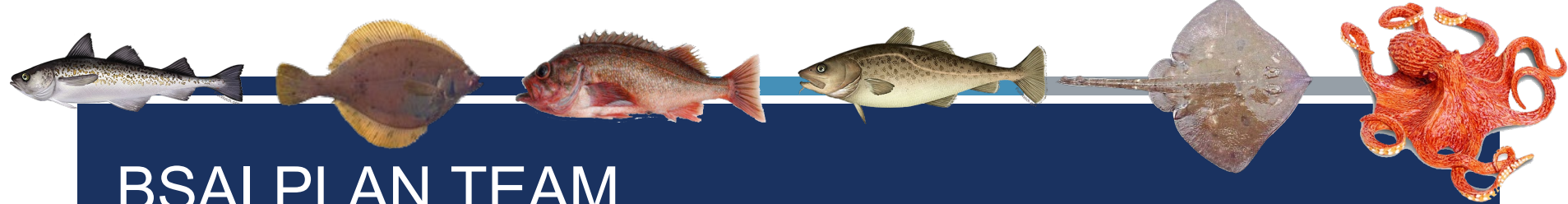


REPORT OF THE NOVEMBER 2024 BSAI GROUND FISH PLAN TEAM MEETING

STEVE BARBEAUX (CO-CHAIR), KALEI SHOTWELL (CO-CHAIR), CINDY TRIBUZIO (VICE-CHAIR), DIANA STRAM (COORDINATOR)

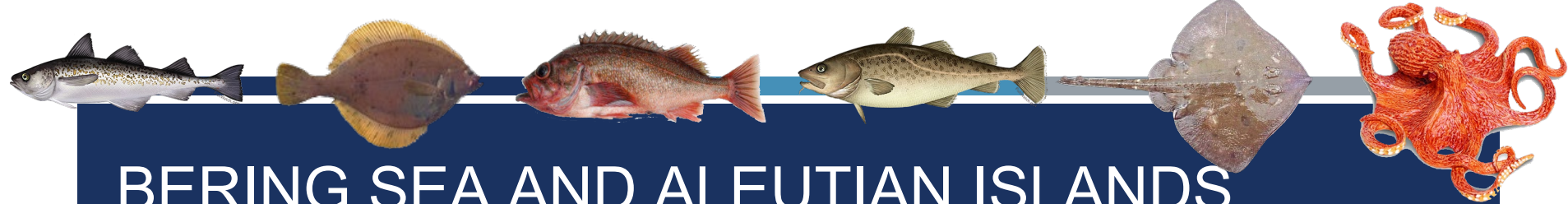
DECEMBER 5, 2024





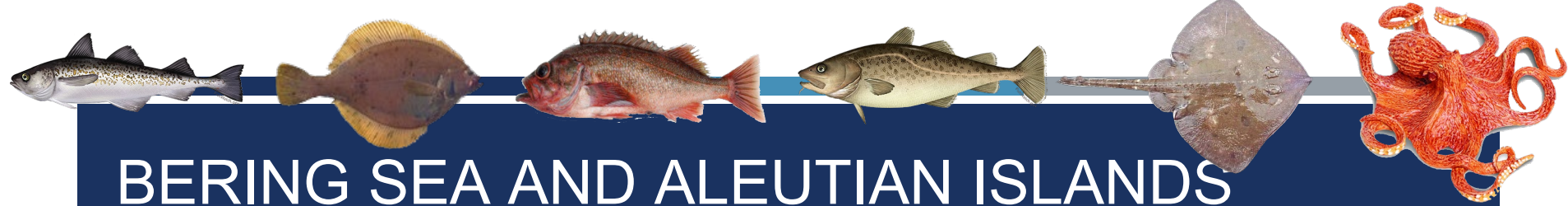
BSAI PLAN TEAM MEETING OVERVIEW

- Dates: November 12-15
- Place: AFSC in Seattle
- Leaders: Steve Barbeaux, Kalei Shotwell (co-chairs); Cindy Tribuzio (vice-chair); Diana Stram (coordinator)
- Participation:
 - Lucas DeFilippo (AFSC ABL)
 - Allan Hicks (IPHC)
 - Lisa Hillier (WDFW)
 - Kirstin Holsman (AFSC REFM)
 - Steven Whitney (NMFS AKRO)
 - Andy Kingham (AFSC FMA)
 - Beth Matta (AFSC REFM)
 - Andy Seitz (UAF)
 - Jane Sullivan (AFSC)
 - AFSC and AKRO staff and members of the public



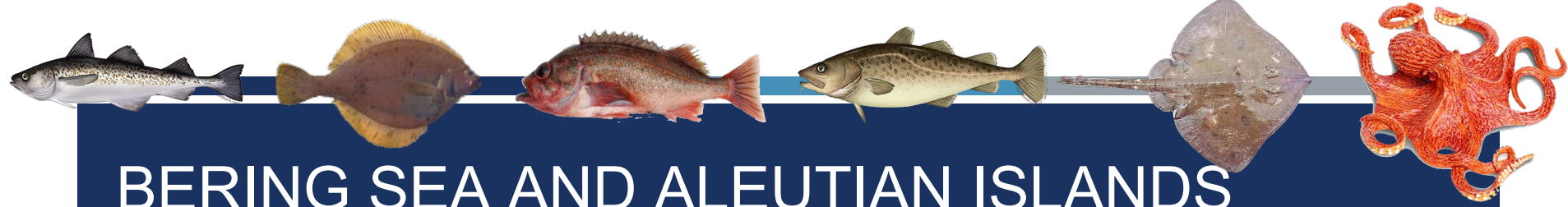
BERING SEA AND ALEUTIAN ISLANDS BIG PICTURE

- Assessments of 26 stocks/complexes – (9 **Full**, 9 Update; 3 Harvest projection; 2 Catch report, 2 Ecosystem report; 1 “none”)
- Total of 28 models, including Tier 5/6 methods:
 - 18 base models/methods
 - 10 additional models/methods
- The Team agreed with authors’ recommendations regarding preferred models/methods and harvest specifications in all stocks
- 1 new reductions from maximum permissible ABC recommended (2 total)
- Of the 15 stocks/complexes in Tiers 1 or 3, only 2 are in sub-tier “b”
- No stocks/complexes were subjected to overfishing in 2023, and no Tier 1 or 3 stocks/complexes are overfished/approaching as of 2024
- 27 additional Team recommendations beyond accepting model recommendations



BERING SEA AND ALEUTIAN ISLANDS BIG PICTURE (TINY FONT)

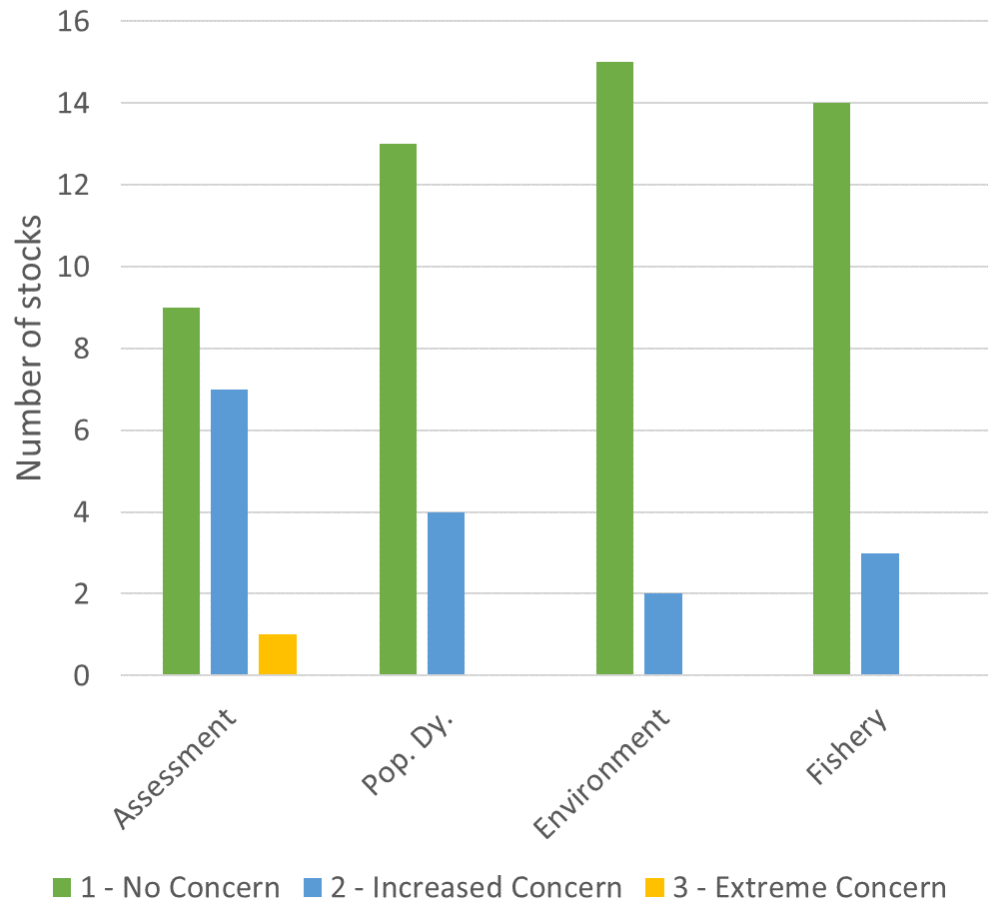
Chapter	Assessment	Author	Tier	Type	Risk	% Reduction
1	Eastern Bering Sea pollock	Ianelli	3a	Full	1,1,1,1	
1A	Aleutian Islands pollock	Barbeaux	3a	Update	1,1,1,1	
1B	Bogoslof Island pollock	Ianelli	5	Update	1,1,1,1	
2	Eastern Bering Sea Pacific cod	Barbeaux	3b	Full	1,1,2,1	
2A	Aleutian Islands Pacific cod	Spies	3b	Full	1,2,2,1	
3	Sablefish	Goethel	3a	Update		
4	Yellowfin sole	Spies/Bryan	1a	Update	1,1,1,1	
5	Greenland turbot	Bryan	3a	Full	3,2,1,2	10%
6	Arrowtooth flounder	Shotwell	3a	H-Proj		
7	Kamchatka flounder	Bryan	3a	Update	2,1,1,1	
8	Northern rock sole	McGilliard	1a	Full	1,1,1,1	
9	Flathead sole	Kapur	3a	Update	1,1,1,1	
10	Alaska plaice	Cronin-Fine	3a	Full	1,1,1,1	
11	Other flatfish	Monnahan	5	Update	1,1,1,1	
12	Pacific ocean perch	Spencer	3a	Full	2,1,1,1	
13	Northern rockfish	Spencer	3a	H-Proj		
14	Rougheye & blackspotted rockfish	Spencer	3a	Full	2,2,1,2	
15	Shortraker rockfish	Shotwell	5	Update	2,1,1,1	
16	Other rockfish	Sullivan	5	Update	2,2,1,2	
17	Atka mackerel	Sullivan/Lowe	3a	Update	1,1,2,1	
18	Skates	Tribuzio	5	H-Proj		
19	Sharks	Tribuzio	6	C-Rep		13%
22	Octopus	Cronin-Fine	6	C-Rep		
Appendix 1	Forage Species (including Squid)	Vollenweider	eco	E-Rep		
Appendix 2	Grenadiers	Siwicke	eco	E-Rep		

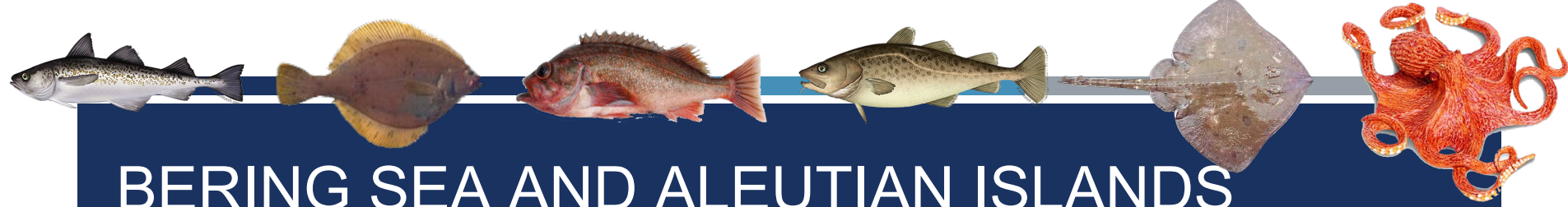


BERING SEA AND ALEUTIAN ISLANDS RISK TABLE AND REDUCTIONS

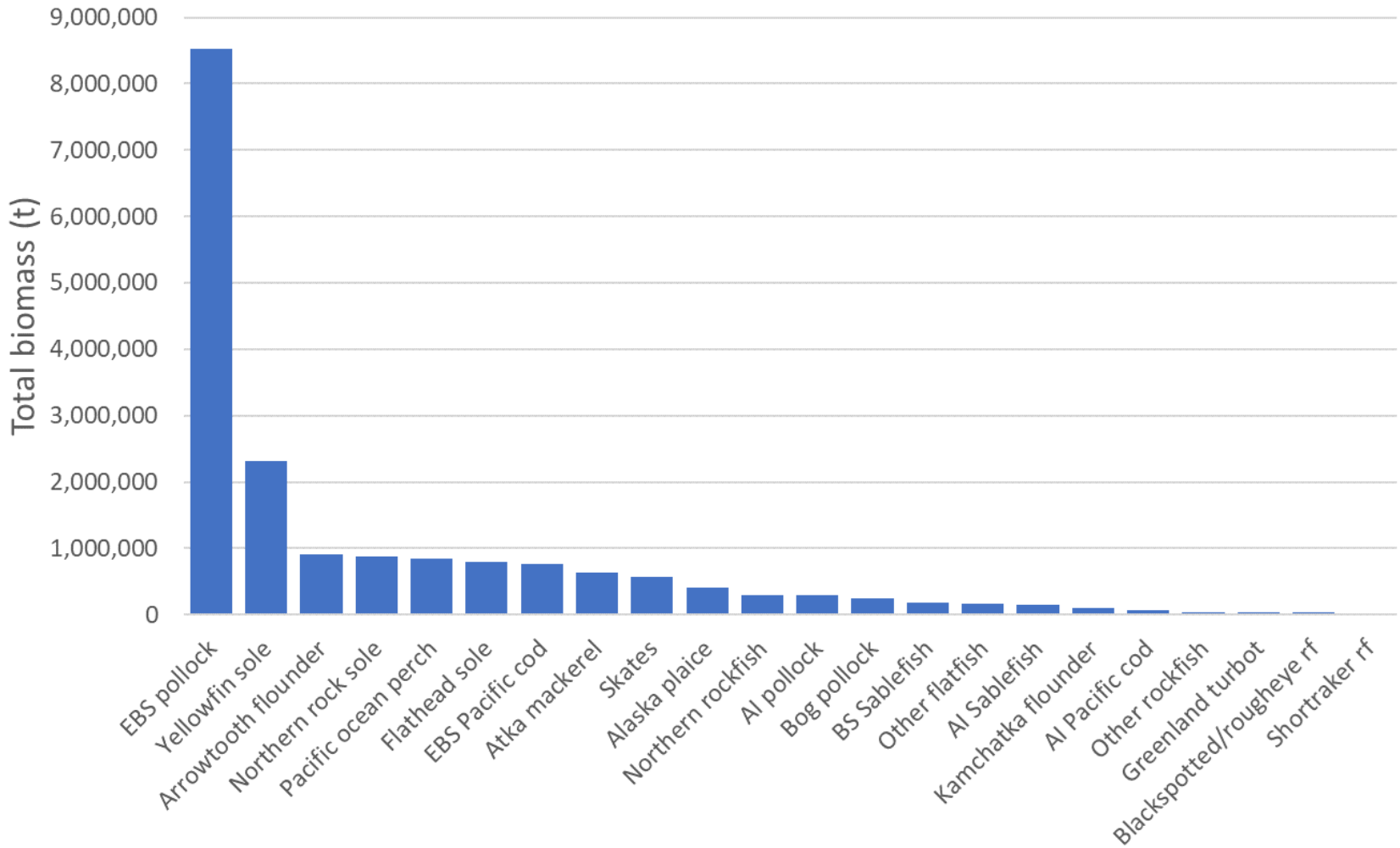
- One category of one stock with extreme concern
- One of the two recommendations for reduction from maximum permissible ABC were from this year's deliberations (Greenland turbot).
- One of the reductions was carried over from 2023 determinations (shark).

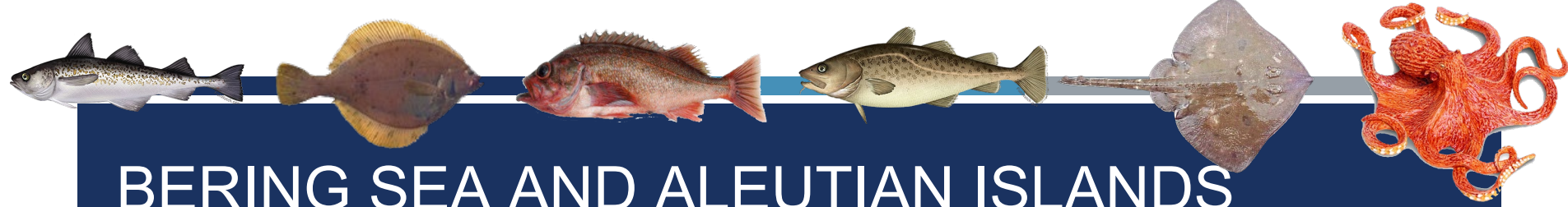
Risk Table Scoring (17 Stocks)



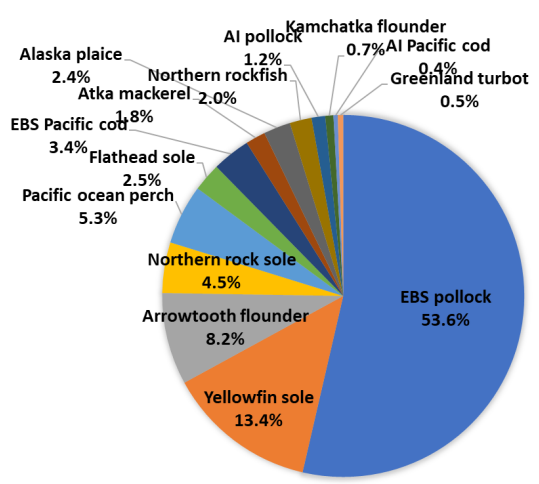
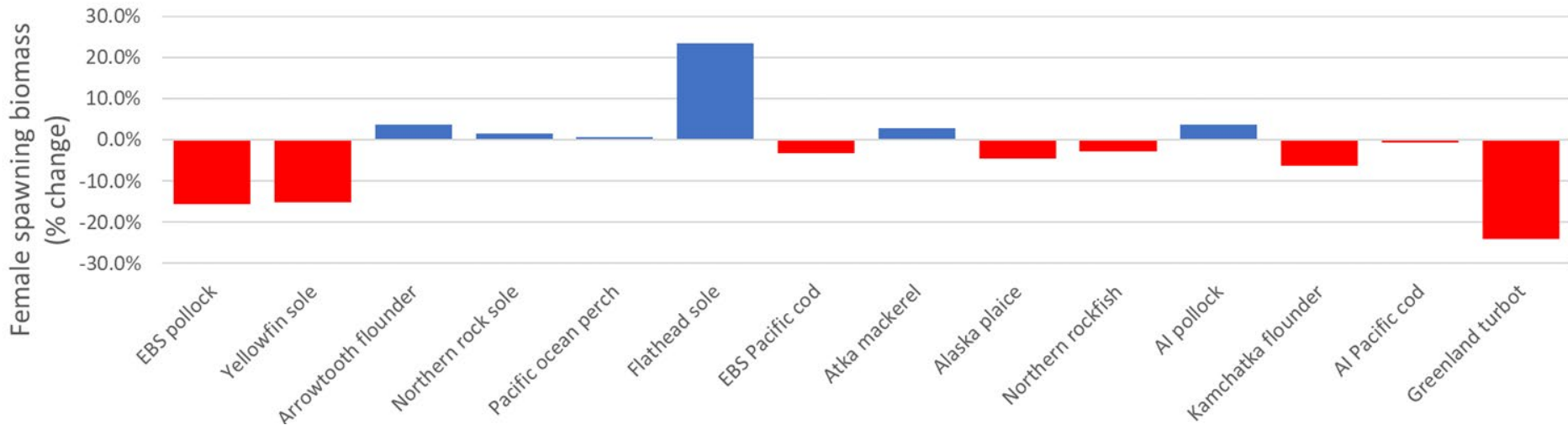


BERING SEA AND ALEUTIAN ISLANDS TOTAL BIOMASS (TIER 1, 3, AND 5)

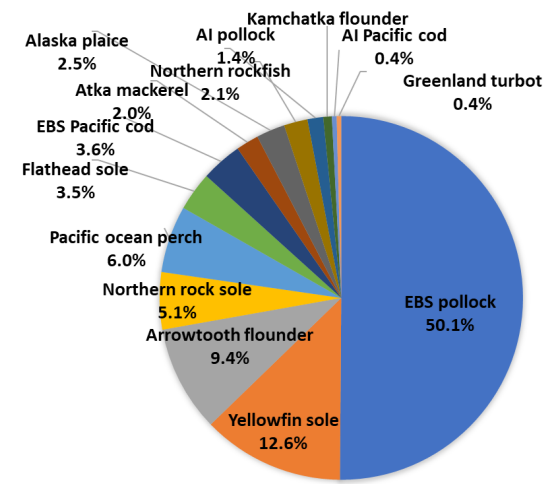




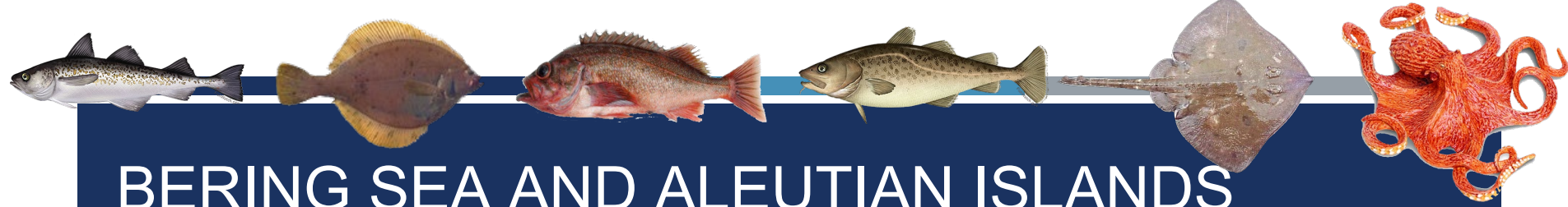
BERING SEA AND ALEUTIAN ISLANDS SPAWNING BIOMASS (TIERS 1 AND 3)



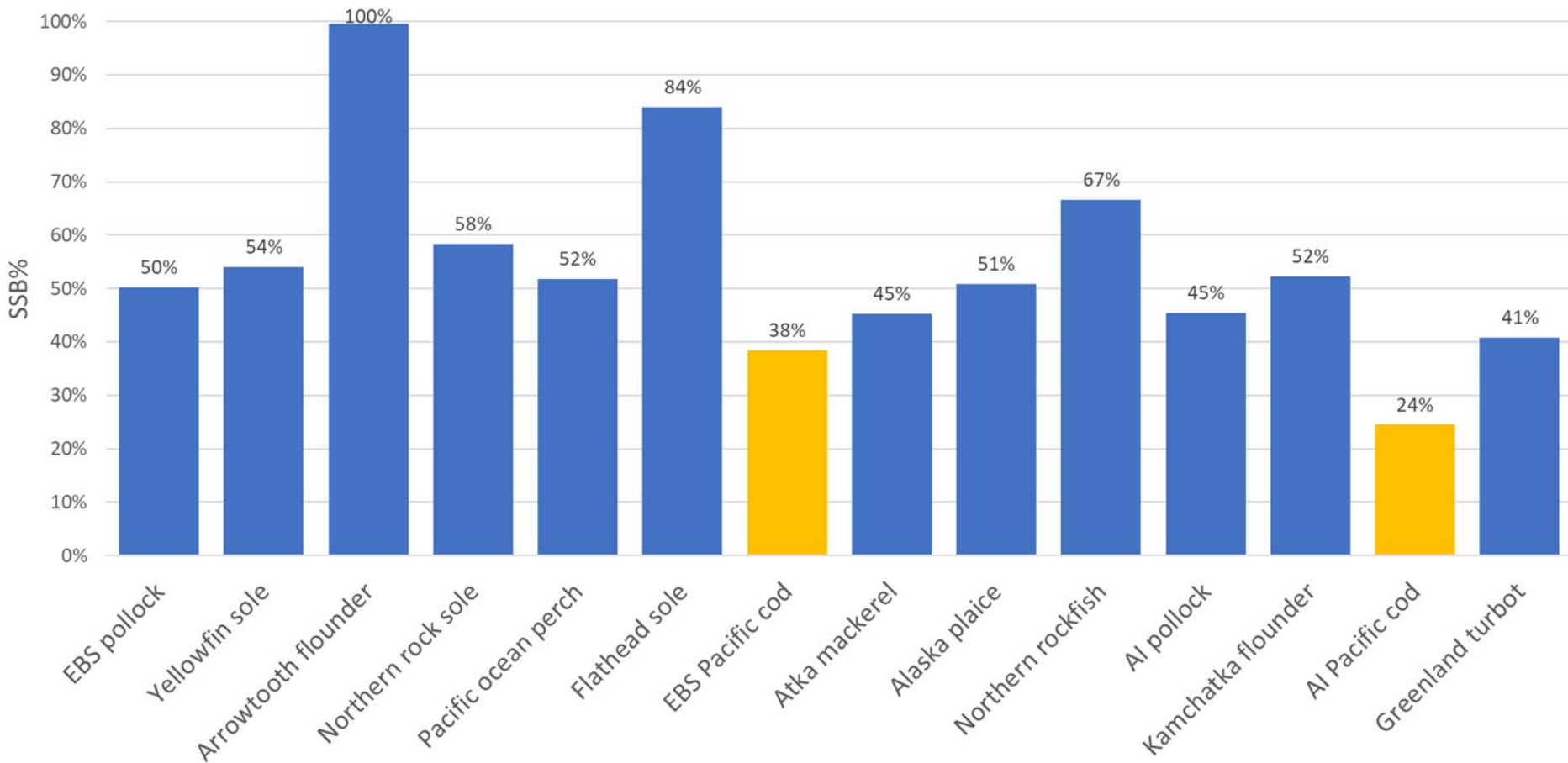
2024

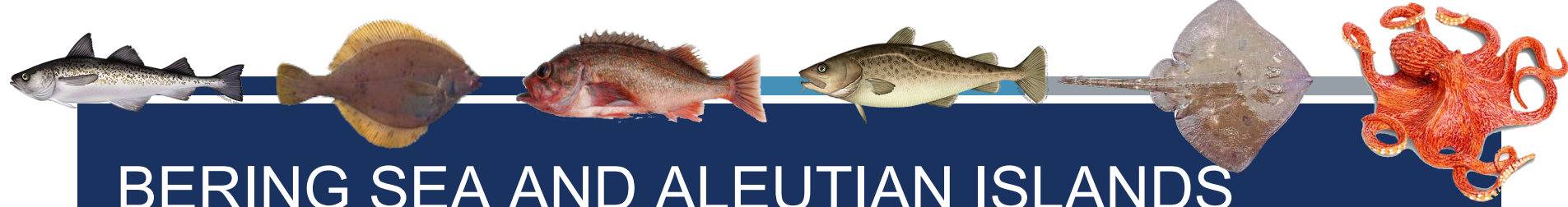


2025

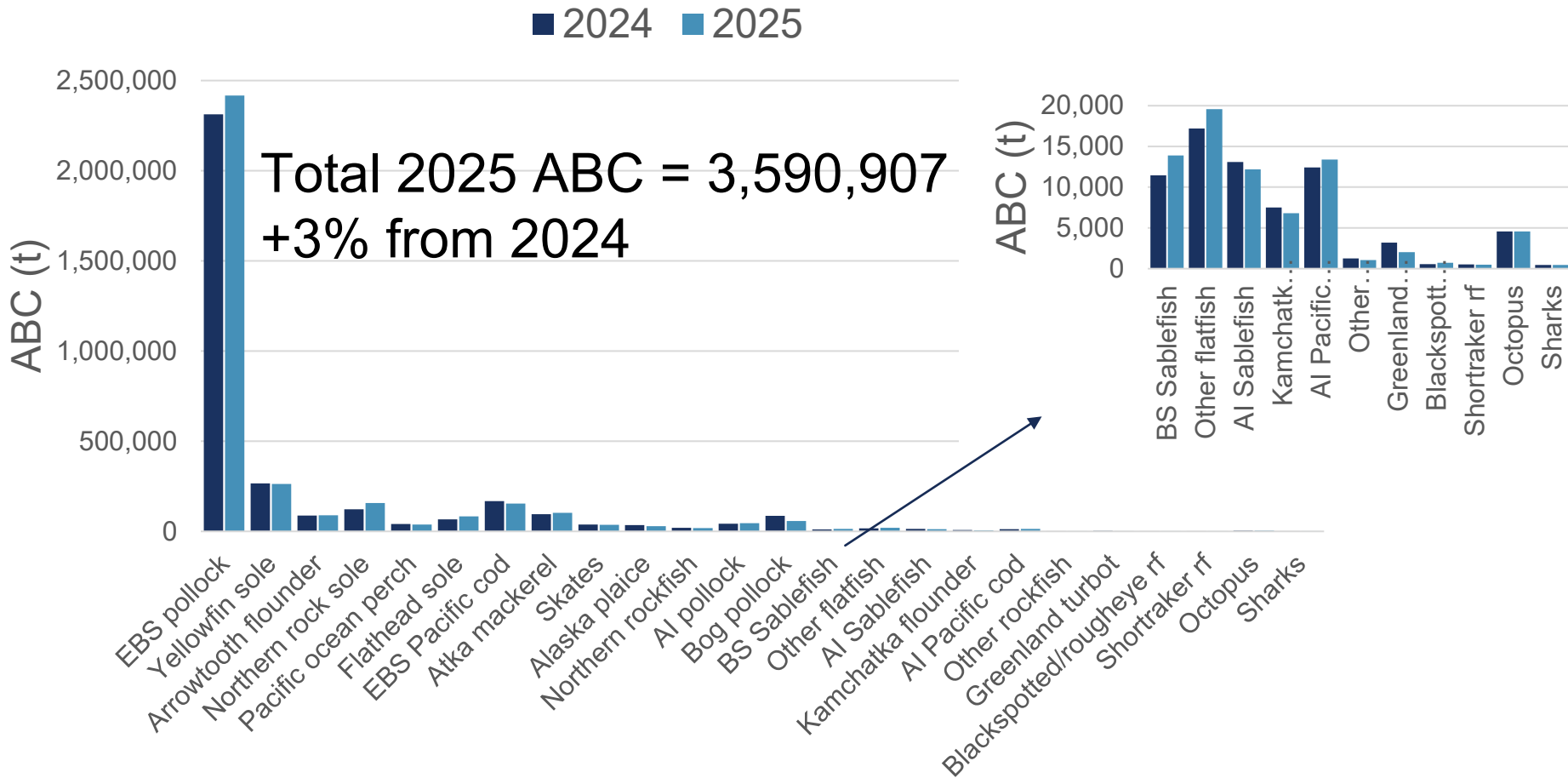


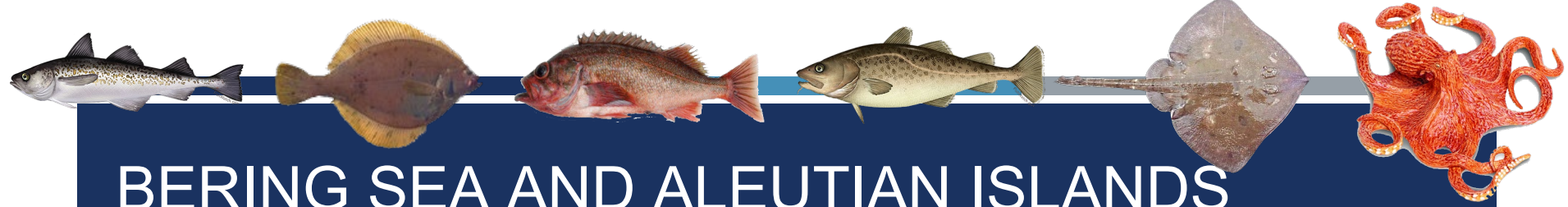
BERING SEA AND ALEUTIAN ISLANDS SPAWNING BIOMASS (TIERS 1 AND 3)



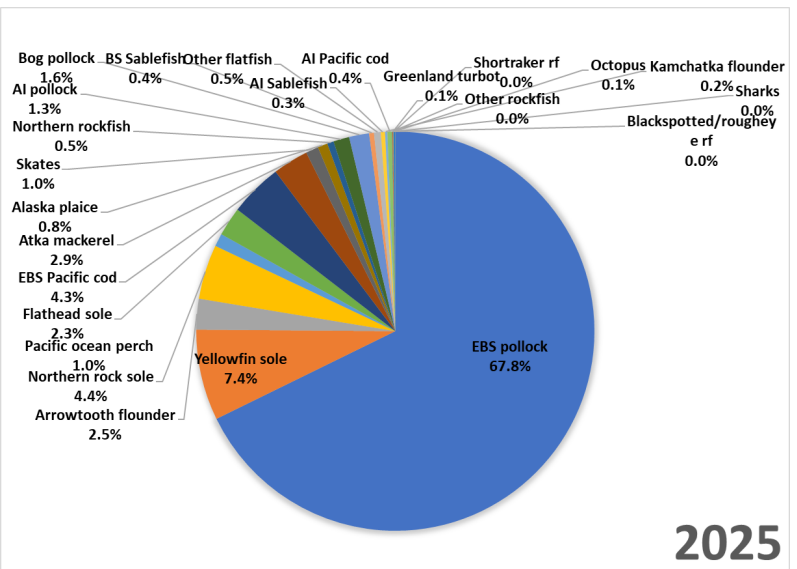
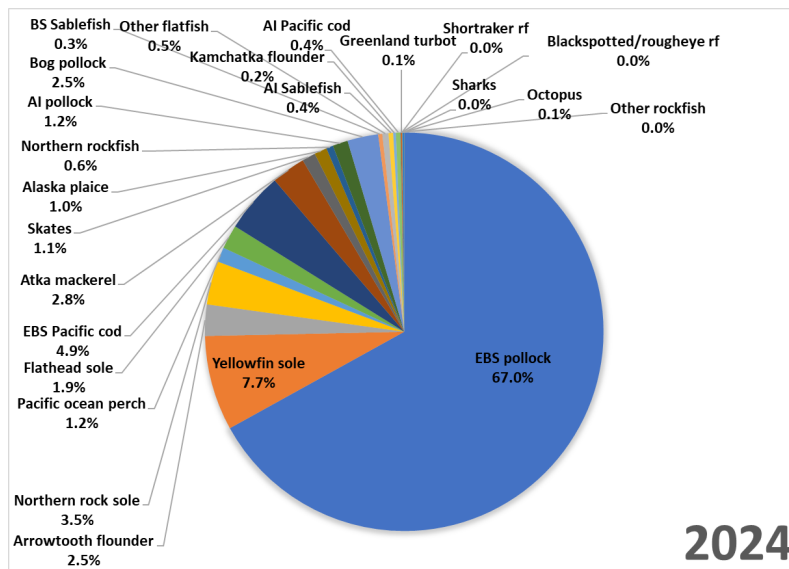
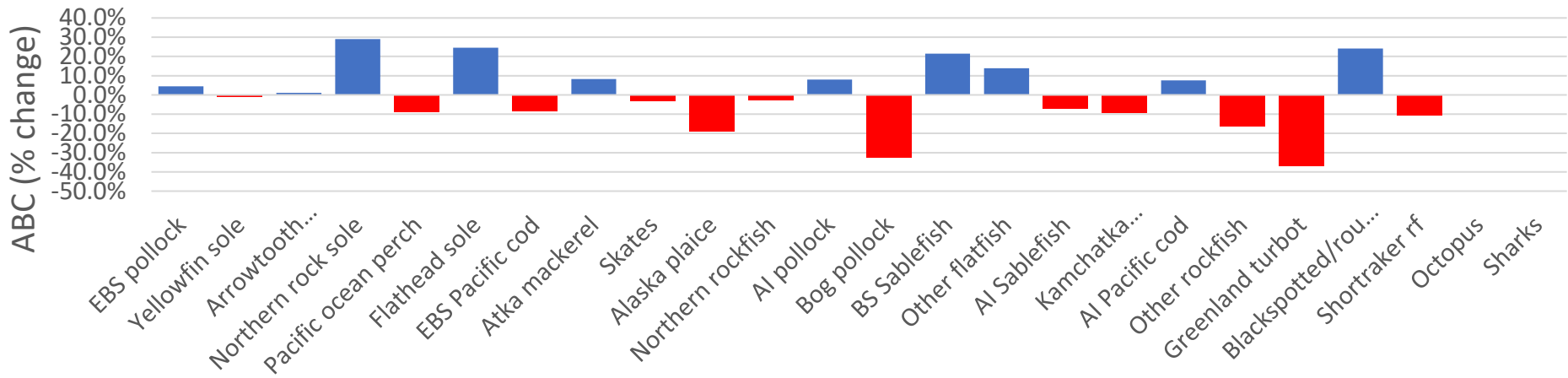


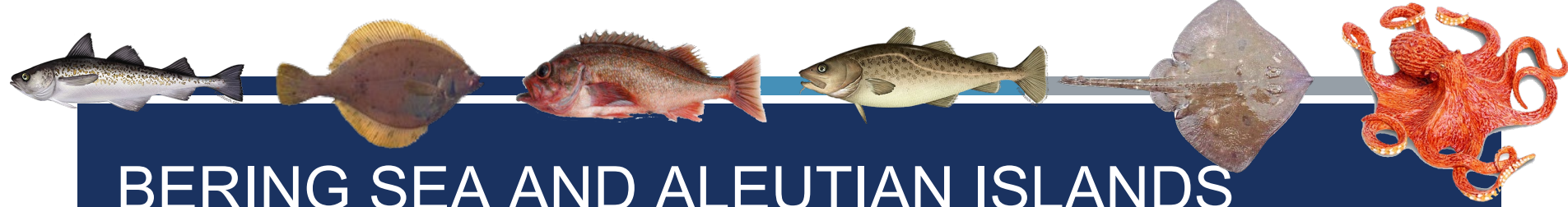
BERING SEA AND ALEUTIAN ISLANDS ALLOWABLE BIOLOGICAL CATCH (ABC)





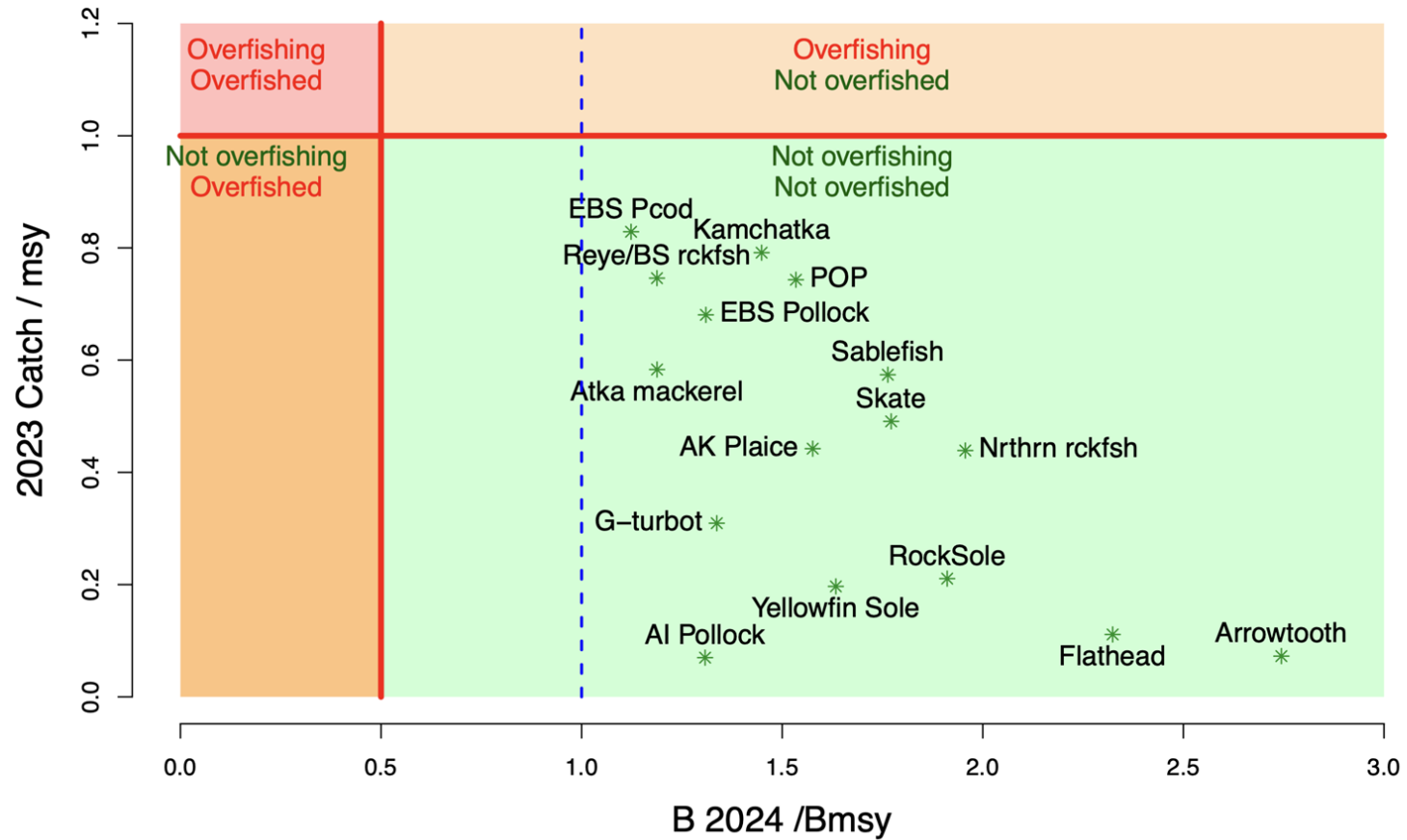
BERING SEA AND ALEUTIAN ISLANDS CHANGE IN 2025 ABC PROJECTION

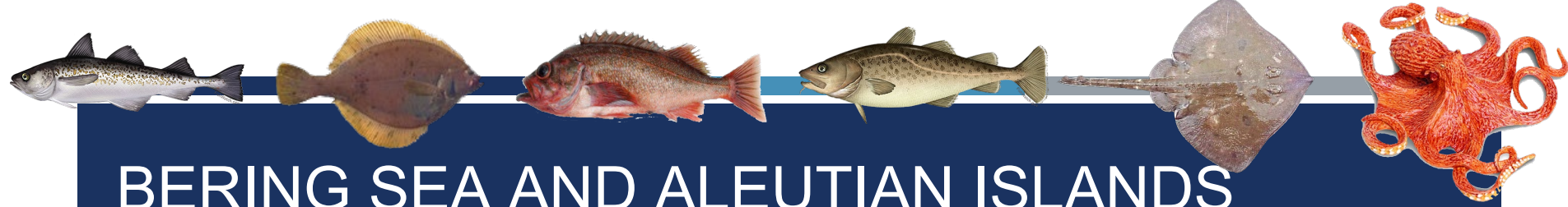




BERING SEA AND ALEUTIAN ISLANDS BIG PICTURE – STOCK STATUS

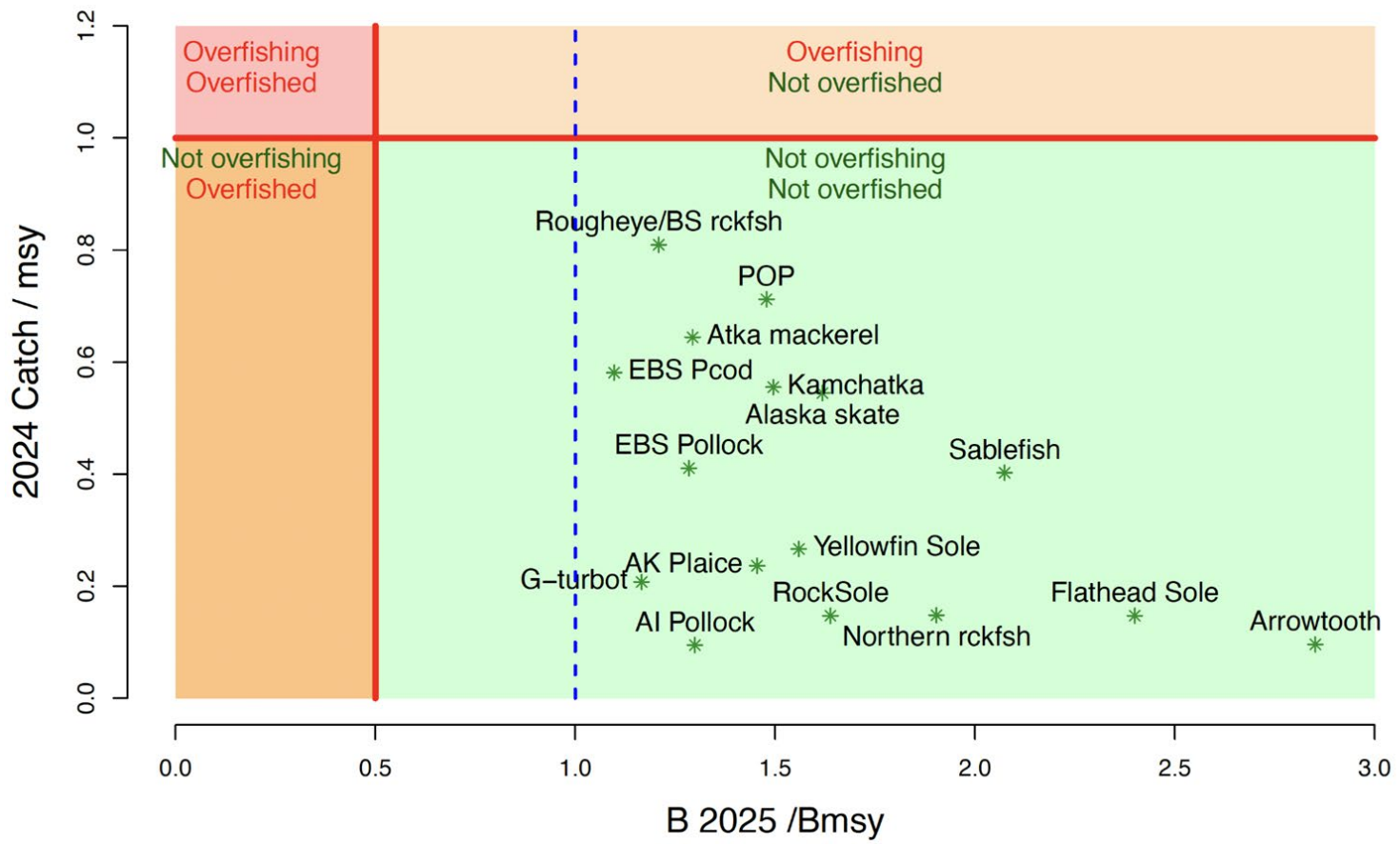
Bering Sea and Aleutian Islands

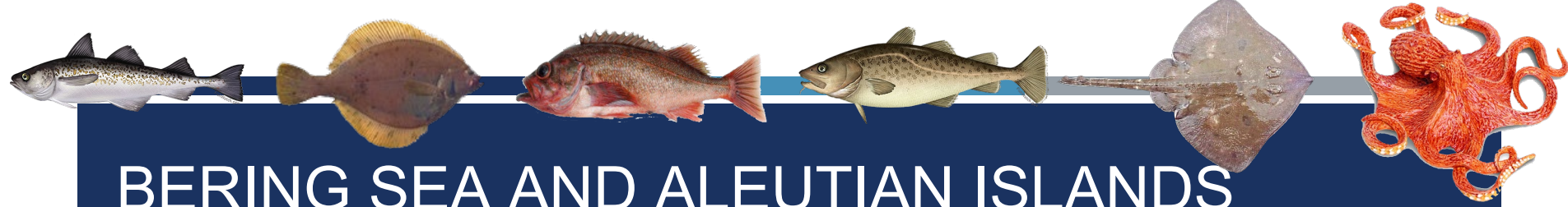




BERING SEA AND ALEUTIAN ISLANDS BIG PICTURE – STOCK STATUS

Bering Sea and Aleutian Islands

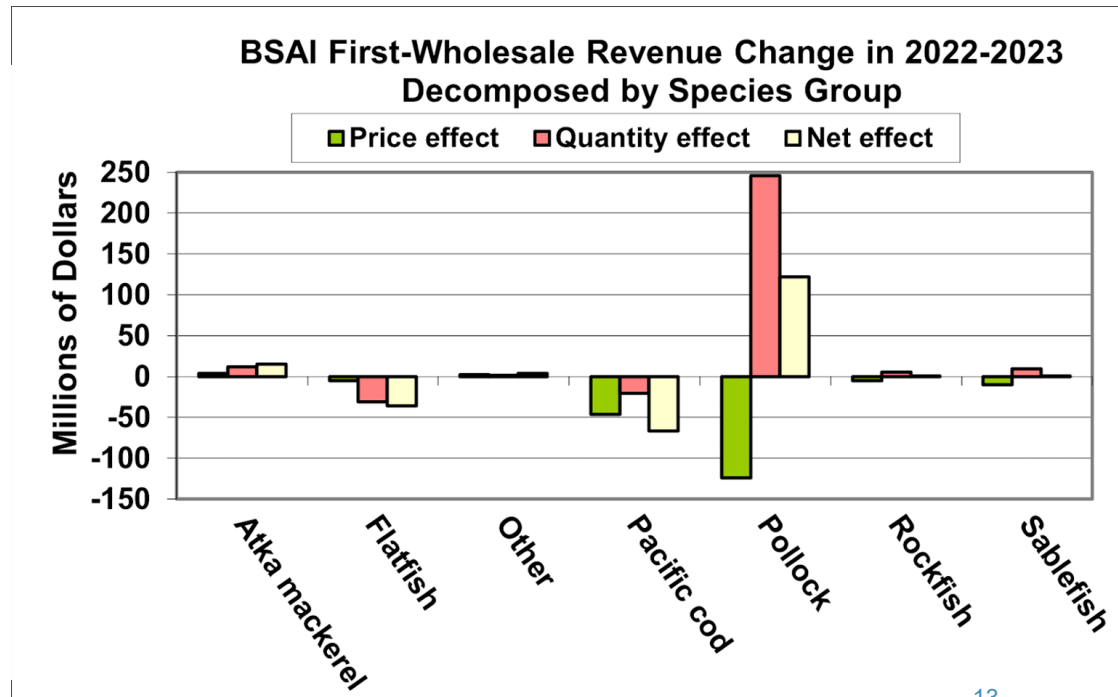
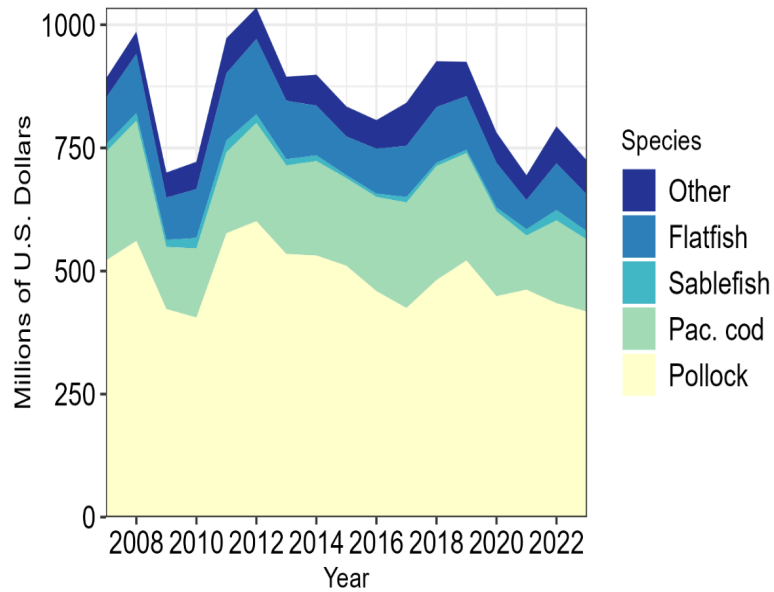


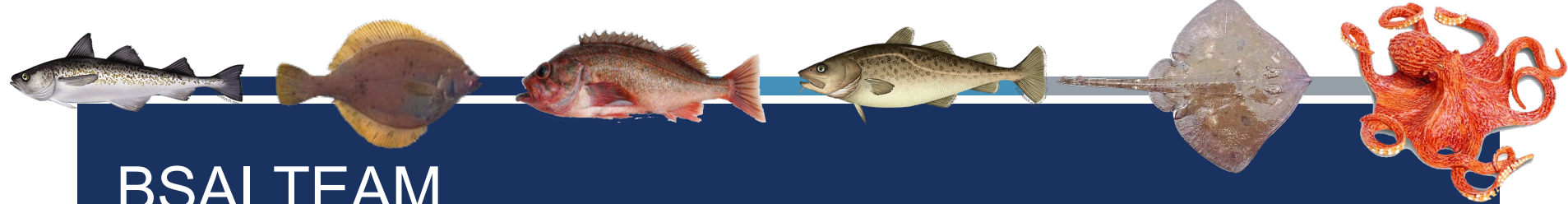


BERING SEA AND ALEUTIAN ISLANDS BIG PICTURE – ECONOMICS

- Decrease in value of BSAI harvested species from 2022 to 2023

Real exvessel value

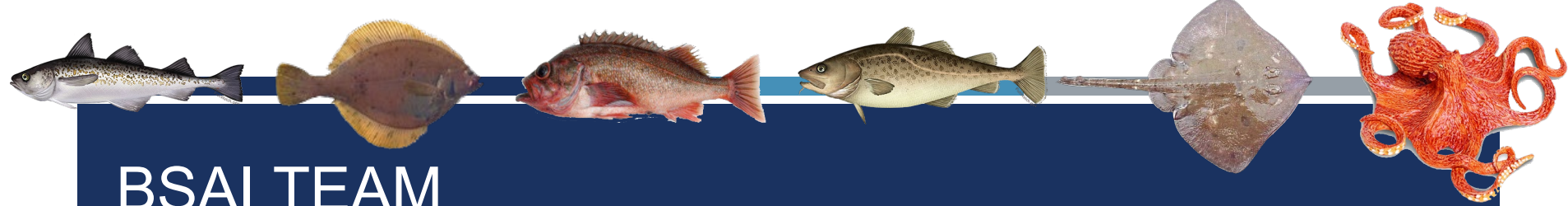




BSAI TEAM DATA LOSS DISCUSSION

Team noted the loss of data in 2024 that will affect stock assessments:

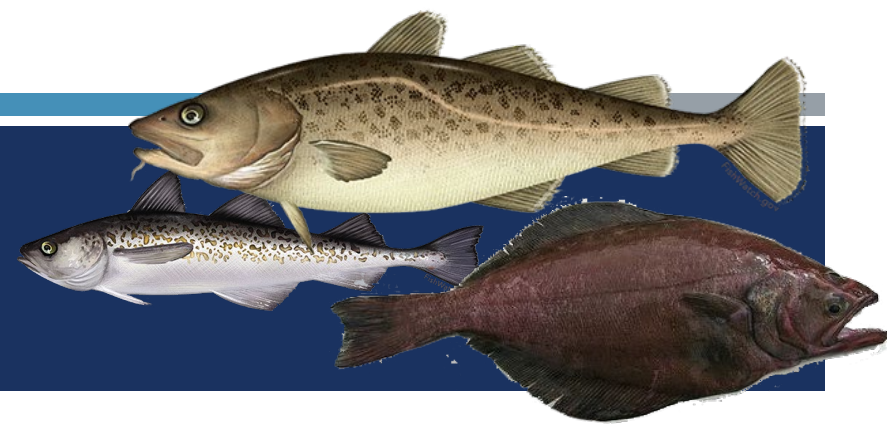
- The 2024 AFSC longline survey did not occur
- The sablefish fishery logbook data stream ended in 2023
- The 2024 AI bottom trawl survey was reduced by 22 vessel days
- The 2024 Northern Bering Sea survey did not occur (it last occurred in 2023)
- There has been no trawl survey on the EBS slope since 2016, which continues to impact several assessments (BSAI Greenland turbot, BSAI POP, BSAI blackspotted/rougheye, BSAI Kamchatka flounder, BSAI shortraker, BSAI other rockfish, and BSAI other flatfish)
- Reduction in Age and Growth Program staff resulted in a loss of regularly scheduled age data sets, including 2023 fishery data for BSAI yellowfin sole and 2022 and 2023 fishery data for BSAI flathead sole



BSAI TEAM GENERAL RECOMMENDATIONS

- The Team recommended that authors using OSA residuals and reporting SDNRs do so with an accompanying 95% confidence interval in order to make it clear when assumptions are violated.

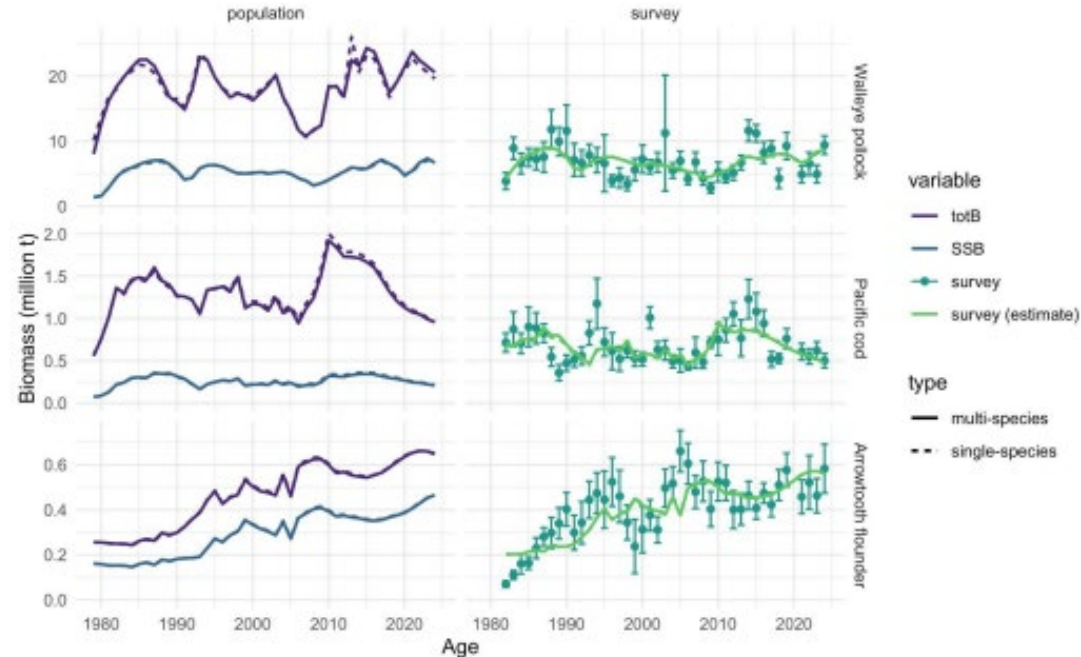
CLIMATE-ENHANCED MULTISPECIES MODEL



● EBS CEATTLE

- Walleye pollock, Pacific cod, and arrowtooth flounder
- Informational only for EBS
- No major model changes from last year

- Trends consistent between single and multi-species modes
- Scale differences due to model specifications (e.g., M at ages)
- Differences in results from single species assessments



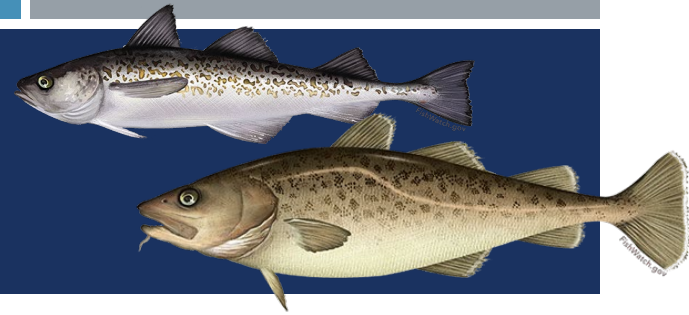


MULTISPECIES RECOMMENDATIONS

■ Multispecies

- The Team recommended that the authors include a comparison of the single-species model in CEATTLE to the operational single-species stock assessment models to evaluate differences between model results.
- The Team recommended the authors communicate with the ESP teams to explore the duplicative methods.

POLLOCK AND PACIFIC COD SUMMARY



Stock	Tier	2025 ABC (t)	2025 OFL (t)	Change from 2024 ABC
EBS Pollock (Full)	3a	2,417,000	2,957,000	4%
AI pollock (Update)	3a	46,051	55,728	8%
Bogoslof poll. (Update)	5	58,015	77,354	-33%
EBS Pacific cod (Full)	3b	153,617	183,509	9%
AI Pacific cod (Full)	3b	13,376	16,782	8%



CHAPTER 1

EBS WALLEYE POLLOCK

- Full Assessment Tier 3; risk table (1,1,1,1)
- Authors' presentation





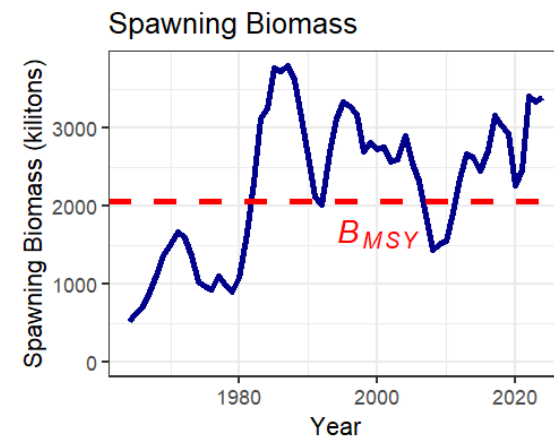
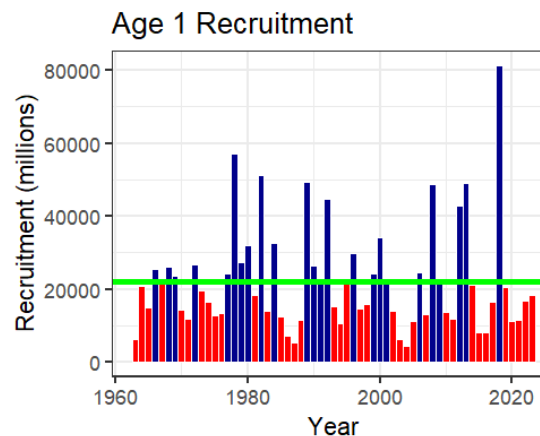
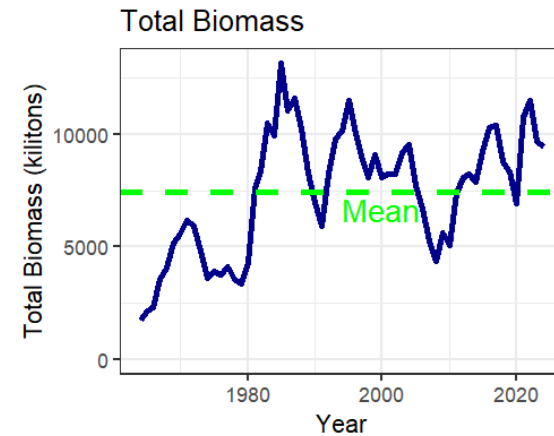
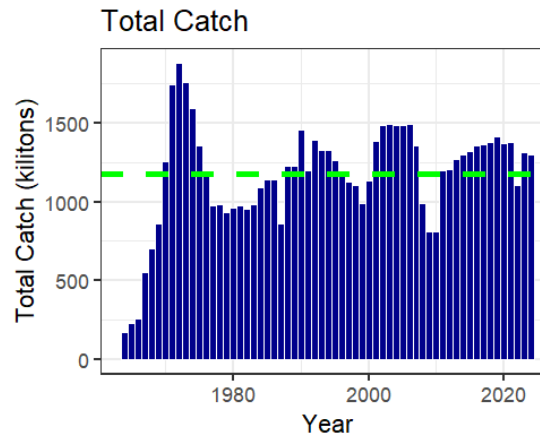
CHAPTER 1

EBS WALLEYE POLLOCK

- Full Assessment; Tier 3; risk table (1,1,1)

- The Team concluded that due to the highly sensitive nature of the SRR, the impact on F_{MSY} and the associated uncertainty of F_{MSY} , the reliability of it may be questionable.

- As a well-informed F_{MSY} is a prerequisite for Tier 1 status under the FMP, the Team determined that this stock should be managed as Tier 3.





CHAPTER 1

EBS WALLEYE POLLOCK

- Full Assessment; Tier 3; risk table (1,1,1)

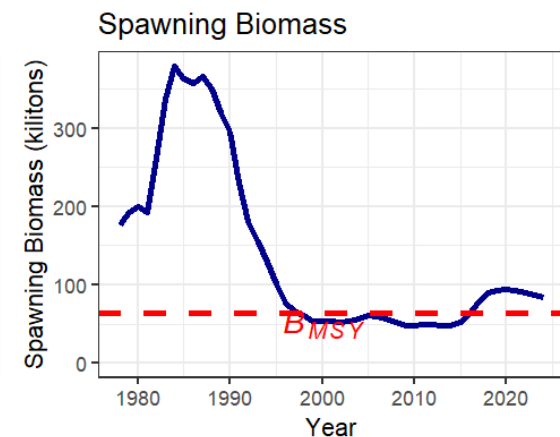
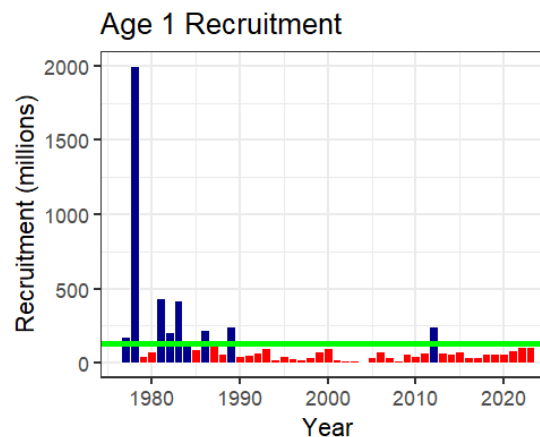
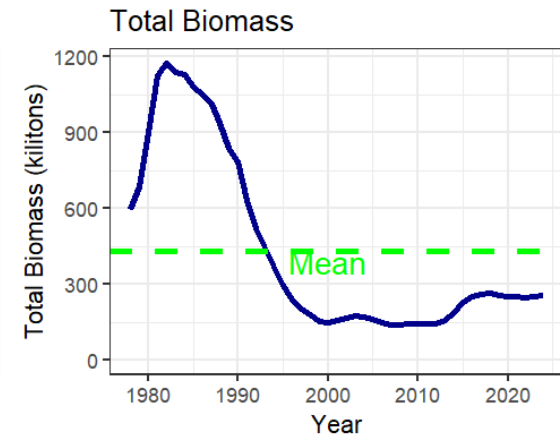
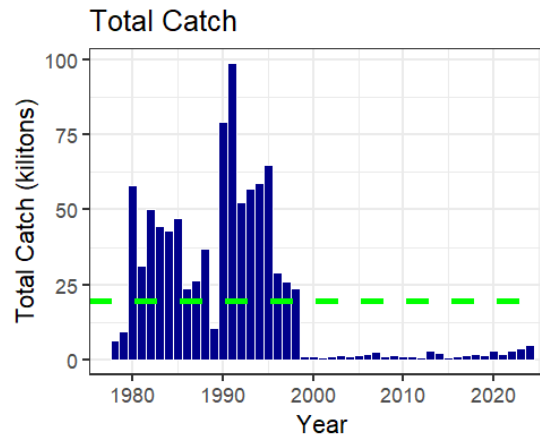
- The Team supported the continued use of the current model (Model 23) for this year and supported the author's recommendation of managing the EBS walleye pollock stock under Tier 3.

Quantity	Last asmt.	This asmt.	Change
M	0.3	0.3	0%
2024 Tier	1a		
2025 Tier	1a	3a	
2024 age+ biomass	10,184,000		-16%
2025 age+ biomass	9,432,000	8,526,000	-10%
2024 spawning biomass	3,518,000		-16%
2025 spawning biomass	3,255,000	2,967,000	-9%
$B_0, B_{100\%}$	6,728,000	5,902,000	-12%
$B_{msy}, B_{35\%}$	2,689,000	2,066,000	-23%
2025 F_{OFL}	0.422	0.513	22%
2025 F_{ABC}	0.379	0.394	4%
2024 OFL	3,162,000		-6%
2025 OFL	3,449,000	2,957,000	-14%
2024 ABC	2,313,000		4%
2025 ABC	2,401,000	2,417,000	1%



CHAPTER 1A ALEUTIAN ISLANDS WALLEYE POLLOCK

- Update Assessment; Tier 3; risk table 1(1,1)
- Same model since 2015
- 19,000t cap remains
- 7t directed fishery in 2024
- <5000 t since 1998





CHAPTER 1A ALEUTIAN ISLANDS WALLEYE POLLOCK

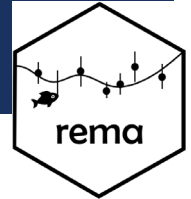
- Update Assessment; Tier 3; risk table (1,1,1)

- The Team recommended the author bring forward a Tier 5 model in 2026 to evaluate going to a Tier 5 from Tier 3.

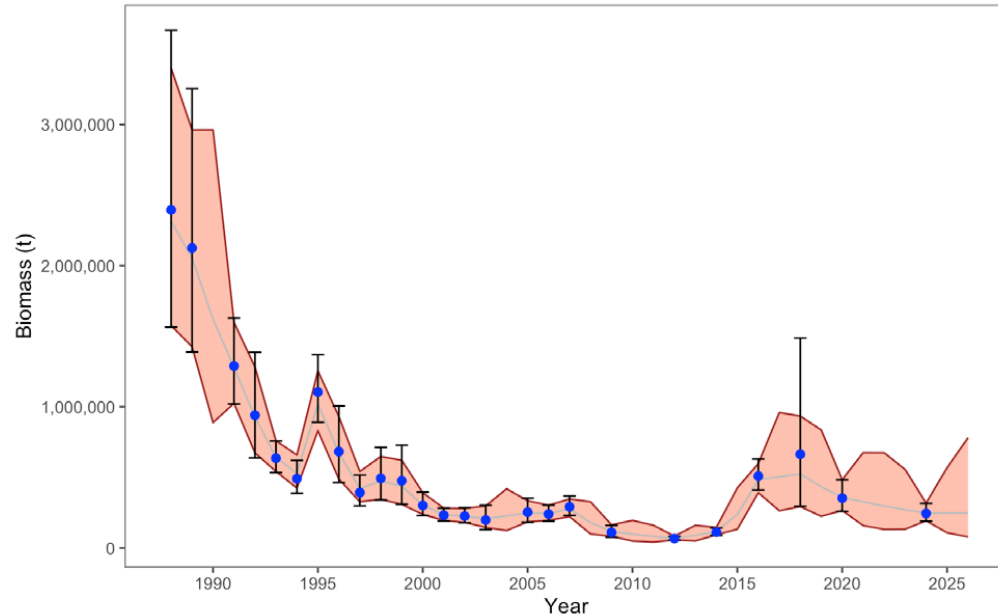
Quantity	Last asmt.	This asmt.	Change
M	0.21	0.21	0%
2024 Tier	3a		
2025 Tier	3a	3a	
2024 age+ biomass	279,764		3%
2025 age+ biomass	302,068	288,407	-5%
2024 spawning biomass	79,747		4%
2025 spawning biomass	81,335	82,781	2%
B _{100%}	174,218	182,006	4%
2025 F _{OFL}	0.38	0.406	7%
2025 F _{ABC}	0.305	0.325	7%
2024 OFL	51,516		8%
2025 OFL	53,030	55,728	5%
2024 ABC	42,654		8%
2025 ABC	43,863	46,051	5%



CHAPTER 1B BOGOSLOF WALLEYE POLLOCK



- Update Assessment; Tier 5; risk table 1(1,1)
- 2024 Acoustic Survey
 - 31% reduction in biomass from 2020
- rema model
 - 33% reduction in biomass from previous assessment





CHAPTER 1B BOGOSLOF WALLEYE POLLOCK



- Update Assessment; Tier 5; risk table (1,1,1)

- Given concerns regarding the frequency of the survey, the Team recommended bringing forward the age-structured model in the next full assessment to incorporate the age data.

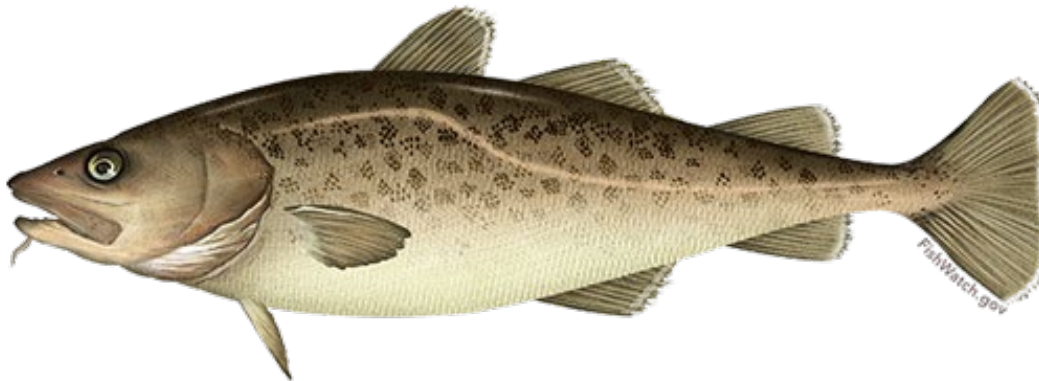
Quantity	Last asmt.	This asmt.	Change
M	0.313	0.313	0%
2024 Tier	5		
2025 Tier	5	5	
2024 age+ biomass	367,880		-33%
2025 age+ biomass	367,880	247,137	-33%
2025 F _{OFL}	0.313	0.313	0%
2025 F _{ABC}	0.23475	0.235	0%
2024 OFL	115,146		-33%
2025 OFL	115,146	77,354	-33%
2024 ABC	86,360		-33%
2025 ABC	86,360	58,015	-33%

CHAPTER 2

EBS PACIFIC COD



- Full Assessment; Tier 3; risk table (1,1,2,1)
- ESP overview then data slides



EBS Pacific cod Ecosystem and Socioeconomic Profile (ESP)



Ecosystem (ABC Information):

- Overall average (YOY ↓, juv ↔, adult ↑)
- North Pacific Index avg signals moderate conditions, surface temperatures cooling
- Low euphausiid prey, below avg juvenile condition
- Sea-ice extent below average, population shifts to the southwest, expanding area
- Above average bioenergetic demand, below avg adult condition, below avg biomass consumed

Socioeconomic (TAC Information):

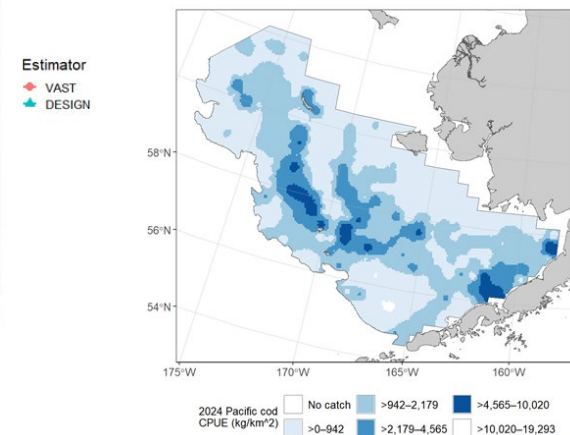
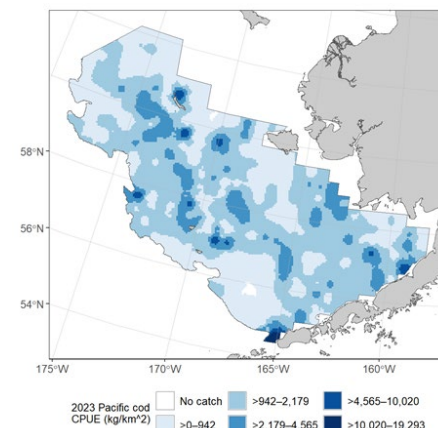
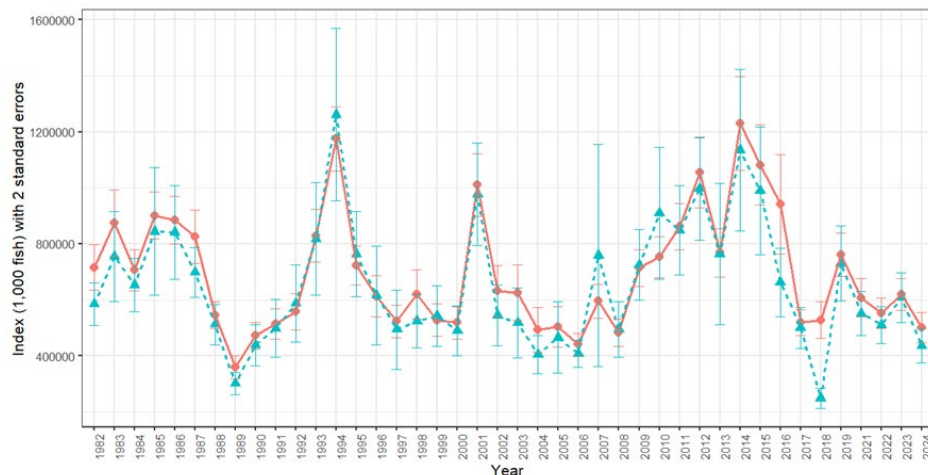
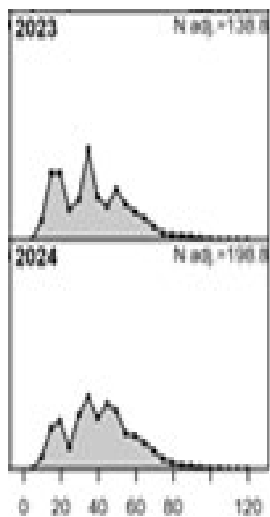
- Low ex-vessel value, price decreased but continues to be above average
- Revenue per unit effort stable and above average





2024 EBS bottom trawl survey

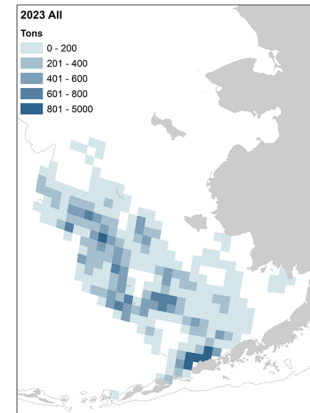
- No Northern Bering Sea extension
- VAST estimate using ice-extent as covariate
 - 19% decline in abundance from 2023
 - 8% decline in biomass from 2023
 - Continued southward shift in distribution



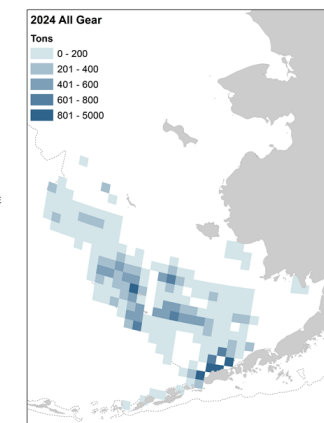
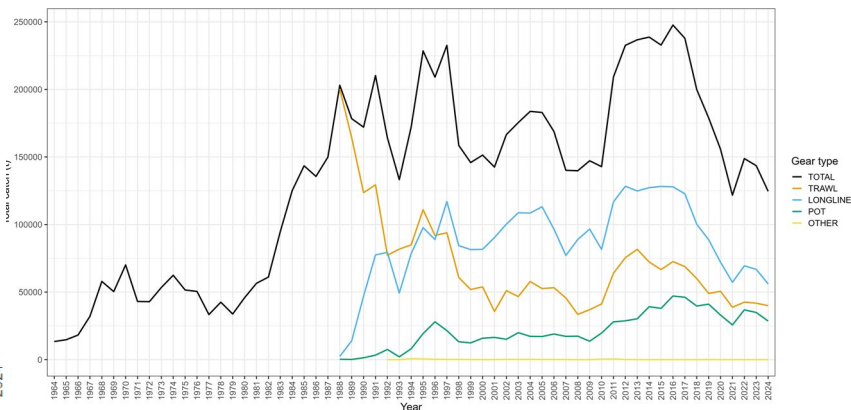
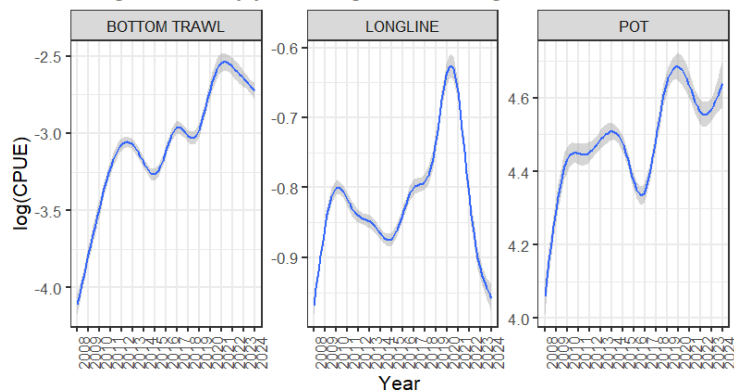


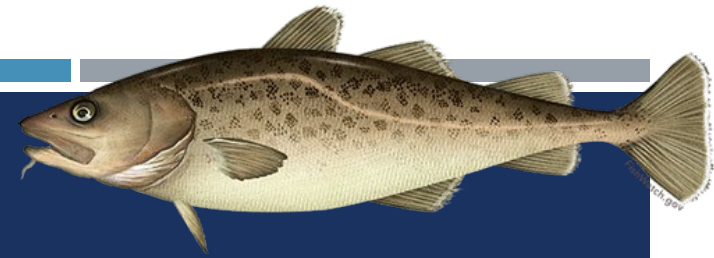
2024 Fishery

- Southward shift in distribution
 - CPUE increase in Pot
 - CPUE decrease in Bottom trawl and Longline
- 2024 Catch at 131,015 t of 167,952 t ABC (78%) as of October 24, compared to 97-99% in previous 5 years at this time
 - Poor market conditions for shoreside sector



Weight CPUE by year and gear for Bering Sea

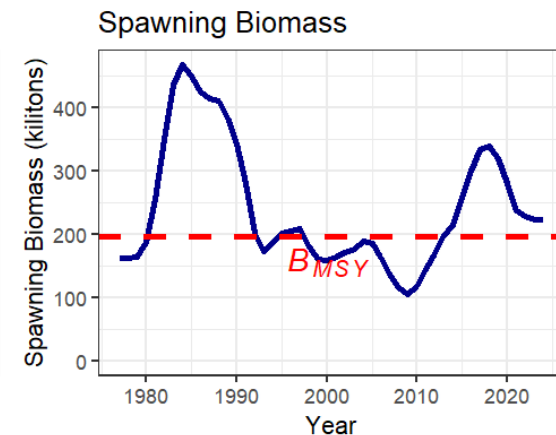
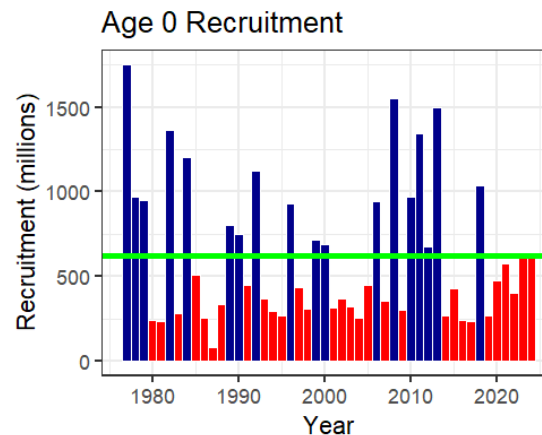
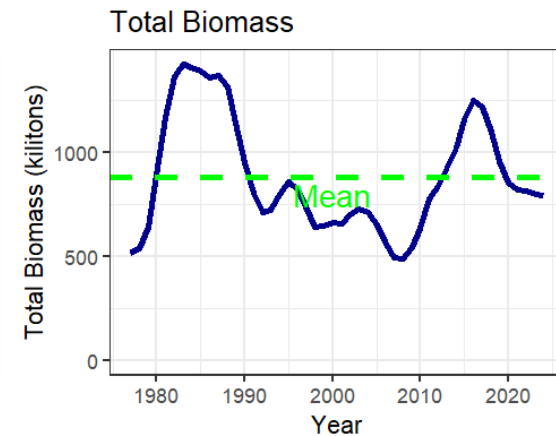
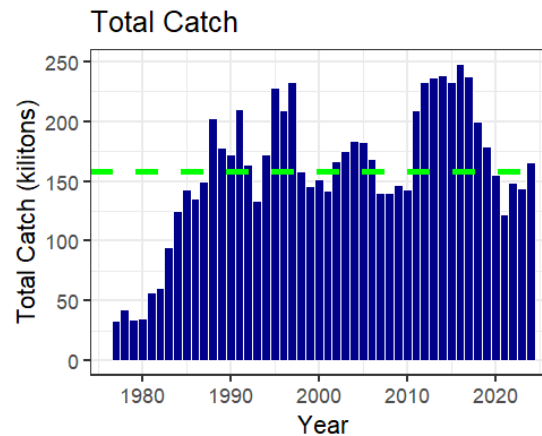




CHAPTER 2

EBS PACIFIC COD

- Full Assessment; Tier 3; risk table (1,1,2,1)
- Team agreed with author's recommendation using Model 24.1
- No reduction from maximum ABC





CHAPTER 2

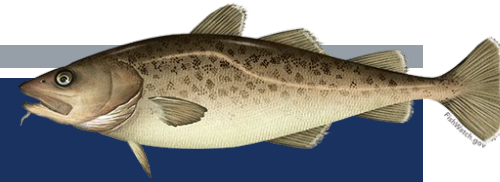
EBS PACIFIC COD

- Full Assessment; Tier 3; risk table (1,1,2,1)

- The Team recommended the authors clarify this section of text in the stock assessment (section describing choice of M), specifically justifying the choice of maximum age assumptions in the natural mortality analysis.

- The Team recommended a likelihood profile on the parameter for the survey selectivity ascending limb in Model 24.3 in order to diagnose the estimate of that selectivity parameter and relative influence of the data components on its estimate

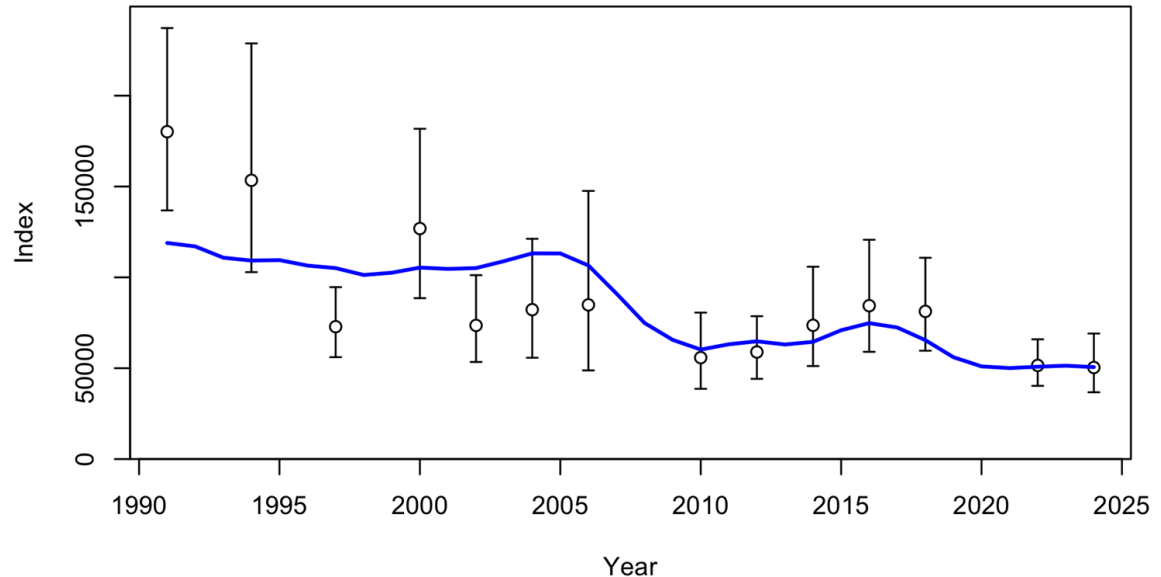
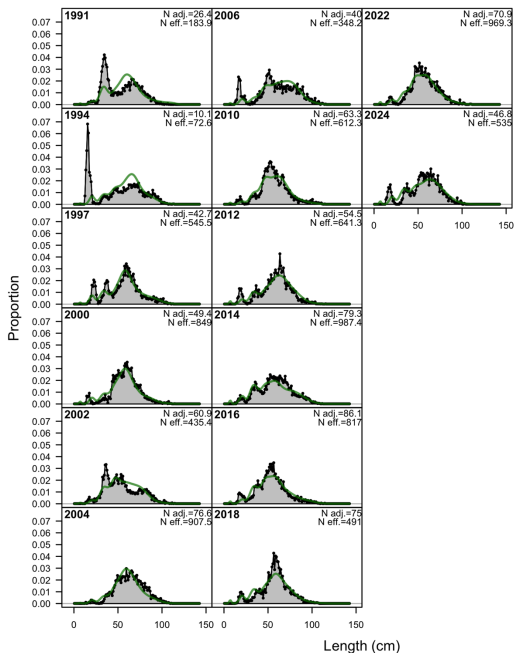
Quantity	Last asmt.	This asmt.	Change
M	0.386	0.386	0%
2024 Tier	3b		
2025 Tier	3b	3b	
2024 age+ biomass	808,203		-5%
2025 age+ biomass	787,837	769,813	-2%
2024 spawning biomass	223,107		-3%
2025 spawning biomass	211,131	215,747	2%
$B_{100\%}$	567,465	561,915	-1%
2025 F_{OFL}	0.46	0.43	-7%
2025 F_{ABC}	0.37	0.35	-5%
2024 OFL	200,996		-9%
2025 OFL	180,798	183,509	1%
2024 ABC	167,952		-9%
2025 ABC	150,876	153,617	2%

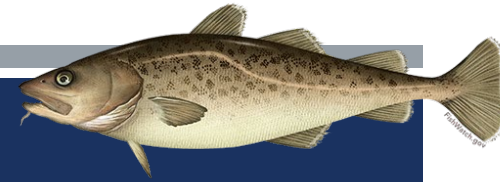


CHAPTER 2A ALEUTIAN ISLANDS PACIFIC COD

■ Full Assessment; Tier 3; risk table (1,2,2,1)

- 2024 AI bottom trawl survey
 - Continued decline from 2022 (-2%)
 - Lowest of time series

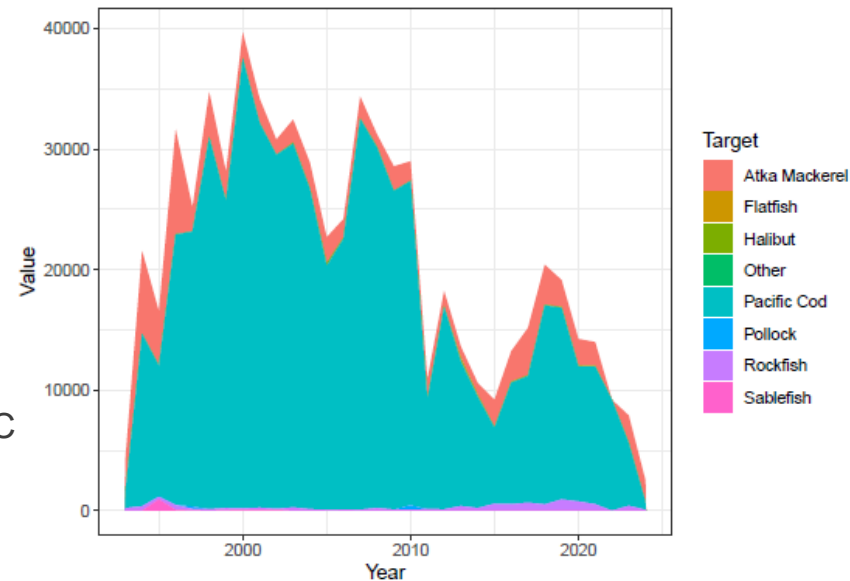
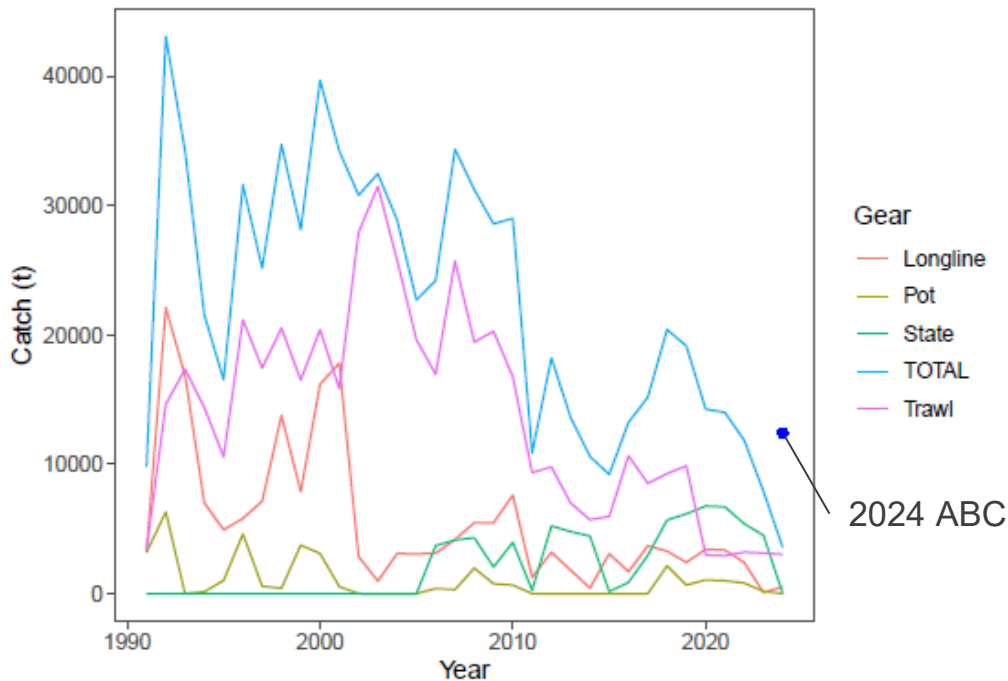


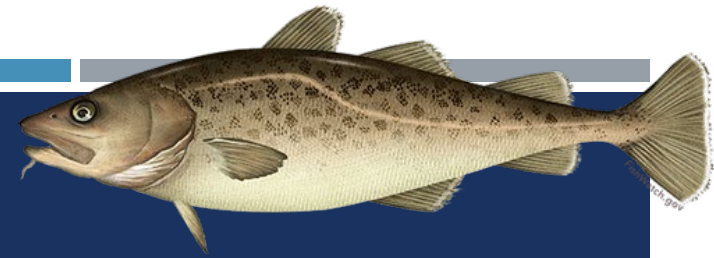


CHAPTER 2A ALEUTIAN ISLANDS PACIFIC COD

■ Full Assessment; Tier 3; risk table (1,2,2,1)

- Fishery data
 - $ABC > TAC$
 - 2024 Catch ~47% of TAC on November 11

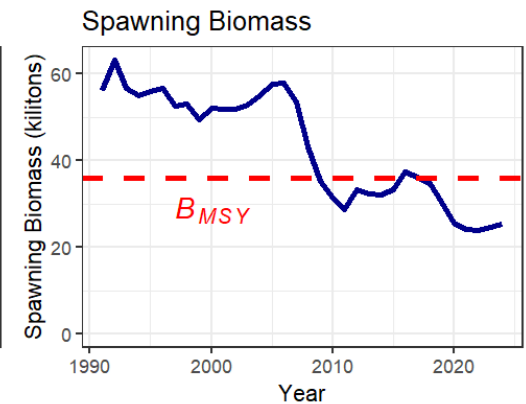
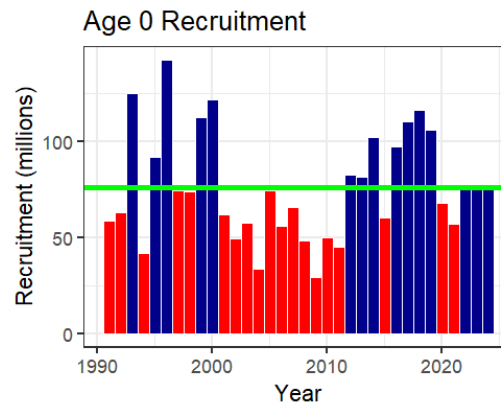
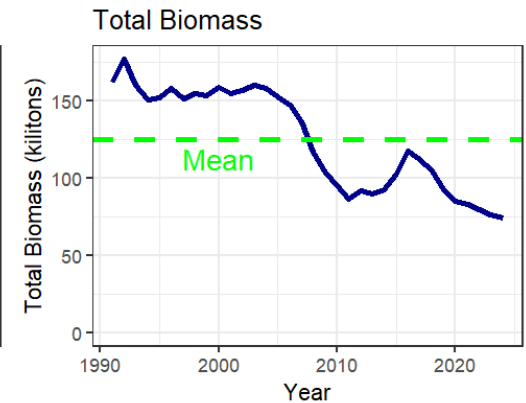
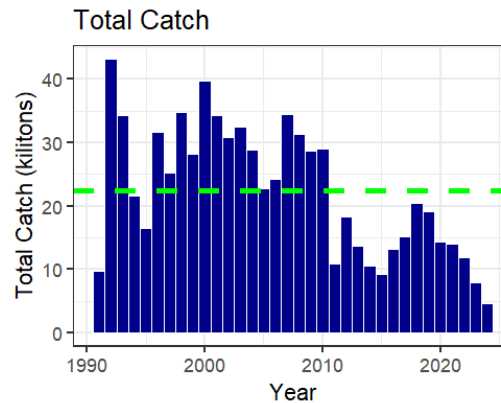




CHAPTER 2A: AI PACIFIC COD

■ Full Assessment, Tier 3; risk table (1,2,2,1)

- The Team agreed with the authors in moving from Tier 5 to Tier 3.
- The Team also agreed with the authors on using Model 24.1 which includes a time block on M from 2016 - 2024.
- No reduction from maximum permissible ABC





CHAPTER 2A: AI PACIFIC COD

■ Full Assessment, Tier 3; risk table (1,2,2,1)

- The Team recommended continued exploration of covariate approaches to M.
- The Team recommended that the author run a likelihood profile over M for next year on the base M to evaluate the sensitivity of the model to various M values.

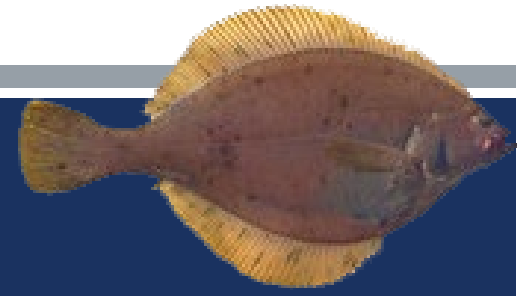
Quantity	Last asmt.	This asmt.	Change
M	0.34	0.42/0.57	
2024 Tier	5		
2025 Tier	5	3b	
2024 age+ biomass	54,165		36%
2025 age+ biomass	54,165	73,679	36%
2024 spawning biomass			
2025 spawning biomass		25,078	
$B_{100\%}$		102,361	
2025 F_{OFL}	0.34	0.655	93%
2025 F_{ABC}	0.255	0.502	97%
2024 OFL	18,416		-9%
2025 OFL	18,416	16,782	-9%
2024 ABC	12,431		8%
2025 ABC	12,431	13,376	8%

FLATFISH SUMMARY



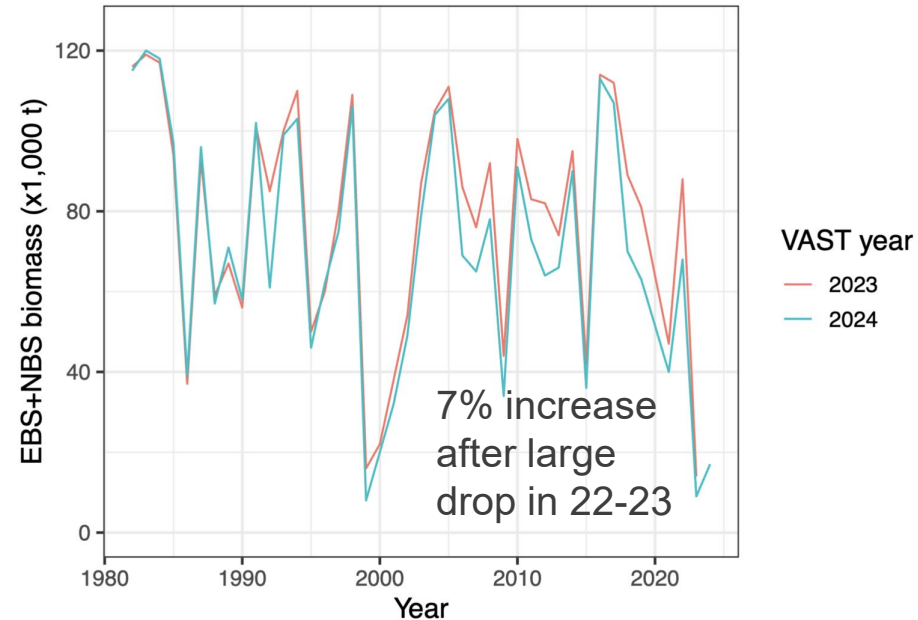
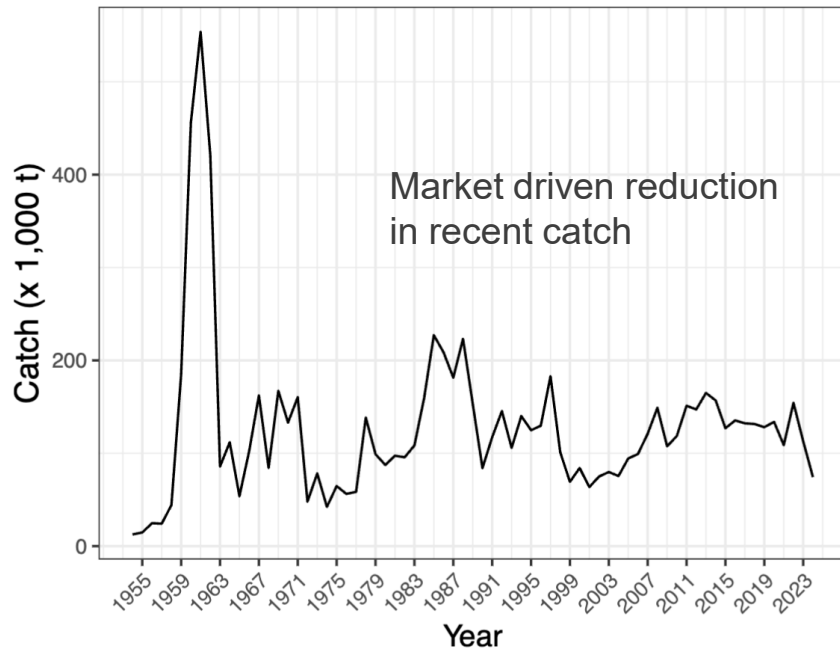
Stock	Tier	2025 ABC (t)	2025 OFL (t)	Change from 2024 ABC
Yellowfin sole (Update)	1a	262,557	299,247	-1%
Greenland turb. (Full)	3a	2,013*(10%)	2,598	-37%
Kamchatka fl. (Full)	3a	6,800	8,019	-9%
Northern rsole (Full)	1a	157,487	165,444	29%
Flathead sole (Update)	3a	83,807	101,624	25%
Alaska plaice (Full)	3a	28,745	34,576	-19%
Other flatfish (Update)	5	19,562	26,083	20%

* xx% Reduced from maximum permissible ABC

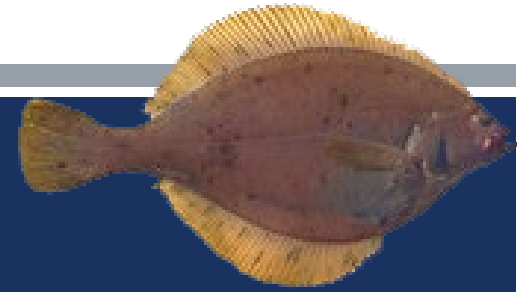


CHAPTER 4 YELLOWFIN SOLE

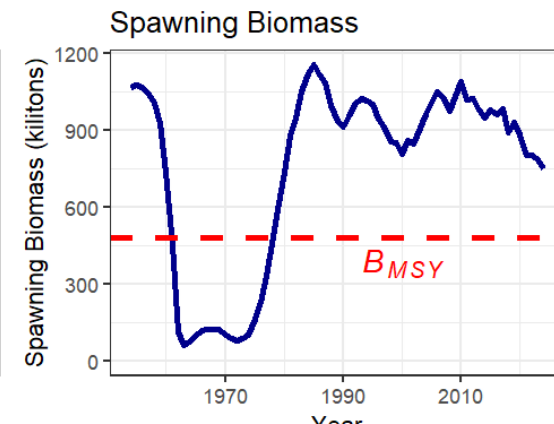
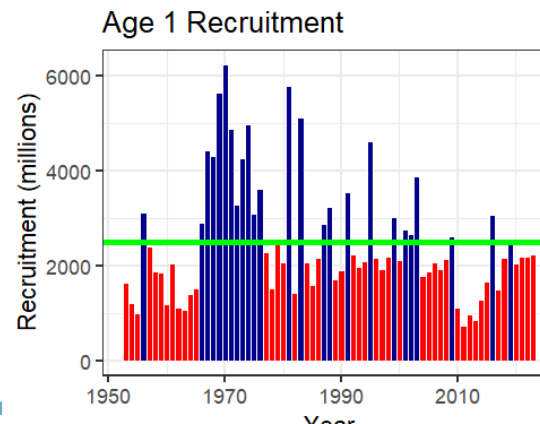
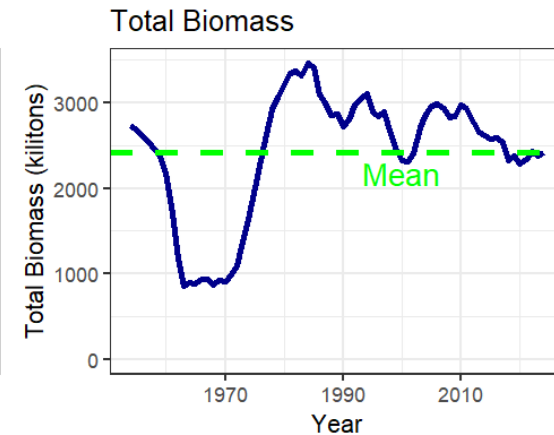
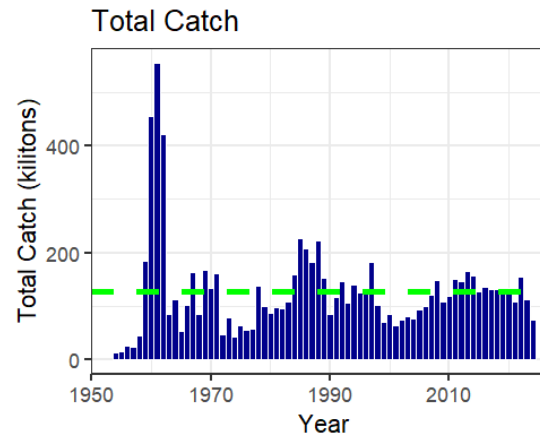
- Update Assessment; Tier 1; risk table (1,1,1,1)
- Model 23.0 updated with new VAST derived bottom trawl survey estimates and catch



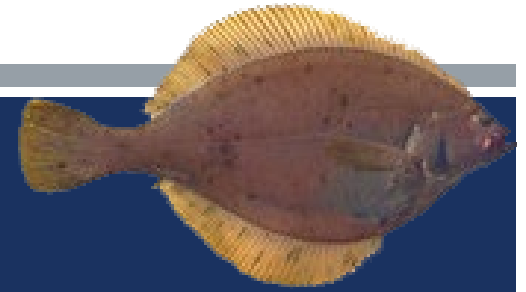
CHAPTER 4 YELLOWFIN SOLE



- Update Assessment; Tier 1; risk table (1,1,1,1)
- Team supports the continued use of Model 23.0
- Team recommended no reduction from maximum permissible ABC



CHAPTER 4 YELLOWFIN SOLE



- Update Assessment; Tier 1; risk table (1,1,1,1)

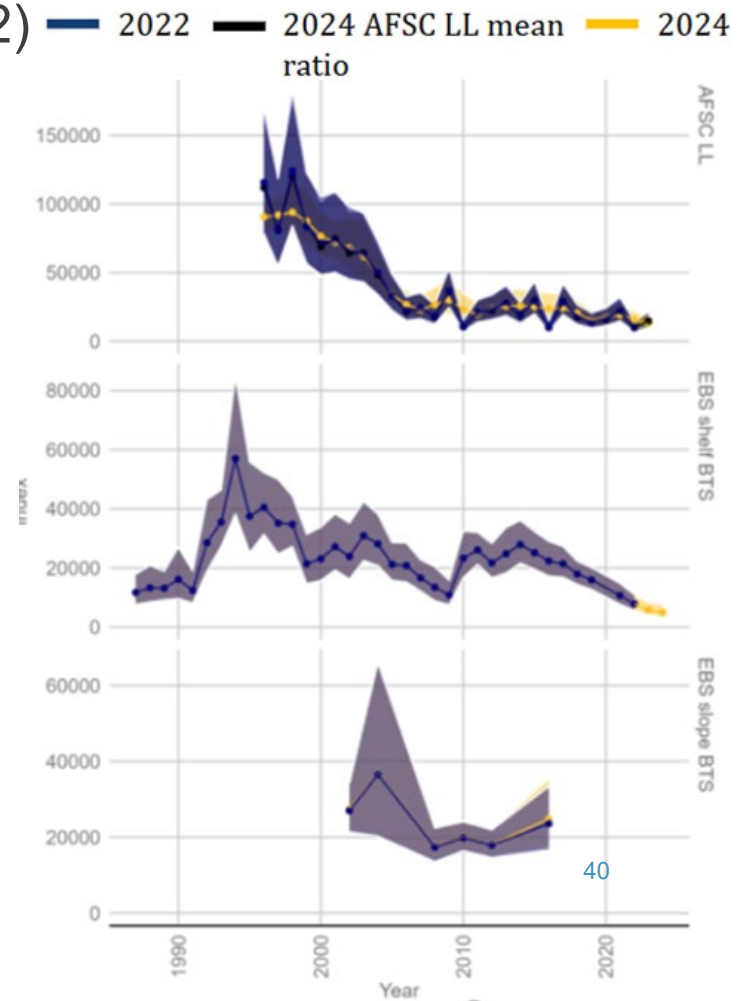
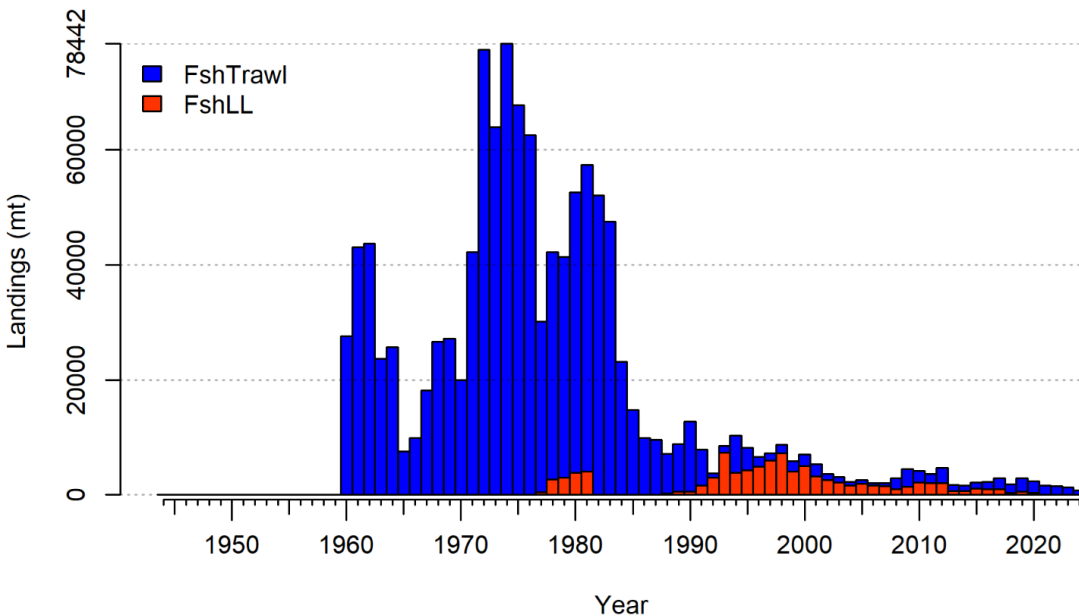
- The Team recommended that the author work with data providers to understand what is driving the VAST time series with trend projections in the southern and northern Bering Sea in years when there were no new data coming from the NBS and the relative influence of the AR1 assumptions in VAST.

Quantity	Last asmt.	This asmt.	Change
M	0.12/0.125	0.12/0.128	0%/2%
2024 Tier	1a		
2025 Tier	1a	1a	
2024 age+ biomass	2,512,810		-8%
2025 age+ biomass	2,616,800	2,308,550	-12%
2024 spawning biomass	881,640		-15%
2025 spawning biomass	857,354	748,076	-13%
B_0	1,516,980	1,383,020	-9%
B_{msy}	539,657	479,711	-11%
2025 F_{OFL}	0.121	0.13	7%
2025 F_{ABC}	0.106	0.114	8%
2024 OFL	305,298		-2%
2025 OFL	317,932	299,247	-6%
2024 ABC	265,913		-1%
2025 ABC	276,917	262,557	-5%

CHAPTER 5 GREENLAND TURBOT



- Full Assessment; Tier 3, risk table (3,2,1,2)
- Same model as 2023, Model 16.4c, with updated catch and EBS bottom trawl survey



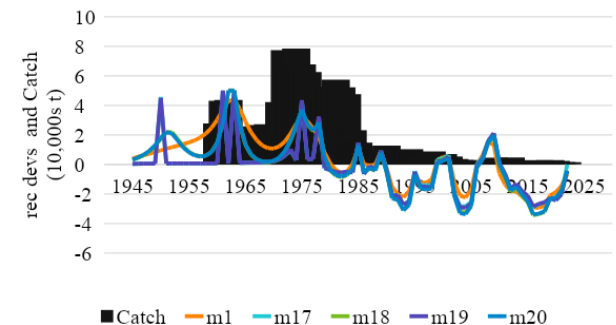
CHAPTER 5 GREENLAND TURBOT



- Full Assessment; Tier 3; risk table (3,2,1,2)
- Risk Table

Assessment-related considerations	Population dynamics considerations	Ecosystem considerations	Fishery-informed stock considerations
Level 3	Level 2	Level 1	Level 2

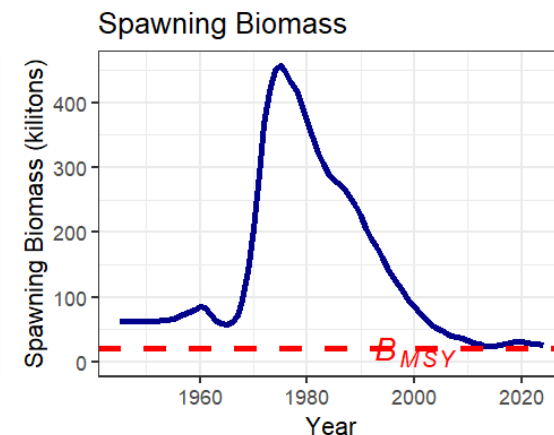
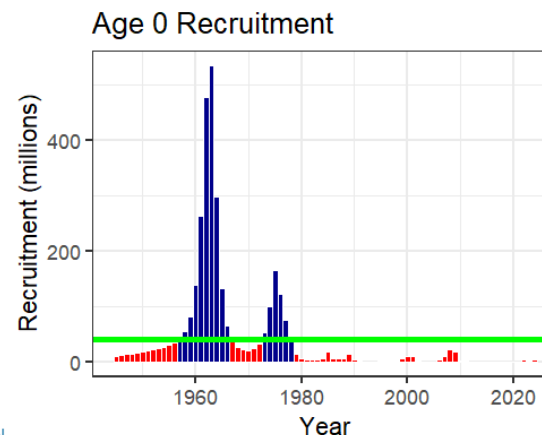
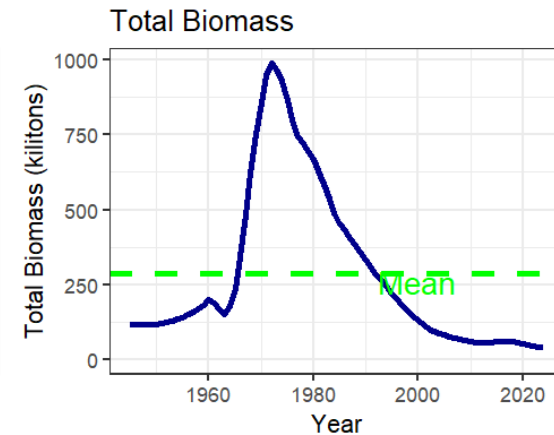
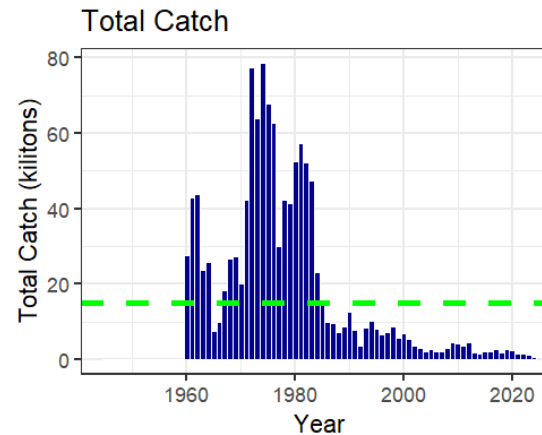
- Assessment related considerations
 - Uncertainty about stock status
 - Loss of data
- Population dynamics
 - Continued low recruitment
- Fishery-informed stock considerations
 - Continued decline in catch with declining population



CHAPTER 5 GREENLAND TURBOT



- Full Assessment; Tier 3; risk table (3,2,1,2)
- Team supported continued use of Model 16.4c
- Team discussed author recommended reduction given model performance and higher risk table scores
- Team supported 10% reduction from maximum permissible ABC



CHAPTER 5

GREENLAND TURBOT



- Full Assessment; Tier 3; risk table (3,2,1,2)
- Specific recommendations from the Team for future assessments included:

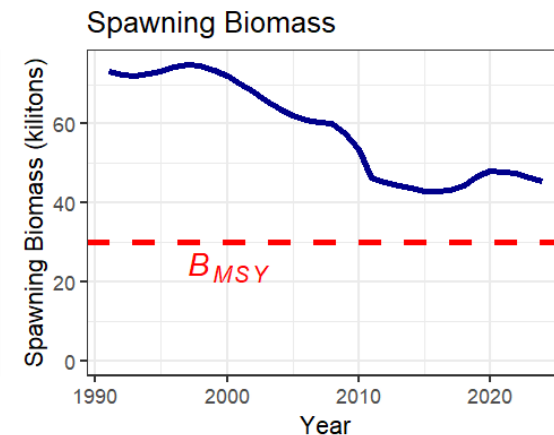
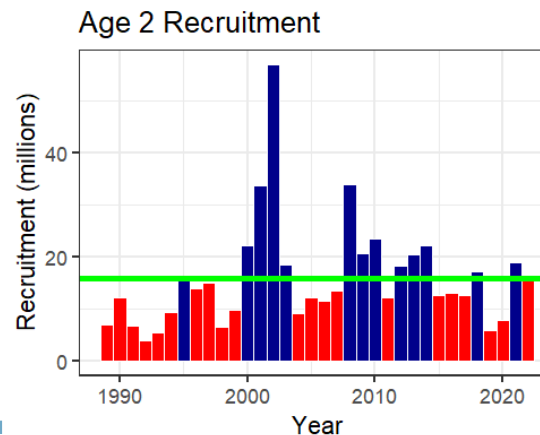
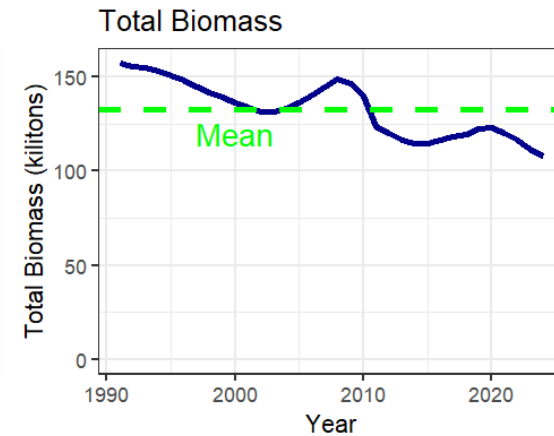
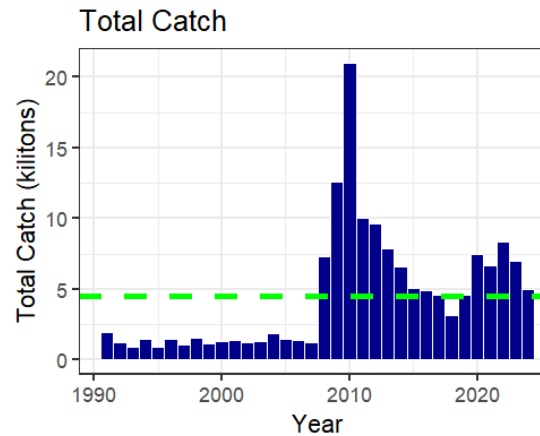
- Using interpolated AFSC longline survey RPN data for all future models, following established best practices.
- Displaying survey mean length-at-age across all model runs to examine interactions with selectivity time blocks and Francis reweighting.
- Exploring later start years, closer to the 1977 regime shift, for potential insights into recruitment dynamics.
- Likelihood profiling over M and von Bertalanffy parameters to address retrospective bias in survey catchability (Q).
- Developing a Tier 5 REMA model to compare with Tier 3 models, given the data losses.

Quantity	Last asmt.	This asmt.	Change
M	0.112	0.112	0%
2024 Tier	3a		
2025 Tier	3a	3a	
2024 age+ biomass	50,278		-25%
2025 age+ biomass	47,854	37,615	-21%
2024 spawning biomass	31,653		-24%
2025 spawning biomass	29,439	23,999	-18%
$B_{100\%}$	67,647	58,812	-13%
2025 F_{OFL}	0.18	0.2	11%
2025 F_{ABC}	0.15	0.17	13%
2024 OFL	3,705		-30%
2025 OFL	3,185	2,598	-18%
2024 ABC	3,188		-37%
2025 ABC	2,740	2,013	-27%

CHAPTER 7 KAMCHATKA FLOUNDER



- Update Assessment; Tier 3, risk table (2,1,1,1)
- Team supported authors recommended use of Model 16.0b with updated data
- No reduction from maximum permissible ABC



CHAPTER 7 KAMCHATKA FLOUNDER



- Update Assessment; Tier 3, risk table (2,1,1,1)
- The Team recommended the authors explore why the model fails to capture the rapid decline of the shelf survey biomass for the most recent years.

Quantity	Last asmt.	This asmt.	Change
M	0.11	0.11	0%
2024 Tier	3a		
2025 Tier	3a	3a	
2024 age+ biomass	119,565		-11%
2025 age+ biomass	116,651	106,850	-8%
2024 spawning biomass	47,849		-6%
2025 spawning biomass	47,330	44,883	-5%
$B_{100\%}$	94,370	85,751	-9%
2025 F_{OFL}	0.103	0.101	-2%
2025 F_{ABC}	0.085	0.085	0%
2024 OFL	8,850		-9%
2025 OFL	8,687	8,019	-8%
2024 ABC	7,498		-9%
2025 ABC	7,360	6,800	-8%

CHAPTER 8

NORTHERN ROCK SOLE



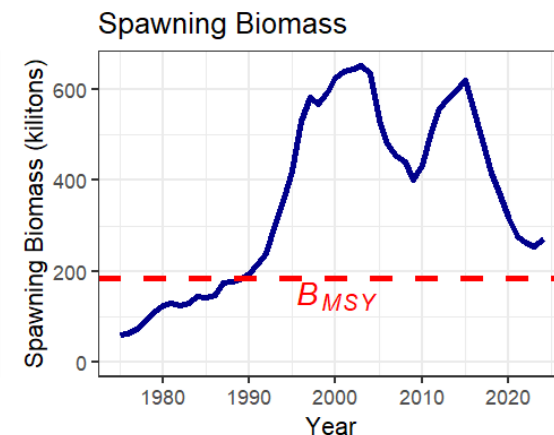
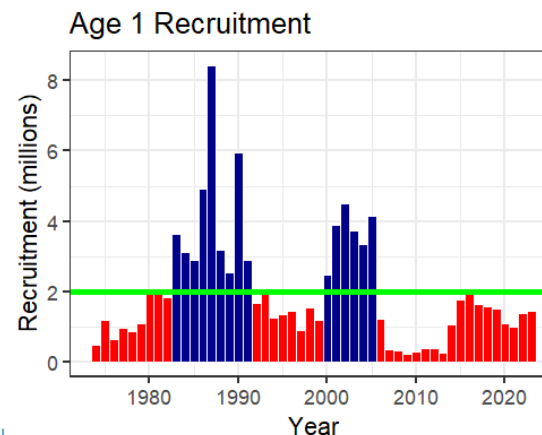
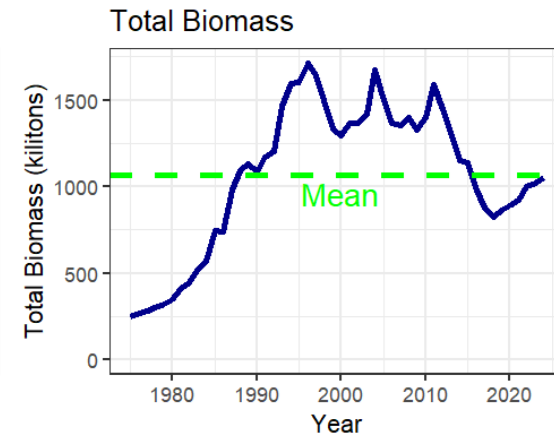
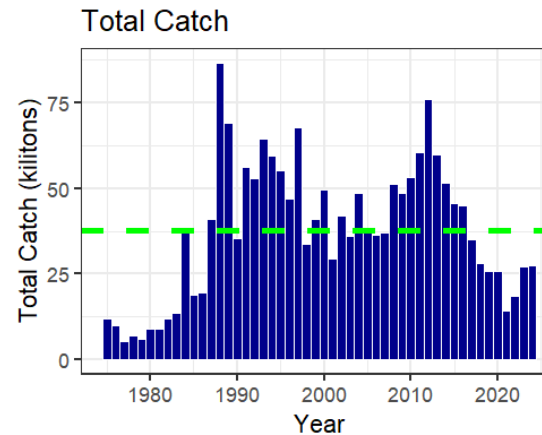
- Full Assessment; Tier 1, risk table (1,1,1,1)
- Alternative Model 24.2 used last cycle to set a reduction in Max ABC
 - Updates survey input sample sizes
 - Re-weights compositional data sources relative to one another
 - Estimates female natural mortality in addition to male natural mortality

CHAPTER 8

NORTHERN ROCK SOLE



- Full Assessment; Tier 1, risk table (1,1,1,1)
- Team supported authors recommended use of Model 24.2
- Large increase in ABC, but large decrease in OFL
 - Different models in 2023 used for ABC versus OFL
- No reduction from maximum permissible ABC



CHAPTER 8

NORTHERN ROCK SOLE

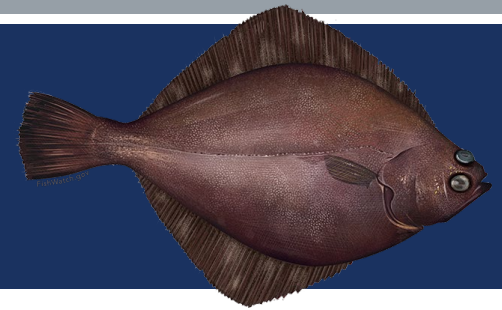


- Full Assessment; Tier 1, risk table (1,1,1,1)

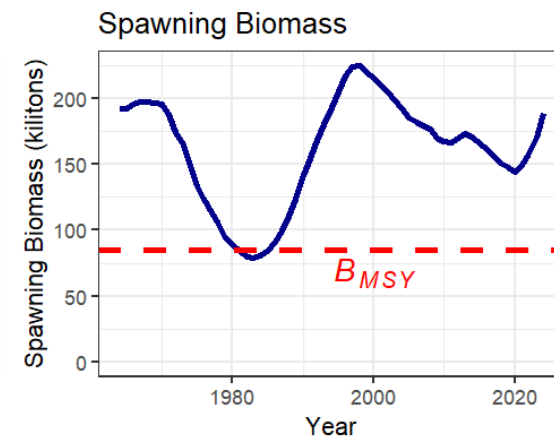
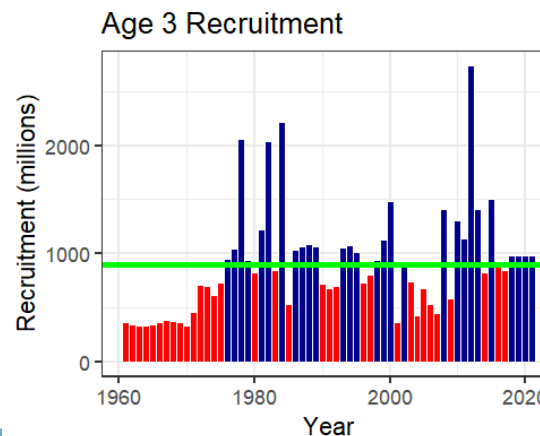
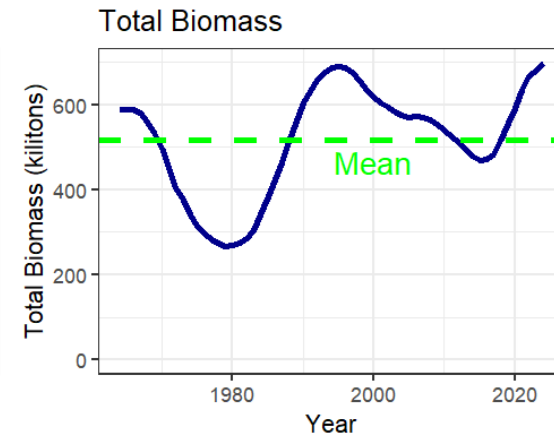
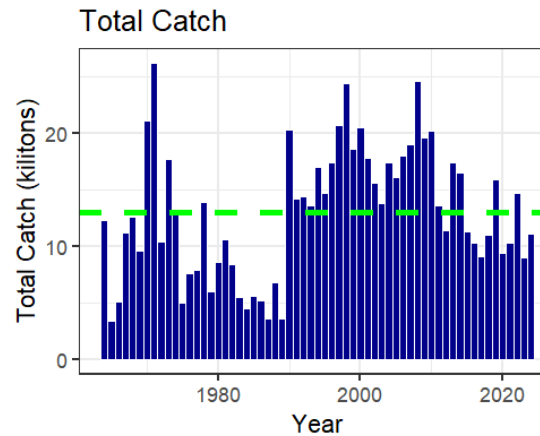
- The Team recommended clarifying when Markov Chain Monte Carlo vs. Maximum Likelihood Estimators are being used in the recommendation table and model diagnostics.

Quantity	Last asmt.	This asmt.	Change
M	0.15/0.17	0.19/0.23	
2024 Tier	1a		
2025 Tier	1a	1a	
2024 age+ biomass	1,121,670		-21%
2025 age+ biomass	1,501,330	881,154	-41%
2024 spawning biomass	296,808		1%
2025 spawning biomass	374,811	301,051	-20%
B_0	447,795	516,007	15%
B_{msy}	155,293	183,756	18%
2025 F_{OFL}	0.176	0.188	7%
2025 F_{ABC}	0.129	0.179	39%
2024 OFL	197,828		-16%
2025 OFL	264,789	165,444	-38%
2024 ABC	122,091		29%
2025 ABC	122,535	157,487	29%

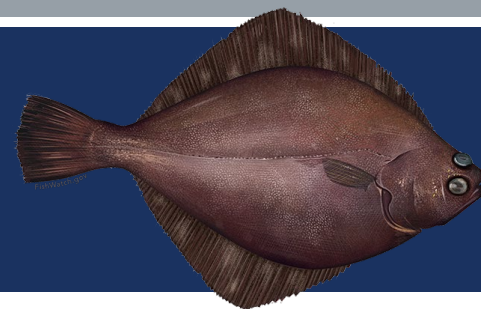
CHAPTER 9 FLATHEAD SOLE



- Update Assessment; Tier 3, risk table (1,1,1,1)
- Team supported authors recommended use of Model 18.2c (2020) with updated data
- No reduction from maximum permissible ABC



CHAPTER 9 FLATHEAD SOLE



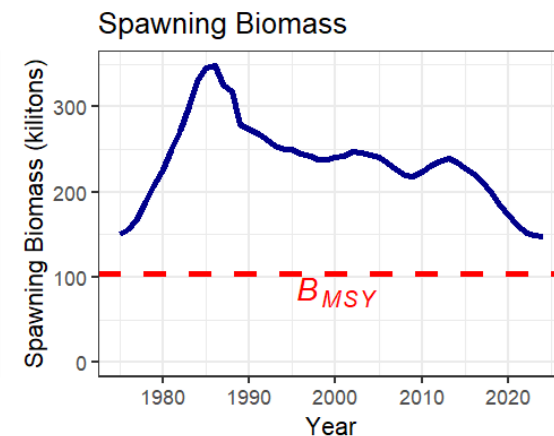
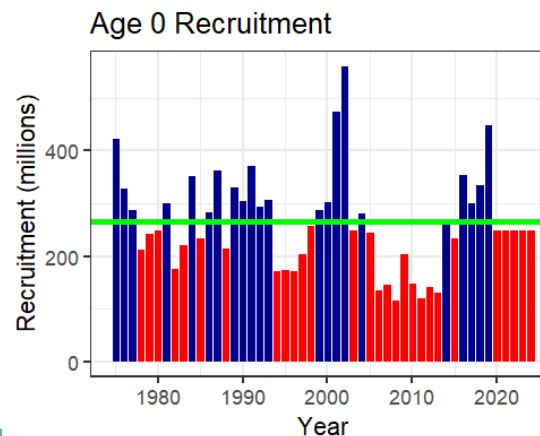
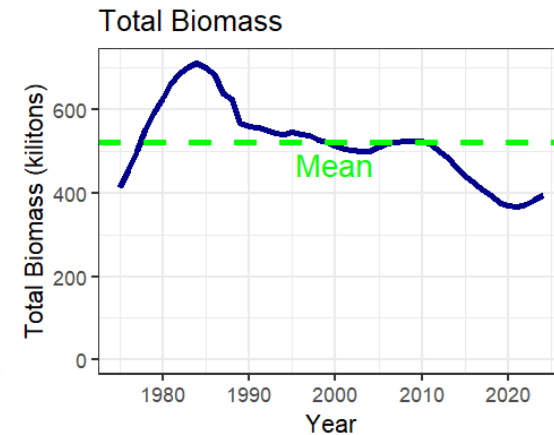
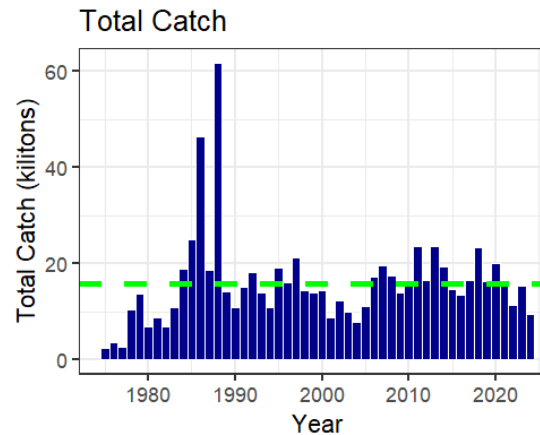
- Update Assessment; Tier 3, risk table (1,1,1,1)
- No additional recommendations

Quantity	Last asmt.	This asmt.	Change
M	0.2	0.2	0%
2024 Tier	3a		
2025 Tier	3a	3a	
2024 age+ biomass	609,488		31%
2025 age+ biomass	608,230	801,418	32%
2024 spawning biomass	165,629		23%
2025 spawning biomass	169,452	204,323	21%
B _{100%}	203,658	243,288	19%
2025 F _{OFL}	0.46	0.49	7%
2025 F _{ABC}	0.37	0.4	8%
2024 OFL	81,605		25%
2025 OFL	82,699	101,621	23%
2024 ABC	67,289		25%
2025 ABC	68,203	83,807	23%

CHAPTER 9 ALASKA PLAICE

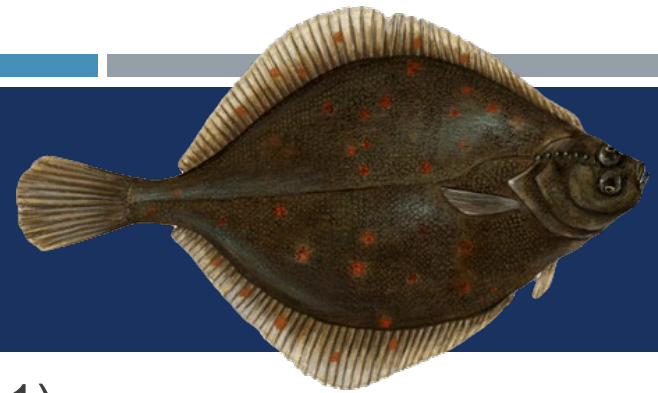


- Full Assessment; Tier 3, risk table (1,1,1,1)
- Team supported authors recommended use of Model 24.1b
- No reduction from maximum permissible ABC



CHAPTER 9

ALASKA PLAICE

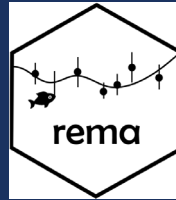


- Full Assessment; Tier 3, risk table (1,1,1,1)

- The Team recommended that future assessments include NBS biomass estimates, maps showing Alaska plaice distribution in surveys and fisheries, and analyses of distribution and movement patterns over time in response to environmental changes, such as the cold pool area.

Quantity	Last asmt.	This asmt.	Change
M	0.13	0.13	0%
2024 Tier	3a		
2025 Tier	3a	3a	
2024 age+ biomass	473,125		-14%
2025 age+ biomass	481,959	406,051	-16%
2024 spawning biomass	158,087		-5%
2025 spawning biomass	166,827	150,892	-10%
B _{100%}	286,587	296,407	3%
2025 F _{OFL}	0.17	0.17	0%
2025 F _{ABC}	0.14	0.14	0%
2024 OFL	42,695		-19%
2025 OFL	45,182	34,576	-23%
2024 ABC	35,494		-19%
2025 ABC	37,560	28,745	-23%

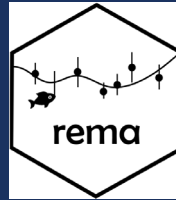
CHAPTER 11 OTHER FLATFISH



- Update Assessment; Tier 5, risk table (1,1,1,1)
- Other flatfish has 15 species, however biomass consists primarily of rex sole, Dover sole, and starry flounder
- rema modeling framework
 - 9 rema models summed for ABC
 - (AI, shelf, slope) x (rex, Dover, 'other' other)

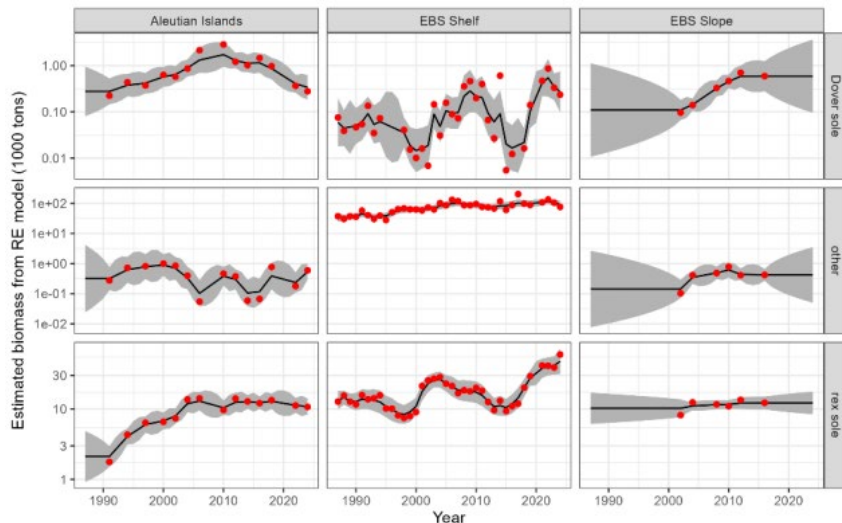
Common Name	Scientific Name
Arctic flounder	<i>Liopsetta glacialis</i>
butter sole	<i>Isopsetta isolepis</i>
curlfin sole	<i>Pleuronectes decurrens</i>
deepsea sole	<i>Embassichthys bathybius</i>
Dover sole	<i>Microstomus pacificus</i>
English sole	<i>Parophrys vetulus</i>
longhead dab	<i>Limanda proboscidea</i>
Pacific sanddab	<i>Citharichthys sordidus</i>
petrale sole	<i>Eopsetta jordani</i>
rex sole	<i>Glyptocephalus zachirus</i>
roughscale sole	<i>Clidodoerma asperrimum</i>
sand sole	<i>Psettichthys melanostictus</i>
slender sole	<i>Lyopsetta exilis</i>
starry flounder	<i>Platichthys stellatus</i>
Sakhalin sole	<i>Limanda sakhalinensis</i>

CHAPTER 11 OTHER FLATFISH



- Update Assessment; Tier 5; risk table (1,1,1,1)
- Team supported authors recommended approach
- No reduction from maximum permissible ABC

Quantity	Last asmt.	This asmt.	Change
M		0.17	0.17 0%
2024 Tier		5	
2025 Tier		5	5
2024 age+ biomass	141,325		17%
2025 age+ biomass	141,325	164,955	17%
2025 F_{OFL}	0.170/0.085/0.150	0.170/0.085/0.150	
2025 F_{ABC}	0.128/0.064/0.113	0.128/0.064/0.113	
2024 OFL	21,824		20%
2025 OFL	21,824	26,083	20%
2024 ABC	16,368		20%
2025 ABC	16,368	19,562	20%



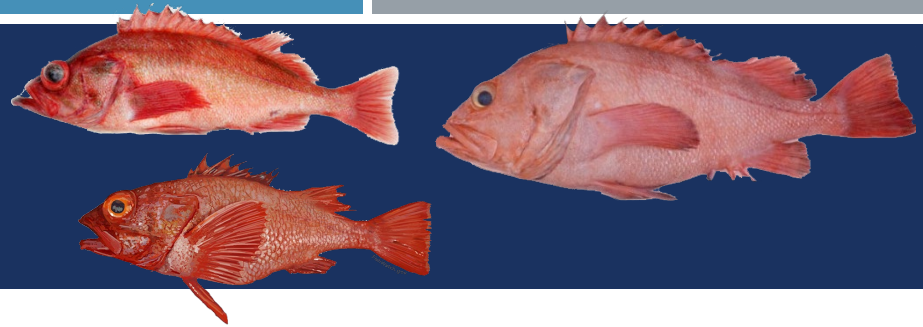
CHAPTER 11

OTHER FLATFISH RECOMMENDATIONS



- Team recommended the authors investigate the potential for use of the AFSC longline survey to supplement the EBS slope time series for the deeper water species (as done in the other rockfish assessment for SST).

ROCKFISH SUMMARY



Stock	Tier	2025 ABC (t)	2025 OFL (t)	Change from 2024 ABC
Pacific ocean perch (Full)	3a	37,375	44,594	-9%
Blackspotted/rougheye (Full)	3a/5	652	766	24%
Shorttraker rockfish (Update)	5	473	631	-11%
Other rockfish (Update)	5	1,054	1,406	-16%

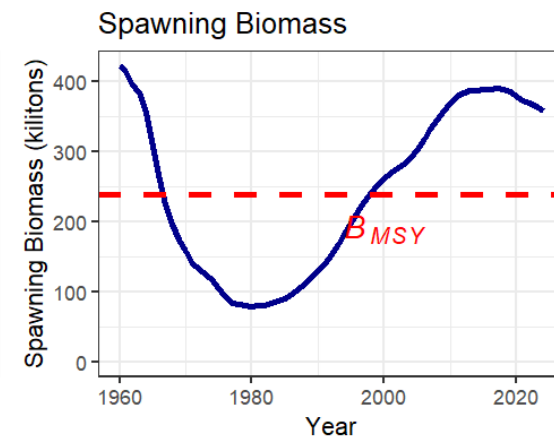
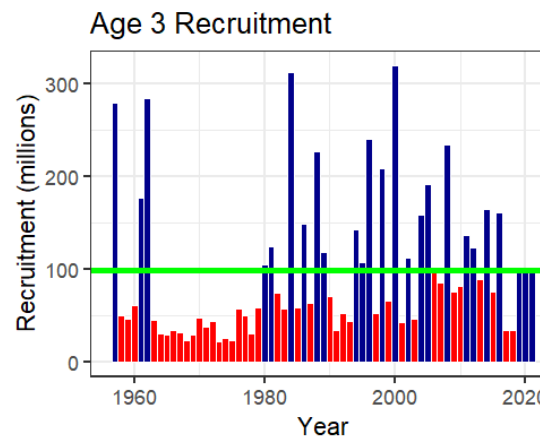
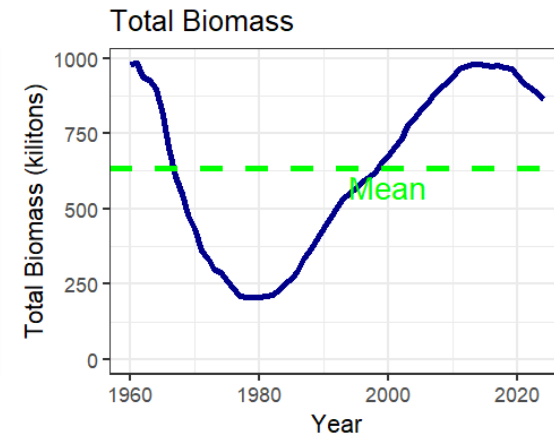
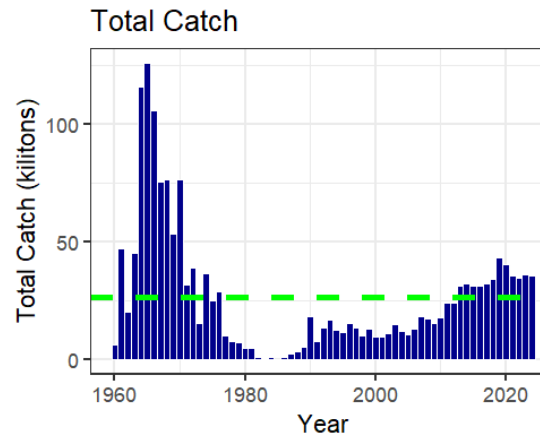
CHAPTER 12

PACIFIC OCEAN PERCH



■ Full Assessment; Tier 3; Risk (2,1,1,1)

- Team supported authors' recommended Model 24 for management
- Team supported authors' recommended no reduction from maximum permissible ABC
- Apportionment based on Random effects model of AI bottom trawl survey biomass into subarea ABCs



CHAPTER 12

PACIFIC OCEAN PERCH



■ Full Assessment; Tier 3; Risk (2,1,1,1)

- The Team recommended that the author explore increasing the penalty to smooth out fishery selectivity.
- The team also recommended an exploration of the mechanisms for time-varying nonparametric fishery selectivity specifically related to changes in fleet dynamics.

Quantity	Last asmt.	This asmt.	Change
M	0.056	0.051	-9%
2024 Tier	3a		
2025 Tier	3a	3a	
2024 age+ biomass	871,892		-3%
2025 age+ biomass	858,751	847,803	-1%
2024 spawning biomass	350,439		1%
2025 spawning biomass	342,980	352,503	3%
B _{100%}	652,626	681,381	4%
2025 F _{OFL}	0.089	0.072	-19%
2025 F _{ABC}	0.074	0.060	-19%
2024 OFL	49,010		-9%
2025 OFL	48,139	44,594	-7%
2024 ABC	41,096		-9%
2025 ABC	40,366	37,375	-7%

Apportionment	2025	2026
EBS	10,121	9,905
EAI	6,278	6,144
CAI	5,559	5,441
WAI	15,417	16,058

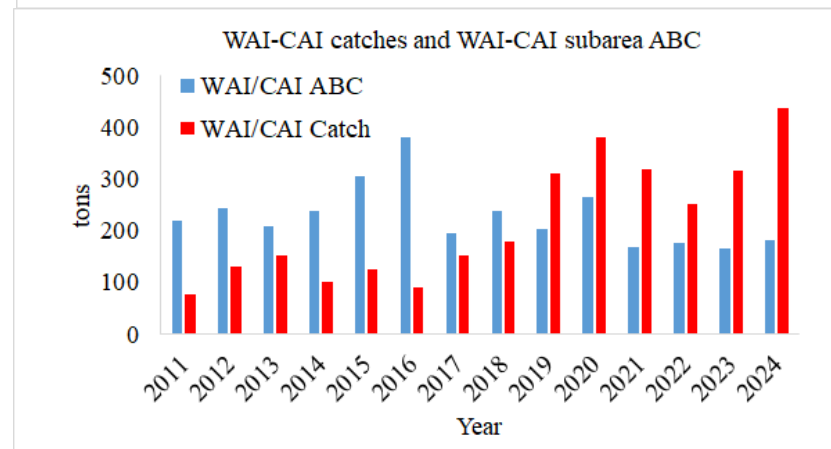
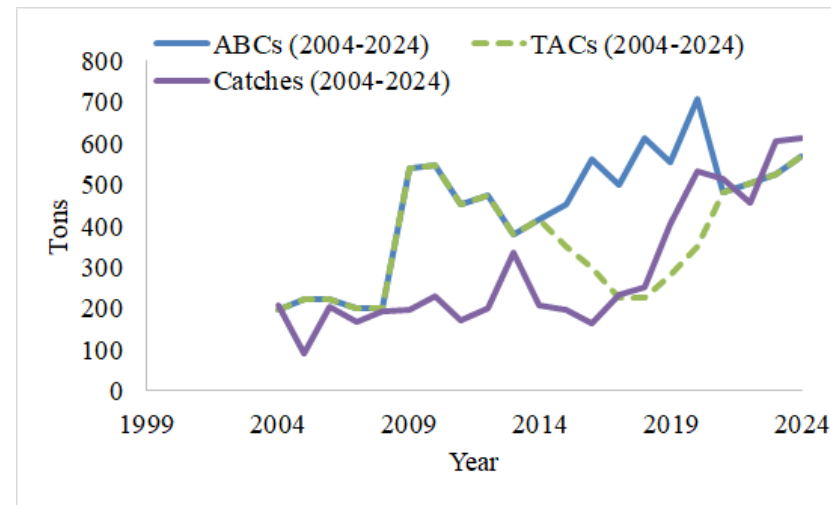
CHAPTER 14

BLACKSPOTTED/ROUGHEYE



■ Full Assessment; Tier 3 (AI) and Tier 5 (BS); Risk (2,2,1,2)

- Bycatch species in rockfish, Atka mackerel, arrowtooth, and Kamchatka fisheries
- Catch increasing in the AI
- Catch exceeding MSSC in WAI in all but 1 year since being established
- Catch exceeding WAI/CAI ABC in all years since 2019
- **Catch exceeded stock-wide ABC in 2021, 2023, and 2024**

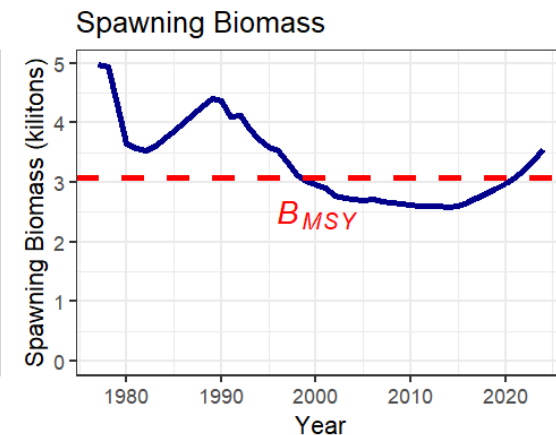
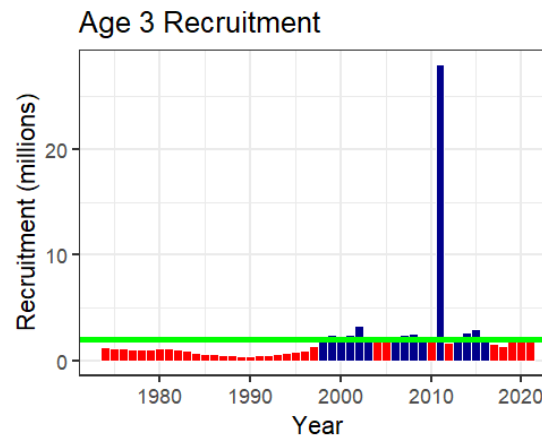
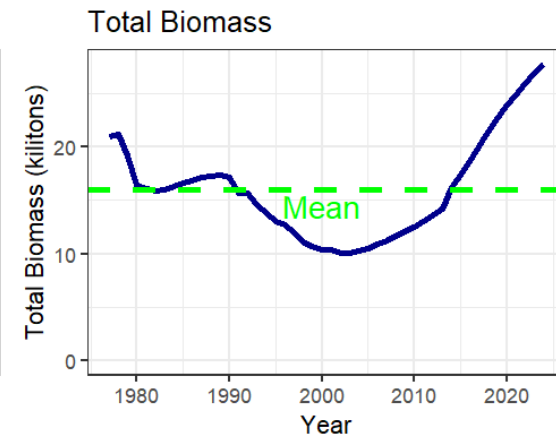
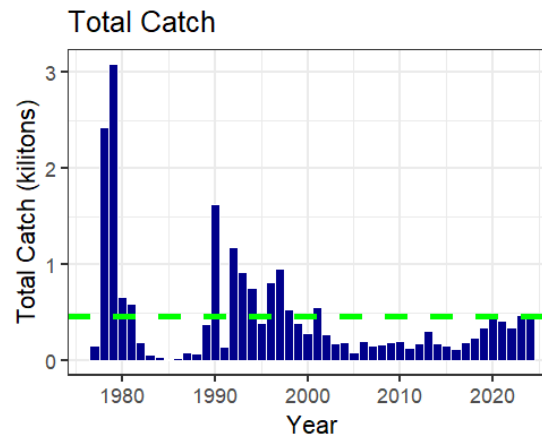


CHAPTER 14 BLACKSPOTTED/ROUGHEYE

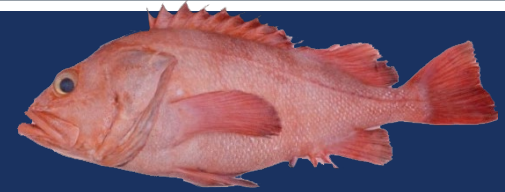


■ Full Assessment; Tier 3 (AI) and Tier 5 (BS); Risk (2,2,1,2)

- Team supported authors recommended use of Model 20 with adjusted 2011 year class for AI and the random effects model for BS portions of the stock



CHAPTER 14 BLACKSPOTTED/ROUGHEYE



- Full Assessment; Tier 3 (AI) and Tier 5 (BS); Risk (2,2,1,2)

Aleutian Islands (Tier 3)

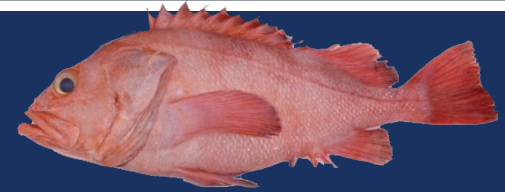
Quantity	Last asmt.	This asmt.	Change
M	0.05	0.05	0%
2024 Tier	3a		
2025 Tier	3a	3a	
2024 age+ biomass	24,315		16%
2025 age+ biomass	24,743	28,314	14%
2024 spawning biomass	3,630		3%
2025 spawning biomass	3,821	3,729	-2%
B _{100%}	8,733	8,813	1%
2025 F _{OFL}	0.04	0.041	2%
2025 F _{ABC}	0.034	0.035	3%
2024 OFL	684		12%
2025 OFL	736	766	4%
2024 ABC	511		28%
2025 ABC	549	652	19%

Bering Sea (Tier 5)

Quantity	Last asmt.	This asmt.	Change
M	0.05	0.05	0%
2024 Tier	5		
2025 Tier	5	5	
2024 age+ biomass	1,544		-6%
2025 age+ biomass	1,544	1,444	-6%
2025 F _{OFL}	0.05	0.05	0%
2025 F _{ABC}	0.037	0.037	0%
2024 OFL	77		-6%
2025 OFL	77	72	-6%
2024 ABC	58		-7%
2025 ABC	58	54	-7%

CHAPTER 14

BLACKSPOTTED/ROUGHEYE



- Full Assessment; Tier 3 (AI) and Tier 5 (BS); Risk (2,2,1,2)

- Combined AI and BS OFL and ABC

Quantity	Last asmt.	This asmt.	Change
2024 OFL	761		10%
2025 OFL	813	838	3%
2024 ABC	569		24%
2025 ABC	607	706	16%

- Subarea apportionment

Quantity	Last asmt.	This asmt.	Change
2024 West/Central AI ABC	181		65%
2025 West/Central AI ABC	195	298	52%
2024 Eastern AI/Eastern BS ABC	388		5%
2025 Eastern AI/Eastern BS ABC	412	408	-1%

- Apportionment within WAI/CAI

Quantity	Last asmt.	This asmt.	Change
2024 WAI MSSC	67		49%
2025 WAI MSSC	71	100	41%
2024 CAI MSSC	114		-4%
2025 CAI MSSC	124	198	60%

CHAPTER 14

BLACKSPOTTED/ROUGHEYE



- Full Assessment; Tier 3 (AI) and Tier 5 (BS); Risk (2,2,1,2)
 - No reduction from maximum permissible ABC recommended despite elevated risk table concerns for three of the four categories
 - Team discussion of maxABC exceedances and utility of reduced ABC
 - BSAI wide ABC exceeded in 2021, 2023 and 2024
 - Team expressed concerns about repeated overages in BSRE stock

ACLs and Accountability Measures

When an ACL is exceeded > 1 time in 4 years, National Standard 1 guidelines at 50 CFR 600.310(g)(7) require that the ACL and accountability measures (AM) be reevaluated for this stock complex and modified if necessary to address their effectiveness

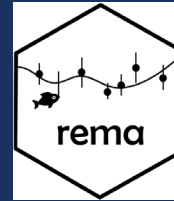
BSRE overall ABC (= ACL) exceeded 3 of out last 4 years; BSAI Other rockfish ACL exceeded in 2024

Current AMs refer to in-season management measures and observer coverage

in-season management cannot constrain fisheries at the ABC (ACL) level only when OFL is approached

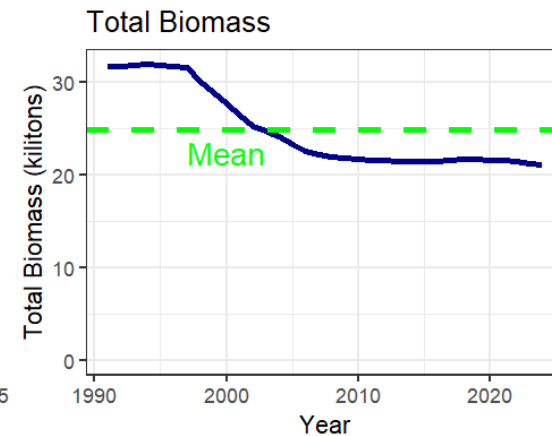
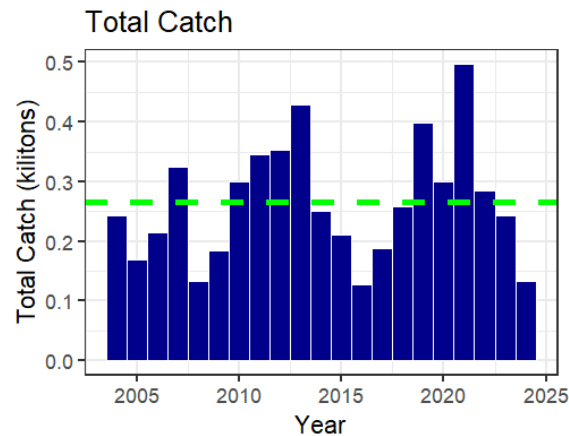
Council may need to consider additional AMs for BSRE stock

CHAPTER 15 SHORTRAKER ROCKFISH



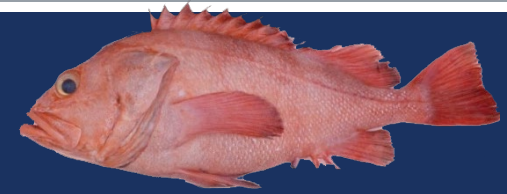
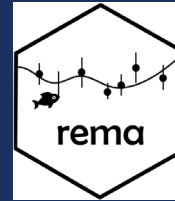
■ Update Assessment; Tier 5; Risk (2,1,1,1)

- Team supported authors' recommended Model 22 for management
- Team supported authors' recommended no reduction from maximum permissible ABC



CHAPTER 15

SHORTRAKER ROCKFISH

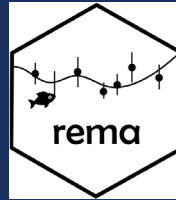


■ Update Assessment; Tier 5; Risk (2,1,1,1)

- The Team supported this approach (one strata for REMA model) and recommended simplifying and combining strata for future assessments.

Quantity	Last asmt.	This asmt.	Change
M	0.03	0.03	0%
2024 Tier	5		
2025 Tier	5	5	
2024 age+ biomass	23,547		-11%
2025 age+ biomass	23,547	21,018	-11%
2025 F _{OFL}	0.03	0.03	0%
2025 F _{ABC}	0.0225	0.0225	0%
2024 OFL	706		-11%
2025 OFL	706	631	-11%
2024 ABC	530		-11%
2025 ABC	530	473	-11%

CHAPTER 16 OTHER ROCKFISH



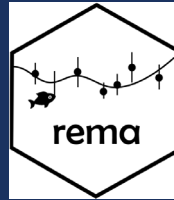
- Update Assessment; Tier 5; Risk (2,2,1,2)
 - Includes all species of *Sebastes* and *Sebastolobus*, except Pacific ocean perch, northern rockfish, roughey rockfish, and shortraker rockfish
 - 2 rema models with survey data updates
 - Shortspine thornyhead (SST)
 - non-shortspine thornyhead (non-SST) - Dusky rockfish and at least 11 other species



Photos courtesy of Aaron Baldwin



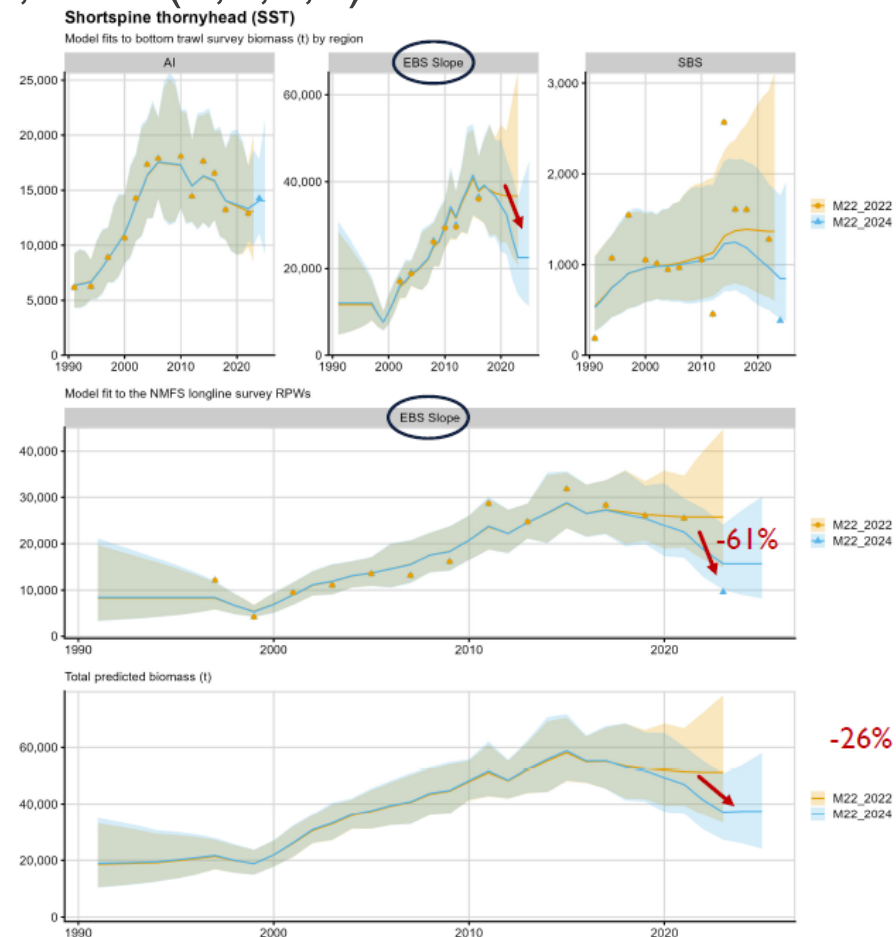
CHAPTER 16 OTHER ROCKFISH



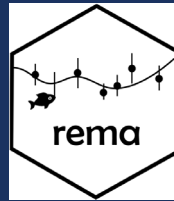
Update Assessment; Tier 5; Risk (2,2,1,2)

● SST

- Sharp decline in AFSC longline survey (-61%)
- Overall decreasing biomass (-26%)

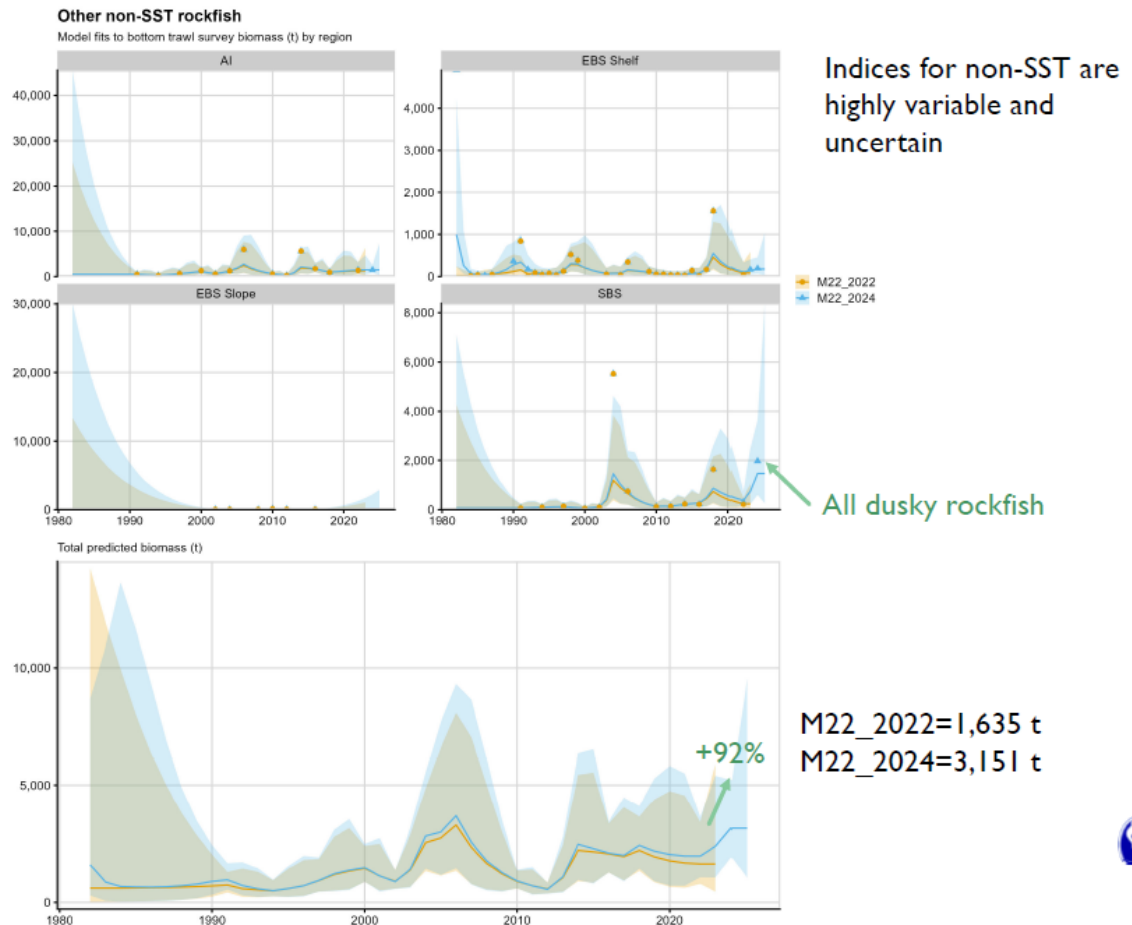


CHAPTER 16 OTHER ROCKFISH



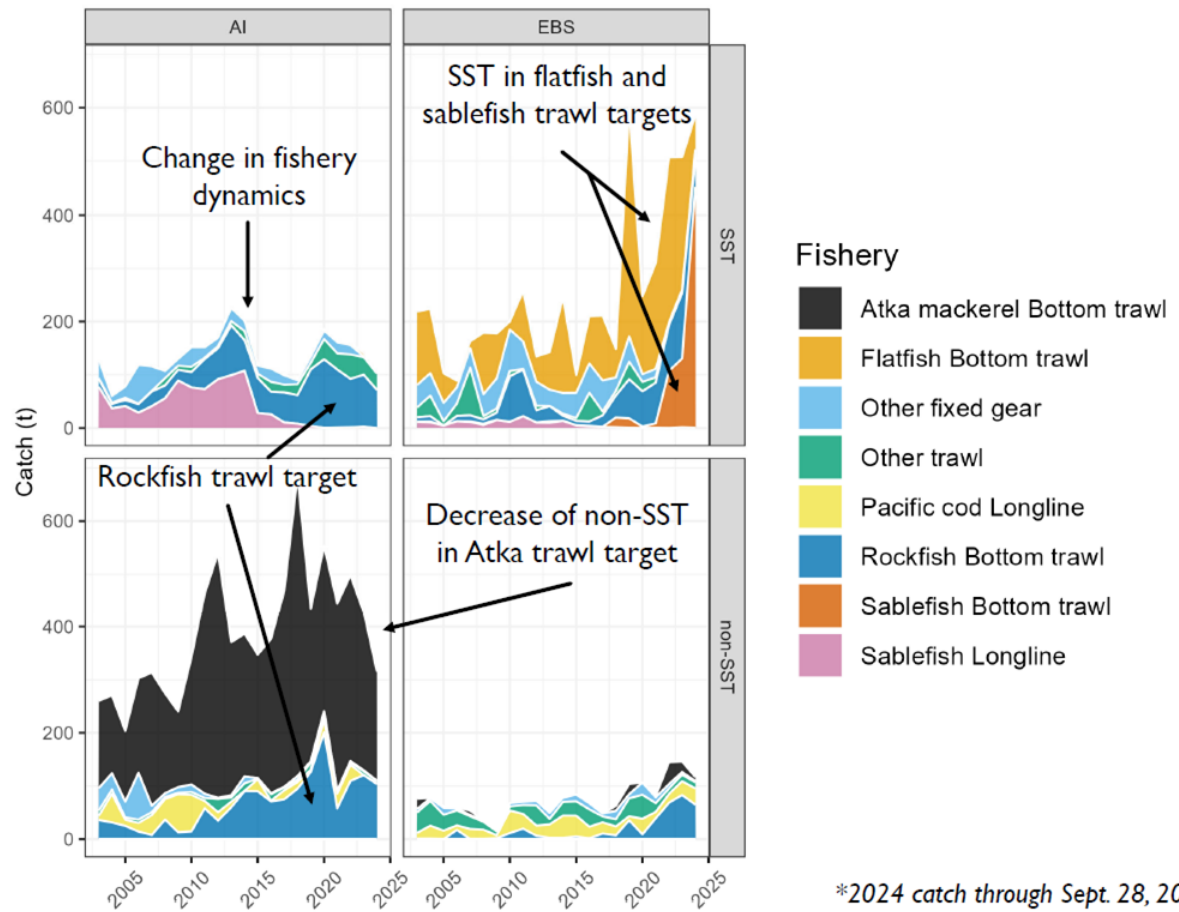
Update Assessment; Tier 5; Risk (2,2,1,2)

- Non-SST
 - Highly variable surveys
 - Overall increasing biomass (+92%)

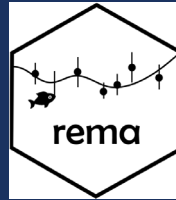


ABC overage for BSAI Other rockfish

- Large increase in SST bycatch in the sablefish bottom trawl target.

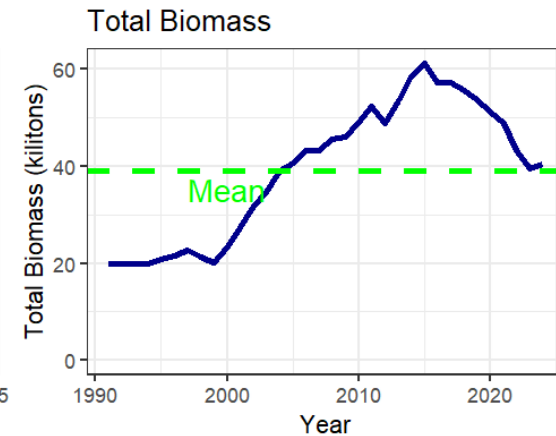
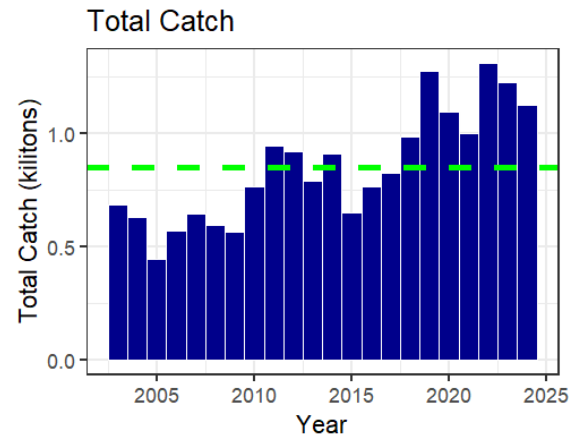


CHAPTER 16 OTHER ROCKFISH

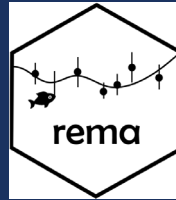


■ Update Assessment; Tier 5; Risk (2,2,1,2)

- Team supported authors' recommended rema approach for management
- Team supported authors' recommended no reduction from maximum permissible ABC



CHAPTER 16 OTHER ROCKFISH



Update Assessment; Tier 5; Risk (2,2,1,2)

- Apportionment uses ratio of estimated biomass in AI and BS from rema
- No additional recommendations

Quantity	Last asmt.	This asmt.	Change
M	0.03/0.009	0.03/0.09	0%
2024 Tier	5		
2025 Tier	5	5	
2024 age+ biomass	52,733		-23%
2025 age+ biomass	52,733	40,559	-23%
2025 F_{OFL}	0.03/0.09	0.03/0.09	0%
2025 F_{ABC}	0.0225/0.0675	0.0225/0.0675	0%
2024 OFL	1,680		-16%
2025 OFL	1,680	1,406	-16%
2024 ABC	1,260		-16%
2025 ABC	1,260	1,054	-16%

Apportionment	Total
Bering Sea ABC	639
Aleutian Islands ABC	415

OTHER SUMMARY



Stock	Tie r	2025 ABC (t)	2025 OFL (t)	Change from 2023 ABC
Atka mackerel (Update)	3a	103,247	122,622	8%

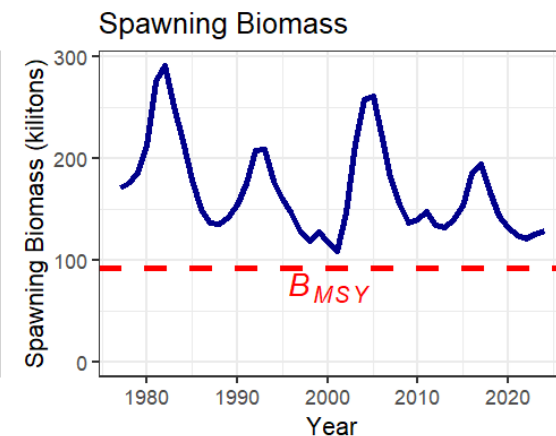
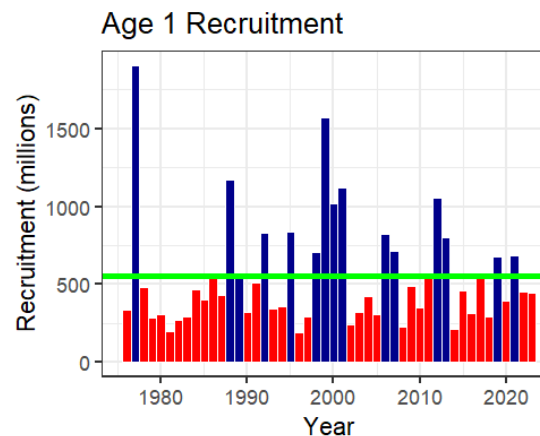
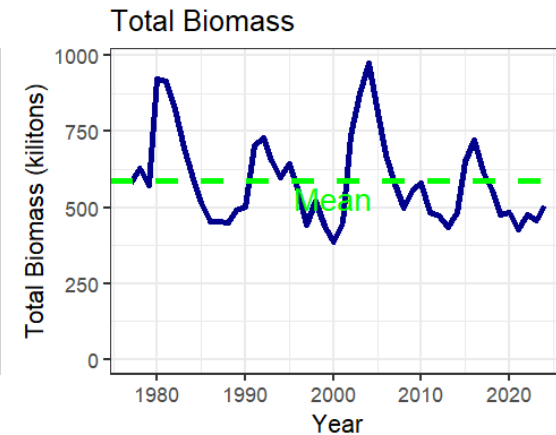
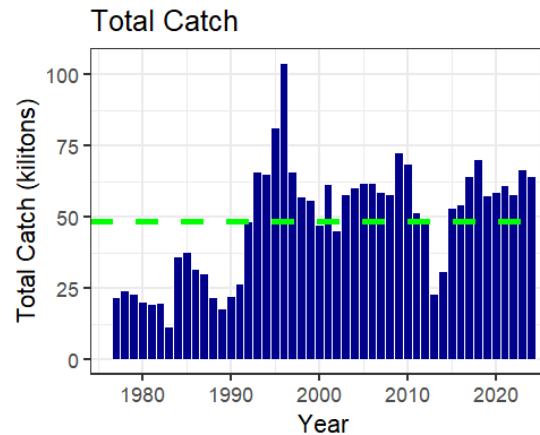
CHAPTER 17

ATKA MACKEREL



■ Update Assessment; Tier 3a; Risk (1,1,2,1)

- Team supported author recommended Model 16.0.b
- No reduction in maximum permissible ABC



CHAPTER 17

ATKA MACKEREL



Update Assessment; Tier 3a; Risk (1,1,2,1)

- Apportionment based on random effects model
- The Team recommended the continued development of an Ecosystem and Socioeconomic Profile (ESP) for this stock to be brought forward with the next assessment

Apportionment	2025	2026
541+SBS	46,650	41,731
542	26,511	23,716
543	30,087	26,914

Quantity	Last asmt.	This asmt.	Change
M	0.3	0.3	0%
2024 Tier	3a		
2025 Tier	3b	3a	
2024 age+ biomass	625,578		0%
2025 age+ biomass	631,261	627,115	-1%
2024 spawning biomass	116,618		3%
2025 spawning biomass	110,694	119,853	8%
$B_{100\%}$	280,456	264,734	-6%
2025 F_{OFL}	0.75	0.64	-15%
2025 F_{ABC}	0.61	0.53	-13%
2024 OFL	111,684		10%
2025 OFL	99,723	122,622	23%
2024 ABC	95,358		8%
2025 ABC	84,676	103,247	22%

HARVEST PROJECTION SUMMARY



Stock	Tier	2025 ABC (t)	2025 OFL (t)	Change from 2024 ABC
Arrowtooth fl (H-Proj)	3a	88,863	104,428	1%
Northern rfish (H-Proj)	3a	18,694	22,848	-3%
Skates (H-proj)	3a/5	36,523	44,086	-3%

CATCH REPORT SUMMARY



	Year	OFL	ABC	TAC	Catch
Sharks (2026)	2023	689	450	333	320
	2024	689	450	400	173
	2025	689	450		
	2026	689	450		
Octopus (2027)	2023	4,769	3,576	400	151
	2024	6,080	4,560	400	240
	2025	6,080	4,560		
	2026	6,080	4,560		

C1 Council Actions for BSAI specifications



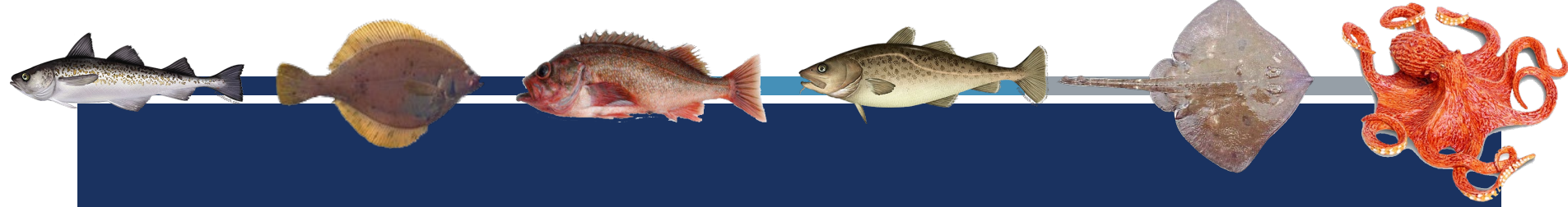
Diana Stram, December 2024



C1 Actions

1. Review 2024 Ecosystem Status Reports for the Eastern Bering Sea (EBS), the Aleutian Islands, and the Gulf of Alaska, and BSAI Plan Team reports
2. Approve the Bering Sea/Aleutian Islands Groundfish Stock Assessment and Fishery Evaluation (SAFE) Report
3. Recommend Final 2025 and 2026 BSAI groundfish harvest specifications





RECOMMENDED HARVEST SPECIFICATIONS

Species	Area	2024				2025		2026	
		OFL	ABC	TAC	Catch as of 11/11/2024	OFL	ABC	OFL	ABC
Pollock	BS	3,162,000	2,313,000	1,313,580	1,298,531	2,957,000	2,417,000	2,496,000	2,036,000
	AI	51,516	42,654	5,420	4878	55,728	46,051	56,231	46,437
	Bogoslof	115,146	86,360	250	23	77,354	58,015	77,354	58,015
Pacific cod	BS	200,995	167,952	147,753	116791	183,509	153,617	169,243	141,520
	AI	18,416	12,431	8,080	3827	16,782	13,376	16,273	12,973
	BSAI/GOA	55,084	47,146	n/a		58,532	50,111	57,797	49,482
Sablefish	BS	n/a	11,450	7,996	5326	n/a	13,898	n/a	13,723
	AI	n/a	13,100	8,440	1152	n/a	12,175	n/a	12,022
Yellowfin sole	BSAI	305,298	265,913	195,000	81307	299,247	262,557	305,039	267,639
	BSAI	3,705	3,188	3,188	769	2,598	2,013	2,059	1,594
Greenland turbot	BS	n/a	2,687	2,687	464	n/a	1,697	n/a	1,344
	AI	n/a	501	501	305	n/a	316	n/a	250
Arrowtooth flounder	BSAI	103,280	87,690	14,000	9915	104,428	88,683	102,472	87,035
Kamchatka flounder	BSAI	8,850	7,498	7,498	4913	8,019	6,800	7,790	6,606
Northern rock sole	BSAI	197,828	122,091	66,000	29137	165,444	157,487	166,220	158,225
Flathead sole	BSAI	81,605	67,289	35,500	12017	101,621	83,807	106,283	87,700
Alaska plaice	BSAI	42,695	35,494	21,752	10091	34,576	28,745	33,965	28,230
	BSAI	22,919	17,189	4,500	3071	26,083	19,562	26,083	19,562
Other flatfish	BSAI	49,010	41,096	37,626	34894	44,594	37,375	43,084	36,578
	BS	n/a	11,636	11,636	9742	n/a	10,121	n/a	9,905
	EAI	n/a	7,969	7,969	7594	n/a	6,278	n/a	6,144
	CAI	n/a	5,521	5,521	5250	n/a	5,559	n/a	5,441
	WAI	n/a	15,970	12,500	12308	n/a	15,417	n/a	16,058
Northern rockfish	BSAI	23,556	19,274	16,752	8,775	22,848	18,694	22,284	18,232
Blackspotted/Rougheye Rockfish	BSAI	761	569	569	616	838	706	902	766
	BS/EAI	n/a	388	388	177	n/a	408	n/a	441
	CAI/WAI	n/a	181	181	439	n/a	298	n/a	325
Shortraker rockfish	BSAI	706	530	530	149	631	473	631	473
Other rockfish	BSAI	1,680	1,260	1,260	1337	1,406	1,054	1,406	1,054
	BS	n/a	880	880	770	n/a	639	n/a	639
	AI	n/a	380	380	568	n/a	415	n/a	415
Atka mackerel	BSAI	111,684	95,358	72,987	71937	122,622	103,247	107,889	92,361
	BS/EAI	n/a	41,723	32,260	31530	n/a	46,650	n/a	41,731
	CAI	n/a	16,754	16,754	16616	n/a	26,511	n/a	23,716
	WAI	n/a	36,882	23,973	23791	n/a	30,087	n/a	26,914
Skates	BSAI	45,574	37,808	30,519	24934	44,086	36,523	43,285	35,833
Sharks	BSAI	689	450	400	173	689	450	689	450
Octopuses	BSAI	6,080	4,560	400	240	6,080	4,560	6,080	4,560
Total	BSAI	4,609,077	3,476,801	2,000,000	1,724,804	4,334,715	3,590,907	3,849,059	3,192,295

SSC changes in bold

Species	Area	2024			Catch as of 11/11/2024	2025		2026	
		OFL	ABC	TAC		OFL	ABC	OFL	ABC
Pollock	BS	#####	#####	#####	1,298,531	2,957,000	2,417,000	2,496,000	2,036,000
	AI	51,516	42,654	5,420	4,878	55,728	46,051	56,231	46,437
	Bogoslof	115,146	86,360	250	23	77,354	58,015	77,354	58,015
Pacific cod	BS	200,995	167,952	147,753	116,791	183,509	153,617	169,243	141,520
	AI	18,416	12,431	8,080	3,827	16,782	13,376	16,273	12,973
Sablefish	BSAI/GOA	55,084	47,146	n/a		58,532	50,111	57,797	49,482
	BS	n/a	11,450	7,996	5,326	n/a	13,203	n/a	13,037
	AI	n/a	13,100	8,440	1,152	n/a	11,566	n/a	11,421
Yellowfin sole	BSAI	305,298	265,913	195,000	81,307	299,247	262,557	305,039	267,639
Greenland turbot	BSAI	3,705	3,188	3,188	769	2,598	1,678	2,059	1,328
	BS	n/a	2,687	2,687	464	n/a	1,415	n/a	1,120
	AI	n/a	501	501	305	n/a	263	n/a	209
Arrowtooth flounder	BSAI	102,280	87,600	14,000	0,015	104,428	88,682	102,472	87,025



Set cod and Sablefish TACs to consider State Waters fisheries

BS cod, AI cod

	2025		
BS cod	ABC	GHL	TAC
	153,617	19,970	133,602
	2026		
	ABC	GHL	TAC
	141,520	18,398	123,077
	2025		
AI cod	ABC	GHL	TAC
	13,376	4,682	8,694
	2026		
	ABC	GHL	TAC
	12,973	4,541	8,432

BS Sablefish, AI Sablefish

State waters GHL set at 5% of the combined BS and AI ABC in 2025 and 2026

Based on the 2024 GHL fishery most of the catch in 2025-2026 expected to occur in State waters adjacent to the federal BS subarea therefore AP may consider recommending that the BS TACs account for the reduction due to State waters GHLs

BS GHL = 13% of ABC +45 t to Area O
 AI GHL = 35% of ABC



Set ABC reserves for flathead sole, rock sole and yellowfin sole

- ABC reserve:

- Consider ABC surplus ($ABC - TAC$ for all 3 species) and consider whether or not to set a discretionary buffer by reducing the available surplus in establishing an ABC reserve



Table 15 ABC reserves

Table 15—Final 2025 and 2026 ABC Surplus, ABC Reserves, Community Development Quota (CDQ) ABC Reserves, and Amendment 80 ABC Reserves in the BSAI for Flathead Sole, Rock Sole, and Yellowfin Sole

[Amounts are in metric tons]

Sector	2025 Flathead sole	2025 Rock sole	2025 Yellowfin sole	2026 ¹ Flathead sole	2026 ¹ Rock sole	2026 ¹ Yellowfin sole
ABC	83,807	157,487	262,557	87,700	158,225	267,639
TAC	35,500	66,000	195,000	35,500	66,000	195,000
ABC surplus	48,307	91,487	67,557	52,200	92,225	72,639
ABC reserve	48,307	91,487	67,557	52,200	92,225	72,639
CDQ ABC reserve	5,169	9,789	7,229	5,585	9,868	7,772
Amendment 80 ABC reserve	43,138	81,698	60,328	46,615	82,357	64,867

¹ The 2026 allocations for Amendment 80 species between Amendment 80 cooperatives and the Amendment 80 limited access sector will not be known until eligible participants apply for participation in the program by November 1, 2025.





PSC LIMITS AND APPORTIONMENTS:
BBRKC, TANNER CRAB, SNOW CRAB,
HERRING, HALIBUT TABLES 15-19
DISCARD MORTALITY RATES TABLE 20

Amd 123 Halibut ABM [letters posted to agenda]

		EBS shelf trawl survey index (t)	
		Low < 150,000	High ≥ 150,000
IPHC setline survey index in Area 4ABCDE (WPUE)	High ≥ 11,000	1,745 mt (current limit)	1,745 mt (current limit)
	Medium 8,000 – 10,999	1,396 mt (20% below current)	1,571 mt (10% below current)
	Low 6,000-7,999	1,309 mt (25% below current)	1,396 mt (20% below current)
	Very Low < 6,000	1,134 mt (35% below current)	1,134 mt (35% below current)



Crab PSC

- BBRKC
- Tanner crab
- Snow crab

PSC species and area and zone ¹	Total PSC
Halibut mortality (mt) BSAI	3,079
Herring (mt) BSAI	2,651
Red king crab (animals) Zone 1	97,000
<i>C. opilio</i> (animals) COBLZ	12,850,000
<i>C. bairdi</i> crab (animals) Zone 1	980,000
<i>C. bairdi</i> crab (animals) Zone 2	2,970,000

Table 16 Halibut, herring and crab PSC

Table 16–Final 2025 and 2026 Apportionment of Prohibited Species Catch Allowances to Non-Trawl Gear, the CDQ Program, Amendment 80, and the BSAI Trawl Limited Access Sectors

PSC species and area and zone ¹	Total PSC	Non-trawl PSC	CDQ PSQ reserve ²	Trawl PSC remaining after CDQ PSQ	Amendment 80 sector ³	BSAI trawl limited access sector ⁴	BSAI PSC limits not allocated to Amendment 80 ³
Halibut mortality (mt) BSAI	3,079	710	315	n/a	1,309	745	n/a
Herring (mt) BSAI	2,651	n/a	n/a	n/a	n/a	n/a	n/a
Red king crab (animals) Zone 1	97,000	n/a	10,379	86,621	43,293	26,489	16,839
<i>C. opilio</i> (animals) COBLZ	12,850,000	n/a	1,374,950	11,475,050	5,639,987	3,688,081	2,146,982
<i>C. bairdi</i> crab (animals) Zone 1	980,000	n/a	104,860	875,140	368,521	411,228	95,390
<i>C. bairdi</i> crab (animals) Zone 2	2,970,000	n/a	317,790	2,652,210	627,778	1,241,500	782,932

Herring biomass 5% increase from 2024 2,651 t

No Togiak fishery in 2024 therefore no catch at age model. Instead biomass estimate based on 5 aerial surveys



Table 17 Fishery Allowances herring and RKC (RKCSS PSC limit in 2025)

Table 17–Final 2025 and 2026 Herring and Red King Crab Savings Subarea Prohibited Species Catch Allowances for all Trawl Sectors

Fishery categories	Herring (mt) BSAI	Red king crab (animals) Zone 1
Yellowfin sole	153	n/a
Rock sole/flathead sole/Alaska plaice/other flatfish ¹	77	n/a
Greenland turbot/arrowtooth flounder/Kamchatka flounder/sablefish	8	n/a
Rockfish	8	n/a
Pacific cod	14	n/a
Midwater trawl pollock	2,359	n/a
Pollock/Atka mackerel/other species ^{2,3}	31	n/a
Red king crab savings subarea non-pelagic trawl gear ⁴	n/a	24,250
Total trawl PSC	2,651	97,000

Note: Species apportionments may not total precisely due to rounding.



Halibut Discard Mortality Rates (DMRs)- Table 20

Table 20–2025 and 2026 Pacific Halibut Discard Mortality Rates (DMR) for the BSAI

Gear	Sector	Halibut discard mortality rate (percent)
Pelagic trawl	All	100
Non-pelagic trawl	Mothership and catcher/processor	86
Non-pelagic trawl	Catcher vessel	67
Hook-and-line	Catcher/processor	9
Hook-and-line	Catcher vessel	9
Pot	All	21





Thank you!