternatives for analysis and provide on analysis, as needed.	June 2022 Agenda Item F.5	See BB Agenda Item F.5 and recorded presentations on Gear switching and trawl allocation attainment webpage.	TBD

Alternatives (Description)

No Action

One of the challenges will be developing comparison points for the no action alternative. Changing conditions over the last few years (COVID in 2020-2021 and a large increase in the ACLs in 2021) have substantially disrupted patterns observed from 2011-2019. On the one hand, these fluctuations begin to reflect the kind of unpredictable situations that will be encountered in the future. If an action alternative is adopted, it will potentially be in place for many decades, over which time fishery conditions are likely to vary substantially. It is difficult to be certain about the variety of stock, market, and other conditions that may be encountered that will affect the relative performance among the alternatives.

In prior documents, analysts have used 2016-2019 as a baseline because it provides a multiyear period over which a relatively stable set of conditions prevailed. For example, the number of gear-switching participants was relatively stable over that period (15-16 vessels²) as was the amount gear switched (average of 33 percent of the total available pounds, ranging from 31.9 percent to 33.8 percent). At this point, analysts are considering using this period as the baseline for any future analysis of the action alternatives noting that, as with most other periods that might be considered, conditions have changed and might or might not return to those present from 2016-2019. The year 2020 is being set aside because fisheries were strongly impacted by COVID, therefore the fishery patterns for that year are likely to be aberrations. This leaves 2021 as the other year that could be used as baseline. The year 2021 represents the most recent year of data available, which is typically used in other groundfish analyses (e.g. the biennial harvest specifications). However, ACLs increased substantially in 2021. It is often recommended that multiyear averages be used for comparison points because data based on any single year can be misleading. In 2021 overall effort and catch in gear switching was lower than average (seven vessels compared to ~16 and approximately 250,000 fewer pounds caught) and the fishing opportunities may have continued to be impacted by the COVID-19 pandemic or other issues. Yet, it sometimes takes a few years for sectors to fully respond and stabilize after major changes.

² There were 15 gear switching vessels in 2018 and 2019, and between 14 and 16 vessels since 2014. Participation declined substantially in 2020 and 2021.

For reference, Table 2 (page 12) provides the history of trawl and fixed gear use of the trawl northern sablefish QP. Regardless of the baseline years that are ultimately selected, at key points in the analysis, qualitative discussions would be provided on the implications of changing conditions in the future for the relative performance among the alternatives.

Alternative 1 – Gear Specific Quota Pound (QP)

Overview. All northern sablefish quota share (QS) will be converted to either QS valid only for the use of trawl gear (“trawl-only QS”) or for the use of any gear (“any-gear QS”, i.e. QS that is the same as status quo QS with respect to gear usage). This one-time conversion will be carried out in a fashion such that it will not impact the total percentage of northern sablefish QP a QS owner receives in the first year after the conversion. The proportions of each type of QS a QS owner receives will be based on the owner’s history of owning a vessel that gear switched or trawled (their participation status), except that any QS an owner holds that is excess of the amount held as of the control date (September 15, 2017) will be converted entirely to trawl-only QS. The trawl allocation of northern sablefish QP issued each year will be split between trawl-only QS and any-gear QS. *See the alternatives attachment for a complete description.*

Alternative 2 – Gear Switching Endorsements

Overview. In the area north of 36° N. lat., a vessel’s gear-switching activity will be restricted to a standardized relatively low annual gear switching limit except for vessels fishing under trawl limited entry permit (LEP) with a gear switching endorsements. Vessel fishing under endorsed trawl LEPs will have higher limits individualized for each permit based on gear-switching history, QS ownership, or a mix of the two. Gear-switching endorsements will be attached to trawl LEPs and based on a permit or vessel meeting minimum qualification criteria that include gear switching history and, under some options, linkage between permit, QS and/or vessel ownership. The endorsement might or might not expire when the permit to which it is attached is transferred. If endorsements expire with permit transfer, the higher gear-switching limits associated with endorsed permits would eventually phase out and all vessels would be restricted to the lower-level gear-switching limit provided for vessels fishing trawl LEPs that do not have gear-switching endorsements. *See the alternatives attachment for a complete description.*

Alternatives Considered but Rejected

Discussion of approached considered in both the SaMTAAC and Council forum.

Analysis of Problem

This section

- reviews the rationale for the original decision to include gear switching in the catch share program provisions,
- looks at the degree to which vessels have been gear switching,
- provides data on the degree of trawl allocation under attainment for all species, and
- covers possible reasons for the under attainment.

Original Decision to Allow Gear Switching

Discussion of Amendment 20 deliberations. History of Council deliberations on gear switching (including during trawl catch share program development). (*Location: SaMTAAC Agenda Item E.2, Analysis, [text p. 8, October 2019](#)*).

Levels and History of Gear Switching

Sablefish north allocations, total catch, and total catch and discard by gear within the trawl IFQ sector, 2007-2018. (*Location: SaMTAAC Agenda Item E.2, Analysis, [Figure 1, October 2019](#)*). Also see following table.

Table 2. Sablefish north of 36° N. lat. total catch by year and gear type (millions of lbs.) compared to the allocation and total available pounds (allocation plus surplus carryover) and number of gear switching vessels and permits, 2011-2021. Source: catch from 2011-2020 GEMM and IFQ vessel account system for 2021; participants from PacFIN.

Landing Year		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 ^{a/}	2011-2021 Avg
Total Catch		5.29	4.92	4.07	4.13	4.82	5.02	5.56	5.08	5.62	4.09	5.04	4.88
Catch by Gear	Trawl	3.75	3.26	3.09	2.86	3.24	3.22	3.69	3.27	3.61	2.61	3.72	3.30
	Fixed Gear	1.54	1.66	0.98	1.27	1.58	1.80	1.87	1.81	2.01	1.48	1.32	1.57
<i>Allocation Lbs</i>		5.61	5.44	4.03	4.38	4.85	5.32	5.33	5.56	5.69	5.81	6.92	5.20
Percentage by Utilization	Trawl	66.8%	59.9%	76.7%	65.3%	66.8%	60.5%	69.2%	58.8%	63.4%	44.9%	53.8%	62.4%
	FG	27.4%	30.5%	24.3%	28.9%	32.6%	33.9%	35.1%	32.5%	35.3%	25.4%	19.0%	29.6% ^{b/}
	Unharvested	5.8%	9.6%	-1.1%	5.7%	0.6%	5.6%	-4.4%	8.7%	1.3%	29.7%	27.2%	8.1%
<i>Available Lbs</i>		5.61	5.44	4.29	4.52	5.05	5.46	5.64	5.67	5.94	6.00	6.92	5.50
Percentage by Utilization	Trawl	66.8%	59.9%	72.1%	63.3%	64.2%	58.9%	65.4%	57.7%	60.7%	43.5%	53.8%	60.6%
	FG ^{d/}	27.4%	30.5%	22.9%	28.0%	31.3%	33.0%	33.2%	31.9%	33.8%	24.6%	19.0%	28.7% ^{c/ d/}
	Unharvested	5.8%	9.6%	5.0%	8.7%	4.5%	8.1%	2.4%	10.4%	5.5%	31.9%	27.2%	10.7%
Gear Switching Participants	Vessels	17	20	11	15	14	16	16	15	15	9	7	14
	Permits	17	21	11	14	14	16	16	15	15	6	7	14

a/ Preliminary estimates.

b/2016-2019 average is 34.2% .

c/2011-2016, shaded cells is 29 percent (28.85 rounded up). This value was used in the Council's April 2021 motion.

d/2016-2019 average is 33.0% .

Levels and History of Trawl Under Attainment

Summary of section on under-attainment of trawl allocations. (*Location: D.1, Att 1, [Text, p. 4ff, September 2020](#)*).

Percent of total aggregate non-whiting QP used/unused by trawl sector. (*Location: F.4, Att 1, [Figure 1, April 2021](#)*).

Number of trawl IFQ species/species groups by degree of under attainment. (*Location: D.1, Att 1, [Table 1, September 2020](#)*).

Sablefish QP unused after taking into account surplus and deficit carryovers. (*Location: D.1, Att 1, [Table 3, September 2020](#)*).

Possible Reasons for Trawl Under Attainment

A limited amount of unused QP available, potentially due to gear switching, is one potential cause of under attainment of the trawl allocations. This, along with other potential causes, are discussed in this section.

Trawl Vessel Participation as a Limit on Attainment (Including Relative Profits)

Summary of section on trawl vessel participation as a limit on attainment. (*Location: D.1, Att 1, [Section 2.1, text p. 12ff, September 2020](#)*).

Number of participating trawl vessels by year (2006-2019). (*Location: D.1, Att 1, [Figure 5, September 2020](#)*).

Trawl vessel entry and exit by before and during the trawl catch share program. (*Location: D.1, Att 1, [Figure 6, September 2020](#)*).

Landings and revenue by **multi-year** period for vessels that exited in the following period, entered during the IFQ program and were consistent participants across all periods. (*Location: D.1, Att 1, [Figure 7, September 2020](#)*).

Landings and revenue by **year** for vessels that exited in the following period, entered during the IFQ program and were consistent participants across all periods. (*Location: D.1, Att 1, [Figure 8, September 2020](#)*).

Annual non-whiting trawl landings by species group 2006-2019. (*Location: D.1, Att 1, [Figure 9, September 2020](#)*).

Market Limits – Domestic Markets and Competing Imports

Summary of section on market limits—domestic markets and competing imports. (*Location: D.1, Att 1, [Section 2.2, text p. 30, September 2020](#)*).

Historic Dover sole landings and prices by time period and relative to initial license limitation period (1994-2000). (*Location: F.4, Att 1, [Table 6, April 2021](#)*).

Historic annual Dover sole landings compared to competing imports (fresh tilapia and catfish). (*Location: F.4, Att 1, [Figure 8, April 2021](#)*).

Historic annual Dover sole landings compared to Dover sole exvessel price. (Location: F.4, Att 1, [Figure 9, April 2021](#)).

Annual Dover sole price distributions showing changes during the 2007-2010 expansion of Dover sole landings. (Location: F.4, Att 1, [Figure 10, April 2021](#)).

Increase in number of Dover sole different reported prices during the 2007-2010 expansion of Dover sole landings (possibly because of a mix of fish going to fresh and frozen markets). (Location: F.4, Att 1, [Figure 11, April 2021](#)).

Increases in amounts of Dover sole delivered at low price points during the 2007-2010 expansion of Dover sole landings. (Location: F.4, Att 1, [Figure 12, April 2021](#)).

Dover sole price shift in first year if catch share program (also note reduction in amount of deliveries at low prices, relative to 2010). (Location: F.4, Att 1, [Figure 13, April 2021](#)).

Price fluctuations for Dover relative to the 1994-2019 average Dover price and for fish tilapia imports, relative to the 1994-2019 average for fresh tilapia imports (Note, Dover price dip corresponding to expansion of production in 2008-2010 period). (Location: D.1, Att 1, [Figure 15, September 2020](#)).

Illustration of low market-demand/low-utilization cycle. (Location: D.1, Att 1, [Figure 16, September 2020](#)).

Infrastructure Limitations (Physical)

Summary of section on possible infrastructure limitations. (Location: D.1, Att 1, [Section 2.3, text p. 35ff, September 2020](#)).

Infrastructure assessment (2017 compared to data from NMFS 2007 port profiles) (Location: D.1, Att 1, [Table 4, September 2020](#)).

Catch Share System Design

Discussion of possibility that QS control limits might be inhibiting large investments because of uncertainties about security of access to fish. (Location: F.4, Att 1, [Section 2.5 text p. 29, April 2021](#)).

Competing Uses of Sablefish QP, Including Gear Switching

Summary of section on competing uses. (Location: F.4, Att 1, [Section 2.1, introductory text and bullets, p. 10, April, 2021](#)).

Distribution of northern sablefish QP across strategies use in the trawl sector (including gear switching). (Location: D.1, Att 1, [Figure 17, September 2020](#)).

Proportion of revenue from sablefish for bottom trawlers and gear-switching vessels (Location: F.4, Att 1, [Figure 19, April 2021](#)).

Sablefish price per pound relative to average price per pound for a mix of Dover sole and thornyheads. (Location: F.4, Att 1, [Figure 21, April 2021](#)).

gear switchers: total revenue and landings from gear switching and percentage from sablefish. (Location: F.4, Att 1, [Table 2, April 2021](#)).

By trawl target strategy: total sablefish usage and rate of contribution to revenue per 1,000 lbs of sablefish. (*Location: F.4, Att 1, [Figure 2, April 2021](#)*).

By trawl target strategy and gear switching: ratio of non-sablefish species to sablefish and rate of contribution to revenue per 1,000 lbs of sablefish (2016-2019). (*Location: F.4, Att 1, [Table 3, April 2021](#)*).

By trawl target strategy and gear switching: ratio of non-sablefish species to sablefish and rate of contribution to revenue per 1,000 lbs of sablefish (2020). (*Location: F.4, Att 1, [Table 4, April 2021](#)*).

Mixed shelf and mixed slope: ratio of non-sablefish to sablefish and total landings of each complex (*Location: F.4, Att 1, [Figure 3, April 2021](#)*).

Historic Dover sole landings and total harvest limits. (*Location: F.4, Att 1, [Figure 4, April 2021](#)*).

Historic Dover sole to sablefish landings ratios. (*Location: F.4, Att 1, [Figure 5, April 2021](#)*).

Historic Dover sole and sablefish landings amounts, including gear switching since 2011. (*Location: F.4, Att 1, [Figure 6, April 2021](#)*).

Percent of Dover sole landings grouped by Dover sole/sablefish ratios. (*Location: F.4, Att 1, [Figure 7, April 2021](#)*).

Total cost net revenue per **vessel**, trawl compared to gear switched vessels (2009-2018). (*Location: D.1, Att 1, [Figure 10, September 2020](#)*).

Total cost net revenue per **metric ton caught**, trawl compared to gear switched vessels (2009-2018). (*Location: D.1, Att 1, [Figure 11, September 2020](#)*).

Total cost net revenue per **vessel day**, trawl compared to gear switched vessels (2009-2018). (*Location: D.1, Att 1, [Figure 12, September 2020](#)*).

Factors that Might Alter Future Levels of Gear Switching

Schematic on vessel profit factors that may influence future levels of gear switching. (*Location: F.4, Att 1, [Figure 14, April 2021](#)*).

Normal Variation

There is a possibility that even if conditions in the fishery are relatively stable gear switching may increase or decrease to some degree due to normal variation, as indicated by a random sampling analysis that is based on conditions present from 2011-2019.

Randomized sampling analysis of gear switching levels assuming no change in underlying market conditions for all species, CPUEs, etc. (*Location: F.4, Att 1, [Section 3.1 Text p. 30, April 2021](#)*).

However, changing conditions could decrease or increase levels of gear switching in the future. Some of the conditions likely to influence levels of gear switching are discussed in the following sections.

Biomass and Changing ACLs

Section on biomass. (Location: F.4, Att 1, [Section 3.2.1, p. 34, April, 2021](#)).

Summary of section on sablefish biomass and trawl allocations. (Location: D.1, Att 1, [Section 6.1, text p. 58, September 2020](#)).

History and projections for sablefish north ACLs (1995-2030). (Location: D.1, Att 1, [Figure 36, September 2020](#)).

Sablefish Market Prices (Exvessel and QP)

Summary of section on sablefish market prices. (Location: D.1, Att 1, [Section 6.2, text p. 60, September 2020](#)).

Summary of section on sablefish market prices. (Location: F.4, Att 1, [Section 3.2.2, bullets, p. 34ff, April, 2021](#)).

Sablefish exvessel prices (trawl and fixed gear) and QP prices. (Location: F.4, Att 1, [Figure 15, April 2021](#)).

Relative comparison of exvessel prices (trawl and fixed gear) and QP prices. (Location: F.4, Att 1, [Figure 16, April 2021](#)).

Prices paid for northern sablefish QP by trawl and gear switching vessels, by quarter and year. (Location: F.4, Att 1, [Figure 17, April 2021](#)).

Exvessel price differentials for sablefish (trawl and fixed gear) and comparison to QP prices. (Location: F.4, Att 1, [Table 8, April 2021](#)).

Proportion of trawl allocation gear switched and trawl/fixed gear exvessel price differential. (Location: F.4, Att 1, [Figure 18, April 2021](#)).

Average price per pound for fixed gear caught sablefish north compared to percent of sablefish north QPs utilized in gear switching, 2011-2018. (Location: SaMTAAC Agenda Item E.2, Analysis, [Figure 2, October 2019](#)).

Schematic of vessel level factors influencing sablefish QP prices. (Location: F.4, Att 1, [Figure 20, April 2021](#)).

Latent and Underutilized Permits

Summary of section on latent and unutilized permits, which might represent an opportunity for entry by additional gear switching vessels—as compared to acquiring permits from active trawlers. (Location: D.1, Att 1, [Section 6.3, text p. 68, September 2020](#)).

Number of trawl endorsed permits and number of permits that were inactive or latent for the entirety of the year. (Location: D.1, Att 1, [Figure 44, September 2020](#)).

Number of Permits that landed sablefish north, number of permits with IFQ landings, number of latent permits, number of permits with no IFQ landings, and total trawl endorsed permits available, 2011- 2018. (Location: SaMTAAC Agenda Item E.2, Analysis, [Table 7, October 2019](#)).

Conditions in Cross-Over Fisheries

Summary of section on crossover fisheries. (*Location: D.1, Att 1, [Section 6.4, text p. 69ff, September 2020](#)*).

Summary of section on crossover fisheries (new information on Alaska). (*Location: F.4, Att 1, [Section 3.2.3, text p. 40, April 2021](#)*).

Plot showing crossover between gear switching vessels and two other groups (trawl IFQ vessels limited entry fixed gear vessels). (*Location: D.1, Att 1, [Figure 45, September 2020](#)*).

LEFG primary fishery vessels that gear switch, number of vessels, share of all gear switched sablefish landings, and average percent of groundfish revenue from sablefish. (*Location: D.1, Att 1, [Table 13, September 2020](#)*).

For vessels that fish fixed gear only in the IFQ fishery and those that also fish in the LEFG fishery, average percent of revenue from gear switching compared to all other sources of revenue. (*Location: D.1, Att 1, [Figure 46, September 2020](#)*).

Number of stacked permits for LEFG vessels that did and did not cross over into the trawl IFQ fishery (*Location: D.1, Att 1, [Table 14, September 2020](#)*).

Tiers stacked for LEFG vessels that did and did not cross over into the trawl IFQ fishery (*Location: D.1, Att 1, [Table 15, September 2020](#)*).

Cross over between the Dungeness crab fishery and the trawl IFQ fishery (including numbers that landed sablefish north with any fixed gear (LEFG, trawl IFQ, and open access) and those that gears switched). (*Location: D.1, Att 1, [Table 16, September 2020](#)*).

Alaska sablefish IFQ fisheries, allocation and attainment trend. (*Location: F.4, Att 1, [Table 9, April 2021](#)*).

Sablefish landings and revenue by vessels that only participate in West Coast gear switching compared to those that also participate in Alaska fisheries. (*Location: F.4, Att 1, [Table 10, April 2021](#)*).

Sablefish landings and revenue by vessels that participate in West Coast gear switching and LEFG fisheries compared to those that also participate in all three fisheries (IFQ gear switching, LEFG and Alaska fisheries). (*Location: F.4, Att 1, [Table 11, April 2021](#)*).

New Entrants

Annually, new permits and vessels that begin fishing in the trawl IFQ fishery as gear switchers (*Location: F.4, Att 1, [Figure 22, April 2021](#)*).

Trends in QS Acquisition by Gear Switchers

A trend toward increasing investment in QS ownership by gear switching entities might indicate the potential for further expansion in the amount of gear switching.

QS Ownership by those that own vessels or permits used to gear switch. (*Location: F.4, Att 1, [Section 3.2.5 text p. 44, April 2021](#)*).

Summary of section on sablefish QS acquisition by gear switchers. (*Location: D.1, Att 1, [Section 6.5, text p. 76, September 2020](#)*).

QS owned by owners of vessels used to gear switch (*Location: D.1, Att 1, [Table 17, September 2020](#)*).

QS owned by owners of vessels or permits used to gear switch (*Location: D.1, Att 1, [Table 18, September 2020](#)*).

Description of Trawl Gear and Gear Switching Sectors (Including FRs and Communities)

As the analysis is developed, some or all of the following information may be incorporated into the related sections on impacts. Information that does not inform the analysis of the alternatives will be dropped.

Vessels and Permits

Counts of vessels using both fixed gear and trawl in a year. (*Location: C.5 Att 3, [Table 21, Sept 2021](#)*). [*First four rows of data remain relevant.*]

Summary of section describing participants in the trawl sector. (*Location: D.1, Att 1, [Section 3.0, text p. 46ff, September 2020](#)*).

Numbers of vessels and permits associated with trawl IFQ sablefish north landings (trawl and fixed gear/gear switched). (*Location: D.1, Att 1, [Table 9, September 2020](#)*).

Cumulative number of vessels and permits entering the gear-switching fishery, 2011-2019. (*Location: D.1, Att 1, [Figure 18, September 2020](#)*).

Number of vessels with the indicated number of pounds in each of the indicated number of years from 2011 – 2019. (*Location: D.1, Att 1, [Figure 19, September 2020](#)*).

Number of permits with the indicated number of pounds in each of the indicated number of years from 2011 – 2019. (*Location: D.1, Att 1, [Figure 20, September 2020](#)*).

By state of owner resident, proportion of permits and vessels associated with each state (those vessels that that gear switch compared to those that only trawl for 2016-2019). (*Location: D.1, Att 1, [Figure 21, September 2020](#)*).

By state of owner resident, proportion of landings for permits and vessels associated with each state (those vessels that that gear switch compared to those that only trawl for 2016-2019). (*Location: D.1, Att 1, [Figure 22, September 2020](#)*).

Develop a summaries of vessels and permits based on ex-vessel values of all landings. Develop the size bins with objective of illustrating any differences between large and small operations but constrained based on what is necessary to preserve confidentiality. Consider whether to summarize only on the vessel or permit or on ownerships of vessels or permits.

QS Ownership and QP Leasing

Trends in sablefish north QS ownership, by those owning trawl permits and vessels, first receivers, and others. (Location: SaMTAAC Agenda Item E.2, Analysis, [Figure 7, October 2019](#)). [Revise to include a line for gear switching entities and separate those that only own vessel owners from those that also own trawl permit owners, or also include [Figure 8](#)].

Amount of gear-switched QP that is leased compared to gear switched QP for which the QS is owned. (Location: SaMTAAC Agenda Item E.2, Analysis, [Figure 11, October 2019](#)). [Relevant to Alternative 1.]

First Receivers

Summary bullets. (Location: F.4, Att 1, [Section 4.1.4 Bullet points, April 2021](#)).

Counts of first receivers buying gear-switched sablefish compared to total number of first receivers buying sablefish from non-whiting vessels. (Location: F.4, Att 1, [Table 25, April 2021](#)).

Counts of first receivers buying sablefish and percentage purchased categorized by those buying only from gear-switching vessels, only from trawl vessels, both, or changing categories during the period (2016-2019). (Location: F.4, Att 1, [Figure 24, April 2021](#)).

Number of first receivers receiving northern sablefish (both trawl and gear switched, trawl only, gear switched only, and those that switched strategies during the period, 2011-2019) and the proportion of sablefish landings for each group. (Location: D.1, Att 1, [Figure 27, September 2020](#)).

Summary of section on first receivers (FRs). (Location: D.1, Att 1, [Section 4.0, text p. 43, September 2020](#)).

Number of FRs and number of business with FR licenses (2011-2019). (Location: D.1, Att 1, [Figure 23, September 2020](#)).

Number of FRs receiving at least three deliveries by type of delivery (whiting/nonwhiting) (2009-2018). (Location: D.1, Att 1, [Figure 25, September 2020](#)).

FRs receiving sablefish north and the number associated with processing fish (2011-2018). (Location: D.1, Att 1, [Figure 26, September 2020](#)).

Develop a summary of first receiver entities based on size of operation (total exvessel value of all purchases). Develop the size bins with objective of illustrating any differences between large and small first receivers but constrained based on what is necessary to preserve confidentiality. Using these bins, produce information similar to Table 10 and Figure 26 described directly above.

Cross-Group Ownership: First Receiver, QS Owner, Permit Owner, Vessel Owners

First receiver counts and ownership of QS, along with trawl permits and vessels, including numbers used for gear switching. (*Location: SaMTAAC Agenda Item E.2, Analysis, [Table 12, October 2019](#)*).

Communities

Geographic distribution of trawl IFQ northern sablefish landings by gear and area. (*Location: D.1, Att 1, [Figure 4, September 2020](#)*).

By port area, revenue from IFQ and non-IFQ fisheries (*Location: F.4, Att 1, [Figure 25, April 2021](#)*).

By port area, revenue, income impacts, jobs, number of vessels and number of dealers for IFQ and non-IFQ fisheries (*Location: F.4, Att 1, [Table 26, April 2021](#)*).

By specific port, the presence/absence of the following sectors: whiting, non-whiting trawl, gear switching, limited entry fixed gear, and open access, together with average revenue from all species and average revenue from groundfish (2016-2019). (*Location: F.4, Att 1, [Table 27, April 2021](#)*).

Gear switching and bottom trawl revenue, income impacts, jobs, number of vessels, and number of dealers, by port area (2016-2019). (*Location: F.4, Att 1, [Table 28, April 2021](#)*).

By large geographic areas (regions used to preserve confidentiality), the percentage of total fishery revenue from DTS and non-DTS strategies that may likely compete with gear switchers for sablefish QP (flatfish, mixed shelf, and mixed slope) (2016-2019). (*Location: F.4, Att 1, [Figure 26, April 2021](#)*).

By port area, percent reduction in groundfish exvessel revenue if gear switching is eliminated and there is no compensating increase in trawl landings (based on 2011-2019 landings) (*Location: F.4, Att 1, [Table 29, April 2021](#)*). (*Planned Analysis: provide similar breakouts for income impacts and jobs—total values rather than % changes*).

Summary of section on communities. (*Location: D.1, Att 1, [Section 5.0, text p. 50, September 2020](#)*).

Distribution of trawl IFQ sector (all gears) nonwhiting landings among ports before catch shares and for two periods after catch shares (2011-2019, average). (*Location: D.1, Att 1, [Figure 28, September 2020](#)*).

Distribution of northern sablefish landings among ports for non-IFQ, IFQ fixed gear (gear switched) and IFQ trawl, 2011-2019, average). (*Location: D.1, Att 1, [Figure 29, September 2020](#)*).

Percentage of total community income impacts (**all fisheries**), by sector, **coastwide and for Morro Bay north** (2016-2019, in aggregate). (*Location: D.1, Att 1, [Figure 30, September 2020](#)*).

Community income impacts (**all fisheries**), by sector, **by state** (2016-2019, in aggregate). (*Location: D.1, Att 1, [Figure 31, September 2020](#)*).

Community income impacts (**coastal non-tribal groundfish fisheries**), trawl and other groundfish, **by port area** (2016-2019, in aggregate). (*Location: D.1, Att 1, [Figure 32, September 2020](#)*).

Community income impacts (**coastal non-tribal groundfish fisheries**), trawl and other groundfish, **by port area** (2006-2010, 2011-2015, and 2016-2019, averages). (*Location: D.1, Att 1, [Figure 33, September 2020](#)*).

Community income impacts (**trawl sector**), shoreside trawl and gear switched, **by state** (2016-2019, average). (*Location: D.1, Att 1, [Figure 34, September 2020](#)*).

Community job estimates (**trawl sector**), shoreside trawl and gear switched, **by state** (2016-2019, average). (*Location: D.1, Att 1, [Figure 35, September 2020](#)*).

Impacts of Alternatives

Approach to Analysis of Impacts

Analysis of No Action and Action Alternatives will consider scenarios in which gear switching is and is not displacing trawl gear catch. The scenario approach will be applied primarily with the short-term analysis, but the issue of whether or not gear switching is constraining the trawl fishery will also be addressed in the analysis of the long-term impacts. Examples of this approach and results with respect to the short-term effects on the trawl fleet can be found in the following sections, most of which were produced for the Council consideration of the maximum level of gear switching that would be used to guide development of the action alternatives.

Textual description of short- and long-term dynamics to be considered in evaluating the levels of gears switching in connection with the Council's development of its 29 percent policy and description of the related analysis (1st two and last two paragraphs, in particular). (*Location: F.4, Att 1, [Section 4.0 text p. 45, April 2021](#)*).

Short-term impacts on gear switching fleet. Summary bullets. (*Location: F.4, Att 1, [Section 4.1.1 Bullet points, April 2021](#)*).

Short-term impacts on trawl fleet. Summary bullets. (*Location: F.4, Att 1, [Section 4.1.2 Bullet points, April 2021](#)*).

Scenario: Gear Switching is Displacing Trawl and Gear Switching Declines to Zero. Summary bullets. (*Location: F.4, Att 1, [Section 4.1.2\(a\) Bullet points, April 2021](#)*). [For this analysis, the decline to zero scenario would come close to what might happen under Alternative 2, if gear switching endorsements expire.]

Scenario: Gear Switching is Displacing Trawl and Gear Switching is Reduced. Summary bullets. (*Location: F.4, Att 1, [Section 4.1.2\(b\) Bullet points, April 2021](#)*). [For this analysis, consider a scenario with reductions to the 29 percent level. Also, consider possibility that the action alternatives could result in reductions well below the 29 percent maximum.]

Effect on 2019 trawl landings and revenue from all competing trawl strategies or from DTS, resulting from application of 12, 20, and 33

percent gear switching limits (assuming adequate market capacity and no changes in price). (*Location: F.4, Att 1, [Table 17, April 2021](#)*).

Effect on 2013, 2019, and 2021 trawl landings and revenue from from DTS, resulting from application of 12, 20, and 33 percent gear switching limits (assuming adequate market capacity and no changes in price). (*Location: F.4, Att 1, [Table 18, April 2021](#)*).

Scenario: Gear Switching Does Not Displace Trawl. Summary bullets. (*Location: F.4, Att 1, [Section 4.1.2\(d\) Bullet points, April 2021](#)*). [For this analysis, consider what the effects would be over the short-term if gear switching is reduced to 29 percent, well below 29 percent, or close to zero if gear switching is not currently displacing trawl activities.]

Changes in trawl revenue if gear switching is reduced and trawlers utilize the additional sablefish by increasing the ratio of sablefish caught in trawl complexes. (*Location: F.4, Att 1, [Table 22, April 2021](#)*).

Qualitative description of changes in trawl activity if gear switching levels are reduced or increased but sablefish QP availability is not constraining landings of co-occurring species (DTS or other complexes). (*Location: F.4, Att 1, [Table 21, April 2021](#)*).

The assessment of long-term impacts is more likely to be qualitative.

Long-term Impacts. Summary bullets. (*Location: F.4, Att 1, [Section 4.2 Bullet points, April 2021](#)*).

Fishery Resources

Impact on spawning biomass and depletion from taking the trawl allocation of sablefish entirely with fixed gear as compared to taking all sablefish with trawl. (*Location: SaMTAAC Agenda Item E.2, Analysis, [Table 22, October 2019](#)*).

Other Biological Resources

Impacts related to groundfish and non-groundfish species, including Endangered Species Act listed and Marine Mammal Protection Act species.

Vessel Owners

Analysis to be developed, including use of information from the above section: Description of Trawl Gear and Gear Switching Sectors (Including FRs and Communities).

Permit Owners

Analysis to be developed, including use of information from the above section: Description of Trawl Gear and Gear Switching Sectors (Including FRs and Communities).

QS Owners (QP Sellers) and QP Buyers

QS Owners (QP Sellers) and QP Buyers could be individuals that own trawl limited entry permits, vessels, first receivers, crew members, or others with an interest in the fishery. Therefore, the impacts on those who own QS sell and buy QP are treated as a separate type of impact that may cross all of the afore mentioned groups.

Summary bullets. (*Location: F.4, Att 1, [Section 4.1.3 Bullet points, April 2021](#)*).

Qualitative description of effects of gear switching on QP prices (*Location: F.4, Att 1, [Table 23, April 2021](#)*).

If gear switching is constrained and trawlers absorb the QP by increasing the rate at which sablefish is used to land the trawl complexes, the amount of revenue generated per pound of sablefish will likely decline, which may influence QP prices. Data provided: By trawl strategy: total exvessel revenue generated per 1,000 pounds of sablefish in 2019 for each trawl strategy; and expected change in revenue per 1,000 pounds if gear switching is eliminated and trawlers utilize the QP by changing their species mix, assuming either all the sablefish is absorbed by four different trawl strategies or all the sablefish is absorbed by vessels fishing DTS. Fixed gear (gear switched) sablefish revenue per 1,000 pounds of sablefish is provided for comparison. (*Location: F.4, Att 1, [Table 24, April 2021](#)*). (Errata Note: “All Sablefish QP Use Reduction Occurs in the DTS Strategy,” should read “All Sablefish QP Use Reduction is Absorbed in the DTS Strategy.”)

Discussion of SaMTAAC request of an analysis on the impact of gear switching on the QP markets for other species and speculation that impact might be minimal due to large QP surpluses. (*Location: SaMTAAC Agenda Item E.2, Analysis, [text p. 50, October 2019](#)*).

Crew Members

Likely to be a qualitative analysis.

Recent (Post-Control Date) and Future Entrants

Analysis to be developed, including use of information from the above section: Description of Trawl Gear and Gear Switching Sectors (Including FRs and Communities).

First Receivers

Analysis to be developed, including use of information from the above section: Description of Trawl Gear and Gear Switching Sectors (Including FRs and Communities).

Communities

Analysis to be developed, including use of information from the above section: Description of Trawl Gear and Gear Switching Sectors (Including FRs and Communities).

Governance: Fishery Management System

Analysis to be developed.

Management Costs

Regulatory Complexity

Impact Summary

The following will need to be modified to address the alternatives and include things like management costs and changed to address the alternatives under consideration.

Summary of Short-term Impacts

Summary of impacts, assuming gear switching is constraining trawl harvest and trawlers do not change their species mixes in response to changing sablefish availability.

(Location: F.4, Att 1, [Table 30, April 2021](#)).

Summary of impacts, assuming gear switching is not constraining trawl harvest and trawlers do not change their species mixes in response to changing sablefish availability.

(Location: F.4, Att 1, [Table 31, April 2021](#)).

Long-term Impacts of Limitation on Gear Switching

Summary bullets. *(Location: F.4, Att 1, [Section 4.2 Bullet points, April 2021](#)).*

Cumulative Impacts

Analysis to be developed.

Appendix: Details of Alternatives: Rationale for Design and Analysis of Elements

This section starts with some overarching contrasts between the action alternatives and then, for each alternative, looks at the functional effects of each provision and documents related rationale.

Discussion of Over-Arching Issues

Control Date

When the Council identified that a limitation on gear switching might be one of the follow-on actions it would consider as a part of the trawl catch shares program review, it adopted a control date of September 15, 2017 to put participants on notice that a change in opportunities related to gear switching may occur.

Gear Switching Limitation (29 Percent Decision)

The Council established a policy designing the draft alternatives such that there would not be more than 29 percent of the trawl allocation gear switched. The analysis will assess the maximum levels of gear-switching expected under each alternative.

Allocation of Gear Switching Opportunities to QS Owners, Permits and Vessels

This section will include, but not be limited to, the following.

Summary of section on choice of qualifying entities. (*Location: SaMTAAC Agenda Item E.2, Analysis, [Text, October 2019](#)*).

Summary of section on vessel and permit relationships. (*Location: SaMTAAC Agenda Item E.2, Analysis, [Text, October 2019](#)*).

Amounts of northern sablefish used by leased versus owned vessels. (*Location: C.5 Att 3, [Table 2, Sept 2021](#)*).

Amount of movement of permits among vessels (*Location: C.5 Att 3, [Tables 3 to 5, Sept 2021](#)*).

Number of gear-switching vessels by the number of permits used to gear switch. (*Location: D.1, Att 1, [Table 20, September 2020](#)*).

Permits used to gear switch by the number of vessels they have been registered to. (*Location: D.1, Att 1, [Table 21, September 2020](#)*).

Number of distinct permit-vessel combinations used for gear switching and the number of years each such combination was used. (*Location: D.1, Att 1, [Table 22, September 2020](#)*).

For non-endorsed permits, the number whose catch would be within the 0.5 percent limit for non-endorsed vessels--for SaMTAAC Alternative 2 Qualification Options. (*Location: D.1, Att 1, [Table 29, September 2020](#)*). [To be updated for Council Alternative 2]

Opportunities for Future Entrants

Alt 1 contrasted to Alt 2

Gear Switching Levels Over Time

Alt 1 – option for cap as ACLs increase

Alt 2 – option for expiration of gear switching endorsements

Policy Flexibility

Flexibility for adjusting the 29 percent cap

Elements of Alternative 1

For Alt 1, assess who will get the any-gear QP – number issued, relative to those who have been gear switching and will not receive such QP. How will the challenge of acquiring the needed any-gear QP change. The number of entities involved to sweep up all 29 percent. Might need Corey’s model.

Initial Allocations

Annual Vessel QP Use Limits and QS Control Limits

Elements of Alternative 2

Endorsement Qualifier Options

Qualification requirements and numbers qualifying – for **permits** 30,000 lbs a year for three years prior to the control date (top line for Option 2). (*Location: C.5 Att 3, [Table 15, Sept 2021](#)*). [*Directly related to Alt 2, for permits, Endorsement Qualification Option Q-PI.*]

Qualification requirements and numbers qualifying – for **vessels** 30,000 lbs a year for three years prior to the control date (Option 1). (*Location: Att 3, [Table 19, Sept 2021](#)*). [*Directly related to Alt 2, for vessels, Endorsement Qualification Option Q-VI.*]

Gear Switching Limits for Vessels with Gear Switching Endorsed Permits

Endorsement limits – gear switching limits for permits under SaMTAAC Alternative 2 [“Opt 2” in the figure directly relates to Alt 2, Endorsement Limit Option L-P1] (*Location: C.5 Att 3, [Figure 4, Sept 2021](#)*).

Distribution of likely size of Gear Switching Endorsement Limits under SaMTAAC Alternative 2 options. (*Location: C.5 Att 3, [Figure 5, Sept 2021](#)*). [*To be updated for the final Alternative 2 options.*]

Degree to which individual permit gear switching limits would reduce gear switching by endorsement qualifiers. (*Location: C.5 Att 3, [Table 17, Sept 2021](#)*). [*Top line for Option 2 in the figure directly relates to Alt 2, Endorsement Limit Option L-PI*]

Gear Switching Limits for Vessels Without Gear Switching Endorsements

Other Provisions of Alternative 2

General discussion related to other aspects of Alternative 2 (Endorsement Expiration, Gear Switching Limit Overages, and Combination of Permits—the Sequential Registration of Permits section would not apply) (*Location: C.5 Att 3, [Text p. 32ff, Sept 2021](#)*).

Midyear Permit Transfers and Sequential Permit Registration

Combination of Trawl Permits

Gear Switching Limit Overages

Gear Switching for Other Species

Annual Vessel QP Use Limit

Endorsement Expirations