# C5 Joint Groundfish September Plan Team Report

Steve Barbeaux, Sara Cleaver, Jim Ianelli, Chris Lunsford, Kalei Shotwell, Diana Stram, Cindy Tribuzio

October 2025, Presentation to the SSC

NOAA FISHERIES

# Groundfish Plan Team Meeting, Sept 16-18, 2025

## Virtual

**BSAI Groundfish Plan Team Members**:

| | | | |
|---|---|---|---|
| Steve Barbeaux | AFSC REFM (co-chair) | Kirstin Holsman | AFSC REFM |
| Kalei Shotwell | AFSC REFM (co-chair) | Andy Kingham | AFSC FMA |
| Cindy Tribuzio | AFSC ABL (vice chair) | Beth Matta | AFSC REFM |
| Diana Stram | NPFMC (coordinator) | Andrew Seitz | UAF |
| Lukas DeFilippo | AFSC | Jane Sullivan | AFSC ABL |
| Allan Hicks | IPHC | Steven Whitney | NMFS AKRO |
| Lisa Hillier | WDFW | | |

**GOA Groundfish Plan Team Members**:

| | | | |
|---|---|---|---|
| Jim Ianelli | AFSC REFM (co-chair) | Pete Hulson | AFSC ABL |
| Chris Lunsford | AFSC ABL (co-chair) | Nat Nichols | ADF&G |
| Sara Cleaver | NPFMC (coordinator) | Jan Rumble | ADF&G |
| Meaghan Bryan | AFSC REFM | Paul Spencer | AFSC REFM |
| Abby Jahn | NMFS AKRO | James Thorson | AFSC REFM |
| Craig Faunce | AFSC FMA | Sophia Wassermann | AFSC RACE |
| Lisa Hillier | WDFW | Ben Williams | AFSC ABL |

# Joint Teams Presentation Summary

- Met Tuesday, September 16-17, 2025 at 8:00 am AKDT
  - Virtual meeting only via Zoom, Team's electronic agenda
  - Presentations are linked in the header (in report)
- Future meetings:
  - November 10, 12-14, 2025
  - Tentative 2026 dates:
    - Week of September 21 (4 days TBD)
    - November (TBD)

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*Issue of Veterans day and Thanksgiving week and proximity of Council meeting in 2025*

# AFSC's Gulf of Alaska bottom-trawl survey

**F/V Alaska Provider**

2013-2016, 2021-Present

8 yrs experience

New stratified random survey as of 2025

N stations $\propto$ stratum area, abundance, and inverse variance of 15 representative species

**F/V Ocean Explorer**

2010-2012, 2017-present

10 yrs experience

# GOA bottom trawl survey

| Species or complex | Biomass in 2023 (mt) | Biomass in 2025 (mt) | Percent change |
|---|---|---|---|
| **Roundfishes** | | | |
| walleye pollock | 918,846 | 1,213,755 | +32.1 |
| Pacific cod | 222,473 | 309,761 | +39.2 |
| sablefish | 194,026 | 152,655 | -21.3 |
| Atka mackerel | 76,627 | 89,117 | +16.3 |
| **Sharks** | | | |
| Sharks complex | 67,601 | 89,624 | +32.6 |

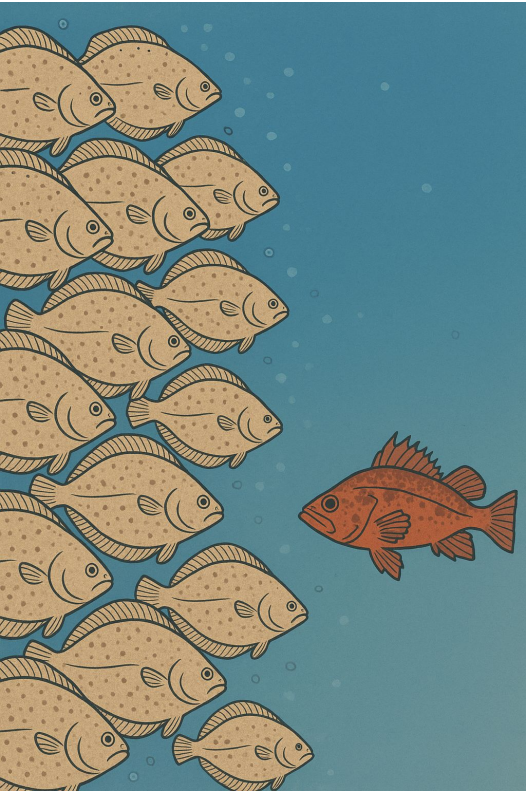
# GOA bottom trawl survey

| Species or complex | Biomass in 2023 (mt) | Biomass in 2025 (mt) | Percent change |
|---|---|---|---|
| **Flatfishes** | | | |
| arrowtooth flounder | 1,184,806 | 1,442,691 | +21.8 |
| Pacific halibut | 432,709 | 297,182 | -31.3 |
| flathead sole | 139,969 | 202,537 | +44.7 |
| Southern rock sole | 114,397 | 153,181 | +33.9 |
| Deepwater flatfish complex | 48,444 | 64,282 | +32.7 |
| Northern rock sole | 26,310 | 30,929 | +17.6 |

# GOA bottom trawl survey

| Species or complex | Biomass in 2023 (mt) | Biomass in 2025 (mt) | Percent change |
|---|---|---|---|
| **Rockfishes** | | | |
| Pacific ocean perch | 1,537,683 | 824,335 | -46.4 |
| Other rockfish complex | 110,351 | 123,133 | +11.6 |
| dusky rockfish | 73,492 | 45,913 | -37.5 |
| Rougheye - blackspotted rockfish group | 30,968 | 30,269 | -2.3 |
| northern rockfish | 31,748 | 19,653 | -38.1 |
| rougheye rockfish | 23,337 | 18,647 | -20.1 |
| Demersal shelf rockfish complex | 19,013 | 8,891 | -53.2 |

# GOA AFSC's bottom-trawl survey comments



**Team noted**

- Total stations dropped (431 stations, 17% fewer)
- Shifts in species groups (rockfish down, flatfish and roundfish up)
  - Suggestion to see if similar shifts occurred in other years
- Commended survey group in completing coverage given shortages and operational difficulties

# Thanks to AFSC's RACE Division+

## Groundfish assessment program

Christina Conrath
Alexandra Dowlin
Sarah Friedman
Zack Oyafuso
Pearl Rojas
Bethany Riggle
Sean Rooney
Megsie Siple
Bianca Prohaska
Joanna Magner
Susanne McDermott
Ned Laman
Rick Hibpshman
KC Dill
Kaitlyn Osborne

## FTE Volunteers

Mary Beth Rew Hicks
David McGowan
Mike Levine
Derke Snodgrass (SEFSC)
John Brogan
Kim Ledger
Katie D'Amelio
Jon Short

# Sablefish activities

**Stock assessment model updates,** including

- ★ Counterfactual analysis of longline survey design changes
- ★ Spatial stock assessment model
- ★ Management Strategy Evaluation (MSE)

# Sablefish assessment model

**Here without short model names and numbers…**

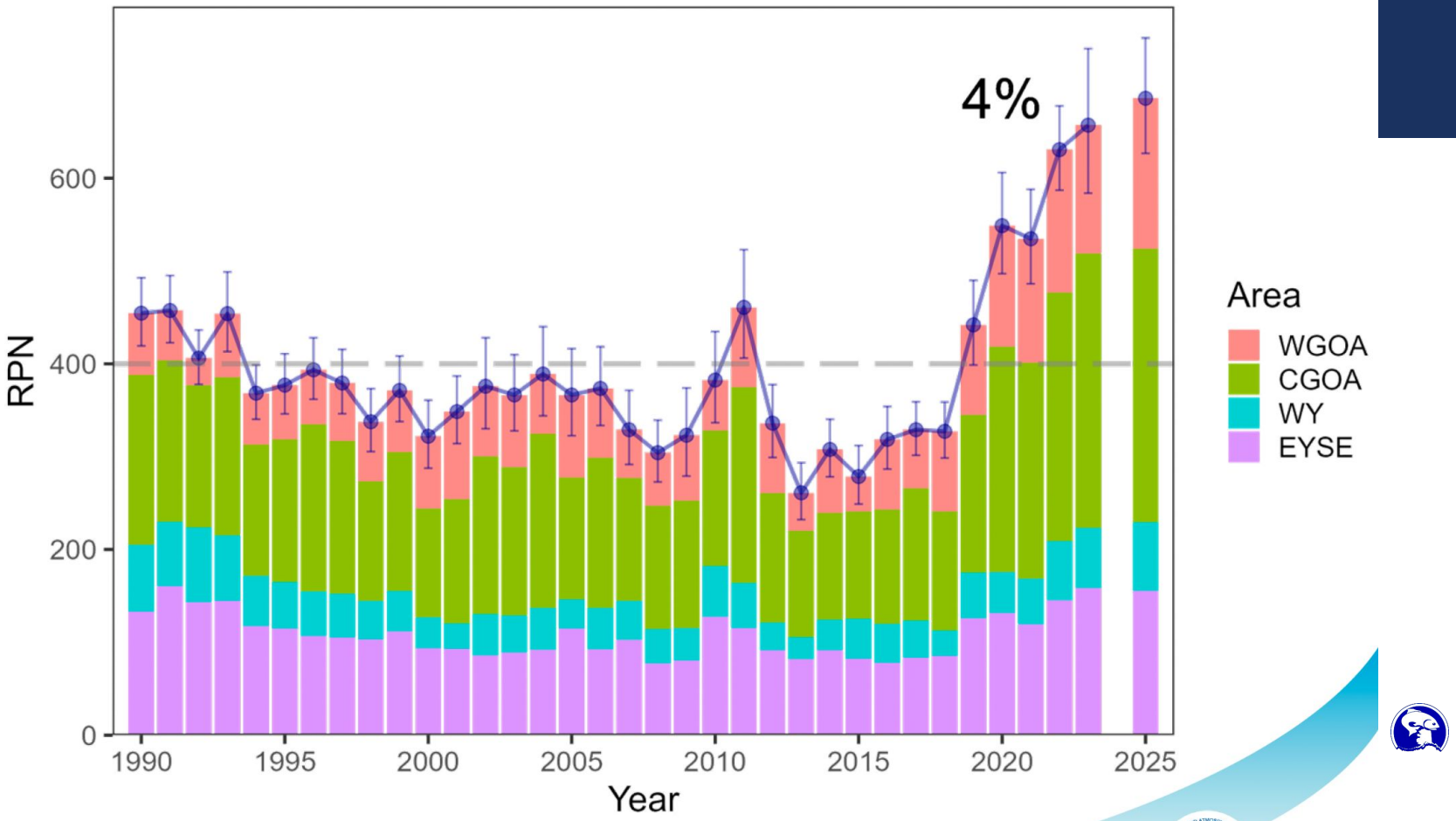
| Model group | Change |
|---|---|
| Bridge to RTMB (Section 1) | None, continuity (23.5, last year's accepted model) |
| | Dev vector change |
| | Dev vector change, max calls |
| | Match RTMB version of 23.5b |
| Code Fixes and "Good Practices" (Section 2) | Legacy code fix |
| | SigmaR=1.1 |
| | Selectivity priors |
| | Cumulative changes |
| | Lambdas=1, PDFs |
| Disaggregate Age Compositions (Section 3) | Sex specific (version of 23.5b) |
| | Sex specific (with code fixes) |
| | Remove length compositions where overlapping |
| Update Data and Model Assumptions (Section 4) | Drop trawl survey |
| | New M prior |
| | Cumulative changes |
| Sensitivity Runs (Section 5) | Time-varying growth |
| | Time-varying fixed-gear selectivity |
| | Spatially explicit model |
| | Logistic-normal instead of multinomial |

# Sablefish activities

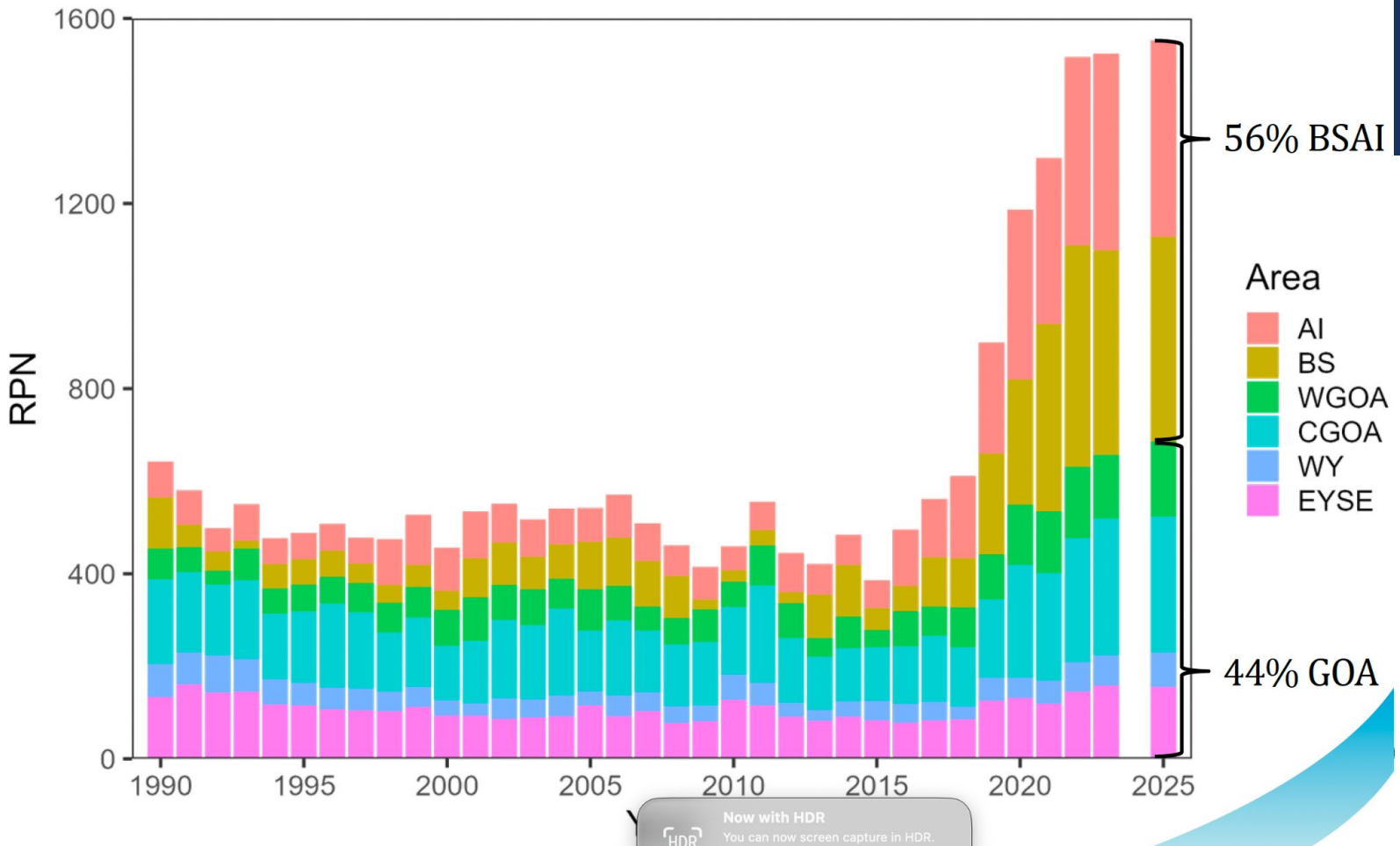
Recommended model for 2025 features

- Code refinements and improvements
  - Stability
  - Retrospective patterns
- Consistency across changes,
  - Revised recent recruitment estimates
  - Stock status similar
- Lower *M* estimate lowers $F_{40\%}$

# GOA Sablefish



# Sablefish AK-wide (2023 BSAI)



# Sablefish discussion

Future pattern of alternating survey data between BSAI and GOA

- Team had some comments/suggestions, reconsider in Sept 2026
- Noted a CIE review expected in 2026 and could be addressed then

# Sablefish

The Teams recommended

- ➔ clarifying and documenting the results of Francis reweighting and include tables of input sample sizes and final effective sample sizes.
  - ◆ Appreciate setting "Lambdas" to 1.0
- ➔ comparing empirical length and weight-at-age directly with modeled estimates
  - ◆ mismatches among indices, lengths, and ages may reflect misspecified growth, as sablefish growth has shifted rapidly in recent years
- ➔ Testing approaches where fishery composition data inform removals only rather than population structure or recruitment.
  - ◆ Lower M improved fits to the plus group…
- ➔ Showing the RTMB continuity model and Model 25.12 ("Drop_TS_Upd_M") **for November**

Teams noted several peer-reviewed studies on sablefish that have been recently published

# Ecosystem Status Report

- North Pacific: Similar warm & windy trends across all regions, but driven by region-specific dynamics

- Gulf of Alaska (GOA): Warm waters from western/central Pacific and from central GOA gyre in winter and late summer at surface and depth; coupled with strong transport across shelf

- Aleutian Islands (AI): Strong AK currents increase eddies and northward transport through eastern & western passes; year-round high sea surface temperatures are back

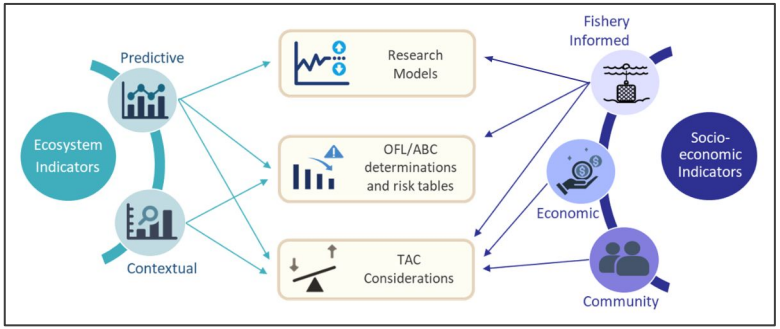
- Eastern Bering Sea (EBS): Warm waters in winter coupled with storms led to reduced sea ice; summer cold pool was reduced; sea ice expected to arrive later this winter

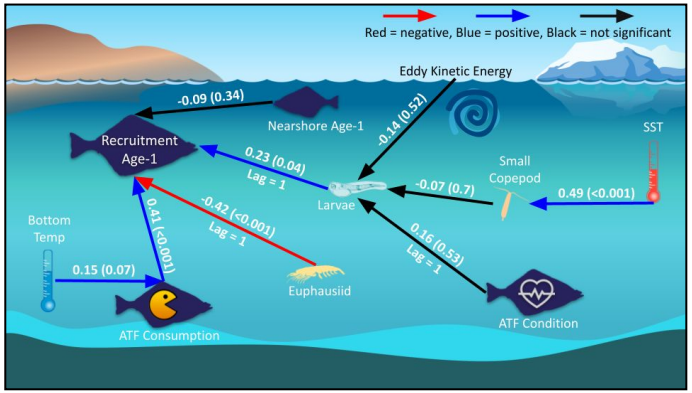
# Ecosystem Status Report

- Discussion
  - Teams appreciated the effectiveness and efficiency of the combined report and summarizing the roles of the ESR and ESP reports for informing the harvest specification process.
  - Teams also discussed expanding some of the hypothesized ecosystem impacts during the September report and noted that some of this information appears in other presentations (e.g., Ecosystem Surveys)
- Recommendations:
  - **ESR team continue working to link climate trends to ecosystem and groundfish community processes in future reports**

# Ecosystem and Socioeconomic Profiles

- Categories and ESP templates
  - Predictive versus contextual and how they feed into advice
  - Full, update (reference), report card options
- Causal modeling
  - Dynamic Structural Equation Model (DSEM)
  - Within RCEATTLE (e.g., GOA arrowtooth, AI Atka Mackerel)



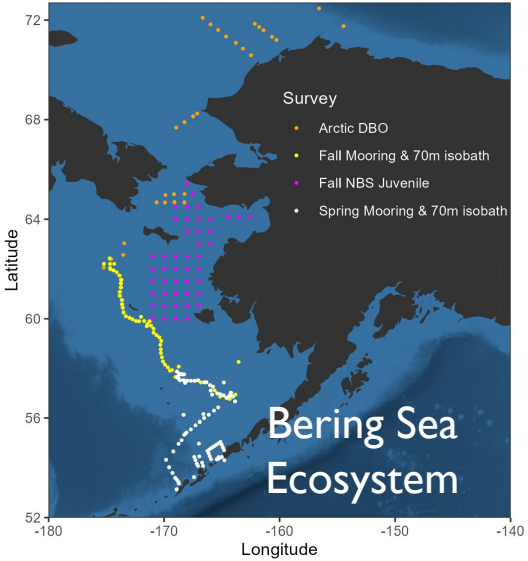



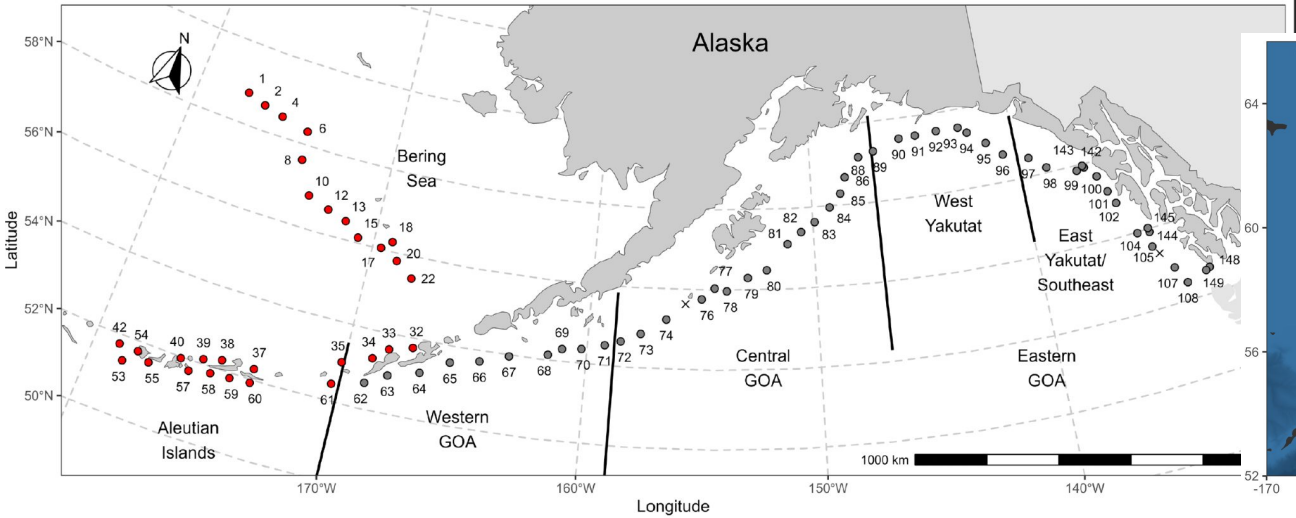
# Ecosystem and Socioeconomic Profiles

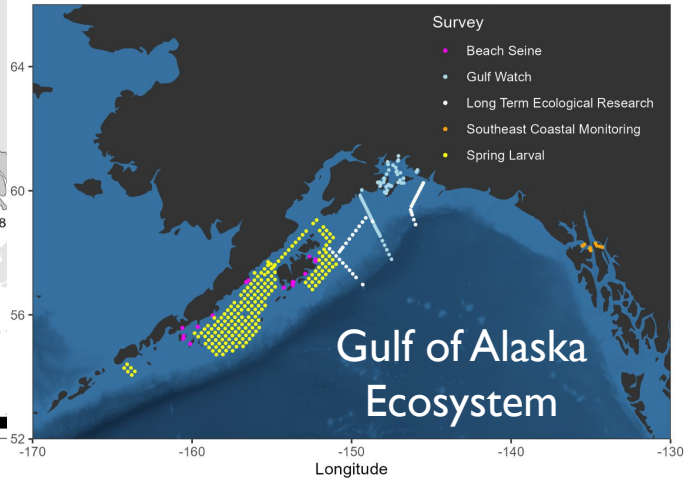
- Discussion
  - The Teams discussed the timeline and potential for updating indicators to best reflect current stock conditions which is part of the update and report card
  - The Teams discussed inclusion of marine mammal information in the multi-species RCEATTLE model and options for ice seal information in future reports.
  - The Teams acknowledged the utility of the new predictive/contextual categories and discussed the challenge of no framework for how to use multiple contextual indicators suggesting poor conditions
- Recommendations:
  - **Develop a multivariate indicator that synthesizes contextual ecosystem time series to measure how anomalous the current year is relative to past conditions**

# 2025 survey previews

## Longline survey

# Ecosystem Surveys: Bering Sea Summary

## Ocean conditions

- SEBS: Ice did not reach M2, warm year overall, mixed layer depth variable @ ~20m
- NBS Fall: warmer than recent years, not as warm as heatwave years.

## Zooplankton

- Small copepod densities were above average in spring, similar to recent warm years. Large copepod densities were average (limited sample size).

## Fish densities

- Age-0 Pollock: Fall (NBS) - Very high densities of age-0 pollock.
- Capelin: Fall (NBS) - low prevalence, characteristic of a warm year, and notable decline from recent years.

Thanks to Rob Suryan

# Ecosystem Surveys: GOA Summary

## Ocean conditions

- Western GOA in spring was warm at surface and at depth.
- Similar to 2015 and 2019.

## Zooplankton

- Springtime small copepod abundance was high, large copepod abundance was low - consistent with warm conditions.

## Fish densities

- Larval: Gadids extremely low, continuing trend since 2019. Rockfishes only 1 of 7 assessed species with high abundance.
- Age-0 Pacific cod densities in the nearshore were moderate, while age-0 pollock densities were low.

## Fish condition

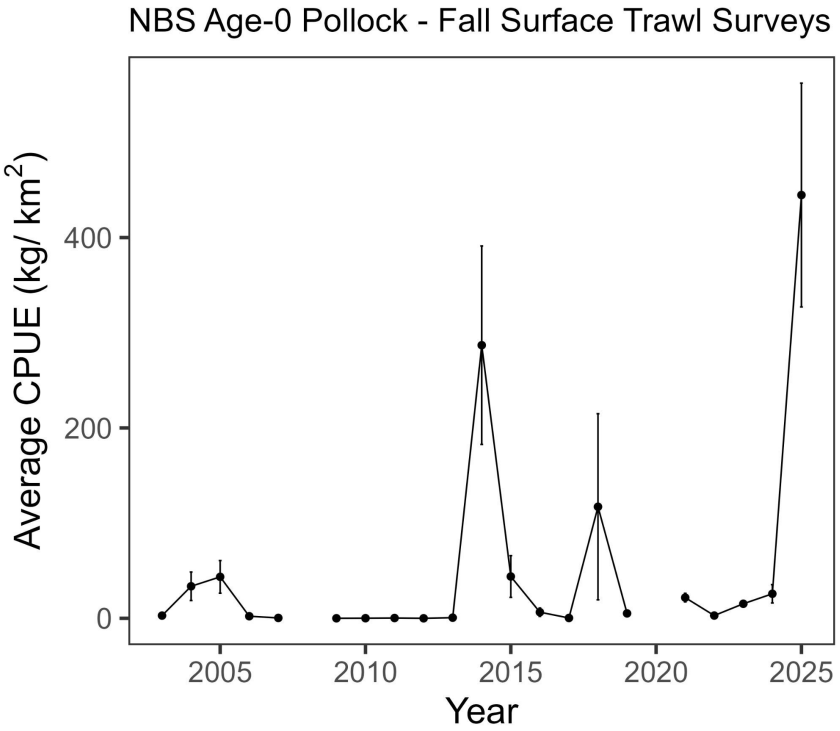
- Age-0 sablefish below average length, but average growth rate.

Thanks to Rob Suryan

# Ecosystem Surveys

- Discussion
  - Teams discussed high volume of age-0 pollock and response to survey timing
  - Teams discussed synthesis of age-0 pollock and Pacific cod to create offshore/onshore combined index
- Recommendation
  - **Combined indices be provided in future presentations**

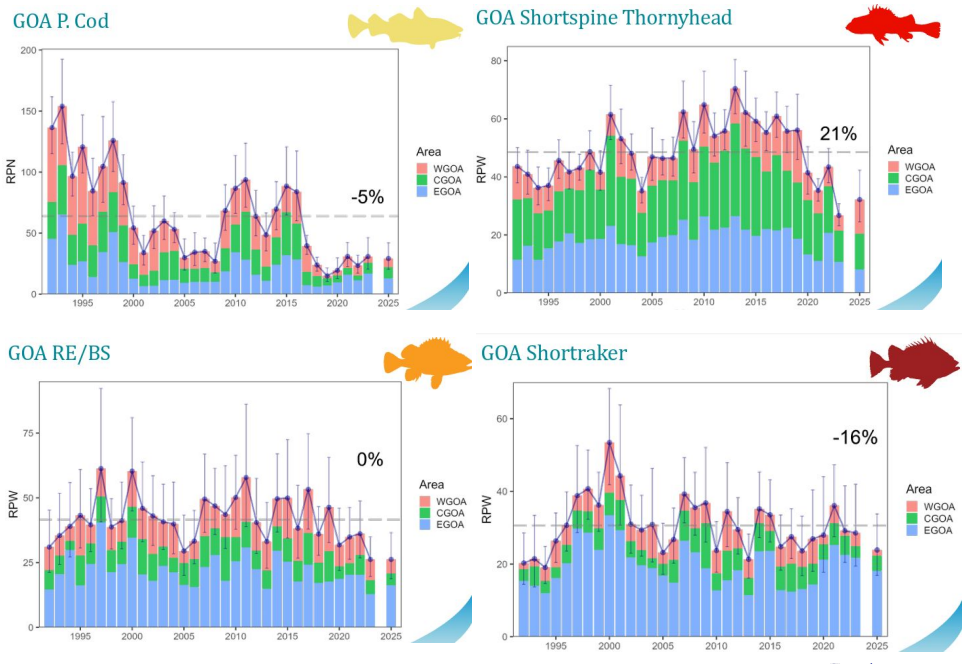
Thanks to Rob Suryan



# Longline Survey

- Sampling in GOA in odd years, BSAI in even years
- 371,700 hooks fished, 109,263 lengths, 2,869 sablefish otoliths, 3,998 sablefish tagged
- 90 temp-depth profiles, sub- surface temps (~250m) near avg in WGOA, CGOA above avg in EGOA
- Pacific cod and REBS similar to last survey, shortraker decreased 16%, thornyhead up 21%

Thanks to Kevin Siwicke



# Harvest Control Rules

- ★ Workplan guidance:
  - Stocks or species to cover,
  - types performance indicators to use
- ★ The Teams noted the need to focus on species that are most susceptible to environmental change
  - Agreed with SSC focus on Pacific cod, pollock, sablefish, snow crab, and Bristol Bay red king crab–added Pacific Ocean perch
- ★ Development of a framework for implementing alternative HCRs
  - Umbrella actions based on evaluations of relevant indicators
  - Consideration of exceptional circumstances invoke meta-rules–a set of guardrails when a simulation-tested HCR appears to be straying from expectations
- ★ Recommendations:
  - **The Teams recommended that a Joint Team meeting be conducted in early 2025 (January) to review and recommend alternative frameworks for when different HCRs could be triggered.**

# Data Limited Working Group

- Presentation included application of the ORCS framework to Pacific sleeper shark, with continued refinement of attribute weighting and planned sensitivity testing
- Described progress toward developing a decision tree approach for Octopus complex
- **Teams recommended:**
  - **Continue to explore the methods described in the report**
  - **Decision tree approach for GOA octopus, and encouraged authors to conduct simulations and power analyses to better evaluate the robustness of the approach.**

Thanks to Cindy Tribuzio

# Halibut DMRs

- Michael Fey provided a presentation on halibut DMRs.
  - Observer estimate methodology was same as last year.

**The Teams recommended the 2026 and 2027 halibut DMRs as presented by the Halibut DMR Working Group, to be included in the proposed specifications.**

# Thanks!

## Groundfish Plan Team Contacts: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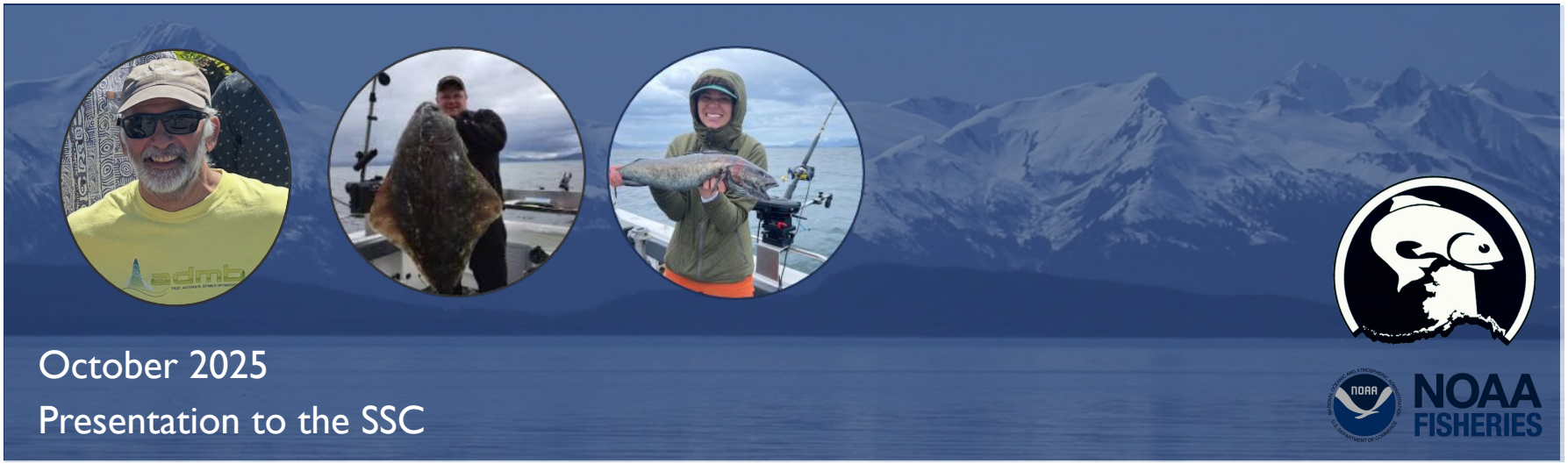
# C5 Gulf of Alaska Groundfish September 2025 Plan Team Report

Jim Ianelli (AFSC), Chris Lunsford (AFSC), Sara Cleaver (NPFMC)



October 2025

Presentation to the SSC

NOAA FISHERIES

# GOA Presentation summary

| Topic | Presenter at Plan Team | Type | Recommendations |
|---|---|---|---|
| GOA BTS survey | Zach Oyafuso | Survey Update | Suggestions |
| Winter Acoustic Survey, refinements | Darin Jones, David McGowan | Survey Update | No |
| GOA Pollock | Cole Monnahan | Full | Yes, author's |
| Arrowtooth, ESP | Kalei Shotwell, Grant Adams | Full | Yes, 25.0 and 25.1 |
| Rex sole | Sandra Lowe (for C. McGilliard) | CIE Response, model updates | Yes |
| SW Flatfish: N/S rock sole | Meaghan Bryan | Full | Yes |
| Pacific ocean perch | Ben Williams | Full | Yes |
| REBS Assessment | Jane Sullivan | Full | Yes |
| Harvest Projections - DWF | Chris Lunsford | Final review | No |
| Proposed Specifications (including DMRs) | Abby Jahn | Proposed specs | Yes |

# 2025 assessment plans: GOA stocks

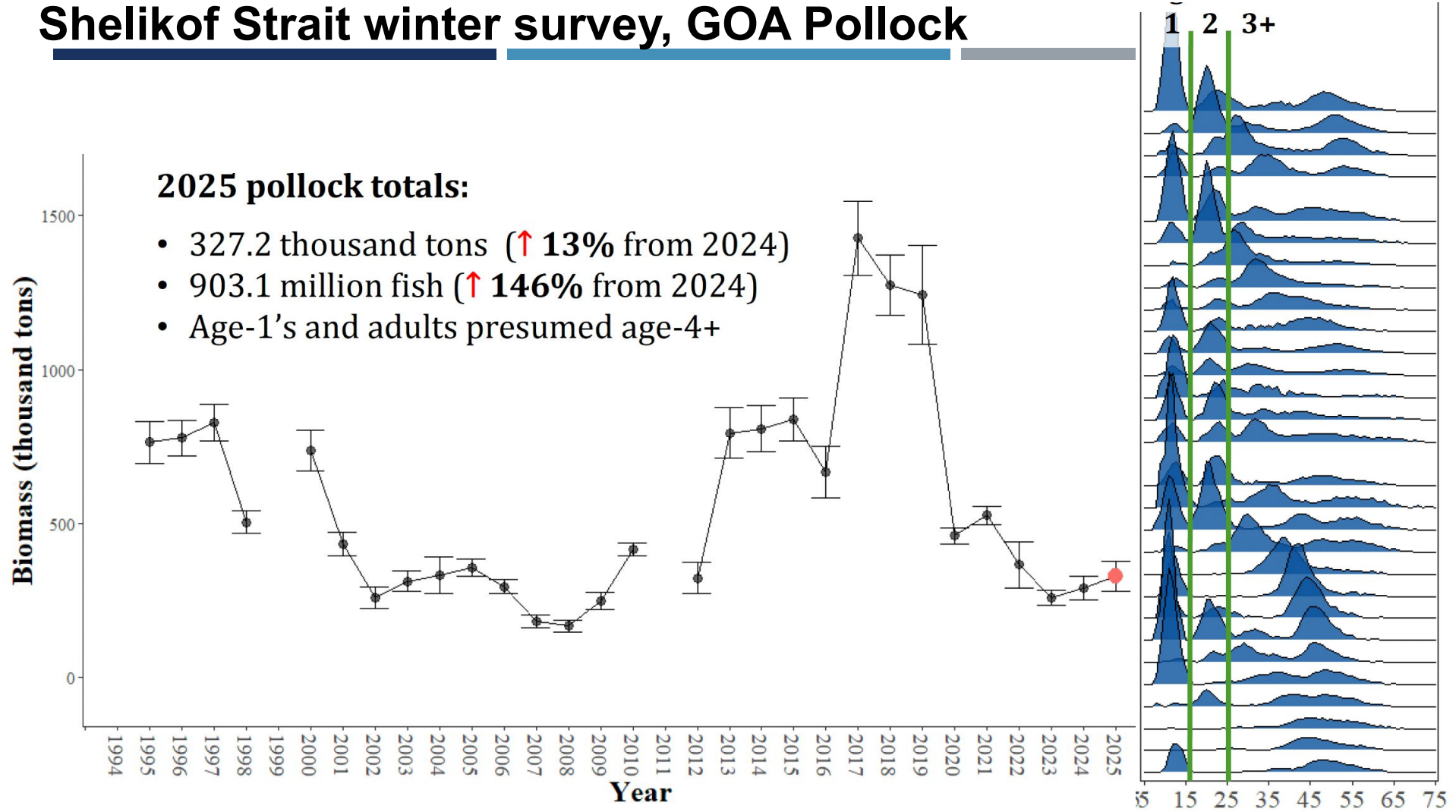
| Assessment Type | GOA Stocks for 2025 (Nov) |
|---|---|
| **Operational full** | Pollock, POP, REBS, ATF, Rex sole, SWF (N/S rock sole) |
| **Operational update** | Pacific cod, Other rockfish, Shortraker, Skates, Atka mackerel, Octopus |
| **Harvest Projections (reviewed in Sept/Oct)** | Deepwater flatfish |
| **Catch Reports** | Dusky rockfish<br>Northern rockfish<br>Thornyhead rockfish<br>Demersal shelf rockfish<br>Flathead sole<br>Sharks |

# GOA General comments

The Team commented on appropriate ISS for fishery age and length composition samples and how environmental data should be used to calibrate numerical models.

**The Team noted virtual environment limited review capabilities**

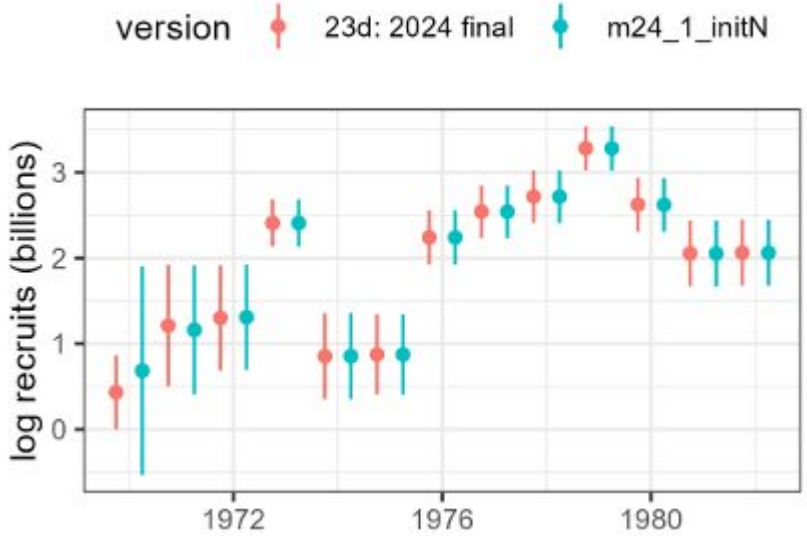
# Shelikof Strait winter survey, GOA Pollock



# GOA Pollock: 3 refinements

1. Minor change to initial age-composition
2. Updated acoustics (re-analysis)
3. Priors for stabilization:
    - Logit on AR(1) process
    - Descending selectivity for Shelikof survey

**The Team concurred with author and recommended bringing forward model 23e, as well as the previously accepted model 23d.**




Thanks to Cole Monnahan

# GOA Rex sole

- CIE Review (desk review)
  - Comments addressed
- **Team supported Carey's recommendation to bring forward Models 25.0 and 25.1**
  - 25.0 - updated 2021 base model
  - 25.1 - updated ageing error matrix
  - Commended on the extensive presentation bridging the modifications



Thanks to Carey McGilliard and Sandra Lowe

# GOA Shallow-water flatfish (N and S rock sole)

- Updated growth estimates by regions
  - N. rock sole stays region-specific
  - S. rock sole common region
- Northern rock sole recommended model
  - 21.2c
- Southern rock sole:
  - 25.1c and 25.1d
    - Refinements in length-wt, catch, and input sample sizes

Thanks to Meaghan Bryan

# GOA Arrowtooth flounder

The Team

- **agreed** with the author's recommendation to bring forward two models (Model 25.0 and 25.1, fixed or estimated male *M*) for November, and
- **Recommended** research on evaluating DSEM fits for
  - interpreting ESPs
  - framework for applying in a management context



Thanks to Kalei Shotwell

# GOA Pacific ocean perch

**Discussion**

- ★ Short turnover with new author
- ★ Converted ADMB code to RTMB
  - Updated basics (likelihood specifications to R functions etc)
  - Bridged satisfactorily
- ★ Survey data treatment
  - Model vs design-based estimates, may evaluate both both if time permits
  - Differences in uncertainties noted



Thanks to Ben Williams

# GOA Pacific ocean perch

**The Team recommended:**

- **Previously accepted model, and Model 25.2a in November**
  - Include updated survey input sample size (ISS)
- Include table of ISS for all fleets and the final adjusted sample sizes after reweighting, and
- evaluate the ratios of effective sample size (ESS) to ISS and provide interpretations of results, particularly when ESS/ISS is greater than 1.0.



Thanks to Ben Williams

# GOA Rougheye-black spotted rockfish

Discussion features

- Extensive evaluation of functional and biological maturity
- Differences between species within complex also notable
- Correct identification rates evaluated
- Recalled issues with the age-structured assessments

Thanks to Jane Sullivan

# GOA Rougheye-black spotted rockfish

- Accepted plus three alternative models:
  - 23.1b – Base SCAA model using the same data as the 2023 assessment
  - 25.1a – Tier 4 model that uses species-specific biological-based maturity estimates
  - 25.1b – Tier 4 model that uses species-specific functional maturity estimates
  - 25.2 – Tier 5 calculations based on trawl survey biomass for the combined complex
- Complex-level F rate based on blackspotted rockfish
  - Declining trends, added precaution appropriate
  - Functional maturity used
- Recommended:
  - Tier 4 YPR/SBPR

Thanks to Jane Sullivan

# GOA Harvest Projections:
# Reviewed in Sept instead of November meeting

1) GOA deepwater flatfish- Carey McGilliard

Thanks to Chris Lunsford (presentation) & authors

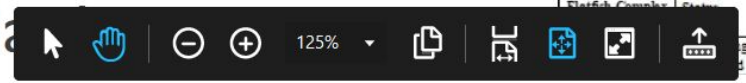
# GOA Deepwater flatfish (Dover sole, Tier 3a)

## Not overfishing, overfished nor approaching overfished

- Fishery Trends: catch remains low
  - 80 t as of September 5, 2025
- Survey Trends (as of Sept. 2025):
  - 2023 biomass similar to 2021
  - Preliminary indications of 2025 survey biomass show an increase (33%) in Dover sole biomass
- Last full/update assessment 2023, next 2027
- ABC: 6,836 t, OFL: 8,118 t
  - No reduction or change from maxABC

Thanks to Carey McGillia

| Species | Quantity | As estimated or *specified last* year for: 2025 | 2026 | As estimated or *recommended this* year for: 2026 | 2027 |
|---|---|---|---|---|---|
| Dover sole | $M$ (natural mortality rate) | 0.12(f), 0.12(m) | 0.12(f), 0.12(m) | 0.12(f), 0.12(m) | 0.12(f), 0.12(m) |
| | Tier | 3a | 3a | 3a | 3a |
| | Projected total (3+) biomass (t) | 84,026 | 81,999 | 82,048 | 80,044 |
| | Projected Female spawning biomass (t) | 24,399 | 23,960 | 23,964 | 23,616 |
| | $B_{100\%}$ | 15,968 | 15,968 | 15,968 | 15,968 |
| | $B_{40\%}$ | 6,387 | 6,387 | 6,387 | 6,387 |
| | $B_{35\%}$ | 5,589 | 5,589 | 5,589 | 5,589 |
| | $F_{OFL}$ | 0.15 | 0.15 | 0.15 | 0.15 |
| | $maxF_{ABC}$ | 0.12 | 0.12 | 0.12 | 0.12 |
| | $F_{ABC}$ | 0.12 | 0.12 | 0.12 | 0.12 |
| | OFL (t) | 8,139 | 7,990 | 7,994 | 7,830 |
| | maxABC (t) | 6,865 | 6,739 | 6,743 | 6,604 |
| | ABC (t) | 6,865 | 6,739 | 6,743 | 6,604 |
| Greenland turbot | Tier | 6 | 6 | 6 | 6 |
| | OFL (t) | 49 | 49 | 49 | 49 |
| | maxABC (t) | 37 | 37 | 37 | 37 |
| | ABC (t) | 37 | 37 | 37 | 37 |
| Kamchatka flounder | Tier | 6 | 6 | 6 | 6 |
| | OFL (t) | 69 | 69 | 69 | 69 |
| | maxABC (t) | 52 | 52 | 52 | 52 |
| | ABC (t) | 52 | 52 | 52 | 52 |
| Deepsea sole | Tier | 6 | 6 | 6 | 6 |
| | OFL (t) | 6 | 6 | 6 | 6 |
| | maxABC (t) | 4 | 4 | 4 | 4 |
| | ABC (t) | 4 | 4 | 4 | 4 |
| Deepwater Flatfish Complex | OFL (t) | 8,263 | 8,114 | 8,118 | 7,954 |
| | maxABC (t) | 6,958 | 6,832 | 6,836 | 6,697 |
| | ABC (t) | 6,958 | 6,832 | 6,836 | 6,697 |
| | Status | As determined *last* year for: 2023 | 2024 | As determined *this* year for: 2024 | 2025 |
| | [illegible] | no | n/a | no | n/a |
| | [illegible] | n/a | no | n/a | no |



# GOA Deepwater flatfish (Dover sole, Tier 3a)
## Not overfishing, overfished nor approaching overfished

- Survey-informed apportionments for the 2026, 2027 ABCs
  - No change in area apportionment percentages since last full assessment (2023)

| Species | Year | Western | Central | West Yakutat | Southeast | ABC |
|---|---|---|---|---|---|---|
| | | 2.6260% | 37.5485% | 26.6279% | 33.1976% | 100.0% |
| Dover Sole | 2026 | 177 | 2,532 | 1,796 | 2,238 | 6,743 |
| | 2027 | 173 | 2,480 | 1,759 | 2,192 | 6,604 |
| | | 100.0% | 0.0% | 0.0% | 0.0% | 100.0% |
| Greenland Turbot | 2026 | 37 | 0 | 0 | 0 | 37 |
| | 2027 | 37 | 0 | 0 | 0 | 37 |
| | | 32.1% | 67.9% | | | 100.0% |
| Kamchatka Flounder | 2026 | 17 | 35 | 0 | 0 | 52 |
| | 2027 | 17 | 35 | 0 | 0 | 52 |
| | | 0.0% | 74.9% | 11.2% | 13.9% | 100.0% |
| Deepsea Sole | 2026 | 0 | 3 | 0 | 1 | 4 |
| | 2027 | 0 | 3 | 0 | 1 | 4 |
| **Deepwater Flatfish** | **2026** | **231** | **2,570** | **1,796** | **2,240** | **6,836** |
| | **2027** | **227** | **2,518** | **1,759** | **2,193** | **6,697** |

Thanks to Carey McGilliard

# GOA Deepwater flatfish- Harvest Projection (PT Recommendations)

The Team recommended:

- Authors' OFLs and ABCs as shown in the documents
- Author's edit final November documents in response to the Council's new terminology regarding "biologically-informed recommended distribution" versus subarea apportionment of ABC

Thanks to Chris Lunsford (presentation) & authors

# GOA Harvest specifications, highlights

- Shortraker rockfish catch in 2025 exceeded the CGOA TAC
  - Could hit the Gulf-wide ABC, hence **flagged for Council**
  - In November authors re-evaluating things in light of spatial apportionment

# GOA stocks without assessments in 2025 (Catch reports)

| Stock | Catch (t) (as of 9/14/25) | 2025 Survey biomass estimate (t) | 2025 biomass relative to 2023 survey estimate |
|---|---|---|---|
| Dusky rockfish | 2,142 | 45,913 | -38% |
| Northern rockfish | 1,582 | 19,653 | -38% |
| Thornyheads | 487 | 42,328 | -26% |
| Demersal shelf rockfish | 193 | 8,891 | -53% |
| Flathead sole | 739 | 202,537 | +45% |
| Sharks | 1,396 | 89,624 | +33% |

# GOA Groundfish Proposed Harvest Specifications- PT Recs Table 1 (1 of 3)

| Species | Area | 2025 | | | Catch | Plan Team Recommended 2026/2027 | |
|---|---|---|---|---|---|---|---|
| | | OFL | ABC | TAC | 9/15/2025 | OFL | ABC |
| Pollock | State GHL | n/a | 4,526 | | 4,226 | n/a | 3,326 |
| | W (610) | n/a | 37,344 | 37,344 | 9,300 | n/a | 27,453 |
| | C (620) | n/a | 82,265 | 82,265 | 63,338 | n/a | 60,477 |
| | C (630) | n/a | 51,605 | 51,605 | 19,632 | n/a | 37,963 |
| | WYAK | n/a | 5,282 | 5,282 | 1,861 | n/a | 3,883 |
| | Subtotal | 210,111 | 181,022 | 176,496 | 98,357 | 153,971 | 133,075 |
| | SEO | 12,998 | 9,749 | 9,749 | 2 | 12,998 | 9,749 |
| | Total | 223,109 | 190,771 | 186,245 | 98,359 | 166,969 | 142,824 |
| Pacific Cod | W | n/a | 8,710 | 6,097 | 3,882 | n/a | 8,182 |
| | C | n/a | 20,506 | 15,379 | 11,065 | n/a | 19,263 |
| | E | n/a | 2,925 | 2,194 | 515 | n/a | 2,748 |
| | Total | 38,688 | 32,141 | 23,670 | 15,462 | 36,459 | 30,193 |
| Sablefish | W | n/a | 4,996 | 4,746 | 2,268 | n/a | 4,687 |
| | C | n/a | 10,257 | 9,744 | 6,105 | n/a | 9,622 |
| | WYAK | n/a | 3,125 | 2,686 | 1,904 | n/a | 2,652 |
| | SEO | n/a | 5,660 | 5,660 | 3,863 | n/a | 5,589 |
| | GOA Total | n/a | 24,038 | 22,836 | 14,140 | n/a | 22,550 |
| Alaska-wide OFL and ABC | AK Total | 58,532 | 50,111 | n/a | | 57,797 | 47,008 |
| Shallow-Water Flatfish | W | n/a | 23,755 | 13,250 | 100 | n/a | 23,902 |
| | C | n/a | 28,279 | 28,279 | 1,526 | n/a | 28,455 |
| | WYAK | n/a | 2,828 | 2,828 | 25 | n/a | 2,846 |
| | SEO | n/a | 1,697 | 1,697 | - | n/a | 1,707 |
| | Total | 69,277 | 56,559 | 46,054 | 1,651 | 69,610 | 56,910 |

# GOA Groundfish Proposed Harvest Specifications- PT Recs Table 1 (2 of 3)

| Species | Area | 2025 | | | Catch | Plan Team Recommended 2026/2027 | |
|---|---|---|---|---|---|---|---|
| | | OFL | ABC | TAC | 9/15/2025 | OFL | ABC |
| Deep-Water Flatfish | W | n/a | 234 | 234 | 1 | n/a | 231 |
| | C | n/a | 2,616 | 2,616 | 72 | n/a | 2,568 |
| | WYAK | n/a | 1,828 | 1,828 | 5 | n/a | 1,795 |
| | SEO | n/a | 2,280 | 2,280 | 4 | n/a | 2,238 |
| | Total | 8,263 | 6,958 | 6,958 | 82 | 8,114 | 6,832 |
| Rex Sole | W | n/a | 3,382 | 3,382 | 12 | n/a | 3,353 |
| | C | n/a | 13,698 | 13,698 | 454 | n/a | 13,582 |
| | WYAK | n/a | 1,436 | 1,436 | - | n/a | 1,413 |
| | SEO | n/a | 2,871 | 2,871 | - | n/a | 2,825 |
| | Total | 26,002 | 21,387 | 21,387 | 466 | 25,743 | 21,173 |
| Arrowtooth Flounder | W | n/a | 33,593 | 14,500 | 126 | n/a | 33,716 |
| | C | n/a | 68,261 | 68,261 | 10,539 | n/a | 68,511 |
| | WYAK | n/a | 6,695 | 6,695 | 19 | n/a | 6,719 |
| | SEO | n/a | 10,998 | 10,998 | 25 | n/a | 11,039 |
| | Total | 142,832 | 119,547 | 100,454 | 10,709 | 143,347 | 119,985 |
| Flathead Sole | W | n/a | 13,592 | 8,650 | 45 | n/a | 13,757 |
| | C | n/a | 21,817 | 21,817 | 694 | n/a | 22,083 |
| | WYAK | n/a | 3,970 | 3,970 | - | n/a | 4,018 |
| | SEO | n/a | 2,097 | 2,097 | - | n/a | 2,122 |
| | Total | 50,587 | 41,476 | 36,534 | 739 | 51,176 | 41,980 |

# GOA Groundfish Proposed Harvest Specifications- PT Recs Table 1 (3 of 3)

| Species | Area | 2025 OFL | 2025 ABC | 2025 TAC | Catch 9/15/2025 | Plan Team Recommended 2026/2027 OFL | Plan Team Recommended 2026/2027 ABC |
|---|---|---|---|---|---|---|---|
| Pacific ocean perch | W | n/a | 1,753 | 1,753 | 1,753 | n/a | 1,688 |
| | C | n/a | 28,209 | 28,209 | 21,865 | n/a | 27,156 |
| | WYAK | n/a | 2,070 | 2,070 | 1,892 | n/a | 1,993 |
| | SEO | n/a | 6,930 | 6,930 | - | n/a | 6,672 |
| | Total | 46,562 | 38,962 | 38,962 | 25,510 | 44,826 | 37,509 |
| Northern Rockfish | W | n/a | 1,396 | 1,396 | 465 | n/a | 1,346 |
| | C | n/a | 3,680 | 3,680 | 1,117 | n/a | 3,549 |
| | E | n/a | | | n/a | n/a | n/a |
| | Total | 6,064 | 5,076 | 5,076 | 1,582 | 5,848 | 4,895 |
| Shortraker Rockfish | W | n/a | 34 | 34 | 3 | n/a | 34 |
| | C | n/a | 189 | 189 | 252 | n/a | 189 |
| | E | n/a | 424 | 424 | 126 | n/a | 424 |
| | Total | 863 | 647 | 647 | 381 | 863 | 647 |
| Dusky Rockfish | W | n/a | 209 | 209 | 66 | n/a | 199 |
| | C | n/a | 5,818 | 5,818 | 2,053 | n/a | 5,527 |
| | WYAK | n/a | 215 | 215 | 23 | n/a | 204 |
| | SEO | n/a | 96 | 96 | - | n/a | 91 |
| | Total | 7,705 | 6,338 | 6,338 | 2,142 | 7,319 | 6,021 |
| Rougheye and Blackspotted Rockfish | W | n/a | 224 | 224 | 54 | n/a | 229 |
| | C | n/a | 359 | 359 | 119 | n/a | 366 |
| | E | n/a | 597 | 597 | 60 | n/a | 608 |
| | Total | 1,576 | 1,180 | 1,180 | 233 | 1,631 | 1,203 |
| Demersal shelf rockfish | W/C/WYAK | 361 | 271 | 271 | 176 | 361 | 271 |
| | SEO | 524 | 394 | 394 | 193 | 524 | 394 |
| Thornyhead Rockfish | W | n/a | 206 | 206 | 15 | n/a | 206 |
| | C | n/a | 590 | 590 | 71 | n/a | 590 |
| | E | n/a | 542 | 542 | 32 | n/a | 542 |
| | Total | 1,784 | 1,338 | 1,338 | 487 | 1,784 | 1,338 |
| Other Rockfish | W/C/WYAK | n/a | 1,084 | 1,084 | 365 | n/a | 1,084 |
| | SEO | n/a | 2,421 | 300 | 19 | n/a | 2,421 |
| | Total | 4,618 | 3,505 | 1,384 | 384 | 4,618 | 3,505 |
| Atka mackerel | Total | 6,200 | 4,700 | 3,000 | 930 | 6,200 | 4,700 |
| Big Skate | W | n/a | 745 | 745 | 88 | n/a | 745 |
| | C | n/a | 1,749 | 1,749 | 1,610 | n/a | 1,749 |
| | E | n/a | 341 | 341 | 254 | n/a | 341 |
| | Total | 3,780 | 2,835 | 2,835 | 1,952 | 3,780 | 2,835 |
| Longnose Skate | W | n/a | 104 | 104 | 56 | n/a | 104 |
| | C | n/a | 1,894 | 1,894 | 638 | n/a | 1,894 |
| | E | n/a | 538 | 538 | 523 | n/a | 538 |
| | Total | 3,380 | 2,536 | 2,536 | 1,217 | 3,380 | 2,536 |
| Other Skates | GOA-wide | 887 | 665 | 665 | 408 | 887 | 665 |
| Sharks | GOA-wide | 6,521 | 4,891 | 4,891 | 1,396 | 6,521 | 4,891 |
| Octopuses | GOA-wide | 1,307 | 980 | 980 | 57 | 1,307 | 980 |
| **TOTAL** | | **709,422** | **593,268** | **514,635** | **1,861** | **649,064** | **539,295** |

# GOA Halibut Discard Mortality Rates (DMRs)

| Area | Gear | Operation | 2025 DMRs (specified) | 2026/27 DMRs (recommended) |
|---|---|---|---|---|
| GOA | Pot | All | 32%[b] | 29%[b] |
| | Hook-and-line | CP | 10% | 12% |
| | Hook-and-line | CV | 19%[c] | 15%[c] |
| | Non-pelagic trawl | Mothership / CP | 76% | 79% |
| | Non-pelagic trawl | CV | 74% | 62% |
| | Non-pelagic trawl | CV-Rockfish Prog | 56%[b] | 53%[b] |
| All | Pelagic trawl | All | 100%* | 100%* |

Thanks to Michael Fey (AKFIN) and other Halibut DMR Working Group members: Jen Cahalan (PSMFC), Jennifer Ferdinand (NMFS AFSC), Krista Melani (NMFS AKRO), Jason Gasper (NMFS AKRO), Ian Stewart (IPHC)

# C5 Bering Sea Aleutian Islands Groundfish September Plan Team Report

Steve Barbeaux, Kalei Shotwell, Diana Stram, Cindy Tribuzio




October 2025, Presentation to the SSC

NOAA FISHERIES

# BSAI Presentation Summary

| Topic | Presenter | Type | Recommendations |
|---|---|---|---|
| EBS Bottom Trawl Survey | Duane Stevenson | Survey Update | No |
| EBS Pollock | Jim Ianelli | Full Model | Yes, data refinement |
| BSAI Skates | Cindy Tribuzio | Full Model | Yes, 4 models |
| Greenland Turbot | Meaghan Bryan | Full Model | Yes, 4 models |
| Yellowfin Sole | Ingrid Spies and Meaghan Bryan | Full Model | Yes, 2 models |
| BSAI Northern Rockfish | Paul Spencer | Full Model | Yes, 2 models |
| BSAI Atka Mackerel ESP | Jane Sullivan | Full ESP Draft | Yes, see in September |
| Catch Report | All Authors | Not Applicable | No |
| Proposed Specifications | Steve Whitney | | |

# BSAI Documentation Summary

| Assessment | BSAI stocks for 2025 (November) |
|---|---|
| Operational Full | EBS Pollock, Yellowfin Sole, Greenland Turbot, Northern Rockfish, BSAI Skates |
| Operational Update | Pacific cod (Eastern Bering Sea and Aleutian Islands (AI)) |
| Harvest Projection (reviewed in Sept/Oct) | None this year |
| Catch Report | Pollock (AI), Pollock (Bogoslof), Arrowtooth flounder, Kamchatka flounder, Northern rock sole, Flathead sole, Alaska plaice, Other flatfish, Pacific ocean perch, Rougheye & blackspotted rockfish, Shortraker rockfish, Other rockfish, Atka mackerel, Sharks, Octopus |

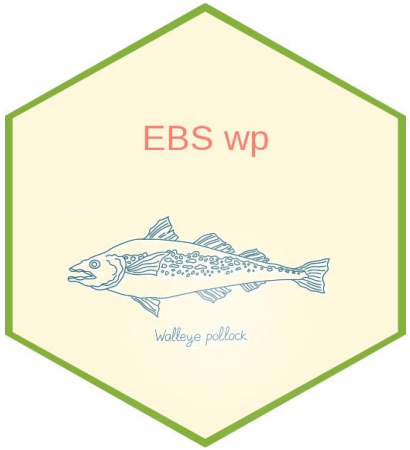
# Eastern Bering Sea Trawl Survey

- EBS 350/350, NBS 137/144 stations sampled (no NBS pres)
- 124,170 lengths, 6,532 otoliths, 4,408 stomachs collected
- Water temps slightly warmer than 2024, cold pool area smaller, no CTD or O2 data
- Biomass similar to last year for most fish species, lots of small Pacific cod

| Common name | Year | Biomass (mt) | Population (x1,000) |
|---|---|---|---|
| walleye pollock | 2024 | 5,476,067 | 10,307,932 |
| | 2025 | 3,825,362 (-30%) | 6,575,619 (-36%) |
| Pacific cod | 2024 | 635,840 | 436,530 |
| | 2025 | 570,986 (-10%) | 516,669 (18%) |
| yellowfin sole | 2024 | 1,503,618 | 5,643,105 |
| | 2025 | 1,548,142 (3%) | 5,772,913 (2%) |
| northern rock sole | 2024 | 1,439,739 | 7,417,950 |
| | 2025 | 1,490,955 (4%) | 7,807,291 (5%) |
| flathead sole | 2024 | 723,996 | 2,311,092 |
| | 2025 | 714,106 (-1%) | 2,278,779 (-1%) |
| Bering flounder | 2024 | 10,370 | 48,918 |
| | 2025 | 12,315 (19%) | 72,799 (49%) |
| Alaska plaice | 2024 | 349,579 | 634,036 |
| | 2025 | 333,810 (-5%) | 586,292 (-8%) |
| arrowtooth flounder | 2024 | 582,469 | 926,415 |
| | 2025 | 491,918 (-16%) | 669,870 (-28%) |
| Kamchatka flounder | 2024 | 28,362 | 69,129 |
| | 2025 | 33,231 (17%) | 73,058 (6%) |
| Pacific halibut | 2024 | 125,145 | 65,136 |
| | 2025 | 133,705 (7%) | 80,524 (24%) |
| Alaska skate | 2024 | 407,133 | 102,931 |
| | 2025 | 399,887 (-2%) | 113,374 (10%) |
| Pacific ocean perch | 2024 | 50,664 | 71,612 |
| | 2025 | 11,741 (-77%) | 12,420 (-83%) |

Thanks to Duane Stevenson

# EBS Pollock




# Eastern Bering Sea walleye pollock stock assessment

Preface

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2025-09-16 22:08

## Preface

This document is organized into two complementary parts.

**Part 1** is a *discussion paper* that was prepared for and presented to the Center for Independent Experts (CIE) review panel in **May 2025**. It summarizes the assessment methods, data sources, and key uncertainties considered at that time.

**Part 2** provides *subsequent updates* and reports on **developments since May 2025**, including research and model refinements in support of the North Pacific Fishery Management Council (NPFMC) review process in September 2025.

Together, these two parts provide a transparent record of the assessment's evolution over the course of 2025. Readers may wish to begin with Part 1 for context and then move to Part 2 for the most current results.

## Contents


- Part 1: Discussion paper presented to CIE review
- Part 2: Assessment research developments for NPFMC Review


Thanks to Jim Ianelli

# EBS Pollock CIE Review

- Themes and responses/ status

| Theme | Lead Reviewer | Recommendation | Status |
|---|---|---|---|
| RTMB transition | All | Port model from ADMB to RTMB | ✅ Completed |
| Russian catch | All | Incorporate or test Russian removals | 🟡 In progress |
| Selectivity complexity | Nielsen | Estimate process variances via marginal likelihood | 🟡 In progress |
| Natural mortality | Jiao | Explore M variation and CEATTLE integration | 🟡 In progress |
| Growth & WAA | Jiao | Model cohort and temperature effects on WAA | ⚪ Deferred |
| Data weighting | Cieri | Test Dirichlet-multinomial likelihoods | ⚪ Available but deferred |
| Retrospective | Nielsen | Use Mohn's rho over shorter periods | ✅ Available |

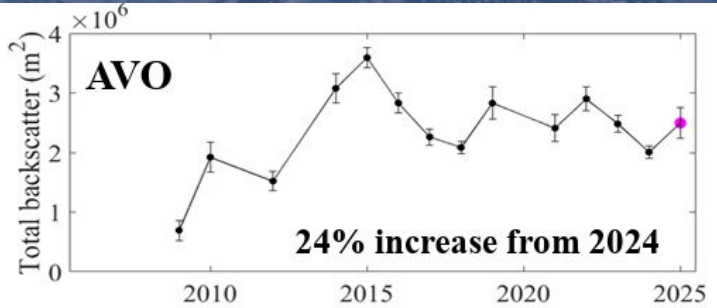
# EBS Pollock Discussions & Recommendations:

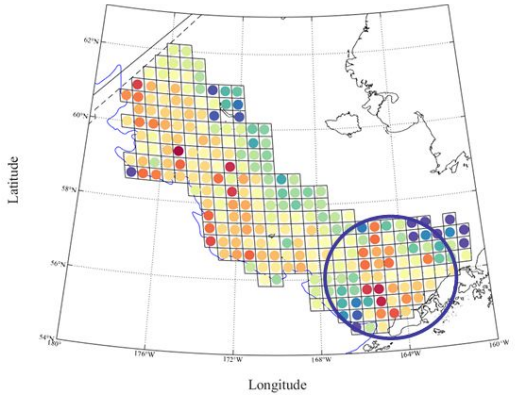
- Extensive presentation on CIE review and planned updates
- **Plan Team recommended using the acoustic-survey design-based estimates and uncertainty for the 2025 assessment, along with other data refinements and conditions (e.g., new FT-NIR generated age data)**
- Plan Team interested in seeing the exploratory model using Russian catches in September 2026 and encouraged ongoing work transitioning from ADMB to RTMB or other platforms (such as Rceattle or Sporc)

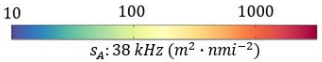
# Acoustic Vessel-of-Opportunity (AVO)

- Annual index of midwater pollock backscatter from bottom trawl (BT) survey acoustics
- No concurrent midwater trawls during the BT survey
- Provides information on midwater pollock in years when the acoustic-trawl survey is not conducted (odd years)
- 2025 estimate is 24% increase from 2024

Thanks to Nathan Lauffenburger



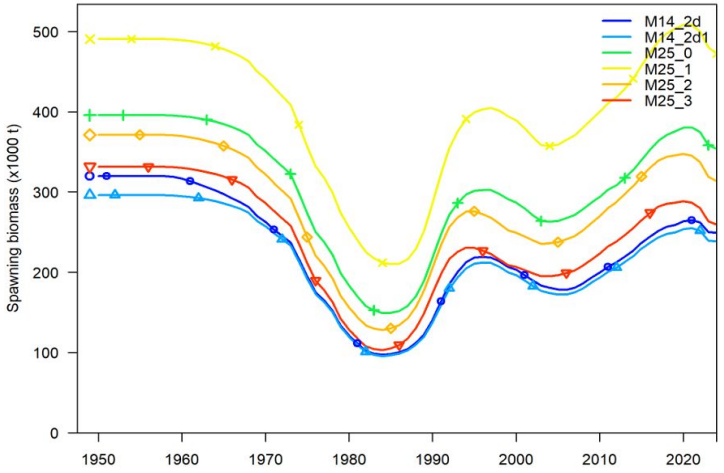



# BSAI Alaska Skate

- Concerns over base model accepted in 2023 (Model 14_2d)
  - Not converged (hitting bounds, high standard errors)
  - Relying on limited age data, some procedural errors in model
- Model Explorations

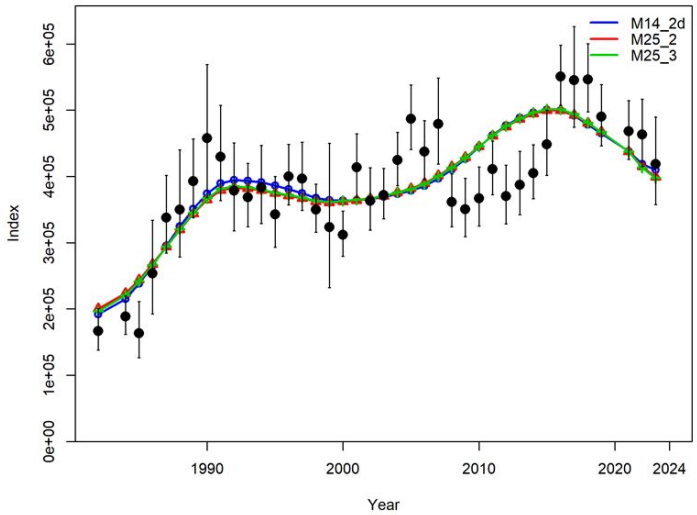
| Model | | Outcome |
|---|---|---|
| 14_2d | 2023 accepted | Not Converged |
| 14_2d1 | Updated SS3 version | Not Converged |
| 25_0 | Fixed growth | Not Converged |
| 25_1 | 25_0 + catchability = 0.836 | Not Converged |
| 25_2 | 25_1 + selectivity | Converged |
| 25_3 | 25_2 + catchability = 1 | Converged |

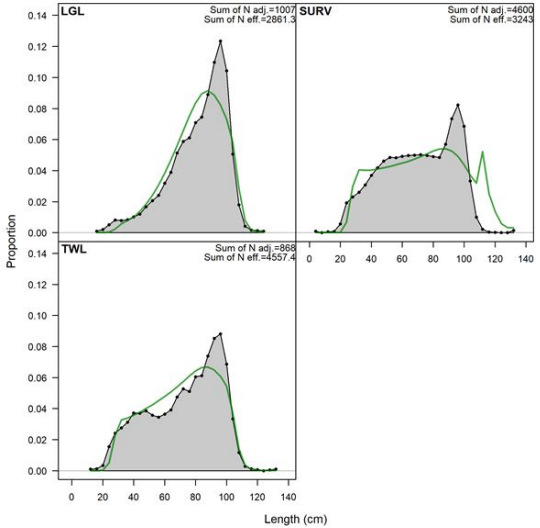



Thanks to Cindy Tribuzio

# BSAI Alaska Skate

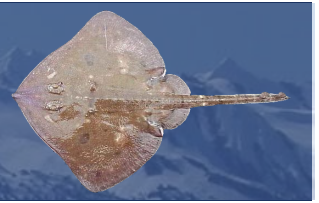
- Concerns over Tier 3 models
  - Small amount of age data, all from > 10 years ago
  - Converged models do not fix the poor fix to the survey index
  - Poor fits to the length composition data




Thanks to Cindy Tribuzio

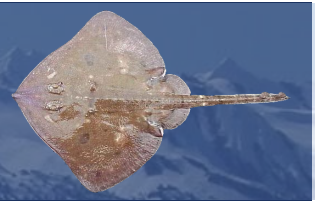
# BSAI Alaska Skate



- Tier 4 and 5 alternatives:
  - Limited capacity for age data for Tier 3 but sufficient for Tier 4 and life history parameters supported by data
  - Species well sampled by the EBS shelf survey
- Length-based models for the future
  - Lot of length data available and many length-based models available for future exploration

Thanks to Cindy Tribuzio

# BSAI Alaska Skate



- Discussion:
  - The Team discussed lack of large skates (>110 cm) in the length data potentially due to large fish moving out of the survey area or outswimming the survey net
  - The Team also discussed poor fits to the survey and a potential shift in catchability from 2008-2015
- Recommendations for November:
  - **Current model 14_2d with author discretion on updating data**
  - **Model 25_2 or Model 25_3 with fixed selectivity to ensure convergence**
  - **Tier 4 model with sensitivities if available (priority)**
  - **Tier 5 model (priority)**

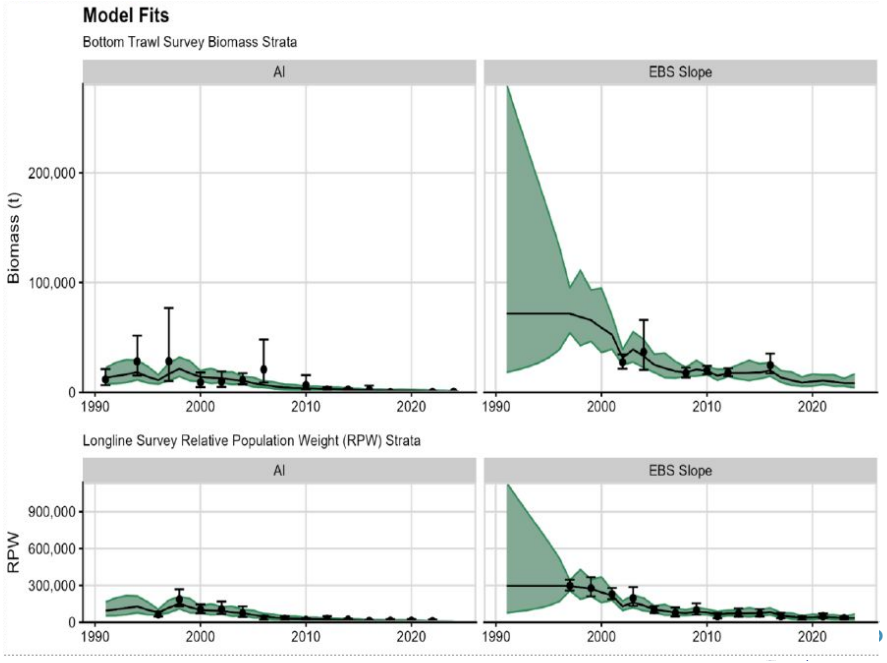
# Greenland Turbot (Model explorations)

- Data updates (d1-d5 series)
  - Survey length data updates
  - Linear interpolation of AFSC longline RPNs
- Bottom trawl input sample size using surveyISS (Model 25.1)
- Fixing the stock-recruitment autocorrelation parameter (Model 25.2)
- Analytical solution for survey catchability (Model 25.3)
- Exploration of model start year (Models 25.4 and 25.5)

Thanks to Meaghan Bryan

# Greenland Turbot (Apportionment)

- REMA model for apportionment
  - Consistent with other stocks to use multiple surveys
  - Averages BS/AI split over previous 10 years
    - For 2025 11.2% to the Aleutian Islands from 15.7% in 2024




Thanks to Meaghan Bryan

# Greenland Turbot

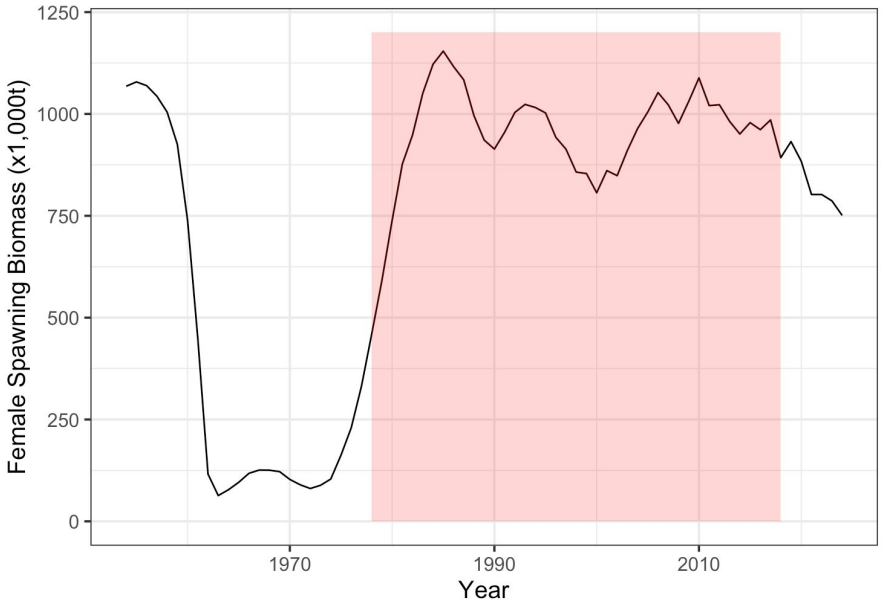
- Discussion & Recommendations:
  - The Team recommended the new REMA method be used for spatial apportionment between the Aleutian Islands and Bering Sea as it was the best available science based on the limitation of slope survey data and noted it was an improvement to the previous approach.
  - **The Team highlighted and supported the author's intent to bring forward a tier 5 alternative model for comparison to the tier 3 model in November.**
  - **The Team agreed with the author's recommendation to bring forward models 16.4c, 25.3, and 25.4 in November**

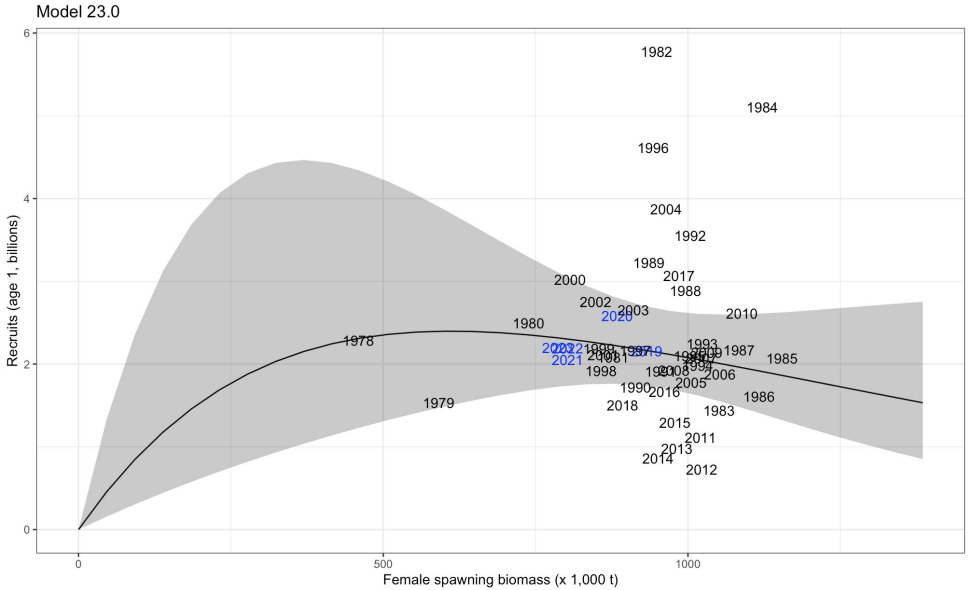
# Yellowfin Sole Proposed Changes


- Proposed changes: Shift from Tier 1 → Tier 3
  - Unreliable recruitment curve, uninformed at the origin
- Bridge bespoke ADMB model → SS3
  - Consistency with other flatfish assessments and easier transition to FIMS
- Remove temperature covariate, retain survey start date for q
  - Eliminate double use of temperature data
- Change survey inputs sample size to bootstrap values from SurveyISS
  - Consistency with other assessment models

Thanks to Ingrid Spies and Meaghan Bryan

# Yellowfin Sole (Shift from Tier 1 → Tier 3)

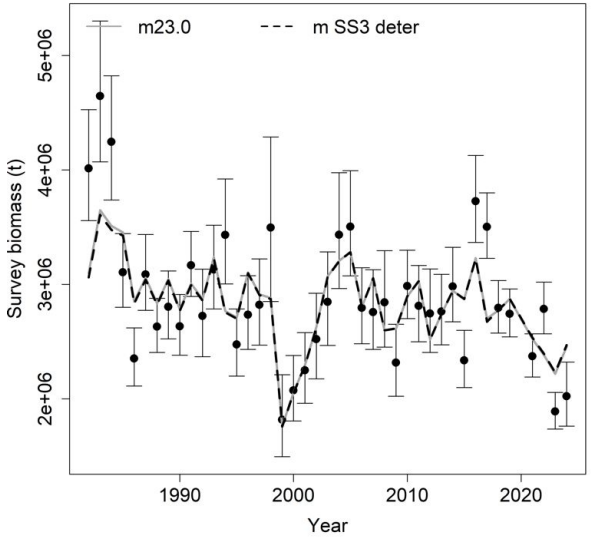


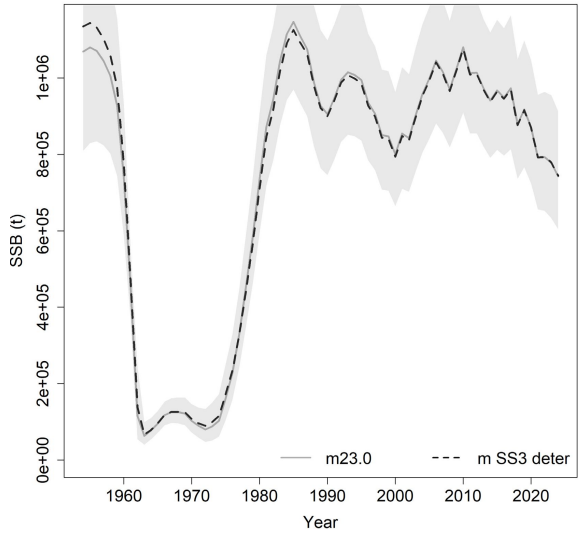




- The most informative data are survey age comps- 1980 is the first year of the standard survey

- Curve uninformed at the origin
- Unreliable PDF of $F_{MSY}$

# Yellowfin Sole (Bridging to SS3)

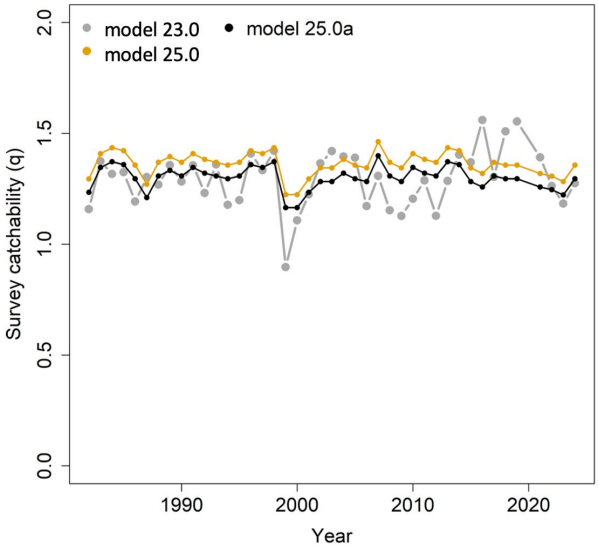


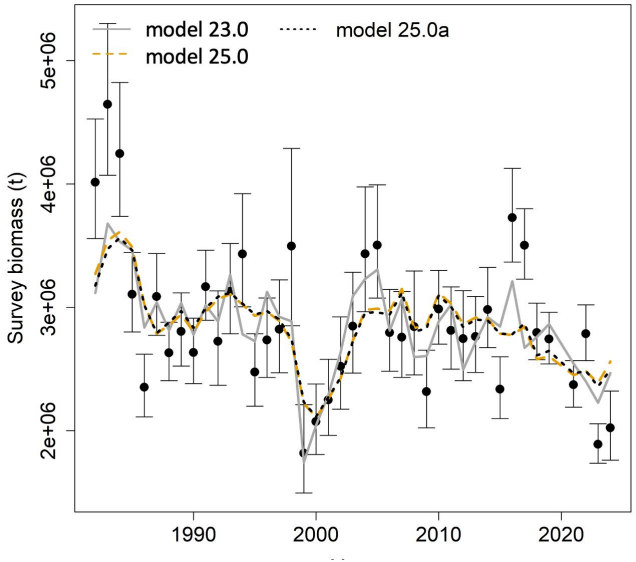

- Model fits are nearly identical between ADMB and SS3 deterministic model for all data components.
- Differences in results are minimal
- Initial difference due to how models incorporate mortality to initial numbers at age

# Yellowfin Sole (Model alternatives )

| Model | Description |
|---|---|
| **23.0** | Accepted ADMB model |
| **25.0** | Estimation version with SS3; q linked to survey start date |
| **25.0a** | 25.0 W/ ISS survey age comp |




- Differences in catchability due to dropping temperature covariate for SS3 models




- Results in difference in fit to survey index

# Yellowfin Sole


- Discussion & Recommendations:
  - **Team recommended presenting Models 23.0 and 25.0a in November**
    - Model 25.0a is preferred because it:
      - Moves to Tier 3 as pdf of $F_{MSY}$ not reliable
      - Transitions to SS3 as requested by the SSC
      - Removes redundant use of temperature covariates
      - Updates data weighting to best available science

# Northern Rockfish

- Model Explorations:
  - Model 25_1: Same as the base (Model 21) but removing survey selectivity constraint and not fixing survey selectivity for ages > 30
  - Model 25_2: Split-sex model with same priors and constraints as the base
  - Model 25_3: Split-sex version of Model 25_1
  - Models 25_4-6: is the base with increasing the CV on the AI survey prior, 5-year time blocks on AI catchability, 5-year time blocks on AI survey selectivity
  - Models 25_7-9: same as Models 25_4-6 but starts with the split-sex Model 25_2

Thanks to Paul Spencer

# Northern Rockfish

- Discussion & Recommendations:
  - The Team discussed time-varying catchability noting potential mechanisms (e.g., environment, patchy distribution) but did not recommend additional research at this time or to bring forward any time-varying catchability models in November
  - The Team noted split-sex models were broadly similar to combined-sex models, but that reference points and management outcomes were not presented and could be informative
- Recommendations for November:
  - **Base (Model 21) and the split-sex model (Model 25_2)**

# BSAI Atka Mackerel ESP

- Draft Full Ecosystem and Socioeconomic Profile (ESP):
  - Presentation on the advancement of the BSAI Atka mackerel ESP
    - Emphasizes spatial structuring across the eastern, central, and western Aleutians to evaluate regionally explicit hypotheses about recruitment variability, growth, and fishery performance.
    - Provides a foundation for process-informed, climate-resilient assessments, with a full ESP planned for 2026.

Thanks to Jane Sullivan

# BSAI Atka Mackerel ESP

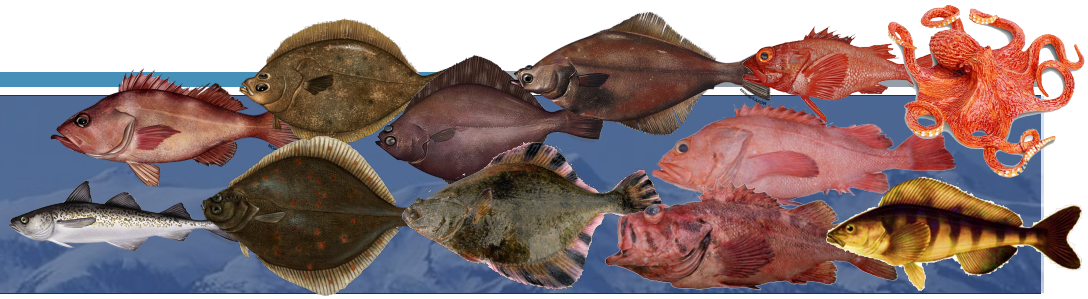
- Discussion & Recommendations:
  - Team discussed the proposed indicator suite and timeline.
  - Recommended considering pre- and post-warming contexts in the Aleutians and consider including Steller sea lion pup counts and killer whale predation as potential indicators.
  - Noted that the weekly TAC utilization indicator must be interpreted cautiously, since fleet behavior often reflects multi-species targeting rather than ecosystem conditions.
  - Authors should explore the use of MOM6 indices as empirical data are scarce for the AI.
  - **The authors were asked to present the draft ESP in September 2026**

# Catch Report Table

(stocks without 2025 assessment)

| Stock | Catch (as of 9/14/25) | EBS Shelf Survey Biomass (t) | Biomass Relative to Last Year |
|---|---|---|---|
| AI Pollock* | 4,125 | NA | NA |
| Bogoslof Pollock* | 334 | NA | NA |
| Arrowtooth Flounder | 7,495 | 491,918 | -16% |
| Kamchatka Flounder | 4,297 | 33,231 | 17% |
| Northern Rock Sole | 28,543 | 1,490,955 | 4% |
| Flathead Sole | 6,665 | 714,106 | -1% |
| Alaska Plaice | 6,206 | 333,810 | -5% |
| Other Flatfish | 5,113 | NA | NA |
| Pacific Ocean Perch* | 24,465 | NA | NA |
| Blackspotted/Rougheye | 481 | NA | NA |
| Shortraker* | 216 | NA | NA |
| Other Rockfish | 819 | NA | NA |
| Atka Mackerel* | 70,909 | NA | NA |
| Sharks* | 154 | NA | NA |
| Octopus* | 280 | NA | NA |

# Catch Report



- No catches above OFL
- Two stocks above TAC, well below ABC
- 2025 survey biomass estimates of the EBS shelf are similar to last year's estimates
- Please see full assessments for more details

Thanks to all Authors of catch reports!!!

# Proposed Specifications Team recommended (1 of 2)

**Table 1. Plan Team Proposed recommended OFL, ABC for Groundfish in the Bering Sea and Aleutian Islands (metric tons) for 2026-2027** **9/14/2025**

| Species | Area | 2024 OFL | 2024 ABC | 2024 TAC | Catch as of 12/31/2024 | 2025 OFL | 2025 ABC | 2025 TAC | Catch as of 9/14/2025 | Plan Team Proposed 2026/2027 OFL | Plan Team Proposed 2026/2027 ABC | Plan Team Proposed 2026/2027 TAC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pollock | EBS | 3,162,000 | 2,313,000 | 1,313,580 | 1,311,261 | 2,957,000 | 2,417,000 | 1,389,000 | 1,216,540 | 2,496,000 | 2,036,000 | |
| | AI | 51,516 | 42,654 | 5,420 | 4,999 | 55,728 | 46,051 | 5,000 | 4,125 | 56,231 | 46,437 | |
| | Bogoslof | 115,146 | 86,360 | 250 | 23 | 77,354 | 58,015 | 250 | 334 | 77,354 | 58,015 | |
| Pacific cod | BS | 200,995 | 167,952 | 147,753 | 142,783 | 183,509 | 153,617 | 133,602 | 117,149 | 169,243 | 141,520 | |
| | AI | 18,416 | 12,431 | 8,080 | 4,169 | 16,782 | 13,376 | 8,694 | 3,355 | 16,273 | 12,973 | |
| Sablefish | BSAI/GOA | 55,084 | 47,146 | n/a | 6,333 | 58,532 | 47,605 | n/a | 3,957 | 57,797 | 47,008 | |
| | BS | n/a | 11,450 | 7,996 | 4,591 | n/a | 13,203 | 8,496 | 3,055 | n/a | 13,037 | |
| | AI | n/a | 13,100 | 8,440 | 1,742 | n/a | 11,566 | 7,940 | 902 | n/a | 11,421 | |
| Yellowfin sole | BSAI | 305,298 | 265,913 | 195,000 | 91,192 | 299,247 | 262,557 | 152,000 | 58,785 | 305,039 | 267,639 | |
| Greenland turbot | BSAI | 3,705 | 3,188 | 3,188 | 768 | 2,598 | 1,678 | 1,678 | 561 | 2,059 | 1,328 | |
| | BS | n/a | 2,687 | 2,687 | 462 | n/a | 1,415 | 1,415 | 381 | n/a | 1,120 | |
| | AI | n/a | 501 | 501 | 305 | n/a | 263 | 263 | 180 | n/a | 208 | |
| Arrowtooth flounder | BSAI | 103,280 | 87,690 | 14,000 | 10,660 | 104,428 | 88,683 | 14,000 | 7,495 | 102,472 | 87,035 | |
| Kamchatka flounder | BSAI | 8,850 | 7,498 | 7,498 | 5,172 | 8,019 | 6,800 | 6,800 | 4,297 | 7,790 | 6,606 | |
| Northern rock sole | BSAI | 197,828 | 122,091 | 66,000 | 29,855 | 165,444 | 157,487 | 67,000 | 28,543 | 166,220 | 158,225 | |
| Flathead sole | BSAI | 81,605 | 67,289 | 35,500 | 13,176 | 101,621 | 83,807 | 27,000 | 6,665 | 106,283 | 87,700 | |
| Alaska plaice | BSAI | 42,695 | 35,494 | 21,752 | 10,399 | 34,576 | 28,745 | 15,903 | 6,206 | 33,965 | 28,230 | |
| Other flatfish | BSAI | 22,919 | 17,189 | 4,500 | 3,197 | 26,083 | 19,562 | 4,500 | 5,113 | 26,083 | 19,562 | |

# Proposed Specifications Team recommended (2 of 2)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Pacific Ocean perch | BSAI | 49,010 | 41,096 | 37,626 | 37,095 | 44,594 | 37,375 | 33,458 | 24,465 | 43,084 | 36,578 |
| | BS | n/a | 11,636 | 11,636 | 11,746 | n/a | 10,121 | 10,121 | 7,315 | n/a | 9,905 |
| | EAI | n/a | 7,969 | 7,969 | 7,792 | n/a | 6,278 | 6,278 | 3,305 | n/a | 6,144 |
| | CAI | n/a | 5,521 | 5,521 | 5,250 | n/a | 5,559 | 5,559 | 3,453 | n/a | 5,441 |
| | WAI | n/a | 15,970 | 12,500 | 12,308 | n/a | 15,417 | 11,500 | 10,391 | n/a | 16,058 |
| Northern rockfish | BSAI | 23,556 | 19,274 | 16,752 | 8,809 | 22,848 | 18,694 | 12,000 | 7,093 | 22,284 | 18,232 |
| Blackspotted/Rougheye Rockfish | BSAI | 761 | 569 | 569 | 639 | 838 | 706 | 706 | 481 | 902 | 766 |
| | EBS/EAI | n/a | 388 | 388 | 201 | n/a | 408 | 408 | 169 | n/a | 441 |
| | CAI/WAI | n/a | 181 | 181 | 439 | n/a | 298 | 298 | 312 | n/a | 325 |
| Shortraker rockfish | BSAI | 706 | 530 | 530 | 177 | 631 | 473 | 473 | 216 | 631 | 473 |
| Other rockfish | BSAI | 1,680 | 1,260 | 1,260 | 1,361 | 1,406 | 1,054 | 1,054 | 819 | 1,406 | 1,054 |
| | BS | n/a | 880 | 880 | 788 | n/a | 639 | 639 | 403 | n/a | 639 |
| | AI | n/a | 380 | 380 | 573 | n/a | 415 | 415 | 416 | n/a | 415 |
| Atka mackerel | BSAI | 111,684 | 95,358 | 72,987 | 72,172 | 122,622 | 103,247 | 82,000 | 70,909 | 107,889 | 92,361 |
| | EAI/BS | n/a | 41,723 | 32,260 | 31,764 | n/a | 46,650 | 39,000 | 33,231 | n/a | 41,731 |
| | CAI | n/a | 16,754 | 16,754 | 16,654 | n/a | 26,511 | 24,443 | 20,669 | n/a | 23,716 |
| | WAI | n/a | 36,882 | 23,973 | 23,754 | n/a | 30,087 | 18,557 | 17,009 | n/a | 26,914 |
| Skates | BSAI | 45,574 | 37,808 | 30,519 | 27,146 | 44,086 | 36,523 | 27,646 | 16,608 | 43,285 | 35,833 |
| Sharks | BSAI | 689 | 450 | 400 | 174 | 689 | 450 | 400 | 154 | 689 | 450 |
| Octopuses | BSAI | 6,080 | 4,560 | 400 | 246 | 6,080 | 4,560 | 400 | 280 | 6,080 | 4,560 |
| Total | BSAI | 4,609,077 | 3,476,801 | 2,000,000 | 1,781,805 | 4,334,715 | 3,588,066 | 2,000,000 | 1,584,149 | 3,849,059 | 3,189,555 |

Sources: 2024 OFLs, ABCs, and TACs and 2025 OFLs and ABCs are from harvest specifications adopted by the Council in December 2023 and December 2024 respectively; 2024 catches through December 31, and 2025 catches through September 14, 2025 from AKR Catch Accounting.

# BSAI Halibut Discard Mortality Rates (DMRs)

| Area | Gear | Operation | 2025 DMRs (specified) | 2026/27 DMRs (recommended) |
|---|---|---|---|---|
| BSAI | Pot | All | 21%[b] | 19%[b] |
| | Hook-and-line | CP | 9% | 10% |
| | Hook-and-line | CV | 9%[a] | 10%[a] |
| | Non-pelagic trawl | Mothership / CP | 86% | 86% |
| | Non-pelagic trawl | CV | 67% | 62% |
| All | Pelagic trawl | All | 100%* | 100%* |

Thanks to Michael Fey (AKFIN) and other Halibut DMR Working Group members: Jen Cahalan (PSMFC), Jennifer Ferdinand (NMFS AFSC), Krista Melani (NMFS AKRO), Jason Gasper (NMFS AKRO), Ian Stewart (IPHC)

# Thank You!

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