

# **Draft SSC Report October 2024**



**SSC Presentation to Council**

# SSC Administrative Discussion

- The SSC received a presentation on administrative items
- The SSC **welcomes** and looks forward to working with new Council members and NPFMC staff
- The SSC **appreciates** the paper describing how the SSC agenda is set and had several suggestions to help with further prioritization
  - Prioritizing LAPP reviews with major fishery changes
  - Prioritizing workplans for such LAPP reviews
  - Strategic topics for future planning, which may include workshops
  - Notification of updated ACEPO or Economic SAFEs availability if SSC review isn't possible
  - Further streamlining SSC review of full and update assessments

# B1 Plan Team Nominations

- The SSC reviewed the nominations of James Thorson (NOAA-AFSC) and Sophia Wassermann (NOAA-AFSC) to the GOA groundfish plan team
  - The SSC *finds* these nominees to be well-qualified and recommends the Council approve their nomination.

# B4 AFSC Report

- Report focused on survey modernization and socio-economics program updates
  - GOA long-line survey cancelled, AI trawl survey reduced 20%, Winter Acoustic survey reduced.
  - Survey Modernization underway, continuing through 2027
  - Excellent, new regional quantitative analysis of regional-scale socio-economic status

# B4 AFSC Report

- The SSC ***recommends*** assessment authors track and communicate survey changes that impact their assessments and how they account for those changes
- The SSC ***recommends*** a time-series of spatial sampling metrics (e.g., swept area) to track changes
- The SSC ***supports*** further discussion/review of survey modernization (e.g. SSC workshop).
- The SSC ***supports*** efforts to find a vehicle to keep regional socio-economic statistics available and updated.

# C3 BSAI/GOA Groundfish Harvest Specifications

## General Groundfish Comments - Harvest Projections

- The SSC **recommends** NMFS consider changes to the harvest projection and catch update timing/process to reduce workload:
  - Changes in catch and ABC/OFL small and not a conservation concern for the short “off-cycle” period.
  - Catch updates only for stocks on a 2-year full/operational assessment cycle (i.e., dropping harvest projections)
  - For stocks on a 4-year full/operational assessment cycle, do a harvest projection in year 3 (mid-way) and catch updates for the other “off-years”
  - The harvest projection document should be augmented with updated survey biomass trends and “red flag” metrics if available

# C3 BSAI/GOA Groundfish Harvest Specifications

## General Groundfish Comments - Plan Team Reports

- The SSC ***appreciates*** the steps taken by the GPTs to clarify the different assessment types (full, update, research models) and the models recommended for review (base model, any alternatives)
- The summary tables in the BSAI/GOA presentations were helpful
- The SSC ***recommends*** a similar/simpler table noting the assessment and assessment type coming out of the GPT meetings

# C3 BSAI/GOA Groundfish Harvest Specifications

## Preliminary Harvest Specifications

- For both the BSAI and GOA:
  - The SSC **recommends** approval of the proposed 2025/2026 groundfish specifications as provided by the BSAI/GOA GPT.
  - The SSC **supports** the BSAI/GOA GPT's recommendation to approve the Halibut DMR Working Group recommendation for proposed halibut DMRs for 2025/2026



# C3 Joint Groundfish Plan Team Report

## ESR Climate Update

- The SSC **notes** that conditions following a recent warm period have largely returned to somewhat cooler conditions that should continue into 2025.
- No specific concerns for groundfish were identified
- The SSC **supports** continued investigation into why some biological indicators are counter to the generally favorable conditions state-wide.

# C3 Joint Groundfish Plan Team Report

## Age and Growth Update

- The SSC notes the need for updated maturity data.
- The SSC ***recommends*** that stock assessments authors highlight need for updated maturity data in “Data gaps and research priorities”.

# C3 Joint Groundfish Plan Team Report

## Other items

- SSC received reports on the EBS trawl survey, ecosystem surveys, REMA diagnostics, and assessment guidelines
- The SSC *appreciates* the updates and had no specific recommendations (but general discussions on surveys)
- The SSC notes the revised three levels of concern (previously 4) in risk tables

# C3 BSAI Groundfish Harvest Specifications

## Acoustic Surveys

### Bogoslof area

- The SSC received a report on the Bogoslof Winter Acoustic Survey and had no recommendations.

### Eastern Bering Sea

- The SSC received a summary of the EBS Acoustic Survey and Acoustical Vessels of Opportunity (AVO) index
- There is a very strong correlation (0.90) between biomass estimates from the acoustic trawl survey and acoustic backscatter from the AVO survey
- The SSC **looks forward** to future updates and discussions on this topic

# C3 BSAI Groundfish Harvest Specifications

## Harvest Projections

- Harvest projections including fishery trends and updated catch for:
  - Northern rockfish
  - Arrowtooth flounder
  - Skate complex (Alaska skate, other skates)
- The SSC **supports** the authors' and BSAI GPT's recommended OFLs and ABCs for these stocks
- The SSC **supports** BSAI GPT's recommendation that biomass trends for stocks with harvest projections are included in the survey presentations

# C3 BSAI Groundfish Harvest Specifications

## EBS Pollock

- The SSC notes that the trawl survey biomass is up 74% from 2023
- Author provided a number of analyses showing the sensitivity of stock-recruit relationship to model assumptions
- GPT recommended Tier 3 designation going forward
- No new models proposed for November
- The SSC **recommends** bringing Tier 1, 2, and 3 alternatives forward
- The SSC **requests** objective method of selectivity choices for biomass projections

# C3 BSAI Groundfish Harvest Specifications

## EBS Pacific Cod

- Trawl survey biomass similar to 2023 (-4%)
- The SSC **recommends** two models in addition to the base that deal with ageing error and larger size bins in agreement with the GPT
- The SSC **suggests** an additional model with the simplest survey selectivity and ageing error assumptions
- The SSC **recommends** continued exploration of the influence of using different length bins (1 mm vs 5 mm) in the assessment

# C3 BSAI Groundfish Harvest Specifications

## Aleutian Islands Pacific Cod

- 2024 AI survey biomass similar to 2022 (+2.3%)
- The SSC **concur**s with GPT recommendation for 3 age-structured models and two Tier 5 models
  - Tier 3 models vary in growth parameters and a new natural mortality block related to MHW
- The SSC **recomm**ends an additional model without natural mortality block and traditional growth model (LVB)
- The SSC **recomm**ends further exploration of biological mechanisms for higher natural mortality and temperature relationship



# C3 BSAI Groundfish Harvest Specifications

## Alaska Plaice

- The SSC **supports** transition of the model from ADMB to Stock Synthesis (SS3)
- The SSC **concur**s with BSAI GPT recommendation of 2 models for 2024 assessment cycle:
  - Bridging model in SS3 that is most similar to previous model
  - Alternative model with updated inputs and parameter estimates
- The SSC **supports** BSAI GPT recommendations for additional documentation in full assessment (diagnostics, retrospective analyses)

# C3 BSAI Groundfish Harvest Specifications

## Northern Rock Sole

- The SSC **concur**s with BSAI GPT recommendation of 2 models for 2024 assessment cycle
  - previous model
  - previous model but with updates, including AFSC input sample sizes and estimation of female M
- The SSC **support**s BSAI GPT recommendations for future model explorations including a number of technical improvements

# C3 BSAI Groundfish Harvest Specifications

## Greenland Turbot

- The SSC **concur**s with BSAI GPT recommendation of 3 models for 2024 assessment cycle
- The SSC **support**s BSAI GPT recommendation to include input sample size reweighting option if time allows

# C3 BSAI Groundfish Harvest Specifications

## Pacific Ocean Perch

- The SSC **concur**s with BSAI GPT recommendation of 2 models for 2024 assessment cycle
- The SSC **support**s BSAI GPT recommendation to explore size distribution of POP over time related to changes in the fishing fleet

# C3 BSAI Groundfish Harvest Specifications

## Blackspotted/Rougheye Rockfish

- The SSC **concur**s with BSAI GPT recommendation of bringing forward the previous model for 2024 assessment cycle
- The SSC **recommends** comparison of fishery and survey lengths and ratio of BS/RE to POP in AI survey be reported in the SAFE

# C3 GOA Groundfish Harvest Specifications

## 2025 Acoustic Survey Planning

- Generally biennial pollock survey: 2013-2023, with the 2021 and 2023 surveys at a reduced resolution
- Resource constraints (vessel availability, staffing issues, and financial) caused NMFS to evaluate possibility of dropping this survey
- Pros/cons considered and evaluation showed small impact on pollock assessment
- SSC indicated concern about losses of survey and encouraged vessel time be redirected to the winter pollock survey and other GOA projects

# C3 GOA Groundfish Harvest Specifications

## Harvest Projections

- The SSC ***concur***s with the GPT recommended ABC, OFL, and apportionments for stocks with a harvest projection.
  - MaxABC for all stocks except RE/BS due to model specification concerns
  - ABC reduced by the same method used in 2023

# C3 GOA Groundfish Harvest Specifications

## GOA Pollock

- The SSC appreciates efforts by the authors to address recommendations arising from the May 2024 CIE review
- The SSC **supports** three models be brought forward for the 2024 assessment cycle: 23 (status quo) and 23d in agreement with the GPT
- The SSC **recommends** an additional model 23c, to assess the impacts of data weighting on management quantities
- The SSC **supports** the GPT recommendation on how to account for variation in Shelikof survey catchability based on the proportion of pollock mature



# C3 GOA Groundfish Harvest Specifications

## Pacific Cod

- The SSC ***supports*** extensive efforts by the assessment author to
  - address necessary model and data housekeeping issues
  - address issues with aging and length composition
  - Explore the influence of using different size bin definitions (1 cm, 2 cm, 5 cm)
- The SSC ***recommends*** the status quo model (2019.1b) and the updated model 2019.1e.5cm be brought forward in the 2024 assessment cycle, in agreement with the GPT

# C3 GOA Groundfish Harvest Specifications

## Pacific Cod

- The SSC ***recommends*** continued exploration of the influence of the length bin structure
- The SSC ***recommends*** continued research on including AFSC Longline survey data in addition to AFSC bottom trawl survey data within the REMA model used for apportionment
  - Including environmental linkages

# C3 GOA Groundfish Harvest Specifications

## Thornyhead Rockfish

- The SSC **concur**s with the GOA GPT recommendation of two models
  - the base model (M22) that included three-area specific process errors and additional observation error for each survey,
  - M24.2 that included a single shared process error and additional observation error for each survey, but calculated differently than the base model

# C3 GOA Groundfish Harvest Specifications

## Arrowtooth Flounder Research Models

- 2024 assessment is a harvest projection
- The SSC ***supports*** transition of the model from ADMB to TMB (CEATTLE run as a single-species model) for 2025 assessments

# C3 GOA Groundfish Harvest Specifications

## Demersal Shelf Rockfish CIE Review

- The SSC **appreciates** the work of the outgoing assessment author for the CIE review of the yelloweye rockfish Bayesian surplus production model for the SEO
- The SSC **supports** continued exploration of this model as time allows, recognizing it would take an MSE to implement this model for harvest specifications

# C3 GOA Groundfish Harvest Specifications

## Demersal Shelf Rockfish Update

- The SSC was informed that there is not sufficient funding for an ADF&G ROV survey of DSR abundance in SEO at this time, limiting the data available for future assessments
- The SSC ***supports*** authors obtaining DSR CPUE and length data from the IPHC survey as practicable and possible for the two agencies.

# C3 GOA Groundfish Harvest Specifications

## Dusky and Northern Rockfish Apportionment

- The SSC **agrees** with the authors and the GOA GPT in the value of consistency between the survey indices used in the apportionment calculations (currently design-based with REMA smoothing) with those in the assessment model (model-based using VAST).
- However, the SSC **recommends** comparing the design-based and model-based apportionment methods presented at this meeting with a third apportionment method (VAST index-standardization with temporal smoothing) in December.
- If the comparison of three methods is not possible for the authors due to time constraints, the SSC **recommends** using the current design-based apportionment in December and comparing the three methods at a later date.

# C3 GOA Groundfish Harvest Specifications

## Dusky Rockfish Model Runs

- The SSC **concur**s with the GOA GPT recommendation of two models
  - the base model (M22.3a) that uses a VAST survey index with normal error, and
  - M22.5a that uses a VAST survey index with lognormal error and a change to the conventional range of recruitment years used for computing the mean for the projection model



# C3 GOA Groundfish Harvest Specifications

## Northern Rockfish

- The SSC **concur**s with the GOA GPT recommendation to accept the two improvements to the base model (Model 22.1b) at this meeting
  - Fit the VAST trawl survey biomass index with a lognormal, instead of normal error
  - Use input sample sizes that incorporate growth variability and aging error
- The SSC **concur**s with the GOA GPT recommendation to bring back two models for a bridging analysis in December:
  - the base model converted to RTMB code (Model 24) and
  - the base model with priors placed on selectivity parameters and freely estimated M (Model 24.a)

# C3 GOA Groundfish Harvest Specifications

## Rockfish Spatial Management

- Informational for SSC: Only received GPT report
- The SSC **notes** the GPT concerns about the role of assessment authors in setting apportionment methods.
- Current apportionment is precautionary for stocks with limited stock-structure information, and there currently is not a conservation concern.
- Flexibility in apportionment across areas or changes to areas may be possible for some stocks as described in the discussion paper.

## C3 Sablefish ESP

- The SSC received a presentation on new socioeconomic sablefish indicators for the 2024 ESP
- Part of a broader process to coordinate the presentation of socioeconomic information for consideration by in the Council in management decisions
- The SSC thanks the authors and appreciates the development of the indicators in response to a December 2023 Council motion and SSC request and **recommends** adoption of those indicators with minor refinement
- The SSC **supports** the further development of these types of indicators with the understanding that flexibility will be needed in addressing other species

## C3 Sablefish ESP

- The SSC **recommends** that authors clarify that the ESPs are intended for multiple audiences
  - Authors/Plan Teams/SSC for informing stock status (OFL/ABC)
  - Council can use ESPs to inform TAC setting
- To reduce confusion, the SSC **recommends** using descriptive terms for fishery performance indicators that inform stock status and reserving 'socio-economic indicators' for those that inform TAC setting

# C5 Crew Data Collection - Initial Review

- Analysis of the costs (recordkeeping, collection, administrative) and benefits (monitoring, analytical) of alternative approaches to a uniform crew data collection program
- The SSC *finds* the current document not sufficient to inform the Council for final action

# C5 Crew Data Collection - Initial Review

- The SSC is strongly supportive of collecting crew participation and dependence data in a consistent way
- The SSC **recommends** identifying alternative data elements at different resolutions, and identifying costs and benefits of each, e.g.,
  - Vessel total pay to crew each year
  - Vessel total pay to individual crew each year
  - Vessel total pay to crew by fishery
  - Vessel pay per day by fishery
  - ...

# C5 Crew Data Collection - Initial Review

- The SSC **suggests** reorganization and supplementing analysis
  - Much of information is already present, but needs to better reflect cost and benefit differences among data elements
  - Be as specific as possible about the types of Council actions and analyses that can be informed by different data elements
  - Consider costs or benefits of supplanting EDRs
  - Consider alternative ways to access data elements by drawing on other sources (e.g., CFEC crew license info)
  - Different fleets may have different costs or benefits from providing the same information, especially small scale fleets

# C5 Crew Data Collection - Initial Review

- The SSC ***recommends*** that, once desired data elements are identified by the Council:
  - Data collection experts be used to design the instrument, following best practices
  - Extensive testing is conducted to insure the instrument is understandable and produces meaningful data across the range of federal fleets



# D2 Climate Funding

## Climate Scenarios Workshop Report

- The SSC received report on the Climate Workshop held in Kodiak June 5-6
  - Informational report for the SSC
- The SSC **highlights** the immense effort in planning the workshop
  - Well attended (over 200 participants)
  - Diverse audience and unique opportunity to bring together an amalgam of backgrounds and expertise
- The report was well-written and did a great job synthesizing a diverse range of issues and ideas
- The SSC found the key messages, staff discussion, and baseline sections of the report informative to future processes

# D2 Climate Funding

## Climate Scenarios Workshop Report

- The SSC offered several ideas for advancing the process:
  - Clearly define issue/objectives- what is the problem we aim to solve? What would success look like?
  - Align issues/objectives with ideas from the workshop, existing and necessary future processes, scope (e.g., is this in the Council purview), implementation difficulty
  - The workshop report and other processes (e.g., CCTF) have already started this process, so this is seen a refinement of these ideas.
  - Create a communication strategy that clearly maps initiatives to actions, objectives, metrics, and anticipated timelines

# D2 Climate Funding

## Climate Science/SCS8 Discussion Paper

- The report identified two priority areas related to next steps
- Priority 1: Consider to what extent, and whether, to revise groundfish harvest control rules (HCRs) to be more climate-resilient
  - The SSC generally **supports** the next steps outlined, but noted there is a similar need to be thinking about crab HCRs
- Priority 2: Compile social and economic information to meet the needs of using BSIA and informing Council decision-making
  - The SSC **supports** the proposed next steps and noted the potential for local knowledge to provide insight into current conditions and encouraged scoping current community vulnerability
- The SSC **supports** and would participate in a workshop on this topic