



Meeting of the Bering Sea/Aleutian Islands Groundfish Plan Team

Plan Team Report

September 17-18, 2025

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 ABL	Jane Sullivan	AFSC ABL
Allan Hicks	IPHC	Steven Whitney	NMFS AKRO
Lisa Hillier	WDFW		

Introduction

The Bering Sea Aleutian Islands (BSAI) Groundfish Plan Team meeting was held virtually via Zoom on Wednesday and Thursday, September 18-19, 2024. Roughly 120 people attended the meeting signing in remotely, but attendance varied throughout the meeting. All documents and presentations were posted to the Team's electronic agenda. All presentations are also linked in the header for each agenda item in this report.

The September Groundfish Plan Team meeting is when proposed models for full operational assessments are presented by assessment authors and when harvest projections (if scheduled) are reviewed. Update operational assessments will be reviewed in November.

EBS bottom trawl survey

Duane Stevenson presented the updates for the eastern and northern Bering Sea bottom trawl surveys. The Team appreciates the quick turn around from the end of the survey to have data available in time for the meeting. The presenter highlighted that the CTD and dissolved oxygen data were not available for this year due to contracting delays, but those data should be available next year to continue the time series.

With regards to Alaska plaice, the Team noted a fairly consistent decline in the survey biomass estimates and asked if there could be a behavioral response to temperature, or a change in spawn timing which would change movement in and out of the survey area? Duane explained that this species tends to be cold water associated, and does not behave like yellowfin sole.

Jeremy Sterling of the Marine Mammal Laboratory commented that in the last few years, fur seals have died from ingesting bivalves with toxic algal levels, and asked about harmful algal blooms and if the survey collects any bivalves for testing? The survey does not encounter many bivalves and has not collected any for testing.

The Team commended the new species identification guides and asked if they were widely available. Duane stated that they are still in draft form and not yet available for the broader audience.

AI Atka mackerel ESP

Jane Sullivan presented the Ecosystem and Socioeconomic Profile (ESP) for Bering Sea and Aleutian Islands Atka mackerel. The ESP is designed to integrate ecological, environmental, and socioeconomic indicators into the stock assessment process for this key commercial species and important prey item for Steller sea lions. The proposed framework emphasizes spatial structuring across the eastern, central, and western Aleutians to evaluate regionally explicit hypotheses about recruitment variability, growth, and fishery performance. While not intended to guide near-term management, this ESP will provide a foundation for process-informed, climate-resilient assessments, with a full ESP planned for 2026.

The Team discussed the proposed indicator suite and timeline. Members of the public recommended considering pre- and post-warming contexts in the Aleutians and suggested including Steller sea lion pup counts and killer whale predation as potential indicators. They also noted that the weekly TAC utilization indicator must be interpreted cautiously, since fleet behavior often reflects multi-species targeting rather than ecosystem conditions. A member suggested exploring the use of MOM6 indices, if validated and available, for integration into the SCEAM/DSEM causal workflow.

The Team supported the proposed timeline for developing a full ESP and **recommended that the authors present the draft ESP in September 2026** to allow adequate time for Plan Team review in advance of the November stock assessment cycle.

BSAI BS/RE Accountability Measures

Diana Stram provided an informational overview of BSAI Accountability Measures (AMs) and a revised list of potential AMs for BSRE rockfish for Council consideration. This discussion paper will be reviewed during the Council's 2025 harvest specification cycle. The Team had no comments or clarifying questions.

Yellowfin Sole

Meaghan Bryan and Ingrid Spies presented a suite of models as part of the yellowfin sole operational stock assessment. They also considered Tier 1 vs Tier 3 options, given the lack of data at low stock sizes to inform the stock-recruitment relationship.

The Team expressed appreciation for the clear presentation and the extensive model development, noting that the assessment benefitted from discussions within the Flatfish Working Group. Members agreed that bridging to SS3 would enhance reproducibility, provide greater flexibility for model development, and facilitate eventual transition to FIMS.

The Team supported the authors' conclusion that yellowfin sole should move from Tier 1 to Tier 3, citing the lack of a reliable pdf of BMSY and the precedent set by EBS pollock in 2024. In considering stock–recruitment curves, the Team discussed the choice of a Ricker model over a Beverton–Holt formulation; the authors explained that the Ricker was more consistent with observed dynamics, potentially reflecting cannibalism or competition, and had provided a better fit to the available data. The Team also noted that if yellowfin sole were retained in Tier 1, Models 25.0 and 25.0a would require different parameterization to meet Tier 1 standards.

In addition, the Team agreed with the authors' rationale for removing temperature as a covariate on survey catchability, to avoid redundancy with the VAST survey index, and for updating survey age composition weighting to reflect best practices. To improve diagnostics, **the Team recommended showing fits to the aggregated age compositions.**

Looking ahead, **the Team recommended bringing forward Models 23.0 and 25.0a for November.** Finally, **the Team recommended that the bridging exercise be included in the appendix for November, so that authors do not need to bring forward the full bridging steps again.**

EBS Pollock

Jim Ianelli presented on the outcomes of a recent Center for Independent Experts (CIE) review of the EBS pollock stock assessment and corresponding planned or implemented updates to the assessment framework. Analyses presented included an exercise in which various sets of data and types were dropped from the assessment to evaluate their sensitivity. Jim noted that selectivities were fixed at the estimated values when age composition data were dropped.

Results from recent research done by the Midwater Assessment and Conservation Engineering (MACE) group were provided with respect to the acoustic biomass indices (Urmy et al. in review). Jim presented results using these and associated uncertainty estimates compared to the conventional design-based method. It was noted that the point estimates differed between these two indices and this needed further study. One suggestion was that if the Urmy approach was to be used, the uncertainty estimates (CVs) should be applied to the current design-based point estimates. Representatives from the MACE group also expressed some caution about the assessment author using the Urmy estimates before they have been published (the manuscript is currently in review). In light of this concern **the Team recommended that the existing design-based point estimates and uncertainty should be used for the 2025 assessment cycle.**

It was noted that the CIE review suggested conducting the assessment with the Russian catches included as a sensitivity; the Team agreed that such analyses are exploratory/research-oriented and need not be prepared for November, but would be interested in seeing those results for next September's GPT meeting. The Team encourages Jim's ongoing switch from the pollock assessment model coded in ADMB to RTMB.

The Team offered feedback on the format of Jim's report and presentation, which were both based on an online/html format. Some Team members expressed enthusiasm for this approach, and noted the ease of readability given the large amount of content presented. Other members found using the online document as the basis for the presentation confusing. Additionally, there was discussion about compatibility of this format with archiving the documents, and it was requested that in the future, a pdf version be posted to the eAgenda as soon as it is available.

A presentation on data from acoustic vessels of opportunity (AVO) was also provided; The Team commended the speed with which these data were prepared and ready for presentation.

Greenland Turbot

Meaghan Bryan presented preliminary results of the BSAI Greenland turbot assessment. While discussing fishery landings, members of the public noted fishery performance is influenced by the nature of a small boutique fishery, avoidance of rockfish species, and recent experimentation with pots. The Team discussed the availability of additional unaged otoliths and agreed with the Author's plan to consider the utility of additional age information. A Team member suggested future exploratory work may include using early trawl fishery age information to inform stock recruitment potentially improving the estimate of unfished equilibrium recruitment (R0).

The Team supported the authors' future research plans, particularly exploring the appropriate start year for the assessment and evaluating using the regime parameter in SS3. **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. **For November, the Team recommended bringing forward models 16.4c, 25.3, and 25.4.**

BSAI Skates

Cindy Tribuzio presented the skate stock assessment. The assessment authors noted that the model accepted in 2024 (model 14_2d) was not converged because some parameters were on bounds and some parameters had very high relative standard errors. The authors developed five additional models, two of which showed good convergence when growth and some selectivity parameters were fixed. The 2025 models also corrected the recruitment bias adjustment, fixed growth at external estimates, and included other minor specification updates. While there is a paucity of age data to inform Tier 3 models, available age data remain valuable for demographic parameters such as age at maturity and age at length. In contrast, there is an abundance of length data available for modeling.

The assessment also explored Tier 4 and Tier 5 models and considered length-based methods as potential alternatives to Tier 3 age-structured models, which often struggle to converge without fixing parameters. The Team supported the authors' suggestion to evaluate sensitivities for the Tier 4 model and expressed interest in further development of length-based approaches for consideration in the 2027 assessment.

The Team discussed the lack of large skates in the length composition data, showing a steep drop in frequency of skates greater than approximately 110 cm. Some skates larger than 110 cm are observed in the survey and fisheries. However, data from the hook-and-line fisheries that likely catch large skates are lacking due to inconsistent identification of skates to species and the release of large skates before they are on the vessel to be sampled. The Team discussed reasons that few large skates are present in the available data including: 1) larger fish may move out of the area sampled by the survey and covered by the fishery, and 2) larger skates may be able to outswim the net more easily than small skates. Both of these concepts would support dome-shaped selectivity.

The Team also discussed the poor fits to the survey. The data indicate a potential change in catchability from about 2008 to 2015, which may be resulting in poor fits to other years. Models to investigate this were not specified at this time.

The Team thanked the authors for their investigation on the non-convergence issues and recommended the following models be brought forward for consideration in November:

- The current model 14_2d should be brought forward even though parameters were on bounds and it was not converged. The Team leaves it to the authors to decide if they would like to update this model with additional data.
- Model 25_2 or 25_3 with fixed selectivity parameters to ensure a converged Tier 3 model is available as an alternative.
- Tier 4 model, with sensitivities if available.
- Tier 5 model

The Team agreed that priority should be on the Tier 4 and Tier 5 models.

BSAI Northern Rockfish

Paul Spencer presented alternative model explorations for the northern rockfish assessment in response to SSC and previous Team comments. The alternative models included split-sex models and models with time-varying survey catchability or selectivity. Paul found that none of the alternatives provided sufficient improvements over the current base model to recommend adoption at this time.

The Team discussed the potential for time-varying survey catchability, noting possible mechanisms such as environmental change, shifts in spatial distribution, or random variation due to patchy distribution and tow selection. However, the Team did not reach consensus on whether time-varying catchability should be further pursued in the assessment model. **The Team did not recommend additional research on this topic and did not recommend bringing forward any time-varying catchability models in November.**

The Team discussed whether to bring forward a split-sex model in November. Members recognized the substantial work involved in developing this model and noted that results were broadly similar to the combined-sex model currently used for management. However, they highlighted that reference points and management outcomes, such as relative spawning biomass, were not presented and that further evaluation of the split-sex model could be informative. **The Team recommended that the authors bring forward both the current base model and the split-sex model (25.2) in November, ensuring that all management outcomes and reference points are included.**

Proposed harvest specifications

Steve Whitney presented the proposed 2026 harvest specifications and reviewed reallocations over specified TAC.

The Team recommended approval of the 2026 specifications for use in informing the proposed rule in 2026 and 2027. The Team also recommended the 2026 and 2027 halibut DMRs as presented by the Halibut DMR Working Group, to be included in the proposed specifications.