### Sablefish and Halibut IFQ Program Review

Presentation to the Advisory Panel

Presented by Marcus Hartley, Northern Economics, Inc. December 5, 2024



### **Presentation Road-Map**

- This presentation will generally the follow the outline of the document distributed by the NPFMC on November 15, 2024.
- This is the second Limited Access Privilege
  Program (LAPP) Review of the Pacific Halibut and Sablefish IFQ Program
- The previous LAPP Review summarized impacts from implementation in 1995 through 2015 and also included data from an aggregated baseline period (1992–1994).

### Table of Contents of This Review

1	Background1
2	Analytical Section
3	Conclusions and Findings
4	References
Appen	dix 1: Participation in Halibut and Sablefish Fisheries at the State, Alaska Regional, and Alaska Community Levels



#### Section 1: Background

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## Table 1, Beginning on Page 3

#### Sections Where Required LAPP Review Elements and

Element/Key Area Section					
Elements of a LAPP Review					
Purpose and need	Section 1.1.1				
Goals and objectives	Section 1.1.2				
History of management	Section 1.2.3				
Description of biological, ecological/environmental, economic, social, and administrative environments	The final EIS for the IFQ Program provides a description of biological, ecological/environmental, economic, social, and administrative environments before program implementation (NPFMC and NMFS 1992). A description of changes in these environments after program implementation, with a focus on changes <u>since</u> the previous review, are presented in Section 2.				
Analysis of the program's biological, ecological/environmental, economic, social, and administrative effects	Section 2				
Evaluation of <u>above</u> effects with respect to meeting the goals and objectives	Section 3.1				
Unexpected effects	Section 3.4				
Identified Issues and Areas for Future Research	Section 3.5				

## Table 1 (continued)

Element/Key Area	Section					
Program Goals and Objectives						
Address the problems that occurred with the open-access management regime to include 1) allocation conflicts, 2) gear conflicts, 3) dead loss from lost gear, 4) bycatch loss, 5) discard mortality, 6) excess harvesting capacity, 7) product wholesomeness, 8) safety, 9) economic stability in the fisheries and communities, and 10) rural coastal community development of a small boat fleet.	Allocation conflicts (Section 2.4.3.2) Gear conflicts (Section 2.4.3.1) Dead loss from lost gear (Section 2.11.1.1 and Section 2.11.2.1) Bycatch loss (Section 2.11.1.1 and Section 2.11.2.1) Discard mortality (Section 2.11.1.1 and Section 2.11.2.1) Excess harvesting capacity (Section 2.4.2) Product wholesomeness (Section 2.4.4) Safety (Section 2.10) Economic stability in the fisheries and communities (Section 2.9) Rural coastal community development of a small boat fleet (Section 2.4.5 and Section 2.9)					
Link the initial quota share allocations to recent dependence on the halibut and sablefish fixed gear fisheries.	Section 2.3					
Broadly distribute QS to prevent excessively large QS holdings.	Section 2.3 and Section 2.4.6					
Maintain the diversity in the fleet with respect to vessel categories.	Section 2.4.5					
Maintain the existing business relationships among vessel owners, crews, and processors.	Section 2.5 and Section 2.6					
Assure that those directly involved in the fishery benefit from the IFQ Program by assuring that these two fisheries are dominated by owner/operator operations.	Section 2.7					
Limit the concentration of QS ownership and IFQ usage that will occur over time.	Section 2.4.6 and Section 2.6.2					

## Table 1 (continued)

Element/Key Area	Section				
Other Program Performance Key Areas					
Limit the concentration of QS ownership and IFQ usage that will occur over time.	Section 2.4.6 and Section 2.6.2				
Limit the adjustment cost to current participants including Alaska coastal communities.	Section 2.9				
Increase the ability of rural coastal communities adjacent to the BSAI to share in the wealth generated by the IFQ Program.	The 2016 IFQ Program Review noted that this objective relates to the implementation of the CDQ Program, and because the CDQ Program is a separate management program, it is not examined as part of the IFQ Program.				
Achieve previously stated Council goals and objectives and meet MSA requirements	Although not expressly addressed in the analysis and key findings, this objective is <u>woven in</u> throughout Section 2.				
Allocations	Section 1.2.4.2, Section 2.4, and Section 3.2.1				
Eligibility	Section 1.2.4.2				
Transferability	Section 1.2.4.4 and Section 2.8				
Catch and sustainability	Section 1.2.4.1, Section 2.2, and Section 2.11				
Accumulation limits/caps	Section 1.2.4.3 and Section 2.4.6				
Cost recovery	Section 2.12.4				
Data collection/reporting, monitoring, and enforcement	Section 2.12.2 and Section 2.12.3				
Duration	Section 3.2.2				
New entrants	Section 2.8				
Auctions and royalties	Section 3.2.3				
Net Benefits to the Nation	Section 3.3				



#### **Section 2: Analytical Section**



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### **Subsection 2.1: Data**

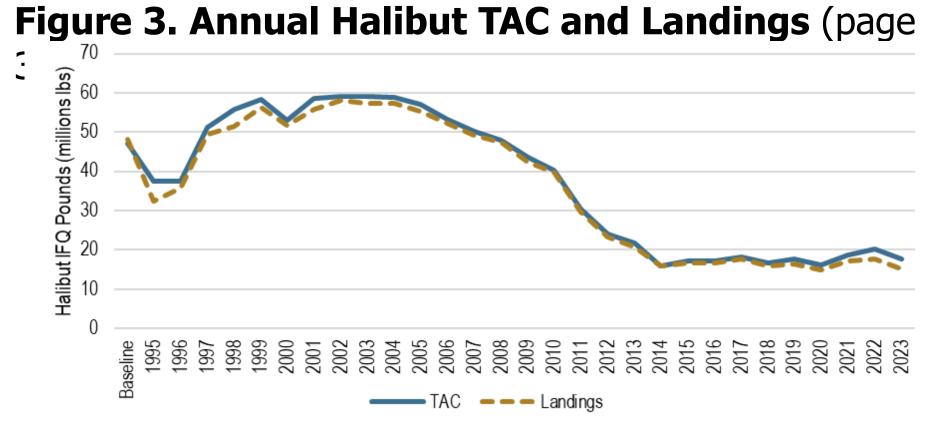
This review uses data from two primary sources:

- QS Allocation data were obtained from the NMFS Alaska Region web page summarizing Permits and Licenses Issued in Alaska
  - Available at <u>https://www.fisheries.noaa.gov/alaska/commercial-fishing/permits-and-licenses-issued-alaska</u>.
  - NMFS data report QS holdings by individuals and entities reflect "End of Year" QS holdings (i.e., as of 11:59 December 31).
  - In general, this review reports QS and IFQ allocations as of the beginning of each year (i.e., as of 12:00 AM January 1).

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Landings and Ex-vessel Revenue data were provided by the Alaska Fisheries Information Network (AKFIN) via Northern Economics

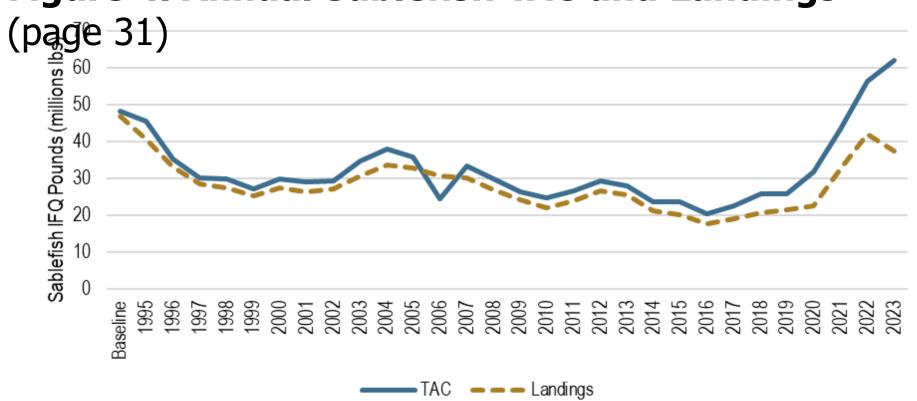
#### Subsection 2.2: Annual Catch Limits and Landings



Source: NPMFC (2024)

#### Subsection 2.2: Annual Catch Limits and Landings

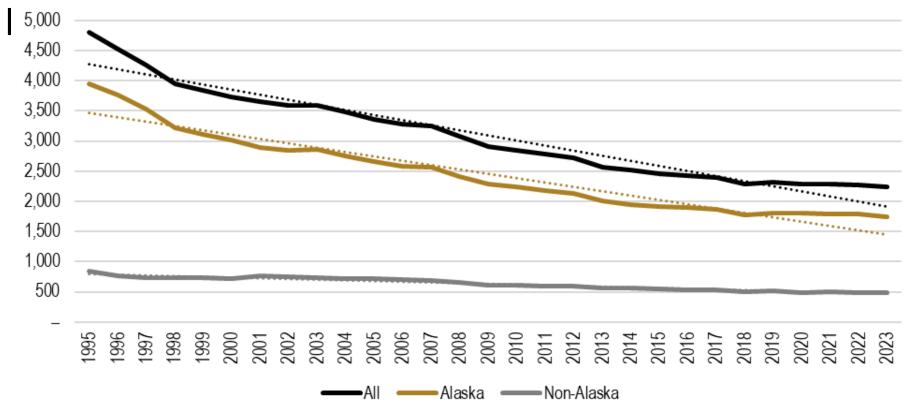
#### Figure 4. Annual Sablefish TAC and Landings



Source: NPMFC (2024)

#### Subsection 2.3: Allocation and Distribution of QS — Halibut

#### Figure 5. Number of All, Alaska, Non-Alaska QS

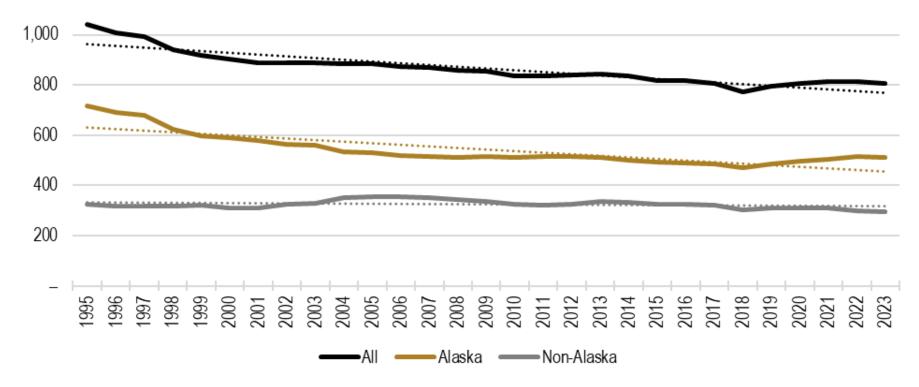


Source: Developed by Northern Economics based on data from NMFS (2024d)

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#### Subsection 2.3: Allocation and Distribution of QS — Sablefish

#### Figure 15. Number of All, Alaska, Non-Alaska Sablefish QS Holders (p. 38)



Source: Developed by Northern Economics based on data from NMFS (2024d) Northern Economics

#### Subsection 2.4: Harvesting Flexibility, Harvest Capacity, Gear and Allocation Conflicts, & Product Wholesomeness

This section provides summaries of the following issues:

- Halibut and sablefish season lengths and harvest by month for 2015–2023 (Section 2.4.1)
- Numbers of active vessels harvesting halibut and sablefish for 2000–2023 (Section 2.4.2.1)
- Utilization by regulatory area for halibut and sablefish for 2013– 2023 (Section 2.4.2.2)
- Overage violations (Section 2.4.2.3)
- Delivery conditions for halibut (Section 2.4.4.1) and Sablefish (Section 2.4.4.2)
- Fleet composition—vessels fishing for halibut, sablefish, or for both ((Section 2.4.5.1)
- Size of participating vessels (Section 2.4.5.2)

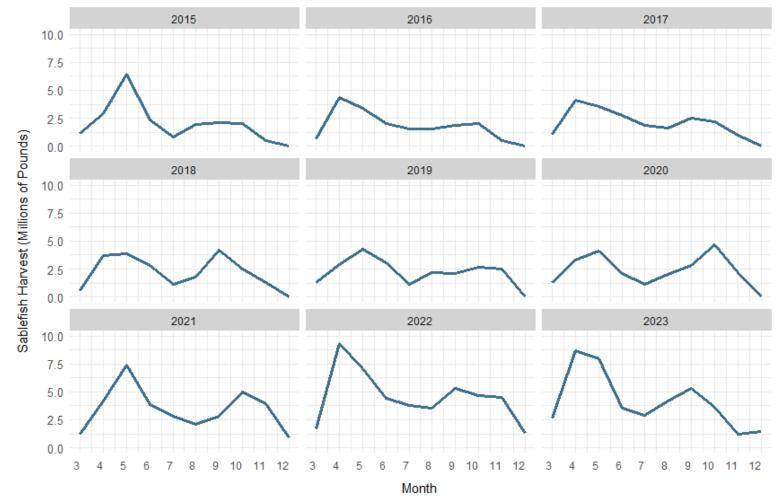
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#### Subsection 2.4: Harvesting Flexibility, Harvest Capacity, Gear and Allocation Conflicts, & Product Wholesomeness

- This section provides summaries of the following issues:
  - Distribution of revenue by vessel length (Section 2.4.5.4)
  - Diversity of landings by participating vessels (Section 2.4.5.5)
  - Gear usage (Section 2.4.5.6)
  - Size of participating vessels (Section 2.4.5.2)
  - QS distribution by vessel length (Section 2.4.5.3)
  - Distribution of revenue by vessel length (Section 2.4.5.4)
  - Diversity of landings Among participating vessels (Section 2.4.5.5)
  - Gear usage (Section 2.4.5.6)

### Harvest Flexibility—Season Length

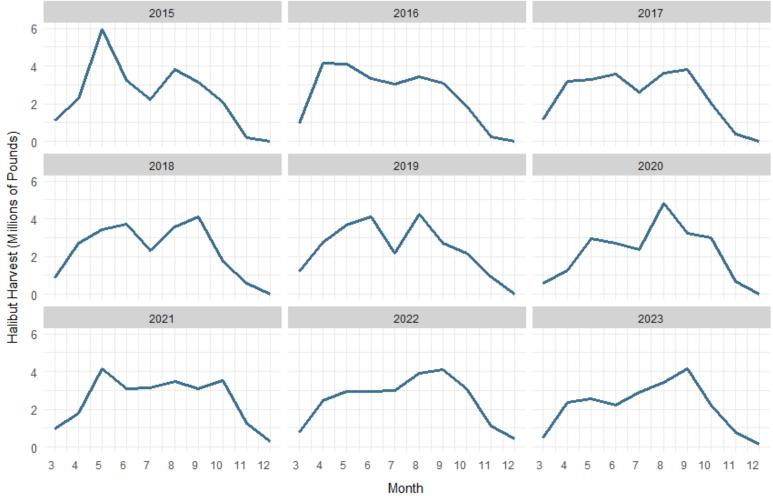
Figure 25. Sablefish Harvest by Month (p. 45)



Source: Developed by Northern Economics based on data from AKFIN (2024) NorthernEconomics

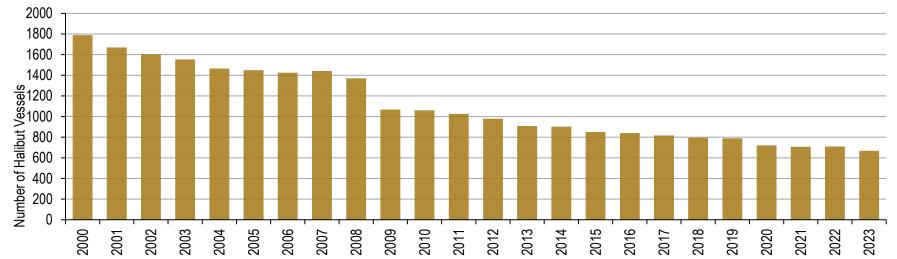
### Harvest Flexibility—Season Length

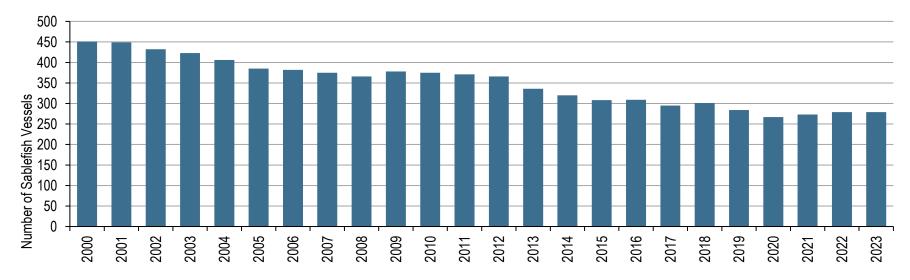
Figure 26. Halibut Harvest by Month (p. 46)



Source: Developed by Northern Economics based on data from AKFIN (2024) NorthernEconomics

## Harvest Capacity: Figures 27 & 28 (pp 47,48)



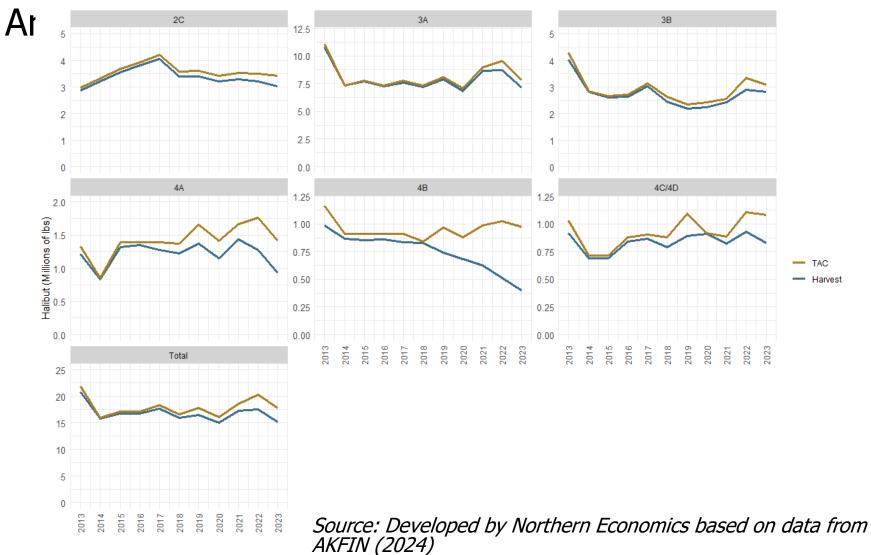


Source: Developed by Northern Economics based on data from AKFIN (2024)

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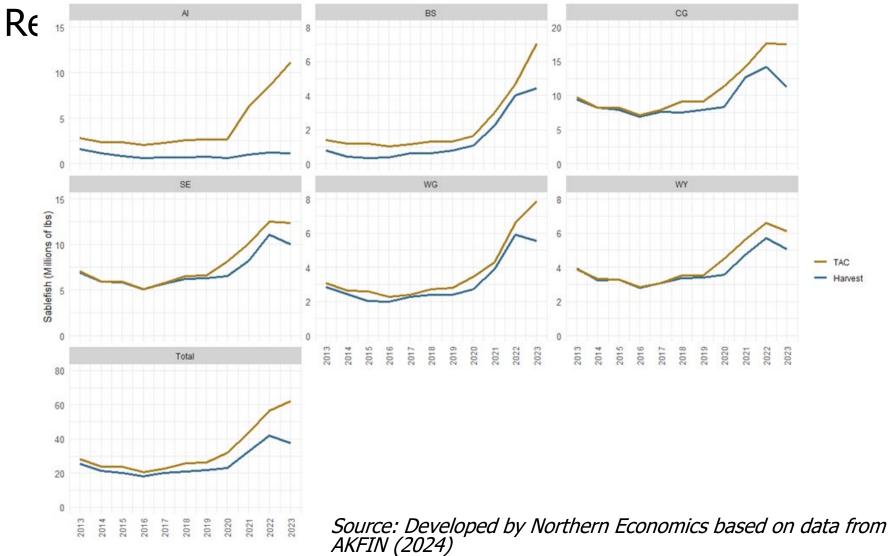
# Area

Figure 29. Halibut IFQ Landings and TAC by Regulatory



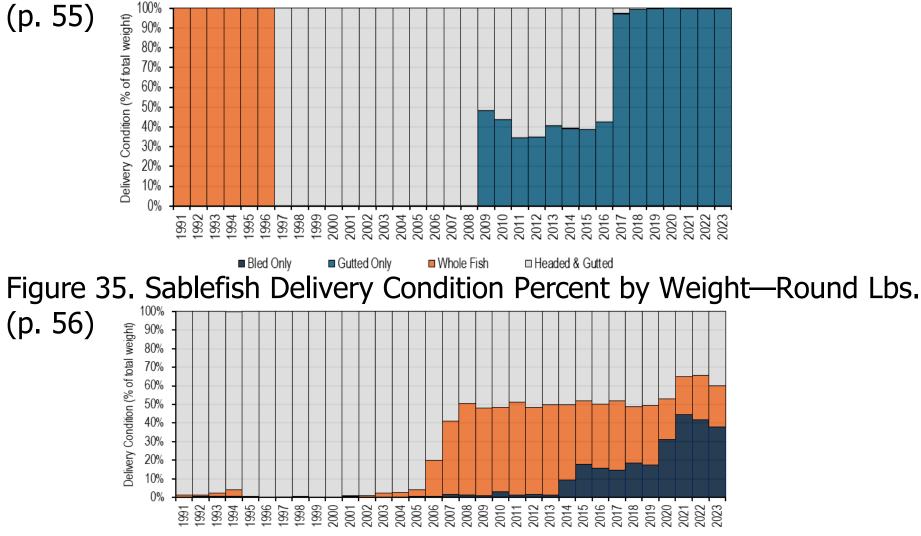
#### Sablefish Utilization by Regulatory Area

Figure 30. Sablefish IFQ Landings and TAC by



### **Product Wholesomeness**





Northern Economics Source: Developed by Northern Economics based on data from AKFIN (2024)

Whole Fish

Headed & Gutted

Gutted Only

Bled Only

#### IFQ Fleet Diversity by Vessel Length

#### Table 9. Number of Active Halibuts Vessel by Length

	2014		2023	Percent change in	
QS Class Category	Number of Vessels	% of Vessels	Number of Vessels	% of Vessels	Number of Vessels
≤ 35 FT	276	30.6%	193	28.8%	-30.1%
> 35 and ≥ 60 FT	565	62.6%	430	64.2%	-23.9%
>60 FT	62	6.9%	47	7.0%	-24.2%
Total	903	100%	670	100%	-25.8%

#### Table 10. Number of Active Sablefish Vessels by

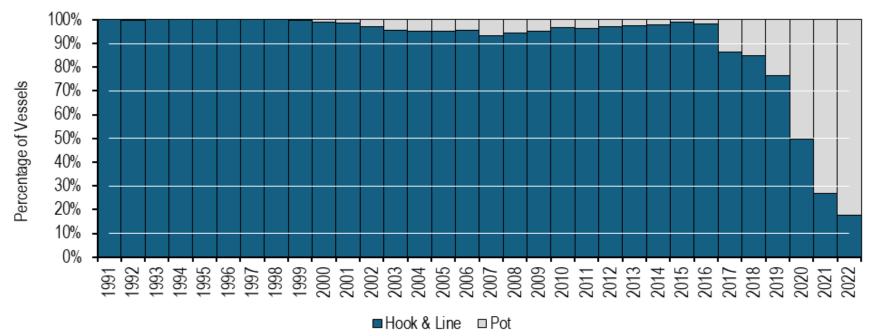
	2014		2023	Percent Change in	
QS Class Category	Number of Vessels	% of Vessels	Number of Vessels	% of Vessels	Number of Vessels
≤60 FT	264	82.5%	234	83.3%	-11.4%
>60 FT	56	17.5%	47	16.7%	-16.1%
Total	320	100%	281	100%	-12.2%

Source: Developed by Northern Economics based on data from AKFIN (2024)

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## Gear Usage in the Sablefish Fishery

#### Figure 44. Percentage of Gear Used in the Sablefish



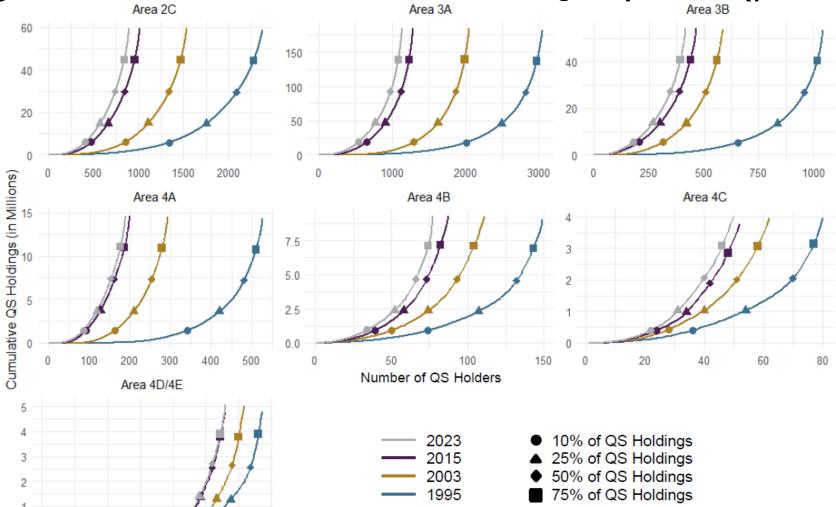
Source: Developed by Northern Economics based on data from AKFIN (2024)

 Amendment 118 approved in 2022 allows the use of pot gear in the halibut IFQ fishery, but pot gear landing of halibut remains very low (<0.5%).</li>

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#### Consolidation of QS Allocations for Halibut

Figure 45. Consolidation of Halibut QS by Area (p. 70)



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0

50

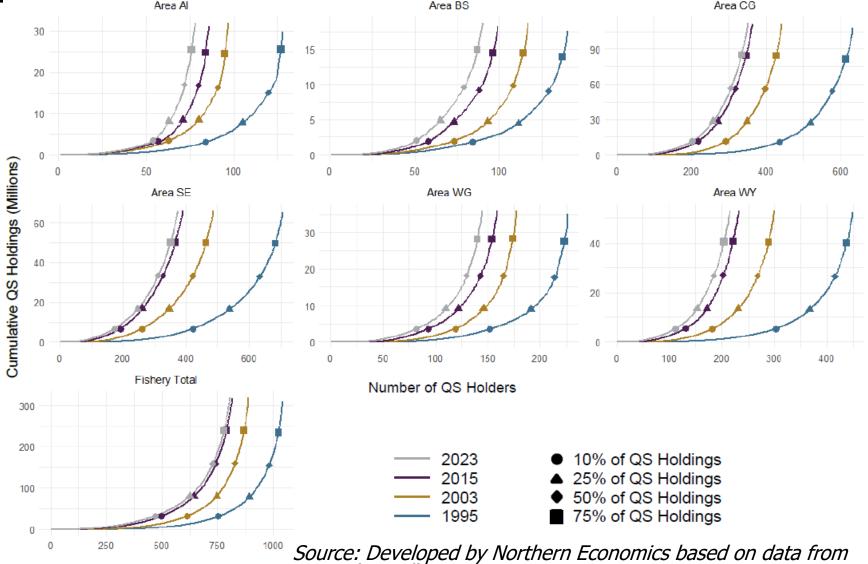
100

150

*Source: Developed by Northern Economics based on data from NMFS (2024d)* 

## Consolidation of QS Allocations for Sablefish

Figure 47. Consolidation of Sablefish OS by Area (p. 76)



NMFS(2024d)

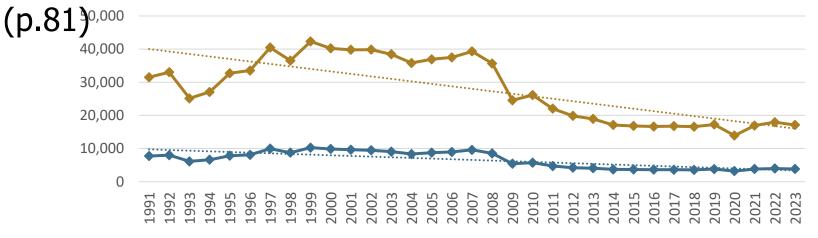
25

#### Subsection 2.5: Crewmember Impacts

- Objective 5: Maintain the existing business relationships among vessel owners, crews, and processors
- Estimates crew & skipper trips from 1991–2023, along with vessel trips
- Estimates crew & skipper days at sea from 2009– 2023 along with vessel days
- Estimate number of individuals who became "bonafide crew" and purchased QS/IFQs

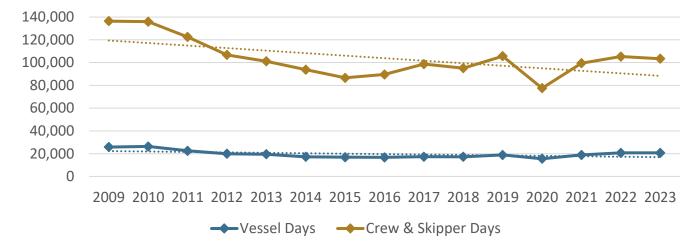
## Halibut Crew & Vessel Trips & Days-at-Sea

Figure 49. Number of Halibut Vessel Trips and Crew/Skipper Trips



→ Vessel Trips → Crew & Skipper Trips

Figure 50. Number of Halibut Vessel Days and Crew/Skipper Days (p.81)



Source: Developed by Northern Economics based on data from AKFIN (2024)

#### Sablefish Crew & Vessel Trips & Days-at-Sea

Figure 51. Number of Sablefish Vessel Trips and Crew/Skipper Trips (p.82)

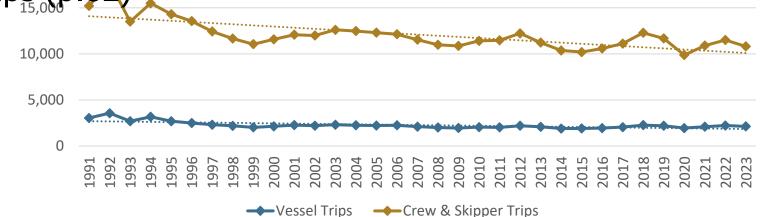
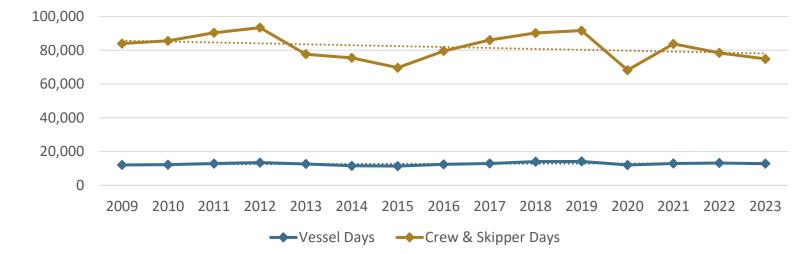


Figure 52. Number of Sablefish Vessel Days and Crew/Skipper Days (p.82)



Source: Developed by Northern Economics based on data from AKFIN (2024)

# Sablefish QS Owned by Crew in 2023

 Alaskan IFQ Crewmembers own 50% or more of Crew-owned QS in every Sablefish Management Area

Largest Crew

Table 29. Count Of All Individuals Who Have BecomeSablefish IFQ Crewmembers as of 2023 and Current QS

	Alaskans		Non-Alaskans		Proportion		
Area	Persons	QS Units	Persons	QS Units	IFQ crewmember QS held by AK crew	All QS held by AK crew	All QS held by crew
BS	25	4,999,761	15	3,569,135	58.3%	26.7%	45.7%
CG	116	20,486,219	161	18,480,799	52.6%	18.3%	34.9%
SE	149	24,764,517	134	8,970,472	73.4%	37.5%	51.0%
WG	37	6,547,654	66	6,492,624	50.2%	18.2%	36.2%
WY	54	9,150,081	94	6,628,229	58.0%	17.2%	29.6%
AI	18	6,746,842	26	4,031,171	62.6%	21.1%	33.8%
Total		72,695,074		48,172,430	60.1%	22.9%	38.0%

Source: NMFS (2023a)

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## Halibut QS Owned by Crew in 2023

 Alaskan IFQ Crewmembers own 69.7% of all Halibut QS owned by Crewmembers over all management areas.

Table 30. Count Of All Individuals Who Have Become

	Alaskans		Non-Alaskans		Proportion		
Area	Persons	QS Units	Persons	QS Units	IFQ Crewmember QS held by AK crew	All QS held by AK crew	All QS held by crew
2C	397	27,324,017	80	4,806,080	85.0%	45.9%	54.0%
3A	455	57,252,897	136	25,232,512	69.4%	31.1%	44.7%
3B	158	15,446,497	55	11,649,299	57.0%	28.5%	50.0%
4A	78	6,578,087	25	1,715,558	79.3%	45.1%	56.9%
4B	20	1,565,708	20	1,904,054	45.1%	16.9%	37.4%
4C	17	1,134,668	12	1,072,192	51.4%	28.3%	54.9%
4D	11	1, <mark>1</mark> 65,516	15	1,559,509	42.8%	23.5%	55.0%
4E	1	84	1	698	10.7%	0.1%	0.6%
Total		110,467,474		47,939,902	69.7%	33.4%	47.9%

Source: NMFS (2023a)

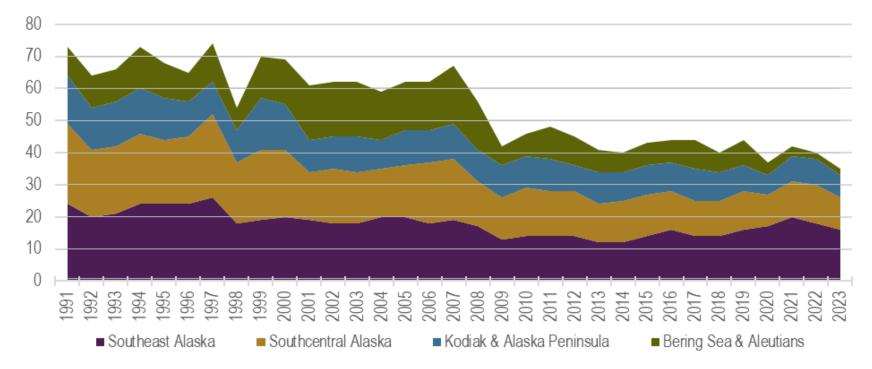
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#### Subsection 2.6.1: Processor Participation

- Summarizes shore-based processor activity in Sablefish and Halibut fisheries
  - $_{\odot}\,$  Shows participation by size of processors
  - Shows participation by regions of processors
  - Shows numbers of buying days by Region

### **Onshore Buyers and Processors**

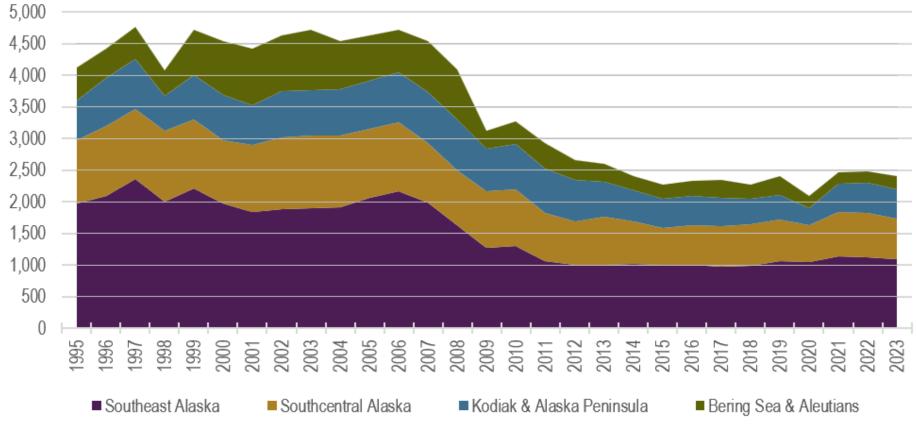
Figure 57. Number of Small, Medium, and Large Onshore Buyers/Processors by Alaska Region (p. 89)



Source: Developed by Northern Economics based on data from AKFIN (2024)

### **Onshore Buyers and Processors**

## Figure 58. Total Port-Level Buying Days of Onshore Buyers/Processors by Alaska Region (p. 90)



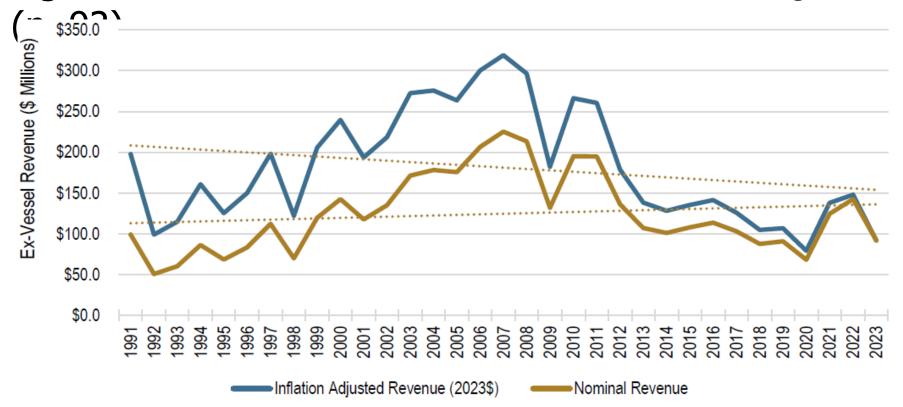
Source: Developed by Northern Economics based on data from AKFIN (2024) NorthernEconomics

## Subsection 2.6.2: Harvester Participation

- Summarizes harvester activity in the IFQ Fisheries
  - Landed Pounds
  - Ex-Vessel Revenues (nominal and inflation adjusted)
  - Permit Holders by Place of Residence
  - Revenue per Person by Place of Residence
  - Number of Vessels (Alaska Non-Alaska)

## Participation and revenue in the halibut fishery

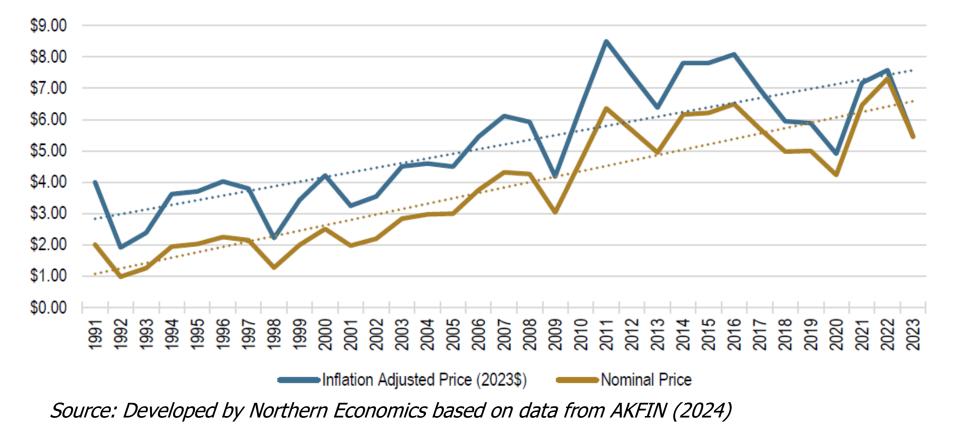
Figure 61. Ex-Vessel Revenue in the Halibut IFQ Fishery



Source: Developed by Northern Economics based on data from AKFIN (2024)

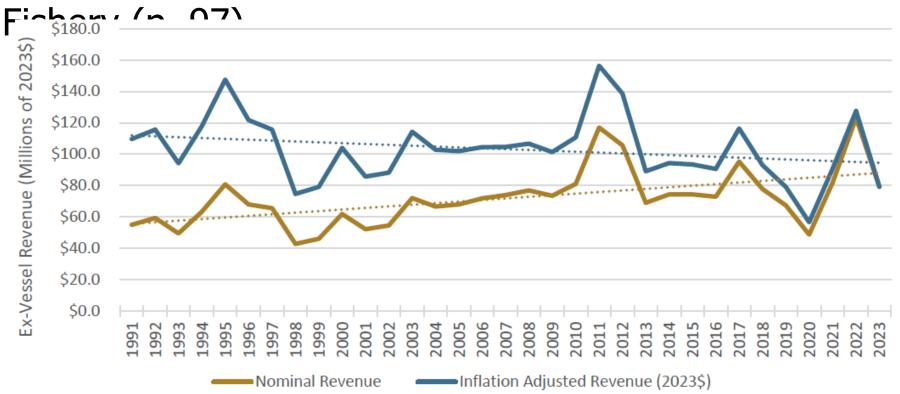
## Participation and revenue in the halibut fishery

Figure 62. Ex-Vessel Prices (\$ per Round-Weight Pound) in the Halibut IFQ Fishery (p. 92)



# Participation & revenue in the sablefish fishery

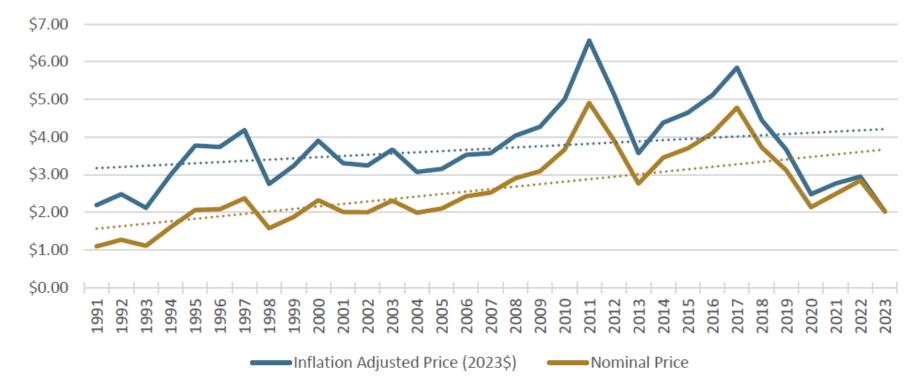
## Figure 70. Ex-Vessel Revenue in the Sablefish IFQ



#### Source: Developed by Northern Economics based on data from AKFIN (2024)

# Participation & revenue in the sablefish fishery

Figure 71. Ex-Vessel Prices (\$ per Round-Weight Pound) in the Sablefish IFQ Fishery (p. 98)



Source: Developed by Northern Economics based on data from AKFIN (2024)

## Subsection 2.7: Owner-Operated Characteristics of the Fleet

- Provides information on the catcher vessel owner types (individual or non-individual entity) in two figures and two tables
  - $_{\odot}~$  The tables break down owner types by management areas.
- Summarizes Leasing of Class A Shares
- Summarizes Medical and Beneficiary Leases
- Summarizes Leases for Guided Angler Fish (GAF)
- Summarizes Hired Master Use

## Hired Master Use in the Halibut CV Fishery

# Table 40. Halibut IFQ Fishery Catcher Vessel Hired Master Harvests of IFQ by Regulatory Area (p.118)

Year	2C	3A	3B	4A	4B	4C/4D	All
2014	1.20%	38.30%	49.10%	43.60%	52.10%	45.10%	32.60%
2015	1.30%	36.60%	45.80%	40.30%	43.80%	40.10%	30.20%
2016	1.20%	36.80%	45.50%	41.40%	42.30%	36.50%	29.40%
2017	1.10%	35.70%	44.00%	37.60%	45.80%	41.30%	29.20%
2018	1.10%	37%	45.20%	39.80%	45.50%	38.70%	30.50%
2019	0.90%	34.40%	45.20%	38.90%	49.50%	35.80%	29.10%
2020	0.90%	32.90%	41.70%	38.80%	48.10%	30.10%	27.60%
2021	0.30%	31.20%	39%	34.80%	44.50%	29.80%	26.20%
2022	0.70%	31.30%	37.70%	34.70%	42.20%	27.50%	26.40%
2023	0.50%	30.10%	35.40%	27.30%	53.20%	26.30%	24.70%

Source: NPFMC (2024)

## Hired Master Use in the Sablefish CV Fishery

# Table 41. Sablefish IFQ Fishery Catcher Vessel Hired Master Harvests of IFQ by Regulatory Area (p.119)

All	WY	WG	SE	CG	BS	AI	Year
44.70%	64.40%	56.90%	9%	64.80%	19.70%	32.50%	2014
43.30%	63.10%	48.90%	9.40%	64.80%	21.30%	7.80%	2015
42.70%	64.50%	47.70%	9%	63.40%	38.60%	4.90%	2016
39.40%	61.10%	47.70%	8%	57.10%	30.20%	6.60%	2017
37.10%	63.50%	46.10%	9%	53.00%	8.10%	7.10%	2018
36.50%	65.70%	47%	8.70%	50.10%	30.10%	4.00%	2019
37.50%	65.10%	41.80%	9.10%	54.30%	9.50%	7.10%	2020
34.70%	61.60%	41.80%	9%	45.30%	16.80%	0.70%	2021
34%	62.10%	41.00%	8.60%	46.40%	19.30%	4.70%	2022
31%	59.10%	31.10%	8.30%	45.40%	10.50%	2.60%	2023

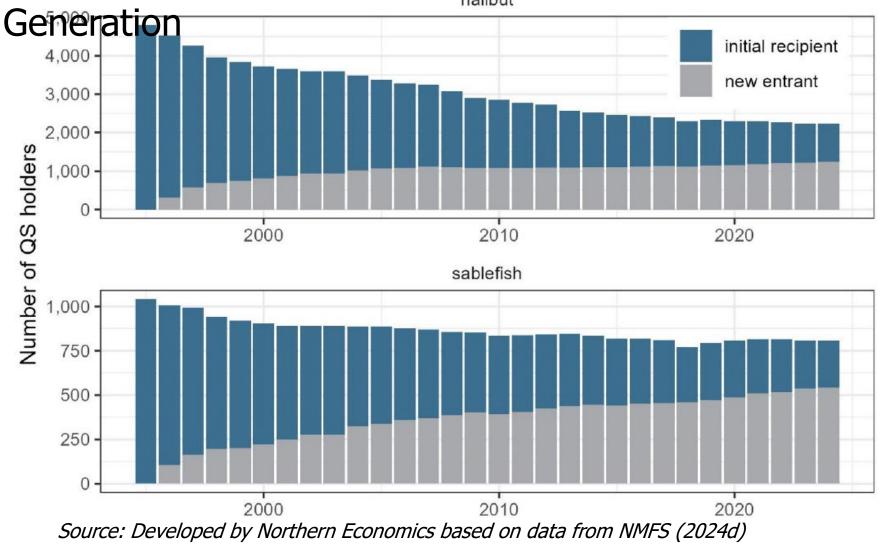
Source: NPFMC (2024)

## Subsection 2.8: New Entry Opportunities and Transferability of QS and IFQ

- Summarize Trends of Participation by Initial QS Recipients and New Entrants
- Estimates the Rate of New Entry
- Summarizes Average Holdings of New Entrants
- Summarize data on QS Prices and Transfers
- Loan Programs

## Initial QS Recipients and New Entrants

Figure 80. Number of QS Holders by IFQ Fishery and



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## **QS** Prices and Transfers

### Table 46. Average Halibut QS Prices and Number of Priced

Year	Average QS Price Per Pound (\$2023/ <u>lb</u> )	Number of Transactions	Number of People Selling	Number of People Buying
2000-2005 Average	14.32	433.00	313.17	284.83
2006-2015 Average	25.27	270.00	190.30	161.80
2016-2023 Average	26.38	429.00	184.63	159.38

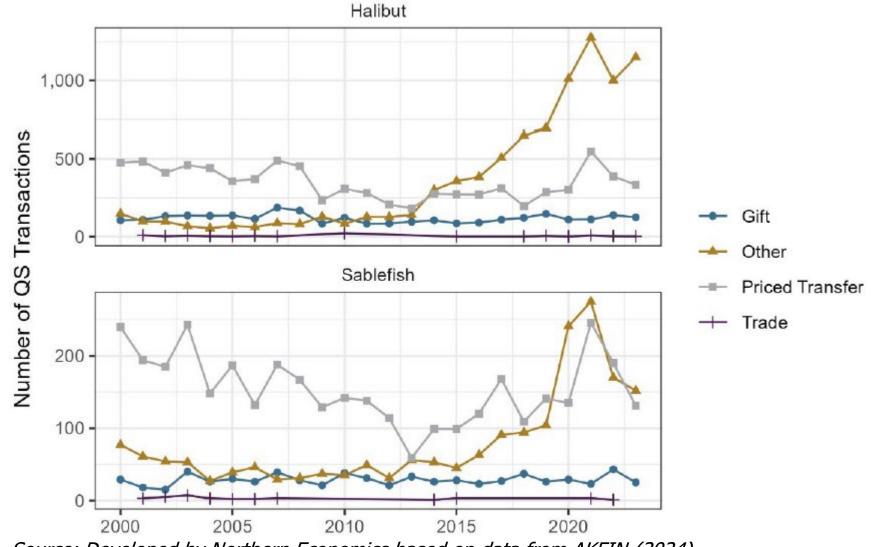
### Table 47. Average Sablefish QS Prices and Number of Priced

Year	Average QS Price Per Pound (\$2023/ <u>lb</u> )	Number of Transactions	Number of People Selling	Number of People Buying
2000-2005 Average	9.90	192.17	110.17	110.33
2006-2015 Average	12.73	114.30	69.80	73.00
2016-2023 Average	13.28	87.50	58.38	56.25

*Note: Data prior to 2000 were not available. Data represent weighted means and have been adjusted for inflation and are shown in terms of real 2023 dollars. Source: Developed by Northern Economics based on data from AKFIN (2024)* 

## **QS** Prices and Transfers

Figure 85. Number of QS Transfers by Type (p. 132)



Source: Developed by Northern Economics based on data from AKFIN (2024)

## **Subsection 2.9: Community Impacts**

- Makes reference to the Community Profiles in Appendix 1
- Provides a review of recent studies of community impacts
- Summarizes QS holdings by Alaska and Non-Alaska Regions
- Summarizes QS holdings by highest ranked communities
- Summarizes QS holdings of CQE Eligible communitiesM

# Appendix 1: Community and Regional Profiles

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# Appendix 1: Regional Profiles by Page

Community	Page	Community	Page
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# Appendix 1: Community Profiles by Page

Community	Page	Community	Page	Community	Page	Community	Page
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Clam Gulch	69	Kasilof	111	Port Alexander	153	Valdez	191
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Cordova	75	King Cove	117	Saint George	159	Whittier	197
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Delta Junction	79	Kodiak	121	Saint Paul	163	Wrangell	201
Dillingham	81	Larsen Bay	123	Salcha	165	Yakutat	203
Edna Bay	83	Mekoryuk	125				

## **Community Profiles**

## Each profile includes:

#### a brief narrative on the community and its participation in the sablefish and halibut fisheries

- a table with regional and EJ information
- a series of six figures providing detailed fishery

Participation in Halibut and Sablefish Fisheries at the State, Alaska Regional, and Alaska Community Levels

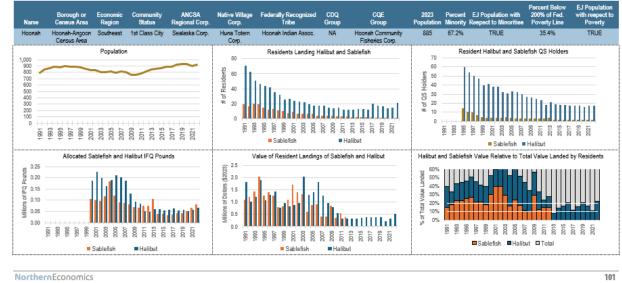
#### Profile 45. Hoonah, AK with Charts of Resident Participation and Landings in Halibut, Sablefish and All Fisheries Combined

Hoonah, a Tlingit village on Chichagof Island's northeast shore, 40 miles west of Juneau, is deeply rooted in Huna tribe history. Known as "village by the cliff," its lineage traces back to prehistoric Glacier Bay. Established with a Northwest Trading Company store in 1880 and a Presbyterian mission in 1881, Hoonah grew around fishing and logging. Despite a devastating 1944 fire, it was rebuilt. Today, Hoonah, with its enduring subsistence lifestyle, honors its rich heritage and natural bounty.

Residents of Hoonah had moderate levels of participation in the halibut fishery and low levels of participation in the sablefish fishery from 1991– 2022. In the years with participation, there were an average of 25.1 residents with halibut landings and 7.1 residents with sablefish landings. Residents had halibut revenues in 32 of the 32 years shown, with an inflation adjusted average of \$894,026. Residents had sablefish revenues in 31 of the 32 years shown, but due to confidentiality restrictions, only 22 years can be reported. The average revenue for sablefish in the non-confidential year(s) shown was \$1,015,738. Between 1991–2020 total revenue for Hoonah has been distributed as follows: IFQ Sablefish—17.9%; Halibut— 22.8%; Salmon—47.9%; Crab/Shellfish—7.0%; Other Finfish—4.5%; During years in which allocations were received, 29.4 Hoonah residents have been allocated an average of 111,377 halibut IFQs. Similarly, 4.1 Hoonah residents have been allocated an average of 78,823 sablefish IFQs. Please note that estimates of IFQ allocations are only available from 2000–2022.



Northern Economics adapted community data from ADCRA (2024), population data from ADOLWD (2024), and environmental justice data from USCB (2024). Fishery data were developed by Northern Economics based on data from NMFS (2024), AKFIN (2024), and CFEC (2022).



## Summary Data Table

The second page of each profile provides a summary data table of resident population participation in the fisheries from 1991 to 2022.

Year	Population	Persons Landing IFQ Halibut	Halibut QS Holdere	Allocated Halibut IFQ Pounds	Halibut Landed Value (\$2023 Millions)	Persons Landing IFQ Sablefish	Sablefish QS Holders	Allocated Sablefish IFQ Pounde	Sablefish Landed Value (\$2023 Millions)	Persons Landing Any Species	Landed Value: All Species (\$2023 Millions)	Sablefish & Halibut % of Total Value
1991	796	71	NA	NA	\$1.82	19	NA	NA	\$1.12	108	\$7.30	40.2%
1992	843	63	NA	NA	\$1.02	17	NA	NA	\$1.22	100	\$6.66	33.6%
1993	871	51	NA	NA	\$1.22	20	NA	NA	\$1.45	88	\$6.22	43.0%
1994	885	46	NA	NA	\$1.92	19	NA	NA	\$2.04	81	\$8.86	44.7%
1995	877	44	60	NA	\$1.08	15	14	NA	\$1.28	75	\$5.07	46.4%
1996	902	42	54	NA	\$1.29	12	11	NA	\$1.40	80	\$5.24	51.2%
1997		~-36~~	50	~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	13	w10	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	\$1.28_	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	\$5.91~	-15.8%

Table 45. Summary Data of Hoonah Resident Participation in Halibut, Sablefish, & All Fisheries Combined,

Zam	~	/13	~ <b>\</b> _	~60,475_		2	~^2\_		- Cônf.~	<u>~</u> 44~	\$2.54	<b>`</b> 0.v%``\
2015	863	13	18	54,194	\$0.35	2	2	38,810	Conf.	47	\$2.29	0.0%
2016	893	12	18	56,519	\$0.39	2	2	33,525	Conf.	44	\$2.09	0.0%
2017	887	20	17	64,147	\$0.38	2	2	37,704	Conf.	49	\$3.56	0.0%
2018	921	18	17	55,410	\$0.38	1	2	43,028	Conf.	45	\$2.48	0.0%
2019	935	17	17	56,848	\$0.39	1	2	43,173	Conf.	43	\$1.95	0.0%
2020	931	14	16	52,391	\$0.23	1	2	52,996	Conf.	38	\$1.48	0.0%
2021	904	15	17	57,776	\$0.32	0	2	66,250	-	47	\$2.83	11.2%
2022	917	21	17	67,549	\$0.54	1	2	81,968	Conf.	41	\$2.45	0.0%

## **Subsection 2.9: Community Impacts**

- Makes reference to the Community Profiles in Appendix 1
- Provides a review of recent studies of community impacts
- Summarizes QS holdings by Alaska and Non-Alaska Regions
- Summarizes QS holdings by highest ranked communities
- Summarizes QS holdings of CQE Eligible communities
- Environmental Justice Issues

# QS Holdings by Region of Residence

Table 53. Halibut QS Ownership by Area of Residence in Millions

			Alaska Re	gions				State	es		
Year	AI	BS	CG	INT	SE	WG	AK	OR	WA	Other	Total
2013	0.5	5.5	103.1	2.2	88.5	3.9	203.7	22.7	82.5	22.7	331.6
2014	1.1	6.4	100.5	2.2	89.6	3.9	203.7	23.9	83.5	20.5	331.6
2015	1.1	6.4	99.0	2.7	90.8	4.0	204.0	23.8	84.4	19.2	331.4
2016	1.0	6.3	98.0	2.3	91.6	3.8	203.0	23.3	85.2	19.8	331.3
2017	1.0	6.3	101.9	2.7	91.3	4.0	207.2	23.6	82.1	18.4	331.3
2018	1.1	6.5	97.6	2.8	93.2	4.0	205.1	23.7	83.0	19.5	331.3
2019	1.6	5.9	97.7	2.7	97.6	3.8	209.4	24.1	78.7	19.1	331.3
2020	1.5	4.5	97.4	2.9	97.1	3.5	206.9	24.6	78.1	21.6	331.3
2021	1.7	5.9	97.8	2.9	99.2	3.6	211.2	23.3	77.1	19.7	331.3
2022	1.7	5.9	96.3	3.1	100.3	3.7	211.0	22.8	75.8	21.5	331.1
2023	1.7	5.5	100.3	3.0	100.4	3.9	214.8	22.2	72.8	21.2	331.0

Note: AI=Aleutian Islands; BS=Bering Sea; CG=Central Gulf; INT=Interior; SE=Southeast; WG=Western Gulf; AK=Alaska; OR=Oregon; WA=Washington

Source: NPFMC (2024), NPFMC (2023)

# QS Holdings by Region of Residence

Table 54. Sablefish QS Ownership by Area of Residence in Millions

(			Alaska Re	gions				State	es		
Year	AI	BS	CG	INT	SE	WG	AK	OR	WA	Other	Total
2013	0.6	4.2	52.0	0.5	78.4	0.1	135.7	11.6	148.9	21.5	317.7
2014	0.7	4.3	51.0	0.5	78.7	0.1	135.3	12.2	147.4	22.9	317.8
2015	0.2	4.6	52.1	0.5	77.7	0	135.1	11.6	147.3	23.8	317.8
2016	0.2	5.2	52.9	0.6	78.9	0	137.8	10.4	145.4	24.2	317.7
2017	0.3	5.1	60.4	0.6	77.0	0	143.5	10.4	142.3	21.6	317.7
2018	1.1	8.1	52.6	0.7	78.6	0	141.1	10.4	142.5	23.7	317.7
2019	1.1	8.1	51.2	1.0	81.1	0	142.4	10.9	138.8	25.6	317.7
2020	0.8	5.2	54.3	1.0	81.1	0	142.4	16.6	131.2	27.6	317.7
2021	1.2	8.3	60.6	0.9	81.7	0.1	152.8	17.0	122.4	25.5	317.7
2022	2.1	8.1	59.2	1.5	82.3	0.1	153.3	21.2	118.6	24.8	317.7
2023	2.1	8.2	59.1	1.5	82.5	0.1	153.5	18.8	117.4	28.1	317.8

Note: AI=Aleutian Islands; BS=Bering Sea; CG=Central Gulf; INT=Interior; SE=Southeast; WG=Western Gulf; AK=Alaska; OR=Oregon; WA=Washington

Source: NPFMC (2024), NPFMC (2023)

# QS Holdings in communities with highest initial QS Allocations

Table 57. QS Holdings in the Halibut Fishery by Top Communities

Community	1995 Rank	1995 (% of Total)	1999 Rank	1999 (% of Total)	Percent Change (1995-1999)	2023 Rank	2023 (% of Total)	Percent Change (1995-2023)
Kodiak	1	17.0%	1	17.3%	1.8%	1	11.7%	-31.5%
Homer	2	7.5%	3	6.9%	-9.3%	3	7.1%	-6.0%
Seattle, WA	3	7.1%	4	6.5%	-9.2%	5	4.6%	-36.0%
Petersburg	4	6.5%	2	8.4%	22.7%	2	8.7%	34.4%
Sitka	5	5.5%	5	5.6%	1.7%	4	5.6%	1.7%
Anchorage	6	3.4%	7	2.8%	-20.1%	7	3.5%	2.0%
Juneau	7	2.9%	6	3.9%	26.4%	6	3.9%	37.3%
Newport, OR	8	1.8%	9	1.7%	-1.8%	93	0.2%	-91.4%
Edmonds, WA	9	1.7%	13	1.5%	-12.7%	16	1.1%	-31.4%
Ketchikan	10	1.4%	8	1.9%	22.5%	11	1.4%	-4.4%
Cordova	21	0.8%	12	1.5%	44.6%	8	3.5%	317.3%
Wrangell*	11	1.4%	10	1.7%	15.0%	9	1.9%	35.4%
Astoria, OR	28	0.7%	22	0.8%	6.7%	10	1.7%	138.1%
Total	-	57.9%		60.6%			54.8%	

Note: \* The data for Wrangell includes data for Meyers Chuck, which was annexed into the City of Wrangel in 2008.

Source: Developed by Northern Economics based on data from AKFIN (2024)

# QS Holdings in communities with highest initial QS Allocations

Table 58. QS Holdings in the Sablefish Fishery by Top

Community	1995 Rank	1995 (% of Total)	1999 Rank	1999 (% of Total)	Percent Change (1995-1999)	2023 Rank	2023 (% of Total)	Percent Change (1995-2023)
Seattle, WA	1	27.1%	1	23.4%	-13.5%	1	12.7%	-53.3%
Sitka	2	9.5%	2	9.9%	4.2%	2	10.0%	4.8%
Petersburg	3	8.3%	3	9.6%	15.7%	3	8.3%	-0.5%
Kodiak	4	5.2%	4	6.5%	25.6%	4	5.5%	6.0%
Homer	5	4.4%	5	4.5%	2.0%	7	3.5%	-21.2%
Bainbridge Island, WA	6	2.5%	7	2.6%	2.1%	20	1.0%	-59.7%
Edmonds, WA	7	2.3%	8	2.6%	10.8%	6	3.8%	61.8%
Fort Bragg, CA	8	2.2%	9	1.7%	-20.3%	35	0.6%	-70.7%
Juneau	9	2.2%	6	2.9%	32.1%	9	2.6%	19.7%
Anchorage	10	1.8%	15	1.2%	-33.3%	5	5.4%	204.1%
Seward	16	1.1%	11	1.4%	33.4%	8	3.0%	181.6%
Cordova	42	0.3%	47	0.3%	-0.4%	10	2.1%	527.0%
Anacortes, WA	15	1.1%	10	1.5%	38.3%	13	1.3%	23.7%
Total	-	68.0%		68.2%			- 59.7%	-

Source: Developed by Northern Economics based on data from NMFS (2024d)

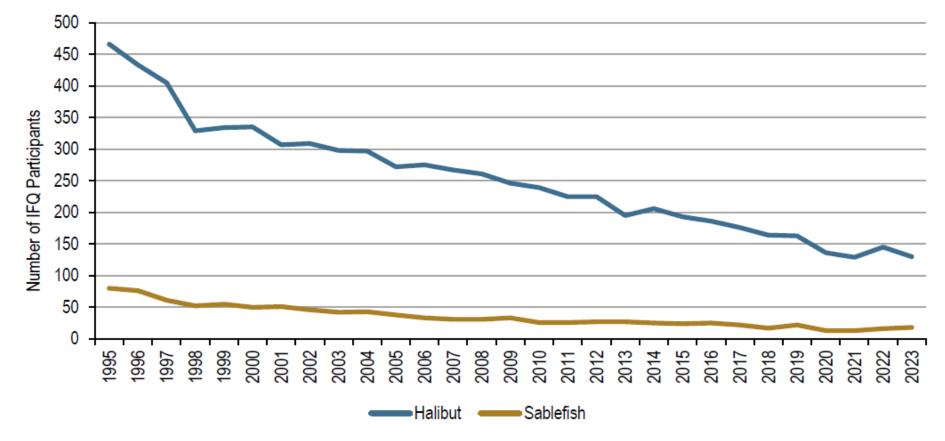
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## QS Holdings in Small Rural Communities (p. 146)

While some communities have benefited from the IFQ Program in terms of increased landings, the general pattern of halibut and sablefish QS ownership since program inception entails decreasing ownership in small, rural communities, with ownership consolidating towards urban centers and to larger rural communities with superior logistic resources (Kotlarov 2019).

## Participation in CQE Eligible Communities

Figure 89. Participation in the Halibut and Sablefish IFQ Fisheries by All Residents of GOA CQE-Eligible Communities (p. 148)



Source: Developed by Northern Economics based on data from AKFIN (2024)

## Errors Found in Table 60 (p. 154)

#### Table 60. QS Holdings in the Halibut and Sablefish IFQ Fisheries by

С	Halibut									
Year	Adak: Adak Community Development Corporation	Hoonah: Hoonah Community Fisheries Corporation	Perryville: Perryville CQE, Inc.	Old Harbor: Cape Barnabas, Inc.	Ouzinkie: Community Holding Corporation for Ouzinkie	Thorne Bay: Thorn Bay Fisheries Association	Halibut Total	Adak: Adak Community Development Corporation		
2007				151,234			151,234			
2008				151,234			151,234			
2009				151,234			151,234			
2010				151,234			151,234			
2011				151,234			151,234			
2012				151,234	106,488		257,722			
2013				151,234	106,488		257,722			
2014				151,234	258,724		409,958			
2015	615,956			151,234	258,724		1,025,914	102,230		
2016	615,956			194,596	281,593		1,092,145	102,230		
2017	678,609			194,596	281,593		1,154,798	102,230		
2018	678,609	114,232		194,596	440,668		1,428,105	221,544		
2019	678,609	114,232	13,072	194,596	440,668		1,441,177	720,570		
2020	1,196,304	114,232	13,072	194,596	440,668		1,958,872	720,570		
2021	1,196,304	114,232	13,072	194,596	451,644		1,969,848	720,570		
2022	1,369,350	114,232	134,072	194,596	451,644		2,263,894	1,133,232		
2023	1,369,350	119,352	148,710	337,914	783,109	8,904	2,767,339	1,976,539		

Note: Data from NMFS (2024b) reflect holdings as of the last day of the year (i.e. 12/31). In this review, the analysts are reporting data as of the first day of the year. <u>Thus</u> data reported by NMFS <u>as</u> 2006 are shown in this table as 2007.

## **Environment Justice Issues**

Table 62. QS Holdings in the Halibut and Sablefish IFQ Fisheries by Residents of Communities with Tribes and Concentrations of Minority and Low-income Populations (p. 157)

		Halibut					Sablefish					
	Number of Communities	Initial Issuance (% of Total)	1999 (% of Total)	Percent Change (1995- 1999)	2023 (% of Total)	Percent Change (1995- 2023)	Initial Issuance (% of Total)	1999 (% of Total)	Percent Change (1995- 1999)	2023 (% of Total)	Percent Change (1995- 2023)	
EJ Population (Tribal)	74	43.0%	45.4%	5.7%	41.2%	-4.2%	29.2%	32.1%	9.9%	31.2%	6.9%	
EJ Population (Minority)	86	41.4%	42.6%	3.0%	41.9%	1.1%	21.1%	22.5%	6.6%	30.2%	43.3%	
EJ Population (Low-Income)	87	39.3%	37.4%	-4.7%	32.0%	-18.4%	15.5%	14.6%	-5.6%	13.1%	-15.3%	
EJ Population (Minority and Low-Income)	66	28.2%	27.4%	-2.7%	21.9%	-22.2%	9.3%	9.0%	-3.4%	8.3%	-11.5%	
All Alaska Communities	129	63.0%	63.8%	1.4%	63.7%	1.1%	40.0%	42.2%	5.8%	48.3%	21.9%	

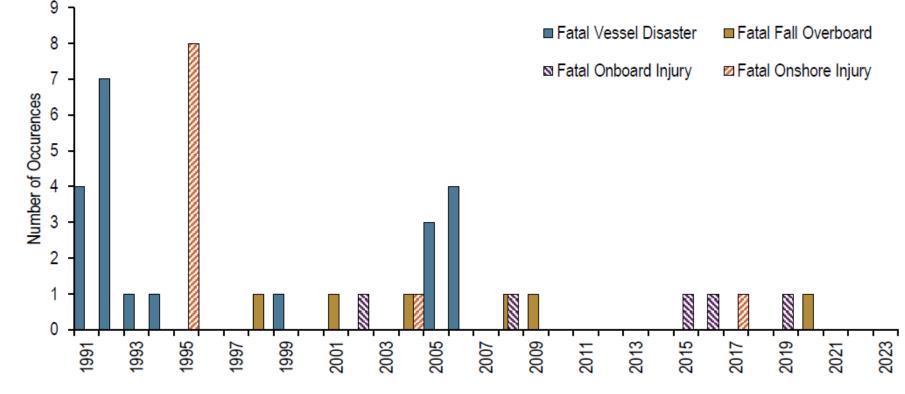
Note: The term EJ (environmental justice) is used rather than EEJ (equity and environmental justice) when referring to the populations listed in the table. As defined by Executive Order (EO) 12898, this is the applicable term when referring to minority and low-income populations. Communities with tribes and concentrations of minority and low-income populations are identified in the community profiles presented in Appendix 1

#### Source: Developed by Northern Economics based on data from AKFIN (2024)

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## Subsection 2.10: Fishing Vessel Safety

# Figure 92. Fatalities At Sea in the Halibut and Sablefish Fishery (p. 159)



Source: Developed by Northern Economics based on data from CFID provided by NIOSH (2024)

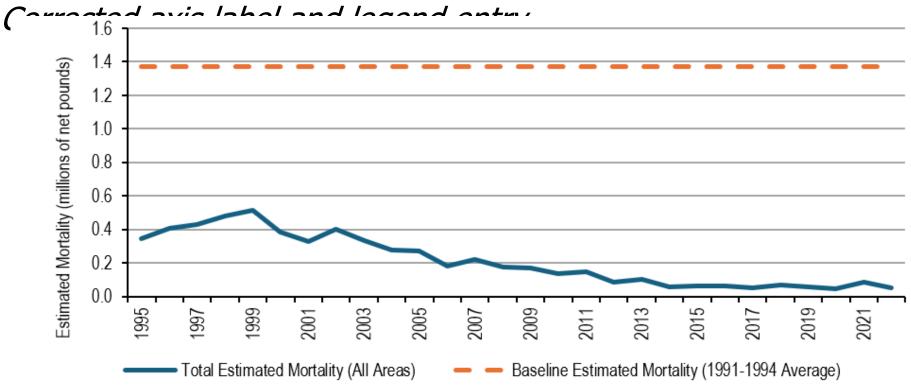
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## Subsection 2.11: Biological Management

- Deadloss from Lost of Abandoned Gear
- Bycatch Loss
- Discard Mortality

## Halibut Mortality from Lost or Abandoned Gear (Updated Figure)

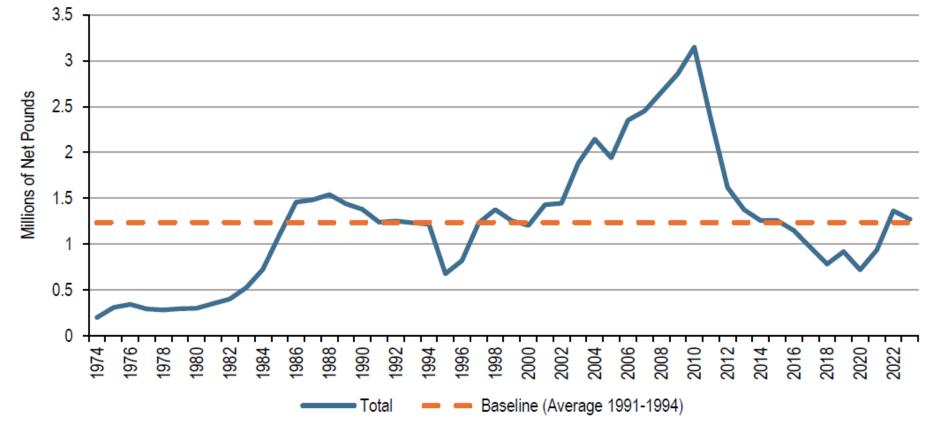
Figure 93. Estimates of Pacific Halibut Mortality from Lost or Abandoned Longline Gear in the Halibut IFQ Fishery (p. 162)



Source: IPHC (2024a)

## Sub-legal (U32) Halibut Discard Mortality

Figure 96. Estimated Sublegal-sized (U32) Halibut Discard Mortality in the Halibut IFQ Fishery (p. 167)

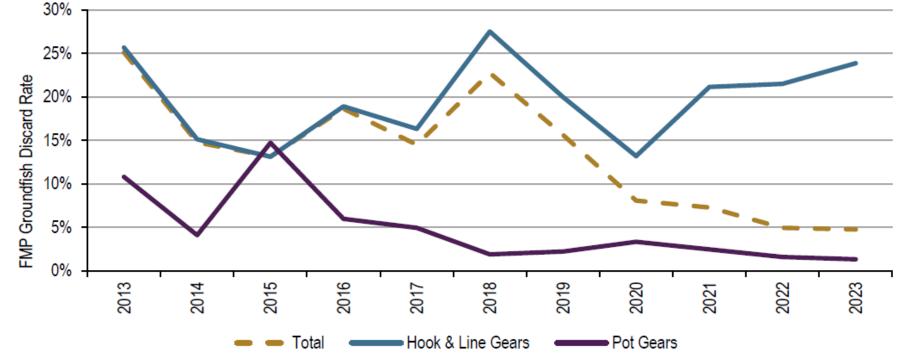


Source: Developed by Northern Economics based on data from IPHC Fisheries Regulations and Data Services Branch (2024)

#### **Northern**Economics

## Groundfish Discards in Sablefish Fishery

Figure 99. Discard Rate of All FMP Groundfish in the Sablefish IFQ Fleet (p. 173)



Source: Developed by Northern Economics based on data from AKFIN (2024)

## Subsection 2.12: In-Season Management

## Halibut and Sablefish Program Review: Management, Monitoring and Enforcement



Caleb Taylor December 2024 Brian Brown, Assistant Regional Administrator, Restricted Access Management Division

Summary points: (Section 2.12.5.2) Interim TEC minimum age policy would benefit from Council input

(Section 2.12.5.5) Survivorship Transfer Privilege (Beneficiary Provision) will become constraining in 2025 and would benefit from Council direction

(Section 2.12.6.4) The extended IFQ Program season is constraining administrative processes



## In-Season Management [Section 2.12]

#### **Monitoring updates**

- Observer coverage percentages
- Development of Electronic Monitoring
- Advent of longline pot gear for sablefish

#### Enforcement

 Shoreside, at-sea and monitoring violations

#### **IFQ Cost Recovery**

Program Costs, Value, and Fee Percentages

#### **IFQ Transfers**

- <u>TEC Minimum Age Policy</u>
- Medical Transfer Provision



- <u>Beneficiary Transfer</u> <u>Provision</u>
- IFQ Return Requests

#### **Administrative Challenges**

- Transfer Provisions
- Quota Share Lien Registry
- Overage and Underage Calculations
- Extended Season
- Halibut Retention in State Groundfish Pot Fisheries



## Management: Transfer Eligibility

### **Interim TEC Minimum Age Policy**

- NOAA Fisheries established an allowable minimum age policy for the issuance of an IFQ transfer eligibility certificate at 18 years old in 2022.
- Commercial harvest crew experience, contractual law, and other legal and enforcement considerations were taken into account.

NMFS recommends initiating a regulatory change to establish a minimum age to be eligible to receive IFQ or QS by transfer based on all applicable laws.



Section 2.12.5.2, pg. 190



### Management: Transfers

### **Beneficiary Transfer Provision**

 Following a QS holder's passing, the NMFS Regional Administrator will approve an application for transfer of IFQ for a period of 3 calendar years following the date of death of an individual to a designated beneficiary (§ 679.41(k)(3)).

Beginning with the 2025 IFQ fishing season, NMFS will no longer issue IFQ to beneficiaries that have exceeded the 3year beneficiary window unless they hold a valid TEC.



Image credit: NPFMC



Section 2.12.5.5, pg. 193



### Management: Transfers

#### **Beneficiary Transfer Provision**

 However, regulations governing the beneficiary provision of the IFQ Program do not provide guidance to NMFS about what should happen to QS held by a beneficiary after the 3-year window following the date of death.

NMFS recommends that the Council consider if changes to the survivorship transfer privilege regulations at 50 CFR 679.41(k) are necessary to govern what happens to QS held by a beneficiary beyond 3-years.



Image credit: NPFMC

Section 2.12.5.5, pg. 193





### Management / Administrative challenges:

### **Extended Season**

- Little time to thoroughly review inputted data from large volume of individual landings
- Administrative procedures have become constrained

NMFS recommends initiating a regulatory change to adjust the timing of the annual cost recovery process to address the current time limitation for this annual process.







#### Summary:

#### (Section 2.12.5.2) NMFS recommends initiating a regulatory change to establish a minimum age to be eligible to receive IFQ or QS by transfer based on all applicable laws.

 This would allow the Council and NMFS to consider a range of options for what the minimum age should be for an individual to receive IFQ or QS by transfer under the IFQ Program.

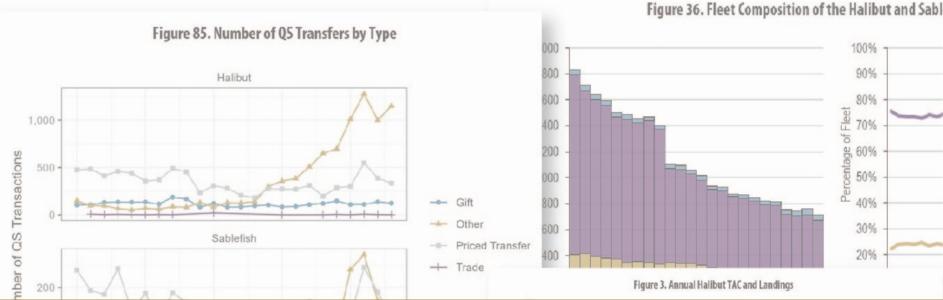
(Section 2.12.5.5) NMFS recommends that the Council consider if changes to the survivorship transfer privilege regulations at 50 CFR 679.41(k) are necessary to govern what happens to QS held by a beneficiary beyond 3-years.

(Section 2.12.6.4) NMFS recommends initiating a regulatory change to adjust the timing of the annual cost recovery process to address the current time crunch for this annual process.

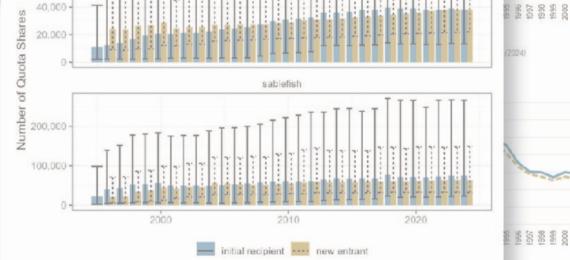


Section 2.12.6.4, pg. 199





### Section 3: Conclusions and Findings



--- landings





TAC --- Landings

5

**Northern**Economics

Program Goals and Objectives	Changes in Program Performance Since 2016 IFQ Program Review
Allocation conflicts (Section 2.4.3.2)	No additional allocation conflicts within the IFQ Program were identified. However, allocation conflicts did occur between the target and non-target fisheries, prompting the Council to set abundance-based PSC limits for the Amendment 80 fleet in 2022.
Gear conflicts (Section 2.4.3.1)	Limited data are available to analyze gear conflicts, most recent evidence comes from an early study of the program where program participants reported "uncrowded fishing grounds" as an outcome.
Dead loss from lost gear (Section 2.11.1.1 and Section 2.11.2.1)	As stated in the previous review, the IFQ Program has decreased fishing pressure and reduced deadloss from lost gear, primarily in the halibut fishery. For halibut, mortality estimates from lost gear have continued to decline 2015-2022 to an average of 0.06 <u>Mlb</u> per year. For sablefish, no estimates are available to estimate losses or changes.

Program Goals and Objectives	Changes in Program Performance Since 2016 IFQ Program Review
Bycatch loss (Section 2.11.1.1 and Section 2.11.2.1)	Estimated discards and discard rates of FMP groundfish in the halibut IFQ fleet have increased since the previous review, 2023 reported the highest discard rate of FMP groundfish (55%) since observer data began to be used to estimate discard rates in 2013. Average annual discards of FMP groundfish by the sablefish IFQ fleet have declined since the previous review.
Discard mortality (Section 2.11.1.1 and Section 2.11.2.1)	Both legal-sized and sublegal-sized discards of halibut by the halibut IFQ fleet have generally decreased since the previous review. Between 2016 and 2023 the discard rate of sablefish remains consistent with the historical average, at around 5%.

Program Goals and Objectives	Changes in Program Performance Since 2016 IFQ Program Review
Excess harvesting capacity (Section 2.4.2)	Since the previous review, the number of active vessels in both the halibut and sablefish IFQ fisheries have continued to decline overall, consistent with the long term-trend. As of 2023, the halibut fishery had 669 vessels making active landings, down an additional 27% from 2014 and down 68% compared to 1995 levels. In the sablefish fishery as of 2023 the fleet has decreased by 11% since 2014 and 55% since 1995.
Product wholesomeness (Section 2.4.4)	Since the previous review, the proportion of halibut deliveries that were headed and gutted-only has increased, from less than 50% between 2009-2015 to 100% since 2019. Sablefish delivery conditions have also changed, with larger percentages of <u>bled-only</u> fish since 2015, increasing to 45% of deliveries in 2021.

Program Goals and Objectives	Changes in Program Performance Since 2016 IFQ Program Review
Safety (Section 2.10)	Four fishing fatalities have occurred since 2016, which is consistent with the long-term trend of fewer fatalities than in the pre-IFQ period.
Economic stability in the fisheries and communities (Section 2.9)	Some larger, regional port communities with a long history of engagement in the halibut and sablefish fisheries continue to benefit from the program by retaining security of access to the IFQ fisheries. Since the previous review, additional CEQs have acquired halibut and sablefish QS, but many small, rural communities continue to have limited access to the IFQ fisheries due to lack of QS by residents.

Program Goals and Objectives	Changes in Program Performance Since 2016 IFQ Program Review
Rural coastal community development of a small boat fleet	The previous review noted that this objective largely relates to the allocations of halibut and sablefish to the CDQ Program at the time of IFQ Program implementation, and because the CDQ Program is a separate management program, it is not examined as part of the IFQ Program. However, the current review examined changes in the vessel size composition of the fleets in the IFQ fisheries (Section 2.4.5) and changes in IFQ landings and QS holdings in small, rural Alaska communities (Section 2.9). The findings of those sections are summarized elsewhere in this table.
Link the initial QS allocations to recent dependence (Section 2.3)	Because this objective concerns the initial allocation, no changes were identified from the previous review.

Program Goals	Changes in Program Performance Since
and Objectives	2016 IFQ Program Review
Maintain the existing business relationships among vessel owners, crews, and processors (Section 2.5 and Section 2.6.1)	The number of crew days and crew trips in both fisheries has declined over time, but not as much as the decline in the number of active vessels, supporting conclusions from the previous review that the IFQ program has increased stability and wages for crew that remain in the fishery. Due to the requirement that bona fide crewmembers can only purchase QS and enter the fishery, the number of IFQ crewmembers and proportion of QS held by these individuals has continued to increase over time. While the number on onshore buyers/processors have declined by 53% between 1991–2022, much of this is accounted by major shift between 2007–2009, which appears to be widespread throughout Alaska fisheries and is not believed to be caused by anything directly related to the sablefish and halibut fisheries of the IFQ Program.

Program Goals and Objectives	Changes in Program Performance Since 2016 IFQ Program Review
Assure that those directly involved in the fishery benefit from the IFQ Program by assuring that these two fisheries are dominated by owner/operators (Section 2.7).	Since the previous review, both IFQ fisheries decreased their hired master use overall. Hired master use in the halibut catcher vessel fishery decreased from 32.6% in 2014 to 24.7% in 2023. Hired master use in the sablefish catcher vessel fleet decreased by 44.7% to 31% in the same period.
Limit the concentration of QS ownership and IFQ usage that will occur over time (Section 2.4.6 & Section 2.6.2)	Since the previous review, holdings of QS have become less concentrated in the sablefish fishery, but more concentrated in the halibut fishery. For the halibut fishery, overall QS holdings are less concentrated than they were in 2002. Additionally, the proportion of QS held by new entrants has continued to increase.

Program Goals and Objectives	Changes in Program Performance Since 2016 IFQ Program Review
Limit the adjustment cost to current participants including Alaska coastal communities (Section 2.9)	Since the previous review, the percentage of the total QS held by Alaska residents has increased in both IFQ fisheries. Among Alaska communities, some have increased their engagement in the processing and harvesting of IFQ fish since the previous review. However, other communities have seen a decrease in engagement, which suggests that they are incurring ongoing adjustment costs to IFQ Program implementation.
Increase the ability of rural coastal communities adjacent to the BSAI to share in the wealth generated by the IFQ Program	The previous review noted that this objective relates to the implementation of the CDQ Program, and because the CDQ Program is a separate management program, it is not examined as part of the IFQ Program.

Program Goals	Changes in Program Performance Since
and Objectives	2016 IFQ Program Review
Achieve previously stated Council goals and objectives and meet MSA requirements	Although not expressly addressed in the analysis and key findings, this is evaluated throughout Section 2.

### Additional LAPP Review Requirements Allocation Review: In April 2023, staff prepared a workplan

- **Allocation Review:** In April 2023, staff prepared a workplan for program and allocation reviews to facilitate a more efficient process while still meeting review requirements. According to the workplan, for those allocations that are within the scope of a program review, the program review will be considered sufficient to satisfy the allocation review requirement.
- Duration: The final EIS for the IFQ Program states that harvesting privileges under the IFQ Program would be good for an indefinite period of time but would be subject to periodic change, including revocation. In 2012, in response to a recommendation from the Council, NMFS issued a final rule, sending notices to QS holders who had been inactive since IFQ Program implementation that their QS would be revoked.
- Auctions and Royalties: While royalties and cost recovery fees are not synonymous, NMFS has implemented a cost recovery program to recover the incremental costs of
   Northern management, data collection, and enforcement of the IFO

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## Net Benefits to the Nation

- A key question of a LAPP review is to assess whether, on the whole, society is better off under the program than it would have been without the program.
- A quantitative assessment of estimate of changes in net benefits to the Nation was not undertaken, but the review discusses major drivers of changes in benefits and costs as a result of the IFQ Program and the likelihood that net benefits have increased by comparing trends before and after program implementation.
  - The end of derby conditions, extending season lengths (Section 2.4.1, have allowed harvesters to more effectively plan their operations around market conditions for the IFQ fisheries and other fisheries they participate in.
  - Average revenue per vessel has generally increased since the program was implemented (Section 2.4.6.2)
- The design of the IFQ Program attempted to balance economic efficiency with social objectives, and several elements of the program directly constrain economic efficiency. Kroetz, Sanchirico, and Lew (2015) found
   Northern Economic at the resource rent (a measure of added value to society) in the fisheries 85

## Net Benefits to the Nation

- When the IFQ program was implemented, it was expected that economic efficiency would be negatively impacted by QS trading restrictions, among other aspects of the program, such as requirements for hired-master use
- These efficiency costs were weighed against expected benefits to providing more widespread fishing opportunities and employment in the IFQ fisheries.
- The net benefits to specific communities and individuals within those communities <u>may or may not</u> be positive under the IFQ Program.
  - Several larger, regional port communities with a long history of engagement in the halibut and sablefish fisheries benefited from the program by securing continuing access to the fisheries.

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• However, some small, rural communities saw their access to the IFQ NorthernEconofisheries limited due to the loss of QS by residents.



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