Small Sablefish Release Final Action

April 2025 Council Meeting

Presenters:

Sara Cleaver, NPFMC

Jon McCracken, McCracken & Associates

Andrew Olson, NMFS Alaska Regional Office

NOAA FISHERIES

Presentation Outline

1) Overview of action: History, Purpose and Need, Alternatives
   - Revisions and clarifications for Alternatives
2) Summary of impacts to the sablefish stock (from prior analysis)
3) Options and Elements under Alternative 2
   - Element 1 (DMR), Element 4 (review)
   - Elements 2, 3, 5, (catch acctng/ICAs, monitoring, enforcement, release requirements) and NMFS recommendations
4) Updates to the social and economic impact analysis
5) Clarifications and decision points for the Council

Presentation Outline

1) **Overview of action: History, Purpose and Need, Alternatives**
   - **Revisions and clarifications for Alternatives**

2) Summary of impacts to the sablefish stock (from prior analysis)
3) Options and Elements under Alternative 2
   - Element 1 (DMR), Element 4 (review)
   - Elements 2, 3, 5, (catch acctng/ICAs, monitoring, enforcement, release requirements) and NMFS recommendations

4) Updates to the social and economic impact analysis
5) Clarifications and decision points for the Council

History of Action

Apr 2018

- IFQ fishermen provided Council testimony regarding influx of small, low-value sablefish in catch.
- Council initiated a discussion paper on a **proposal to release small sablefish.**

Oct 2018-Dec 2019

- Council reviewed 3 discussion papers on the small sablefish release issue.

Dec 2019

- Council adopted a purpose and need statement and developed alternatives to initiate analysis.

Alt 2: Allow Voluntary Release of Sablefish in the IFQ Fishery

Feb 2021

Council received initial review analysis

- **SSC recommended additional analyses before final action**

History of Action (cntd)

Oct 2021-June 2022

- Council directed staff to prepare and schedule second initial review analysis when time and resources allow.
- Council noted that discussion about a minimum size limit (MSL) for sablefish retention should not be considered in the revised analysis.

June 2023

- Staff "update" document reviewed at Council
- **Council *revised alternatives***
  - **Included option for voluntary release <22 inches (retention required ≥22 inches)**

2024

- SSC reviewed methods for proposed simulation analysis, selects DMRs for analysis. (February)
- **Second initial review, Council revised alternatives, added ICAs and eliminated option to allow voluntary discarding of any size.** (June)

Purpose and Need

“Beginning with the 2014 age class, a continuing series of large year classes of sablefish are resulting in significant catches of small sablefish in the IFQ fixed gear fisheries and current regulations require IFQ holders to retain all sablefish. Small sablefish have low commercial value under current market conditions. Although no scientific studies are available to estimate survival rates for Alaska sablefish, information from other areas suggests that survival rates for carefully released sablefish may be high enough to warrant consideration of relaxing full retention requirements. Limited operational flexibility to carefully release sablefish may increase the value of the commercial harvest and allow small fish to contribute to the overall biomass.”

Alternative 1: **Clarifications**

Alternative 1, No Action (Status quo)

50 CFR 679.7(d)(4)(ii) prohibits *only catcher vessels (CV)* from discarding sablefish IFQ

50 CFR 679.7(f)(11) prohibits *vessels* using fixed gear from discarding sablefish *CDQ*.

There is currently no regulation prohibiting catcher/processors (CPs) that possess sablefish IFQ from discarding sablefish (of any size), unless catch of sablefish exceeds bycatch allowances or vessel limits.

Table 3-20

Sablefish CDQ/IFQ discards and retention (mt) by subarea, CP & CV, 2013-2023

Year	BSAI									GOA								
	CP			CV			Total			CP			CV			Total		
	Discards	Total harvest	Retention rate	Discards	Total harvest	Retention rate	Discards	Total harvest	Retention rate	Discards	Total harvest	Retention rate	Discards	Total harvest	Retention rate	Discards	Total harvest	Retention rate
	CDQ																	
2013	1	84	99.1%	2	302	99.2%	3	386	99.2%									
2014	0	42	100.0%	10	280	96.5%	10	323	96.9%									
2015	0	0	0.0%	0	34	99.6%	0	34	99.2%									
2016	3	3	0.0%	1	34	95.6%	5	37	87.2%									
2017	1	70	97.9%	8	201	96.2%	9	271	96.6%									
2018	15	206	92.6%	3	96	96.4%	19	302	93.9%				N/A					
2019	0	36	99.6%	23	148	84.6%	23	184	87.5%									
2020	8	248	96.9%	22	150	85.7%	29	398	92.7%									
2021	14	321	95.5%	216	532	59.3%	231	853	73.0%									
2022	17	583	97.2%	9	545	98.3%	26	1,128	97.7%									
2023	13	806	98.3%	1	262	99.6%	15	1,068	98.6%									
	IFQ																	
2013	1	407	99.8%	16	722	97.8%	17	1,129	98.5%	N/A	608	N/A	530	10,385	94.9%	608	11,085	94.5%
2014	2	136	98.2%	24	593	96.0%	26	729	96.4%	0	488	100.0%	421	8,933	95.3%	464	9,468	95.1%
2015	0	108	100.0%	5	439	98.8%	5	547	99.0%	1	414	99.9%	541	8,761	93.8%	587	9,235	93.6%
2016	3	101	97.2%	14	377	96.4%	17	479	96.5%	7	349	98.0%	572	7,856	92.7%	633	8,259	92.3%
2017	1	116	99.4%	19	472	96.0%	19	589	96.7%	10	405	97.5%	512	8,544	94.0%	611	9,039	93.2%
2018	0	94	99.8%	32	493	93.4%	33	588	94.5%	8	426	98.0%	550	8,968	93.9%	711	9,564	92.6%
2019	1	75	99.1%	109	705	84.6%	110	779	85.9%	15	449	96.6%	1,205	9,776	87.7%	1,364	10,382	86.9%
2020	4	171	97.9%	62	626	90.1%	66	796	91.7%	5	367	98.7%	565	9,771	94.2%	725	10,293	93.0%
2021	5	248	98.2%	25	1,276	98.0%	29	1,523	98.1%	7	751	99.1%	476	13,096	96.4%	626	13,990	95.5%
2022	0	490	99.9%	62	1,953	96.8%	62	2,443	97.5%	4	1,002	99.6%	448	16,175	97.2%	623	17,369	96.4%
2023	3	735	99.6%	15	1,819	99.2%	18	2,554	99.3%	13	901	98.6%	365	13,980	97.4%	590	15,094	96.1%

Source: AKFIN, source file sablefish_removals_discards(1-31-25)

Alternative 1: **Clarifications**

Alternative 1, No Action (Status quo)

50 CFR 679.7(d)(4)(ii) prohibits *only catcher vessels (CV)* from discarding sablefish IFQ

50 CFR 679.7(f)(11) prohibits *vessels* using fixed gear from discarding sablefish *CDQ*.

There is currently no regulation prohibiting catcher/processors (CPs) that possess sablefish IFQ from discarding sablefish (of any size), unless catch of sablefish exceeds bycatch allowances or vessel limits.

Groundfish FMP language inconsistent with Federal regulations:

- "freezer longliners" rather than "CPs"
- language at 3.7.1.7 General Provisions prohibits discarding sablefish for IFQ and CDQ.

CLARIFICATIONS- IFQ/CDQ mismatch

Currently no regulation prohibiting catcher/processors (CPs) that possess sablefish IFQ from discarding sablefish (of any size), unless catch of sablefish exceeds bycatch allowances or vessel limits.

However, **CPs** that possess sablefish ***CDQ*** are prohibited from discarding sablefish.

Need to be aligned, per:

! **changes made to the Magnuson-Stevens Act (MSA) in 2006**:

305(i)(l)(B)(iv) REGULATION OF HARVEST.—The harvest of allocations under the program for fisheries with individual quotas or fishing cooperatives shall be regulated by the Secretary in a manner no more restrictive than for other participants in the applicable sector, including with respect to the harvest of nontarget species.

Alternative 2 **Clarifications**

Alternative 2 would require the retention of sablefish ≥ 22 inches total body length (provides for voluntary release of sablefish <22 inches), on all fixed gear *CVs* fishing sablefish IFQ or CDQ.

AND, one of the following options to align sablefish retention requirements for fixed gear CPs (IFQ and CDQ):

Option A

Allow discarding of small sablefish for CPs:

IFQ/CDQ CPs would be required to retain sablefish ≥ 22”

- voluntary release of sablefish <22”
- same flexibility offered to CVs under Alternative 2.
- would provide more flexibility for CPs fishing sablefish CDQ as compared to status quo regulations
- would introduce a size restriction that limits flexibility for CPs fishing sablefish IFQ as compared to the status quo.

Option B

Allow discarding of sablefish of any size for CPs:

IFQ/CDQ CPs could discard sablefish of any size

- would increase flexibility for fixed gear CPs fishing sablefish CDQ
- would retain the status quo regulations for CPs fishing sablefish IFQ.
- would provide CPs more flexibility than CVs

Alternative 2

Allow Release of Sablefish in the Fixed Gear IFQ/CDQ Fishery

This alternative would modify the regulatory restrictions that prohibit release of sablefish caught by sablefish IFQ and CDQ vessels as well as the FMP provision prohibiting discarding.

Require retention of sablefish 22 inches total body length or longer (provides for voluntary release of sablefish under 22 inches total body length).

Sex	Age	Proportion Females Mature	Total length (in)	Round weight (lb)	Dressed weight (lb)
Male	1	--	18.3	1.5	1.0
Male	2	--	20.3	2.4	1.5
Male	3	--	21.9	3.2	2.0
Male	4	--	23.1	3.9	2.5
Male	5	--	24.1	4.6	2.9
Male	6	--	24.9	5.1	3.2
Male	7	--	25.5	5.5	3.5
Male	8	--	26.0	5.9	3.7
Male	9	--	26.4	6.2	3.9
Male	10	--	26.7	6.4	4.0
Male	11	--	27.0	6.5	4.1
Male	12	--	27.2	6.7	4.2
Male	13	--	27.3	6.8	4.3
Male	14	--	27.5	6.8	4.3
Male	15	--	27.6	6.9	4.4
Female	1	0.01	18.1	1.5	1.0
Female	2	0.02	20.4	2.4	1.5
Female	3	0.05	22.4	3.3	2.1
Female	4	0.10	24.0	4.3	2.7
Female	5	0.18	25.4	5.3	3.3
Female	6	0.32	26.6	6.2	3.9
Female	7	0.49	27.6	7.0	4.4
Female	8	0.67	28.5	7.8	4.9
Female	9	0.81	29.2	8.5	5.3
Female	10	0.90	29.8	9.1	5.7
Female	11	0.95	30.3	9.6	6.1
Female	12	0.97	30.7	10.1	6.4
Female	13	0.99	31.1	10.5	6.6
Female	14	0.99	31.4	10.9	6.9
Female	15	1.00	31.6	11.2	7.0

Appendix 1: sablefish size and weight at age metrics Courtesy of Jane Sullivan and Katy Echave

Elements of Alternative 2

Element 1: DMRs

The SSC recommends the DMR through the stock assessment process.

Element 2: Catch and Release Mortality Accounting

Sablefish catch and release mortality associated with the IFQ fishery will be accounted for in the stock assessment. For inseason management, an ICA must be established to account for sablefish discards:

Option 1: As part of the annual harvest specification process, fixed gear ICAs will be established separately for the CP and CV categories.

Option 2: As part of the annual harvest specification process, a fixed gear ICA will be established for all IFQ vessels combined.

Element 3: Monitoring and Enforcement

The analysis should describe potential monitoring and enforcement provisions that could improve estimates of voluntary and regulatory discards.

Element 4: Review

The ability to release sablefish will be reviewed in:

a) 3 years **b) 5 years** c) 7 years following implementation.

Element 5: Release Requirements

The Council recommends development, in conjunction with industry, of careful release requirements for all fixed gear sablefish fisheries. The analysis should describe gear modification options (voluntary and regulatory) used to improve size-selectivity for pot and hook-and-line gear fisheries

Presentation Outline

1) Overview of action: History, Purpose and Need, Alternatives
   - Revisions and clarifications for Alternatives

2) **Summary of impacts to the sablefish stock (from prior analysis)**
3) Options and Elements under Alternative 2
   - Element 1 (DMR), Element 4 (review)
   - Elements 2, 3, 5, (catch acctng/ICAs, monitoring, enforcement, release requirements) and NMFS recommendations

4) Updates to the social and economic impact analysis
5) Clarifications and decision points for the Council

Summary of impacts to the sablefish stock (Appendix 3)

C4 Small Sablefish Release

North Pacific Fisheries Management Council
Kodiak, AK
June 2024

Dan Goethel (AFSC), Sara Cleaver (NPFMC),
Chris Lunsford (AFSC), and Ben Williams (AFSC)

A Projection Analysis Quantifying the Implications of the Proposed Small Sablefish Release Action

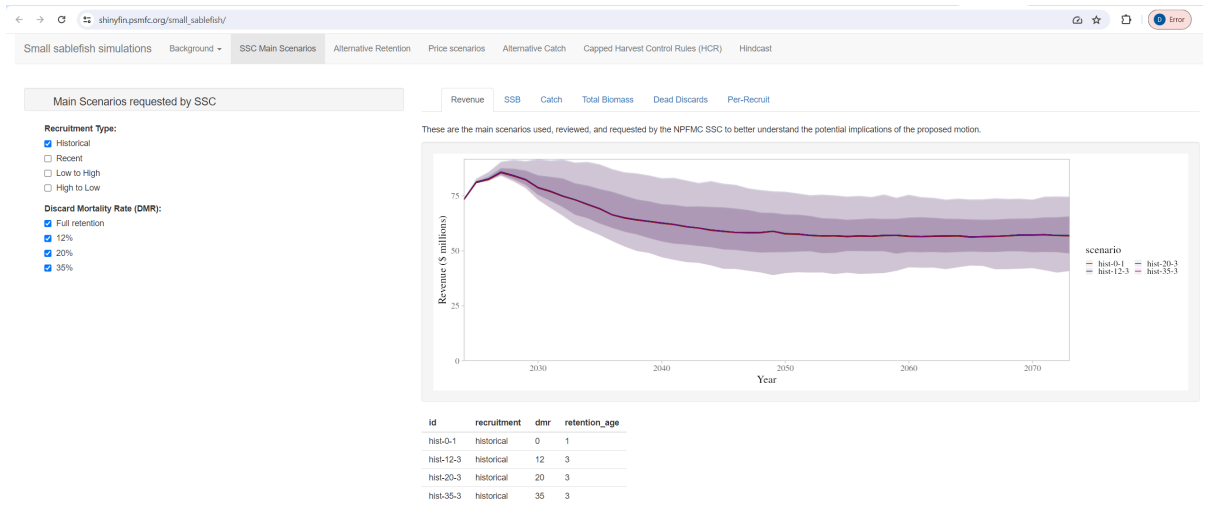
NOAA FISHERIES

Conclusions of Simulation Study (Appendix 3)

- Given the proposed ‘optional release’ size, corresponding essentially to an average age-2 fish, the simulation does not indicate negative consequences of allowing discarding.
- However, no biological benefits for enacting a minimum size limit for Alaska sablefish.
- More extreme impacts not observed due to the limited selectivity of age-2 fish and the comparatively high natural mortality compared to fishing mortality at this age.
- Likely to be some economic benefits, but costs associated with increased effort also likely to increase.
- Scientific uncertainty associated with the stock assessment and resulting ABC projections will likely increase due to limited data available to model the discarding process.
- Interactive app available to further explore results of this work: https://shinyfin.psmfc.org/small_sablefish/.

Summary of impacts to the sablefish stock (Appendix 3)

- Ben Williams developed a user-friendly **shiny app** to illustrate impacts of retention and DMR options-- https://shinyfin.psmfc.org/small_sablefish/.
  - **Provides results in an interactive format to aid understanding and comparisons.**
- Includes full factorial combination of sensitivity runs and some alternate runs, which were not meant for review (provided to further aid understanding of model dynamics).
- Intended to enable interested parties to explore assumptions and consider impacts on their own and in a different format from a management document.



Presentation Outline

1) Overview of action: History, Purpose and Need, Alternatives
   - Revisions and clarifications for Alternatives
2) Summary of impacts to the sablefish stock (from prior analysis)
3) **Options and Elements under Alternative 2**
   - **Element 1 (DMR), Element 4 (review)**
   - Elements 2, 3, 5, (catch acctng/ICAs, monitoring, enforcement, release requirements) and NMFS recommendations
4) Updates to the social and economic impact analysis
5) Clarifications and decision points for the Council

Elements of Alternative 2

Element 1: DMRs

The SSC recommends the DMR through the stock assessment process.

Element 2: Catch and Release Mortality Accounting

Sablefish catch and release mortality associated with the IFQ fishery will be accounted for in the stock assessment. For inseason management, an ICA must be established to account for sablefish discards:

Option 1: As part of the annual harvest specification process, fixed gear ICAs will be established separately for the CP and CV categories.

Option 2: As part of the annual harvest specification process, a fixed gear ICA will be established for all IFQ vessels combined.

Element 3: Monitoring and Enforcement

The analysis should describe potential monitoring and enforcement provisions that could improve estimates of voluntary and regulatory discards.

Element 4: Review

The ability to release sablefish will be reviewed in:

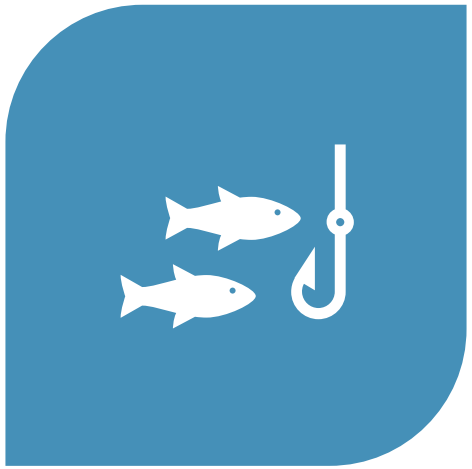
a) 3 years **b) 5 years** c) 7 years following implementation.

Element 5: Release Requirements

The Council recommends development, in conjunction with industry, of careful release requirements for all fixed gear sablefish fisheries. The analysis should describe gear modification options (voluntary and regulatory) used to improve size-selectivity for pot and hook-and-line gear fisheries

Element 1: Discard Mortality Rate (DMR)

The SSC recommends the DMR through the stock assessment process.



ELEMENT 4: REVIEW

The ability to release sablefish will be reviewed in:

a) 3 years

b) 5 years

c) 7 years

following implementation.

Presentation Outline

1) Overview of action: History, Purpose and Need, Alternatives
   - Revisions and clarifications for Alternatives
2) Summary of impacts to the sablefish stock (from prior analysis)
3) **Options and Elements under Alternative 2**
   - Element 1 (DMR), Element 4 (review)
   - **Elements 2, 3, 5, (catch acctng/ICAs, monitoring, enforcement, release requirements) and NMFS recommendations**
4) Updates to the social and economic impact analysis
5) Clarifications and decision points for the Council

Elements 2 & 3: Catch and Release Mortality Accounting

For inseason management, an ICA must be established to account for sablefish discards as part of the annual harvest specification process

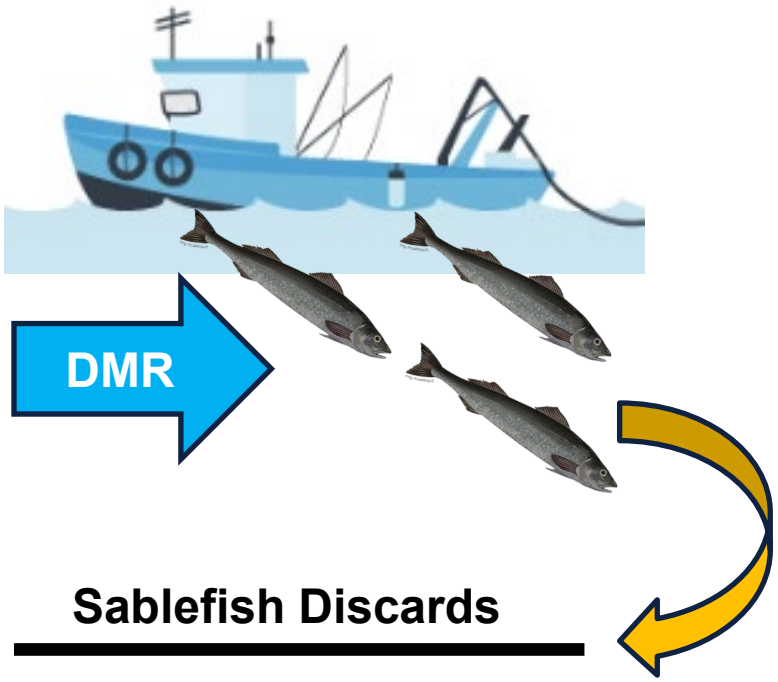
- **Incidental catch or incidental species:** fish caught and retained while targeting other species but does not include discard of fish that were returned to sea (50 CFR 679.2)
  - Small sablefish discards does not align with the definition of "*incidental catch*" or "*incidental species*" due to sablefish being a targeted species and the voluntary choice in retaining any sablefish < 22 inches total body length under this action.
  - **NMFS recommends new terminology, "*sablefish discard allowance (SDA)*", to account for projected discards of sablefish by fixed gear vessels engaged in directed fishing for sablefish in the IFQ and CDQ programs.**

Section 4.4, pages 83–89

Elements 2 & 3: Catch and Release Mortality Accounting

- **Fixed gear TAC is fully allocated for sablefish IFQ/CDQ fisheries without a discard allowance, unlike other groundfish fisheries.**
  - No sablefish discard allowance was created during IFQ program implementation due to minimal information needed to estimate a sablefish DMR.
    - Monitoring coverage (observer and electronic) information has expanded and improved since IFQ program implementation.
    - SSC would recommend DMR through stock assessment process (Element 1).

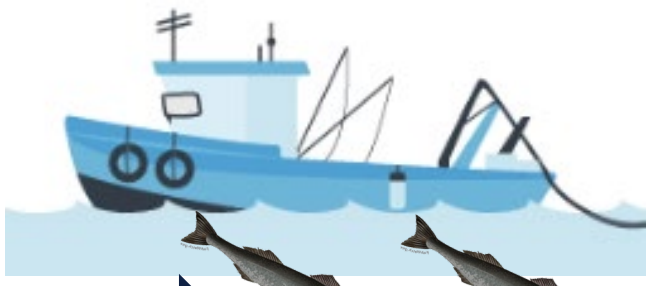
- **Inseason Management**
  - For groundfish fisheries, annually NMFS sets ICAs using information on incidental catch in the previous years and manages ICAs inseason to prevent exceeding TACs each year.
  - Limited management tools for SDA due to sablefish IFQ program structure
  - **NMFS recommends establishing inseason management authority to prohibit discarding when the area-wide SDA is reached in the sablefish IFQ/CDQ fisheries to prevent exceeding a TAC or ABC.**



Section 4.4, pages 83–89

Elements 2 & 3: Catch and Release Mortality Accounting

Previous Season



DMR

Sub-area A Discards

plus

Sub-area B Discards

Next Season

Sub-area A TAC

minus

Sub-area B TAC

Est. discards subarea A

Est. discards subarea B

Area-wide SDA

equal

Sub-area A IFQ TAC

equal

Sub-area B IFQ TAC

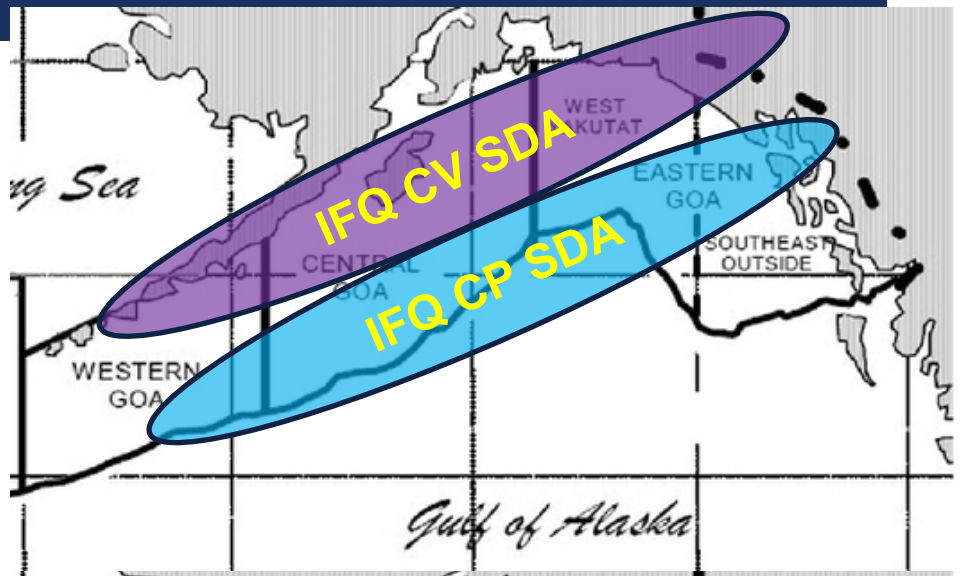
- Estimates discards at a broader level aggregating them across multiple subareas to inform an SDA.
- Proportionally distributes each subareas contribution to the SDAs (Option 1) or SDA (Option 2) to inform each subarea TAC.
- Increases flexibility for harvesters and management (*i.e.* not managing for smaller boxes)
- Exceedance of subarea TAC unlikely to be harmful to stock due to area-wide SDAs

Elements 2 & 3: Catch and Release Mortality Accounting

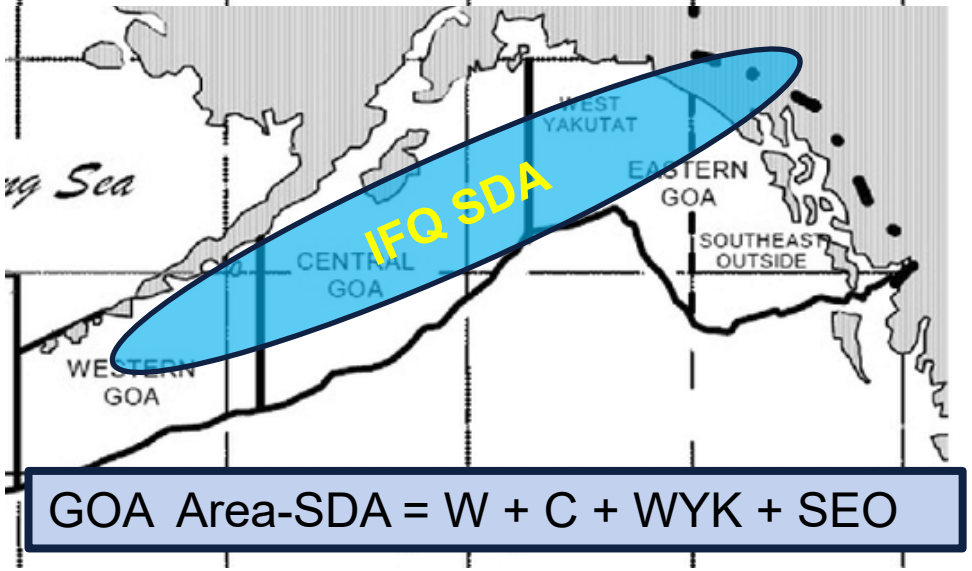
- **NMFS would establish a sablefish discard allowance (SDA) by area (BSAI and GOA), sector (CDQ and IFQ), and fleet specific (Option 1) or combined (Option 2)**
  - BSAI FMP Area
    - Subareas: BS and AI
  - GOA FMP Area
    - Subareas: W, C, WYK, and SEO

- **BSAI vs GOA**
  - SDA application differs by area due to CDQ reserve requirements in BSAI (50 CFR 679.20(b)(1)(ii)(B)).
  - CDQ reserve allocation for each subarea (BS and AI) incorporates directed fishing and non-target needs.
  - CDQ groups manage everything retained and CDQ CP discards. Must be within their total allocation.

Opt. 1



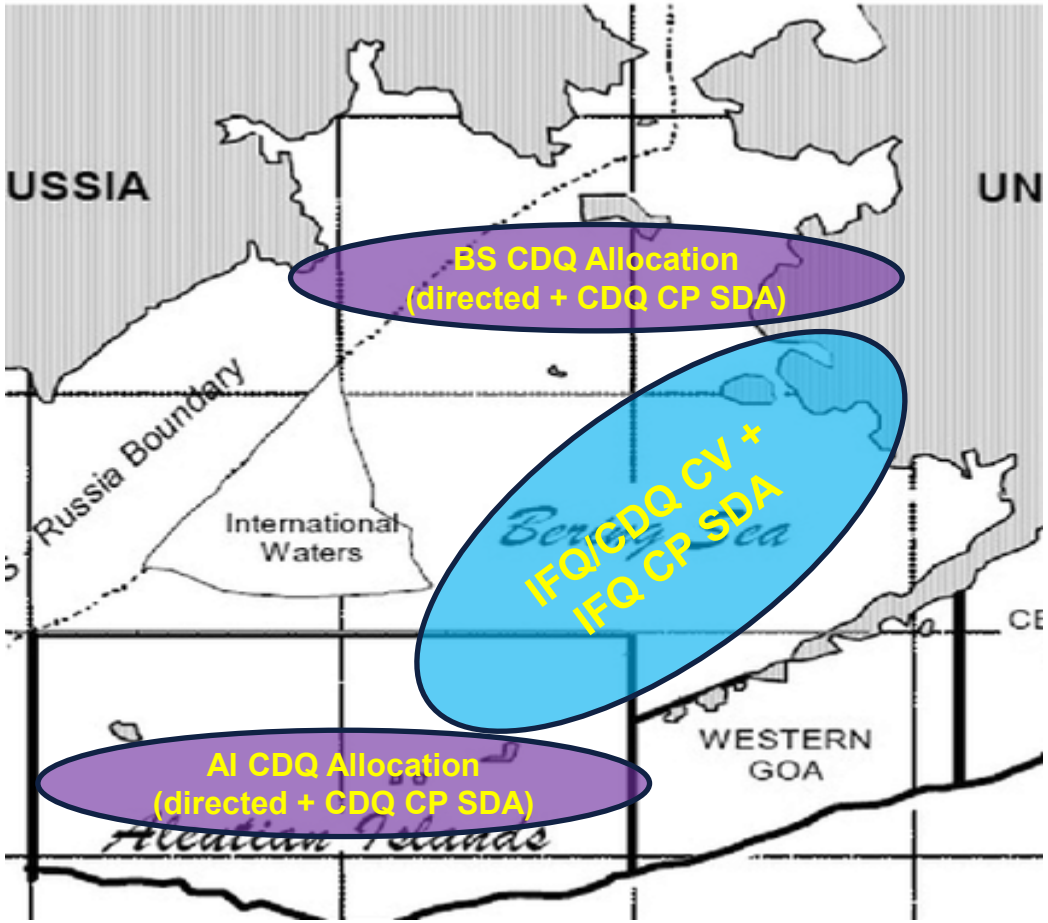
Opt. 2



Elements 2 & 3: Catch and Release Mortality Accounting

- **Monitoring Coverage and Discard Data (BSAI)**
  - **Sablefish discards by CPs** would be estimated and an SDA applied to IFQ CPs due to full observer coverage.
  - **Sablefish discards by CVs** would be estimated on a mixture of observed trips between sectors (CDQ + IFQ) due to partial observer coverage and applied as an area-wide SDA to the sablefish IFQ TAC.
    - CDQ and IFQ CVs catch accounting sources must use the same information sources and treated the same (50 CFR 679.32).
    - Combined IFQ/CDQ CV discard data will include data not associated with the CDQ program and is not sufficient in managing the CDQ program.

Opt. 2



Elements 2 & 3: Catch and Release Mortality Accounting

The analysis should describe potential monitoring and enforcement provisions that could improve estimates of voluntary and regulatory discards.

- **Data collection processes and catch estimation methods for sablefish are designed to assess total catch and not designed to evaluate size-selective discards.**
  - Generates unbiased estimates of sablefish discards
  - Size-selective discards creates overestimation risk by not adjusting total catch estimation methods.

- **Observer sampling and duties will currently remain unchanged as a result of this action.**
  - Difficult to assess appropriate sampling methodologies and priorities in a shifting environment due to voluntary behavior of size-selective discards.
  - Changing observer duties complex due to evaluating data needs of Council priorities, stock assessments, and other mandates.

Section 2.2.3, pages 26–27

Elements 2 & 3: Catch and Release Mortality Accounting

The analysis should describe potential monitoring and enforcement provisions that could improve estimates of voluntary and regulatory discards.

- **Require implementing new total catch accounting method for IFQ and CDQ sablefish fisheries to estimate discards possible, but complicated…**
  - No change in methodology for retained sablefish
  - Different methodology for CPs vs CVs
    - Full vs Partial observer coverage
    - Production vs Landings reports

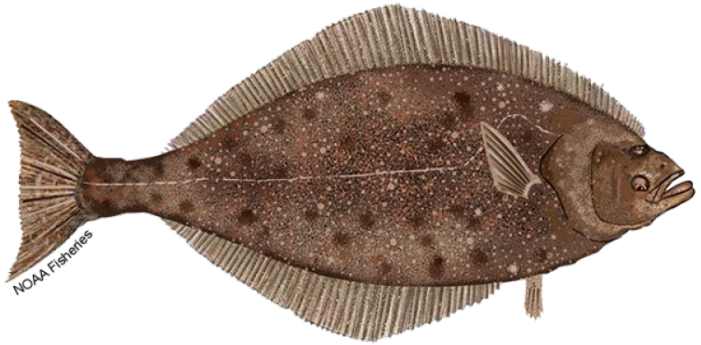
- **New methods to account for voluntary discarding would be a unique process for sablefish compared to other groundfish species.**
  - Requires substantial modification to catch accounting estimation processes.
  - Implementation dependent upon available resources.

Section 4.2, pages 78–81

Element 5: Release Requirements & Gear Modifications

The Council recommends development, in conjunction with industry, of careful release requirements for all fixed gear sablefish fisheries.

- **Careful Release Provisions (Table 2-1)**:
  - Prohibited Species Catch (PSC) Bycatch (50 CFR 679.21)
  - Halibut discard (50 CFR 679.102 and 679.7)
  - Section 7 of IPHC regulations
  - SEAK inside waters sablefish fishery (5 AAC 28.170(f))



- **Considerations**:
  - Existing regulations for H&L and pot gear
  - Ensure observer access to collect biological information prior to release
  - Releasing fish immediately and with minimal injury
  - Enforceability and industry input

Section 2.2.5.1, pages 28–29

Element 5: Release Requirements & Gear Modifications

The Council recommends development, in conjunction with industry, of careful release requirements for all fixed gear sablefish fisheries.

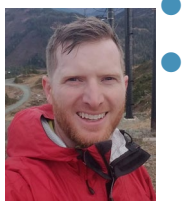
- **Enforcement Limitations (Section 4.5)**
  - To detect illegal discards of sablefish >= 22" or noncompliance with catch handling provisions, these events would need to be witnessed (Enforcement officer, observer, or review of EM) and referred to NOAA OLE for investigation.
  - Difficult to enforce retention of fish “visibly injured or dead” if considering SEAK inside waters sablefish regulations.

- **NMFS in consultation with industry and OLE recommends a careful release requirement for sablefish that includes:**
  - **Sablefish are released immediately and with a minimum of injury.**
  - **Ensuring observers when on deck and sampling have access to the fish to collect necessary biological information.**
  - **Requirements be similar to existing regulations for halibut and sablefish for H&L and pot gear.**

Element 5: Release Requirements & Gear Modifications

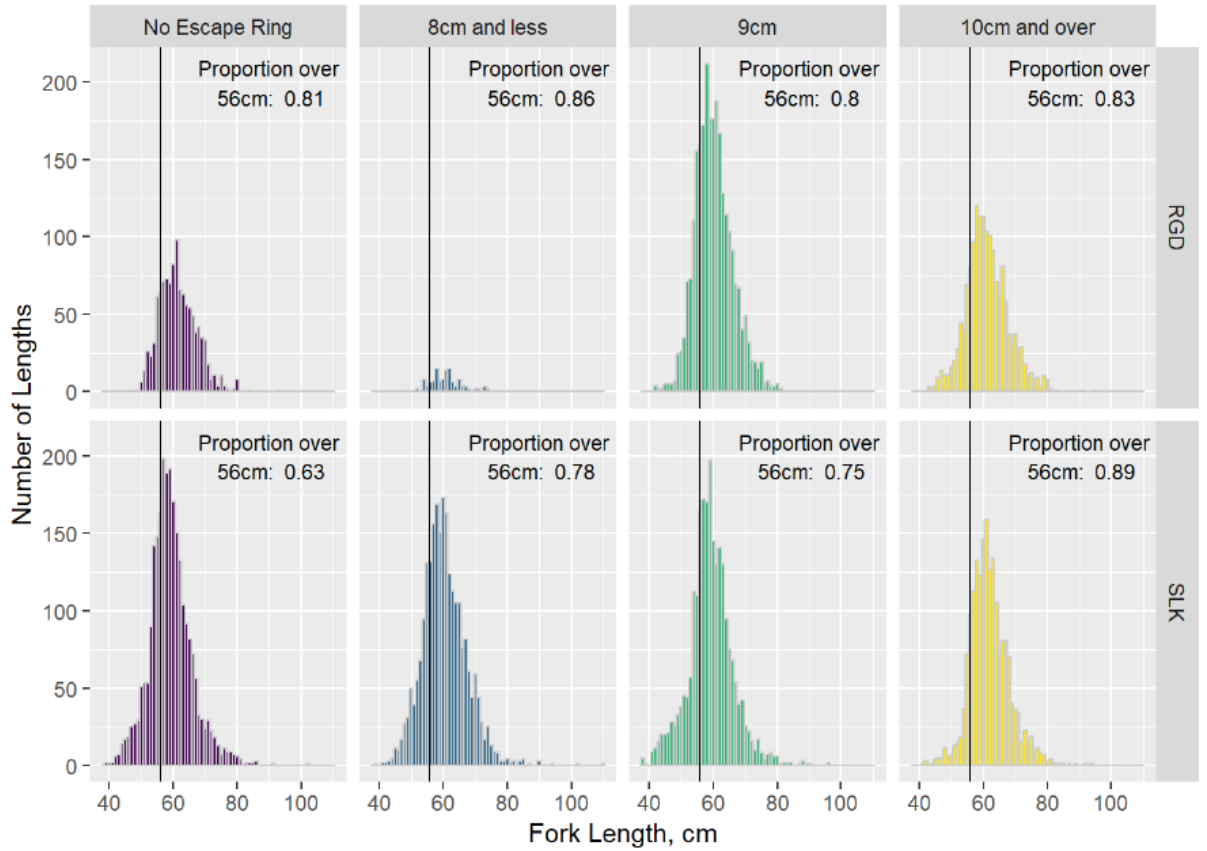
The analysis should describe gear modifications options (voluntary and regulatory) used to improve size-selectivity for pot and hook-and-line gear fisheries

- Gear modifications improve size-selectivity of a target species in order to retain larger more valuable fish, reduces bycatch of non-target species, and reduces discard mortality.
  - *e.g.* escape rings, vents, stretch-mesh, hook size/shape, etc.
- **ADF&G (2019) and AFSC (2020) escape ring studies**
  - Demonstrated use of escape rings decreased capture of small sablefish
- **2024 Observer Program & IFQ Fishery**
  - Collected info on escape ring presence, size, and opening status of rings
  - Ring size ranged from 5–14 cm with ~ 3.9 rings per pot
  - Majority of pots used 8–10 cm sized escape rings
  - Escape ring size-selectivity more pronounced for slinky than rigid pots



Section 2.2.5.2, pages 30–35

Figure 2-3 **Length distributions for sablefish caught on CVs for rigid-sided (RGD) and slinky (SLK) pots for a range of binned escape ring sizes. The most common escape ring size for each pot was summarized for each vessel an observer was deployed. The proportion of lengths over 55.88cm (22in) is given within each pot type and escape ring size bin.**

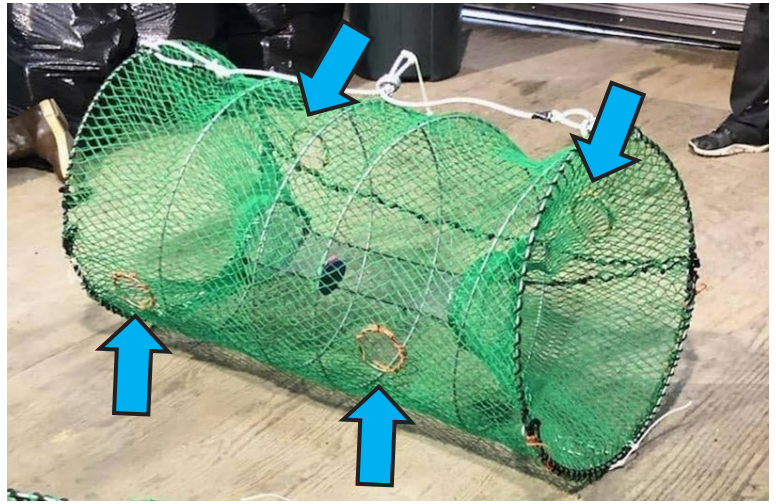


Element 5: Release Requirements & Gear Modifications

- **Sablefish Gear Modification Requirements**
  - 3.5 in/8.9 cm escape ring size in B.C., Canada & SEAK
  - No hook-and-line gear size/shape or escape ring requirements for IFQ, but voluntarily used.

Source: Seattle Marine and Fishing Supply

- **Required vs Voluntary Escape Rings**
  - Reduces capture of small sablefish.
  - Reduces number of discards and overall discard mortality and potential interactions with marine mammals.
  - If required easy to implement and comply with, but removes flexibility to “top-off” (*i.e.* close escape rings) any remaining quota such as at the end of a fishing season or last IFQ trip of the season for a vessel.



Source: Fish Tech Inc.

Section 2.2.5.2, page 30–35

Summary of NMFS Recommendations

Alternatives 1 & 2:

- Align sablefish retention requirements for fixed gear CPs fishing in the IFQ and CDQ fisheries to comply with section 305(i)(1)(B)(iv) of the MSA.
- Technical revisions to the BSAI and GOA Groundfish FMPs to align with Federal regulations by:
  - Changing FMP reference to “freezer longliners” to “catcher/processors (CPs)”.
  - Matching FMP language to regulations on sablefish retention requirements.

Alternative 2:

- ***Element 2 & 3:***
  - Establish inseason management authority to prohibit discarding in the sablefish IFQ/CDQ fisheries when an area-wide SDA is reached to prevent exceeding a TAC or ABC.
  - Establish new terminology “sablefish discard allowance (SDA)” rather than “ICA”.

- ***Element 5:***
  - Careful release requirements to include language similar to existing regulations for halibut and sablefish such that sablefish are released immediately and with a minimum of injury while ensuring observers are able to collect necessary biological information.

Presentation Outline

1) Overview of action: History, Purpose and Need, Alternatives
   - Revisions and clarifications for Alternatives
2) Summary of impacts to the sablefish stock (from prior analysis)
3) Options and Elements under Alternative 2
   - Element 1 (DMR), Element 4 (review)
   - Elements 2, 3, 5, (catch acctng/ICAs, monitoring, enforcement, release requirements) and NMFS recommendations
4) **Updates to the social and economic impact analysis**
5) Clarifications and decision points for the Council

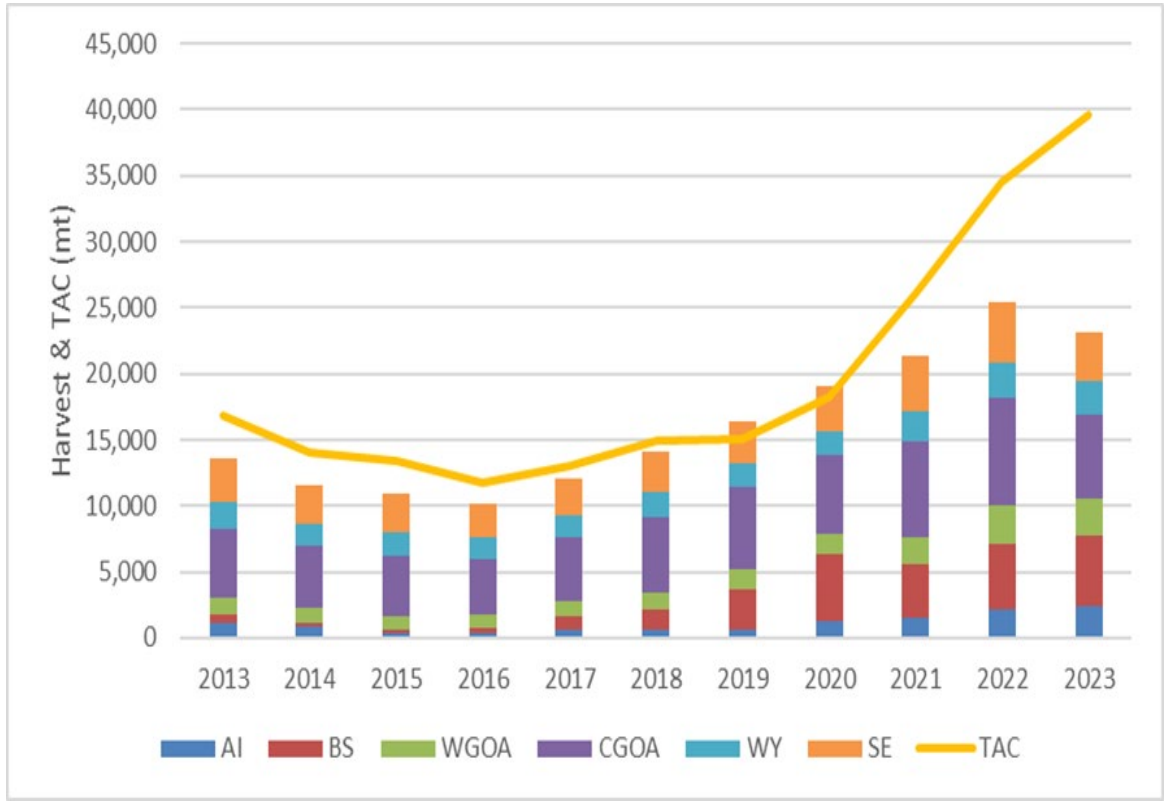
Chapter 3 - Description of Sablefish Fisheries

Chapter 3 includes four sections:

- **Section 3.1 - Harvest of Sablefish**
- **Section 3.2 - Target products**
- **Section 3.3 - Markets**
- **Section 3.4 - Local knowledge, traditional knowledge, and subsistence**

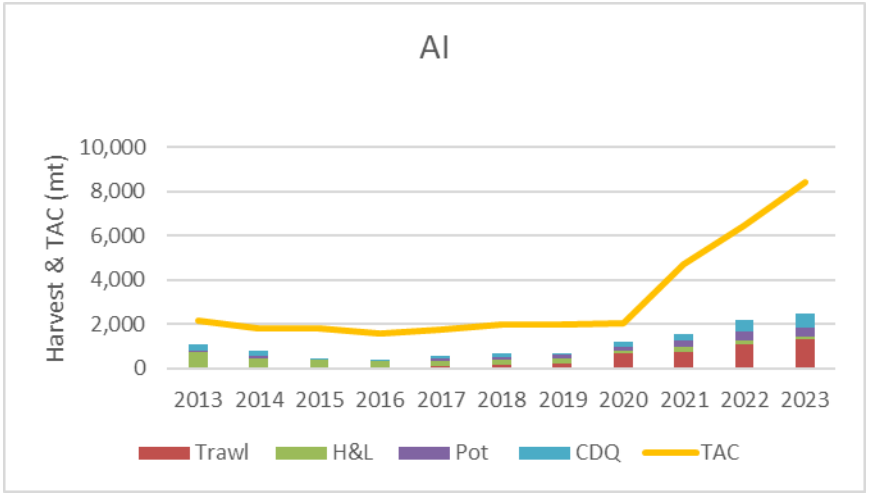
Chapter 3 - Description of Sablefish Fisheries

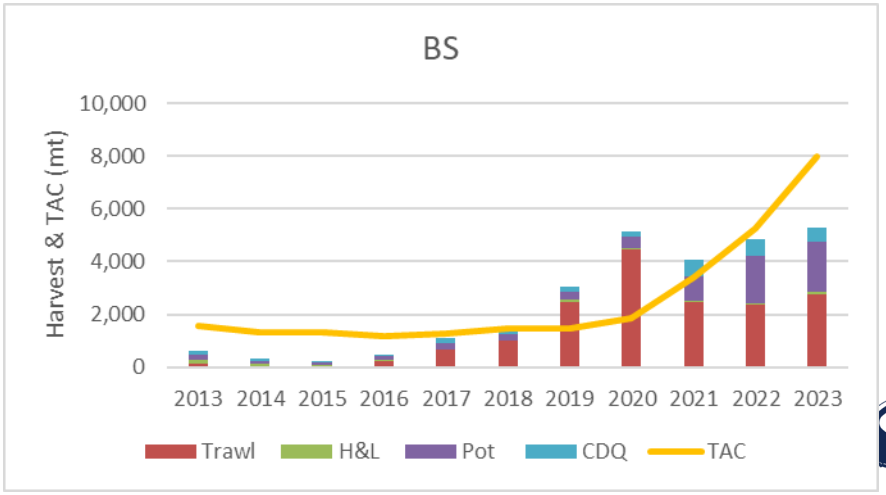
- Table 3-1 and Figure 3-1 on page 35 presents TAC (mt) and harvest of sablefish (mt) by FMP subarea, 2013-2023
- From 2013-2016, average harvest was 83% of TAC
- 2017 & 2018 average harvest was 93% & 94%
- 2019 & 2020 average harvest exceeded TAC
- 2021-2023 average harvest as percent of TAC declined sharply
- New Table 3-2 CP & CV sablefish harvest by subarea and % of total harvest



Chapter 3 - Description of Sablefish Fisheries

- Next series of tables and figures page 40 – 46 present TAC (mt) and harvest of sablefish (mt) for each FMP subarea by sector from 2013-2023
- Presented in this slide are figures for BS and AI TAC and sablefish harvest by sector from 2013 through 2023
- These figures illustrate recent trend of TAC remaining unharvested
- The BS figure also illustrates the sharp increase in harvest of sablefish by the trawl sector

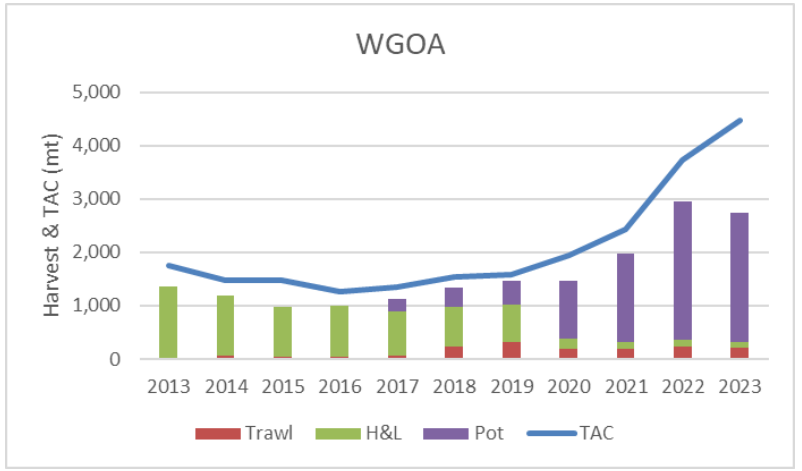


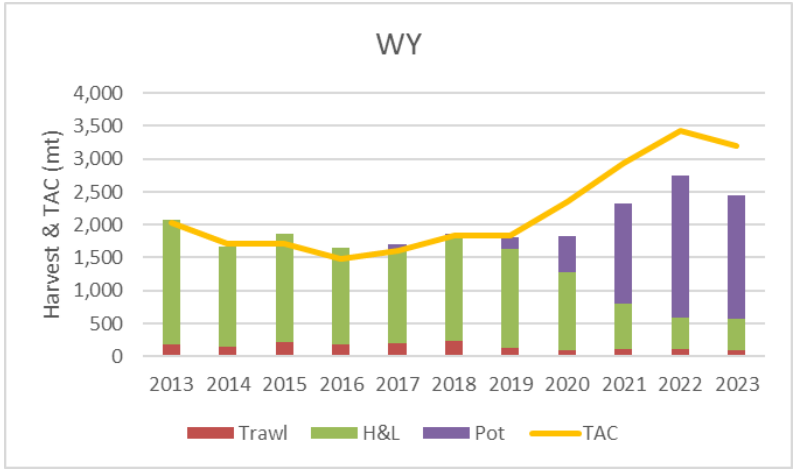


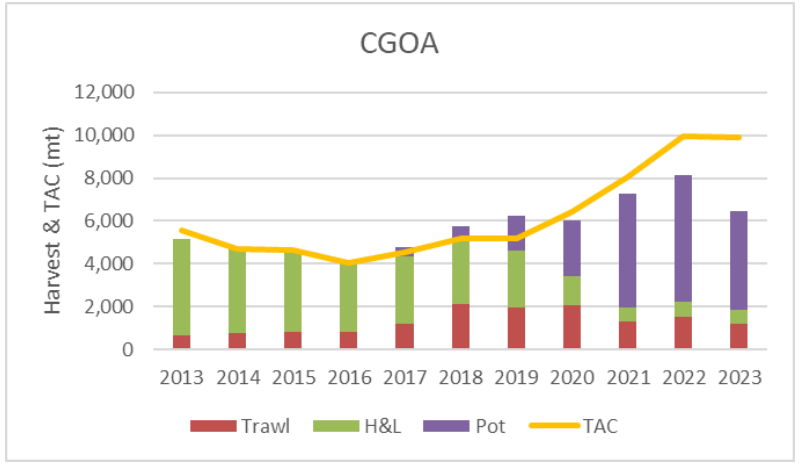
Chapter 3 - Description of Sablefish Fisheries

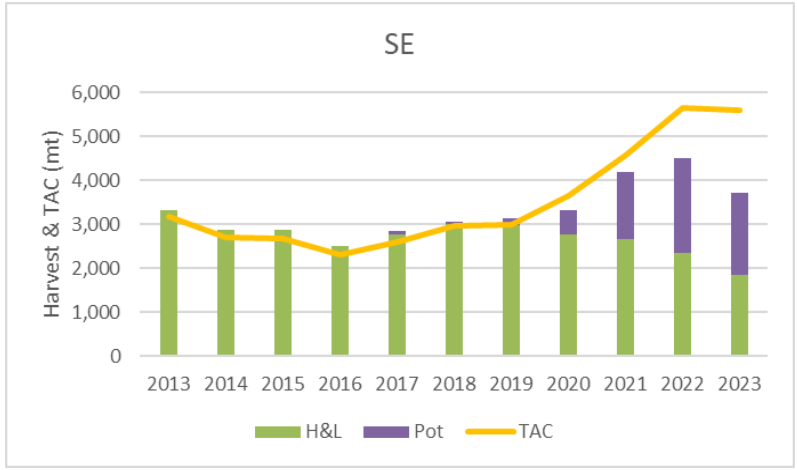
- Presented in these figures are GOA subareas TAC and sablefish harvest by sector from 2013 through 2023
- Again, these figures illustrate the recent trend of TAC remaining unharvested
- Illustrate the growing utilization of pot gear to harvest IFQ sablefish

Starting in 2017, pot gear was authorized in the GOA sablefish IFQ fishery









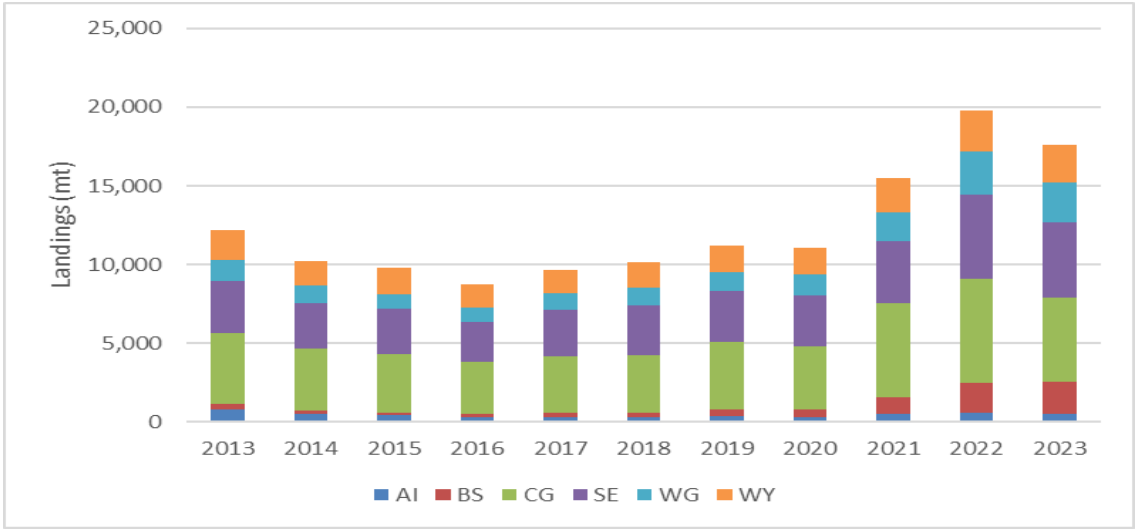
Chapter 3.1.1 – Sablefish IFQ Fishery

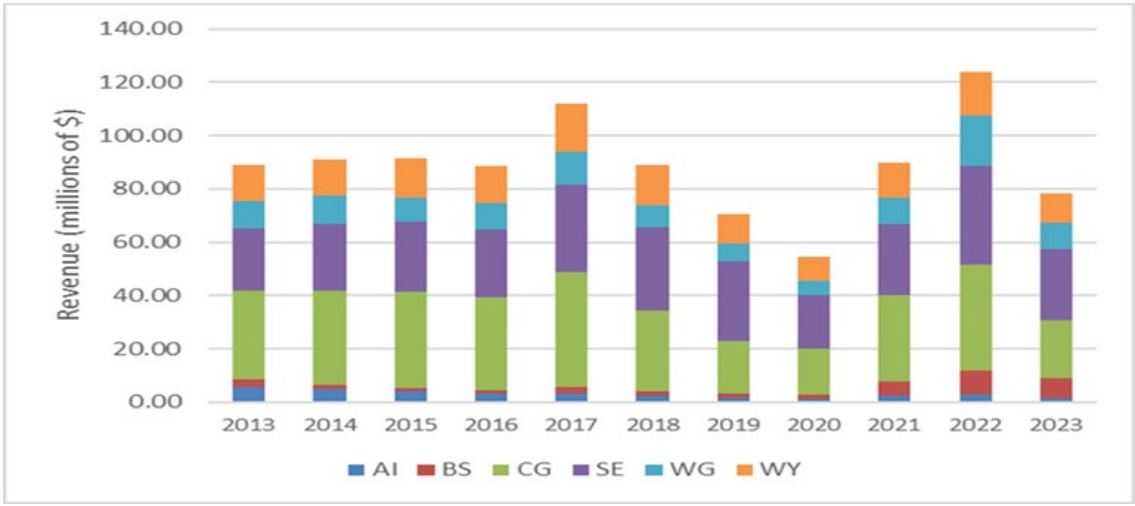
Chapter 3.1.1 – Sablefish IFQ Fishery includes four sections

- **Section 3.1.1.1 - sablefish IFQ gear types (p48)**
- **Section 3.1.1.2 – sablefish IFQ/CDQ vessel count, CP/CV vessel count, and landings by vessel class and subarea (p49-51)**
- **Section 3.1.1.3 – sablefish IFQ retained catch and revenue (p51-56)**
- **Section 3.1.1.4 – sablefish IFQ processor grade prices and composition (p56-64)**

Chapter 3.1.1.3 – Sablefish IFQ Revenue

- Table 3-15 (p53) provides sablefish IFQ allocations (mt), landings (mt), and ex-vessel revenue (millions of 2022 $) by subarea from 2013-2023
- Table 3-16 (p53) provides sablefish IFQ retained catch and percent of total for CPs and CVs by area from 2013-2023
- Table 3-17 (p54) provides sablefish IFQ ex-vessel revenue by area and gear from 2013-2023
- Total ex-vessel revenue for 2023 was $78 million which is lower than the 2022 ex-vessel revenue of $124 million
- Table 3-18 (p54) provides CP first wholesale gross revenue by area

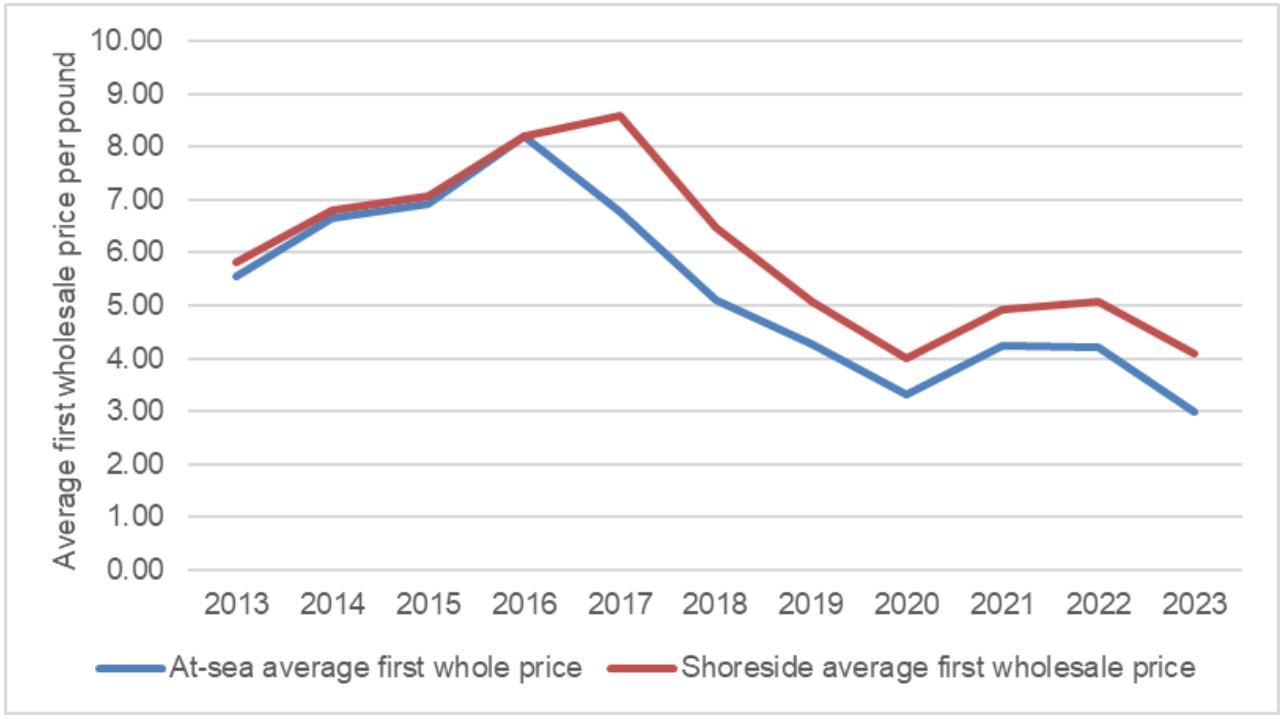




Chapter 3.1.1.3 – Sablefish IFQ Revenue

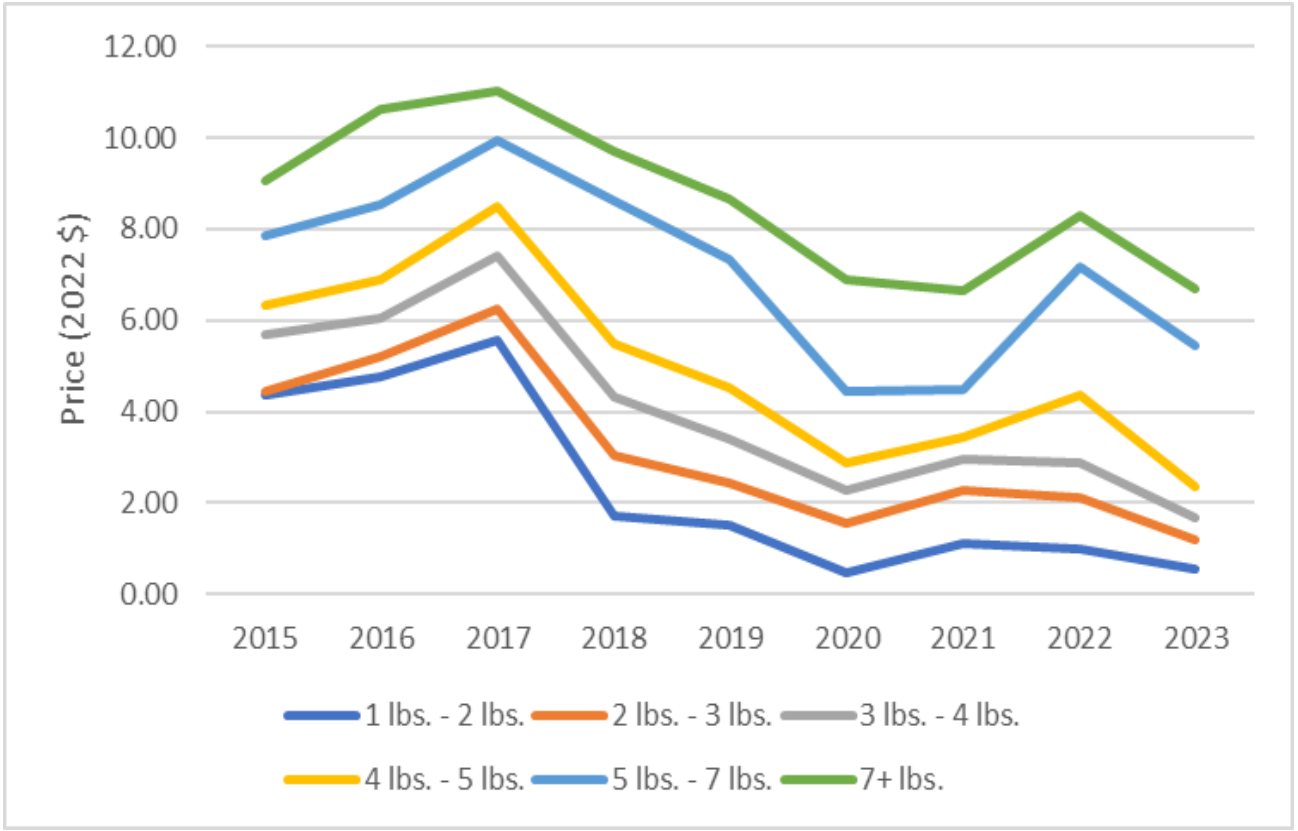
- Table 3-19 (p55) provides average first wholesale revenue for at-sea processors and shoreside processors 2013 - 2023

- Prices increase 2013 - 2016/2017 but declined until 2020 followed by slight increase in 2021 and 2022 then a steep decline in 2023



Chapter 3.1.1.4 – Sablefish IFQ Processor Grade Prices and Composition

- Table 3-21 and Figure 3-11 (p57) provide Alaska-wide average sablefish processor size grade prices in 2022 dollars from 2015-2023
- Table 3-22 (p58) provides average sablefish processor grade prices by regulatory area
- Table 3-23 (p59) provides # of unique processors by area and processor grade
- Prices were uniform in movement with the except of 2022 when higher grades increased while lower grades declined
- 2023 had the lowest prices for each grade since 2015



Chapter 3.1.1.4 – Sablefish IFQ Processor Grade Prices and Composition

- Table 3-24 (p60) provides percent of sablefish IFQ landings by grade for all regulatory areas combined, 2015-2023
- Composition of sablefish IFQ landings is changing where premium grade landings are diminishing as a percent of total landings while smaller grades are increasing
- Figures 3-12 through 3-17 (p61) show the composition of landings for each subarea from 2015-2023
  - In general, 2 lbs. to 3 lbs. grade increased as a proportion to total landings and 7+ grade diminished
- Table 3-25 (p63) provides percent of sablefish IFQ gross ex-vessel revenue by regulatory area and market grade

Grades	2015	2016	2017	2018	2019	2020	2021	2022	2023
7 UP	23%	20%	24%	22%	12%	7%	4%	3%	3%
5 to 7 Lbs	27%	26%	26%	23%	21%	19%	9%	10%	14%
4 to 5 Lbs	22%	24%	19%	21%	19%	22%	15%	17%	20%
3 to 4 Lbs	23%	20%	18%	18%	24%	25%	37%	32%	32%
2 to 3 Lbs	5%	7%	9%	13%	18%	21%	28%	31%	25%
1 to 2 Lbs	1%	3%	5%	4%	7%	5%	7%	7%	5%

Source: AKFIN; source file is sablefish_Grading_Area(4-30-24)

Chapter 3.1.2 – CDQ Fixed Gear Sablefish Fishery

Table 3-26 (p67) provides annual sablefish CDQ fixed gear allocations, CDQ vessel count, CDQ landings, and CDQ landings as percent of annual CDQ fixed gear allocations, 2013-2023

AI

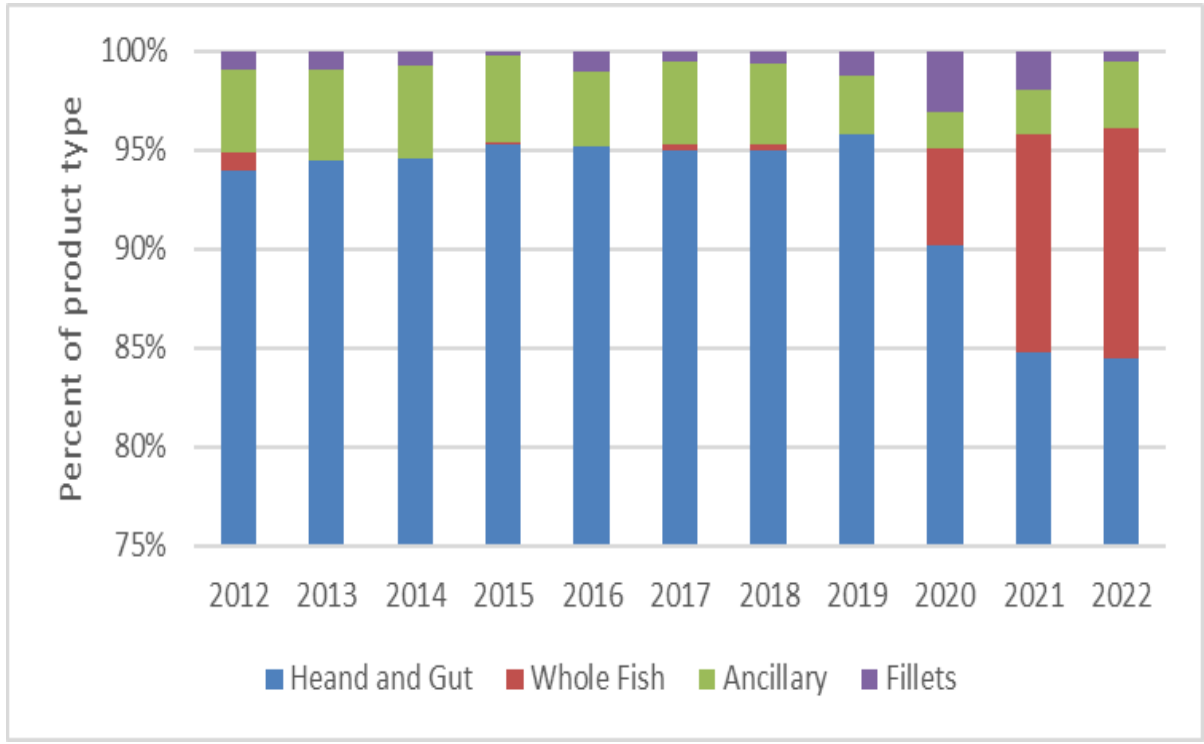
- Percent of CDQ landings relative to allocations ranged from 80% in 2013 to 3% in 2016
- CVs were primary harvester from 2013-2017
- CPs were primary harvester from 2018 through 2023

BS

- Percent harvested ranged from 26% in 2015 to over 100% in 2021
- CVs were the primary harvester

Chapter 3.2 – Target Products

- Table 3-31 (p72) shows sablefish production (mt) by product form, 2012-2023
- The dominant sablefish wholesale product is H&G followed by whole fish as illustrated in Figure 3-21
- First wholesale volume of sablefish products averaged just under 8,000 mt annually
  - However, in 2021 and 2022 production increased which has flooded the market which has results in lower prices
- Tables 3-32 and 3-33 (p73) provide annual mt of sablefish IFQ and percent of sablefish IFQ sold and not sold by disposition code, 2013-2023
  - During the 2013-2023 period, over 99% of sablefish IFQ was sold for human consumption



Chapter 3.3 – Sablefish Markets

- Japan is historically the primary market for Alaska's sablefish, generally accounting for over 70 percent of total export volume followed by China
- U.S. and Canada have accounted for nearly all global production of sablefish
  - Alaska is the primary contributing an annual average of 62 percent between 2016 and 2020
- As reported in the past Undercurrent News, Russia, which has been a relatively small contributor to world sablefish production, could play a more significant role as catch recommendations have increased dramatically
  - Continues to be some uncertainty how and if Russian fishing fleet can capitalize on these high harvest recommendations
- Preliminary indications are that sablefish ex-vessel prices for 2024 were even lower than 2023
- Finally, there are numerous geopolitical challenges, trade inequities, and economic factors that are not directly controlled by seafood participants that are impacting the Alaska sablefish fishery
  - These include large harvests by overseas competitors with low currency valuations (Russia), trade conflicts with a major U.S. export receiver (China), higher operating costs due to domestic inflation, and high interest rates that have affected processors' ability to finance operations and needed investments to support processing facilities, vessel fleets and crew

Social Impact Assessment
Harvesters

- Section 6.2 Social Impact Assessment (p134-154)
  - Sablefish IFQ vessel ownership for CVs is concentrated in Alaska, specifically Homer, Seward, Kodiak, Juneau, Petersburg, and Sitka, which accounts for 55% of CVs (Table 6-1 p139)
  - For CPs, ownership is also concentrated in Alaska at 70%, with Sitka having the highest percentage of ownership address at 33% (Table 6-2 p140)
  - From the perspective of sablefish IFQ gross ex-vessel revenue by ownership address, Petersburg at 19% and Sitka at 15% had the largest revenue (Table 6-3 p141)
  - Sablefish IFQ vessels with a highest degree of dependency on the sablefish fishery by historic ownership address include Cordova at 48%, Sitka and Seward at 42%, and Petersburg at 34% (Table 6-4 p142)
  - For sablefish IFQ vessels, the sablefish and halibut IFQ fisheries are the primary source of ex-vessel revenue, while salmon and Pacific cod are less important (Table 6-7 p144)
  - Several Alaska communities are dependent on the sablefish IFQ fishery: Sitka at 27%, Seward at 28%, and Petersburg at 14% (Table 6-5 p143)

Social Impact Assessment
Crew and Quota Share Owners

Crew (Table 6-8 p145)

- Crew numbers have declined over the years, but during 2021-2023 crew numbers increased
- Crew numbers for the less than 40’ and the greater than 60’ have shown the greatest loss in crew numbers since 2013

Quota Share Owners (Table 6-9 & Table 6-10 p146 & 147)

- Sitka has the largest number of quota share owners at annual average of 123 owners
- Other communities with high numbers of quota share owners are Kodiak at 68 owners, Petersburg at 59 owners, and Seward at 57 owners
- The region with highest concentration of sablefish quota share is Southeast at 106 million shares which accounts for 31% of the total sablefish quota shares
  - Of the Southeast communities, Petersburg at rough 53 million shares or 15% of the total shares and Sitka at 31 million shares or 9% of the total shares had the largest number of shares

Social Impact Assessment
Shore Processors

- Annual average number of processors accepting sablefish IFQ deliveries from 2013-2023 was 35 (Table 6-11 p148)
- Sitka, Seward, Kodiak, and Petersburg combined to accounted for approximately 73% of the average annual first wholesale gross revenue from the sablefish IFQ fishery from 2013 through 2023 (Table 6-12 p149)
- Processors in Sitka at 34%, Seward at 26%, and Juneau at 13% were highly dependent on the sablefish fishery (Table 6-13 p150)
- Seward at 25% and Sitka at 15% were the two communities with highest dependency on the sablefish IFQ fishery (Table 6-14 p151)
  - Other communities with dependency greater than 5% included Petersburg and Juneau at 7% each (Table 6-14 p151)

Economic and Social Impacts

Alternative 1, No Action

- Selecting Alt 1 leaves in place the existing regulatory restrictions prohibiting release of sablefish caught by sablefish IFQ/CDQ vessels either when directing on sablefish or when anyone onboard has unused IFQ/CDQ in their account
- Under Alt 1, harvest participation and fishing behavior are likely to be similar to current participation and fishing practices which include:
  - IFQ holders not harvesting all their allocations (Table 6-17 and Figure 6-1 on p155 & 156 show annual percent of allocations harvested by regulatory area)
  - Reduced number of vessels active in the fishery (Figure 6-2 p156 shows declining number of active vessels through 2023)
  - Reduced fishing days (Figure 6-3 p157), especially for vessels fishing less than 24 days a year (Table 5-16 and Figure 6-18 p157)
  - More dependent on the sablefish fishery in more recent years (Table 6-6 p144)
  - Little ability to improve ex-vessel revenue with higher encounter rates of smaller sablefish and continued very low prices for smaller sablefish due to world market for sablefish

Economic and Social Impacts

Alternative 1, No Action

- Processors that receive deliveries of sablefish IFQ/CDQ would experience similar processing activity and would also be negatively impacted under Alt 1 relative to Alt 2
  - As noted earlier, Table 6-13 (p150) provides dependency information for those shore processors that accept sablefish IFQ/CDQ deliveries
  - These processors that are most dependent on the sablefish fishery include Sitka, Seward, Juneau, and Petersburg
- Communities that are directly engaged and dependent on the sablefish fishery would likely see similar expenditure patterns associated with the sablefish fishery under Alt 1
  - Communities impacted the greatest under Alt 1 include Sitka, Seward, Petersburg, Juneau, Kodiak, and Homer
  - These communities would likely experience reduced direct, indirect, and induced expenditures under Alt 1 relative to Alt 2 from reduced harvesting and processing of sablefish

Economic and Social Impacts

Alternative 2: Allow Release of Sablefish in the IFQ/CDQ Fishery

- Discarding small sablefish would enhance harvester flexibility to improve gross ex-vessel revenue and reduce use of sablefish of no economic value
  - Harvester participation and fishing behavior would likely change when there is perceived benefit from discarding
  - Not all harvesters would change their fishing behavior, casei n point H&L CPs in the BS
- Table 6-19 (p162) provides an estimate of revenue under Alt 2 for highgrading 1 and 2 lbs. sablefish IFQ
  - Assumptions: highgrading 1 and 2 lbs. sablefish IFQ matches the percent composition for 2023 Table 3-24 p60
  - Estimated 2023 value from highgrading 1 & 2 lbs. was $4.3 million
  - Relative to the 2023 total ex-vessel revenue for sablefish IFQ was $78 million, the estimated highgraded value is relatively small addition, but this additional revenue could be important for some IFQ participants.

Economic and Social Impacts

Alternative 2: Allow Release of Sablefish in the IFQ/CDQ Fishery

- Factors influencing sablefish IFQ/CDQ harvesters to discard smaller sablefish include:
  - Continued population trends in sablefish stocks which have resulted in high proportion of small sablefish relative to large sablefish
  - Increased fishing effort to highgrade which could increase costs of fishing (higher fuel costs, bait costs, observer costs, vessel maintenance costs and higher crew costs)
  - Continued low prices for smaller sablefish due to seafood world market conditions
  - The relative percentage of sablefish IFQ that can be highgraded under Alt 2
  - The use of an ICA/SDA to account for discards
- Collectively these factors could make it difficult for some harvesters to increase their ex-vessel revenue from highgrading smaller sablefish, but there is potential for some harvesters to increase their ex-vessel revenue

Economic and Social Impacts

Alternative 2: Allow Release of Sablefish in the IFQ/CDQ Fishery

- Processors that receive deliveries of sablefish IFQ/CDQ would likely face challenges in benefiting from Alt 2 for many of the same reasons that could impact harvesters
  - Continued downward pressure on sablefish prices for all grades of sablefish combined with the relatively small percentage of sablefish that can be highgraded could result in less than expected gross first wholesale revenue
- Communities that are directly engaged and dependent on the sablefish fishery would depend on the success of harvesters and processors utilizing Alt 2 highgrading to improve ex-vessel and first wholesale revenue which would likely increase expenditures in the communities
  - Communities impacted the greatest under Alt 2 include Sitka, Seward, Petersburg, Juneau, Kodiak, and Homer

Presentation Outline

1) Overview of action: History, Purpose and Need, Alternatives
   - Revisions and clarifications for Alternatives
2) Summary of impacts to the sablefish stock (from prior analysis)
3) Options and Elements under Alternative 2
   - Element 1 (DMR), Element 4 (review)
   - Elements 2, 3, 5, (catch acctng/ICAs, monitoring, enforcement, release requirements) and NMFS recommendations
4) Updates to the social and economic impact analysis
5) **Clarifications and decision points for the Council**

Council Decision Points: Discard Allowance

Options for CPs

(to align IFQ/CDQ per MSA):

- Allow discarding of small sablefish
  - Limits flexibility for IFQ CPs from status quo regulations
  - Application of size limits and ICAs introduces restrictions for IFQ CPs
  - Additional flexibility for CDQ CPs
- Allow discarding of sablefish of any size
  - Status quo for IFQ CPs
  - Increases flexibility for CDQ CPs (beyond that of CVs)

Options for CVs:

- Alt 1: Status quo, no discarding
- Alt 2: Allow discarding of small sablefish

Council Decision Points

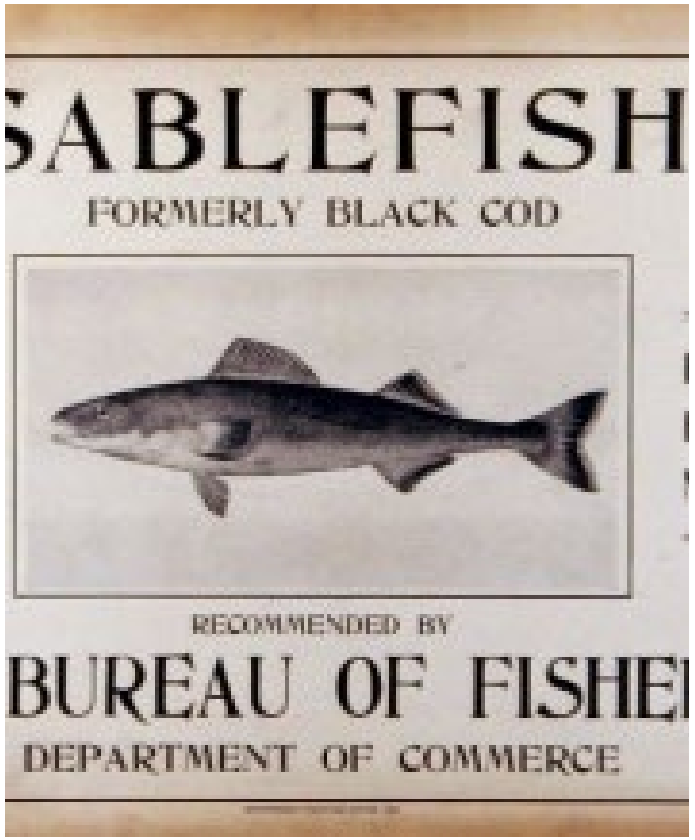
ICAs

- Combined or separate for CPs/CVs

Review

- 3, 5, or 7 years following implementation.

- Careful release requirements?
- Gear modifications?



Thank you to all preparers, contributors, and persons consulted