

Scientific and Statistical Committee

Pacific Fishery Management Council
Hilton Orange County/Costa Mesa
Newport Beach 1&2
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November 13-14, 2024

Members in Attendance

Dr. Cheryl Barnes, Oregon State University and Oregon Department of Fish and Wildlife, Newport, OR
Dr. John Budrick, California Department of Fish and Wildlife, San Carlos, CA
Mr. Alan Byrne, Idaho Department of Fish and Game, Boise, ID
Dr. John Field, National Marine Fisheries Service Southwest Fisheries Science Center, Santa Cruz, CA
Dr. Chris Free, University of California Santa Barbara, Santa Barbara, CA
Dr. Owen Hamel, National Marine Fisheries Service Northwest Fisheries Science Center, Seattle, WA
Dr. Michael Hinton, San Diego, CA
Dr. Dan Holland, National Marine Fisheries Service Northwest Fisheries Science Center, Seattle, WA
Dr. Galen Johnson, Northwest Indian Fisheries Commission, Olympia, WA
Dr. Kristin Marshall, National Marine Fisheries Service Northwest Fisheries Science Center, Seattle, WA
Dr. Tommy Moore, Northwest Indian Fisheries Commission, Forks, WA
Dr. André Punt, University of Washington, Seattle, WA
Dr. Matthew Reimer, University of California Davis, Davis, CA
Dr. William Satterthwaite, National Marine Fisheries Service Southwest Fisheries Science Center, Santa Cruz, CA
Dr. Jason Schaffler (SSC Chair), Muckleshoot Indian Tribe, Auburn, WA
Dr. Ole Shelton, National Marine Fisheries Service Northwest Fisheries Science Center, Seattle, WA
Dr. Tien-Shui Tsou, Washington Department of Fish and Wildlife, Olympia, WA

Members Absent

None

SSC Recusals for the November 2024 Meeting		
SSC Member	Issue	Reason
Dr. Will Satterthwaite	F.2 Final Methodology Review Results; and F.6 Sacramento River Fall Chinook Workgroup Progress Report	Dr. Satterthwaite authored/supervised analysis under methodology review (F.2 partial recusal for that portion) and serves as Chair of the SRFC Workgroup (F.6).
Dr. Owen Hamel	I.3 Methodology Review: Final Stock Assessment Methodologies	Dr. Hamel supervises co-authors who contributed to the FT-NIRS methodology review (partial recusal for that portion of this Agenda Item).

SSC Administrative Matters

Dr. Jason Schaffler (SSC Chair) called the meeting to order. Mr. Merrick Burden briefed the Scientific and Statistical Committee (SSC) on their tasks at this meeting and answered questions from SSC members.

The November 2024 SSC agenda was approved, with some noted flexibility to ensure salmon items could be completed and ensure key advisors for the CPS items were available during SSC discussion times. Minor edits were made to the September 2024 SSC Minutes and adopted as final. Thus, the November 2024 briefing book version of the September 2024 SSC Minutes will be updated to reflect SSC approved changes and the final document will be posted to the [SSC minutes archive website](#).

Subcommittee assignments were reviewed, and Dr. Tommy Moore will serve as Chair of the SSC Ecosystem-Based Management Subcommittee.

Open discussion included a presentation by Dr. Jason Schaffler (SSC Chair) on outcomes from the Council Coordination Committee’s (CCC) Scientific Coordination Subcommittee meeting (SCS8) held in August 2024.

Per suggestion in March 2024, a public comment period was conducted at the beginning of each day to allow for relevant public comments to be made and considered prior to the SSC taking up an Agenda Item.

C. Administrative Matters

5. Membership Appointments and Council Operating Procedures – Including Final 2025-27 Advisory Body Appointments
 - a. Membership Appointments (SSC Closed Session)

F. Salmon Management

6. Sacramento River Fall Chinook Workgroup Progress Report and Recommendations

Will Satterthwaite (NMFS SWFSC) provided an update on the progress of the Sacramento River Fall Chinook Workgroup (SRWG) and discussed future avenues of work. The SRWG has made substantial progress on six aspects of SRFC management, including developing new S_{MSY} and F_{MSY} reference points, conservation objectives, and control rules. The SSC is supportive of the SRWG's work and recognizes the complexity involved in this work.

The SSC reviewed the F_{MSY} proxy and the cohort reconstruction for SRFC during the October 2024 Salmon Methodology review. Discussion of these topics is summarized in Agenda Item F.2.a Supplemental SSC Report 1.

The fundamental challenge for the SRFC is that the stock is a composite of natural- and hatchery-origin fish. Current management reference points are defined in terms of this composite. Unfortunately, concepts such as S_{MSY} and F_{MSY} are not applicable to a composite stock because production may be largely or entirely decoupled from spawning abundance. There is no theoretically sound way to define abundance and harvest rate reference quantities for a composite stock that are roughly equivalent to S_{MSY} and F_{MSY} . Developing appropriate new methods would require substantial effort.

S_{MSY} and F_{MSY} do have a sound theoretical basis for the natural-origin component of the stocks, and the SSC supports the SRWG's efforts to estimate these quantities (or appropriate proxies, see Agenda Item F.2.a Supplemental SSC Report 1). Available data for SRFC limit the ability to identify spawners of natural-origin and therefore the SSC supports the SRWG proposals to measure S_{MSY} in terms of natural-area spawners. However, the current control rules and harvest planning models are based around total (natural plus hatchery) escapement for SRFC, so moving to natural area spawners would require altering several preseason planning tools.

SSC Notes

SSC suggested non-parametric forms for stock-recruit relationships.

F. Salmon Management

2. Final Methodology Review Results and Proposed Council Operating Procedure (COP) 15 Updates

Final Methodology Review Results

The Scientific and Statistical Committee (SSC) received a report summarizing reviews of salmon methodology topics conducted by the [SSC Salmon Subcommittee \(SSC-SSC\)](#) with the Salmon Technical Team (STT) via webinar on October 4, 2024. The SSC-SSC received presentations and documents for two review topics:

- Cohort reconstruction (CR) for Sacramento River Fall Chinook (SRFC) salmon and comparison with the Sacramento index (SI) (Attachment 1)
- Updated F_{MSY} proxy and S_{MSY}/S_{MP} ratio (Attachment 2).

The SSC endorses the updated cohort reconstruction and the updated F_{MSY} proxy of 0.58 for SRFC, and finds them to be the best scientific information available. The STT briefed the SSC on the implementation challenges and schedule.

Cohort reconstruction for Sacramento River Fall Chinook salmon and comparison with the Sacramento Index

The SI and CR are intended to support management by quantifying the ocean abundance of adult (age-3+) Chinook salmon at the start of each fishing season, identifying harvest impacts on adult SRFC, and determining adult escapement predicted to occur in the absence of fishing. The results from the new CR analysis account for additional biological processes and incorporate multiple new data sources. In addition, the CR incorporates uncertainties associated with Coded Wire Tag (CWT) sampling and the scale ageing procedure to provide confidence bounds for estimates of abundance and harvest. The SSC finds that the changes introduced in the CR represent considerable improvements over the SI, and endorses its use for management decision making.

The SI calculation excludes ocean harvest north of Cape Falcon and considers harvest in only the current management year. For consistency, these limitations were also imposed on the CR in the initial comparison of the CR and SI. The authors also documented the effects of including ocean fishery impacts north of Cape Falcon and earlier in ocean residency. The SSC agrees that including harvest information from north of Cape Falcon was advisable to accurately represent ocean harvest for SRFC in both the SI and the CR. In terms of including harvest impacts earlier in ocean residency, this seems logically appropriate to do in the postseason when making status determinations (comparing cumulative exploitation rates to the Maximum Fishing Mortality Threshold), but not in the preseason when determining the year-specific exploitation rate expected to achieve an escapement target.

Updated F_{MSY} proxy and S_{MSY}/S_{MP} ratio

The Sacramento River Working Group (SRWG) developed criteria for which analyses to include in developing a new proxy, such as the use of recent data and similarity to SRFC in ocean distribution and life history traits. The SSC agrees with the decision of the SRWG to use Klamath and Rogue Fall Chinook stocks for the new F_{MSY} proxy. The mean and median F_{MSY} and S_{MSY}/S_{MP} ratio are the same (0.58). In future cases where the mean and median are not equal, the SSC supports using the median as it is the more risk neutral measure. If the 0.58 value is adopted, the new F_{MSY} should be included in the Salmon Fishery Management Plan (FMP) and in the appropriate tables and text in the stock assessment and fishery evaluation (SAFE) documents.

The SSC also recommends that F_{MSY} values be revisited for all Chinook stocks, and a similar exercise be carried out as appropriate.

Proposed Council Operating Procedure (COP) 15 Updates

The Scientific and Statistical Committee (SSC) reviewed a draft revision of the Council Operating Procedure (COP) 15 for Salmon Estimation Methodology Updates and Reviews (Agenda Item F.2 Attachment 3), presented by Angela Forristall (Council staff). This revision is intended to reflect

the current process for conducting salmon methodology reviews and clarify roles and responsibilities. The Council is scheduled to take final action on COP 15 updates during its March 2025 meeting. The SSC appreciates the efforts and offers the following comments.

- The SSC recommends a single COP for methodology reviews from all Fishery Management Plans (FMPs) for consistency among the FMPs and with National Standard 2. Separate Terms of Reference (TOR) for methodology reviews can be codified for each FMP.
- If the Council or Council staff chooses not to combine all methodology reviews into one methodology review COP or if a salmon TOR is needed, the SSC should work with the Salmon Technical Team (STT) to accurately characterize the current process to develop a TOR or update the current COP 15.
- The roles and responsibilities of the SSC, SSC Salmon Subcommittee, STT, and Model Evaluation Workgroup (MEW) are not clearly defined in the current or proposed COP 15 revision. The STT and MEW are not classified as review bodies in the current [COP 3 for Plan, Technical, and Management Teams](#), though they are often tasked to produce methodologies for SSC review. There should be a clear description of the roles and responsibilities for Council bodies in any future salmon methodology COP or TOR, as is the case for [groundfish and CPS methodology review TORs](#).
- A review of the implementation of a topic found to be Best Scientific Information Available (BSIA) by the SSC does not need to be conducted at the same time as the scientific review nor does review of a methodology topic need to be predicated on planned use in the next preseason cycle. A methodology determined to be BSIA may be challenging to implement, thus identifying a specific timeline for implementation in the COP may not be feasible.
- Some terms used in the COP need to be defined more clearly. As pointed out in June 2021 ([Agenda Item C.10.a, Supplemental SSC Report 1](#)), the COP should clarify the definition of “major stocks.” The current COP states “Examples of issues that could merit a full methodology review include new model algorithms, methods for incorporating base data into models, forecasting methods for major PFMC stocks,” but does not define “major.” As another example, the terms “scientific”, “technical”, and “analytical” are used to distinguish different types of work without clearly defining these terms.

The SSC is willing to work with the Salmon Technical Team (STT) and Council staff to contribute to developing a single methodology review COP and a salmon methodology TOR or update the current COP 15, at the Council’s direction.

J. Coastal Pelagic Species Management

3. Stock Assessment Prioritization

The Scientific and Statistical Committee (SSC) heard from West Coast Region (WCR) and Southwest Fisheries Science Center (SWFSC) staff regarding options for altering the current schedule for Coastal Pelagic Species (CPS) stock assessments outlined in the situation summary. The current schedule is not considered by the SWFSC to be viable, due to the need to divert staff

resources to evaluate gear and survey performance of the new Integrated West Coast Pelagics Survey.

The SSC agrees that the need to conduct a methodology review of the integrated survey to fully evaluate any potential challenges for forthcoming assessments in 2026 justifies postponing the currently scheduled benchmark assessments as recommended in Agenda Item J.3 Attachment 1. The SSC recommends that a benchmark assessment for Pacific sardine be conducted no later than 2027, along with a stock assessment update of Pacific mackerel later in 2027. The SSC considers a benchmark assessment for Pacific sardine to be a higher priority, as that stock is currently under a rebuilding schedule. A benchmark assessment for Pacific mackerel could be conducted in 2028.

Based on discussions with the SWFSC, the SSC recommends that analyses leading to any proposed revision to E_{MSY} for Pacific sardine be developed prior to or in concert with a new Pacific sardine benchmark assessment. If E_{MSY} is reviewed in advance of the assessment, an in-person meeting could be conducted separately as a methodology review.

The SSC notes that an initial exploration of data and informal discussion about potential changes to E_{MSY} could also be helpful during the 2025 Pacific sardine update assessment.

SSC Notes

The current schedule includes a Pacific sardine update in February 2025, a Pacific mackerel catch-only update in June of 2025, a Pacific sardine benchmark in February 2026 and a Pacific mackerel benchmark in May of 2027.

A new E_{msy} should not be reviewed during an update assessment review meeting because is a fairly technical undertaking and requires a careful technical review, given the need to splice together time series of biomass and recruitment from no less than two separate assessments.

Region staff reported that the formula for E_{msy} is not hard wired in FMP, such that there is no need for an FMP amendment to change E_{msy} , although the “fraction” parameter within the HG harvest control rule is “hard-wired: within the FMP, and changing this parameter would consequently require an FMP amendment.

H. Highly Migratory Species Management

3. Biennial Harvest Specifications and Management Measures – Final

The Scientific and Statistical Committee (SSC) reviewed and discussed the reference points (D_{MSY} and U_{MSY}) for shortfin mako shark estimated by the International Scientific Committee for Tuna and Tuna-Like Species in the North Pacific Ocean (ISC). The SSC endorses these proxies as adequate for estimating status relative to B_{MSY} and F_{MSY} .

The SSC did not review the specifications for the models and the model fits. The SSC noted that the ensemble reference points included contributions from four models that did not converge, which could have justified their exclusion, but that this decision did not affect the estimates of stock status and fishing mortality relative to the proxies for B_{MSY} and F_{MSY} .

SSC Notes

The stock assessment was an ensemble of 32 state-space surplus production models that varied in their use of CPUE index, treatment of catch, and specification of priors. Each model estimated two MSY-based reference points: D_{MSY} , depletion that produces MSY and U_{MSY} , the exploitation rate that produces MSY. Ensemble D_{MSY} and U_{MSY} reference points were calculated by weighing member models based on the expert perceived likelihood of each model.

D. Cross Fishery Management Plan

3. Research and Data Needs

The Scientific and Statistical Committee (SSC) discussed the Council's research and data needs to support the management of U.S. West Coast fisheries. Council staff have proposed a revised framework (Attachment 2) for structuring this research and data needs (RDNs) review cycle. This framework involves identifying high-level science and management challenges and organizing specific topics and RDNs under each challenge. The SSC focused its discussion on the high-level challenges but also made recommendations regarding the revised RDN framework.

The SSC appreciates the four draft challenges presented in Attachment 1 but found they were overly broad, imprecise, and/or omitted several important challenges for U.S. West Coast fisheries. In particular:

- Data limited stocks (Draft Challenge 1): This challenge mischaracterizes the level of information available for most stocks managed by the Council. All stocks have data collection needs; the challenge is identifying the appropriate methodology for using the data that we have to perform stock assessments.
- Socioeconomic resilience (Draft Challenge 2): This challenge is too vague to be useful and should be divided to consider economics and social science separately.

The SSC recommends that the four draft challenges be replaced with the following challenges:

1. Data collection: Data collection is required to conduct stock and ecosystem assessments, evaluate policies, and support management. It is necessary to continue and expand existing data collection efforts, develop new data streams (e.g., to support indices of abundance or life history parameter estimation), and improve access to relevant databases. Community-based participatory research programs can aid in this effort.
2. Stock assessment methodologies: Routine methodological development and advancement are required to improve the best scientific information available for stock status determinations. This will include the development and testing of data-limited and data-moderate assessments, dynamic reference points, and methods to account for large spatial closures.
3. Life history and stock structure: Regular collection and evaluation of scientific information is needed to parameterize life history traits, inform the degree of population connectivity and ensure appropriate spatial scales for management actions.
4. Evaluating fishery impacts: Many Council-managed fisheries rely on the evaluation of fishery impacts associated with trip limits, bag limits, season or area closures, incidental mortality, and other factors. These require research and data to inform a number of assumptions utilized in estimation.
5. Ecosystem dynamics: The effects of a changing ecosystem raise challenges for fishery science and management. Continued efforts to account for ecosystem change can involve approaches such as collecting diet data, developing ecosystem models, evaluating the use of ecological indicators in stock assessments, and identifying environmental thresholds.

6. Harvest policy: Improved methods are needed to evaluate harvest policies, including harvest control rules and reference points, which are integral to Council decision-making, especially during periods of nonstationary environmental conditions.
7. Economics: Data and analytical tools are needed to develop and evaluate fishery management policies that aim to ensure the economic viability of recreational, Tribal, and commercial fisheries, including post-harvest sectors and infrastructure.
8. Social science: Data and analytical tools are needed to develop and evaluate fishery management policies intended to address social and cultural objectives of participants in fisheries and fishing communities.
9. Habitat science and spatial management: Ongoing and emerging uses of marine, estuarine, and freshwater resources are diverse, potentially conflicting, and likely to impact fished stocks and their habitats, as well as the surveys used to inform science and management. Continued development of the models used to designate essential fish habitat (EFH) and otherwise inform spatial management are needed, including for transboundary stocks.

The SSC also has the following recommendations regarding the proposed RDN framework:

- The SSC is unclear about the benefits of identifying topics that would fall below key challenges rather than linking research projects in the database to the key challenges and identifying a small set of research projects that would make the largest contributions to addressing the key challenges.
- The proposed framework should be revised to encourage engagement between the SSC and other advisory bodies when identifying and prioritizing RDNs.
- Active monitoring of the RDN database is required to update the status of RDNs (e.g., underway, complete, no action) and could be undertaken more frequently than the Council review cycle.

SSC Notes

Continued efforts to account for ecosystem change can involve collecting diet data for key stocks, developing ecosystem models to test different climate and fishing scenarios on food web dynamics, evaluating the use of ecological indicators in stock assessments (e.g., in the form of model covariates, risk tables, ecosystem considerations), identifying environmental thresholds, and nonstationarity in relationships between the environment or ecosystem and fish stock dynamics.

1. Groundfish Management

3. Methodology Review: Final Fishery Impact Model Review Topics and Stock Assessment

Methodologies

Methodologies for review in 2025

The Scientific and Statistical Committee (SSC) was advised that the groundfish incidental-catch projection model for non-sablefish, non-nearshore fishing was no longer being proposed for review. However, a method for extrapolating discard mortality for the open access sector may be available for review during 2025. If this method is developed, it could be reviewed by the SSC Groundfish Subcommittee (GFSC) prior to the June 2025 Council meeting.

Review of the Fourier Transformed Near-Infrared Spectroscopy (FT-NIRS) ageing method

The GFSC conducted a review of the FT-NIRS methodology for use in fish age estimation for groundfish stock assessments of U.S. West Coast species on October 1-2, 2024. This method has the potential to estimate fish ages more efficiently than traditional methods, improve standardization of ageing approaches, and increase replicability of ageing. FT-NIRS has been

applied by Northwest Fisheries Science Center (NWFSC) staff to sablefish, Pacific hake, and rougheye/blackspotted rockfish, and the GFSC reviewed these applications.

The work reviewed by the GFSC is part of a national initiative to operationalize FT-NIRS across National Oceanic and Atmospheric Administration (NOAA) ageing laboratories. The review benefited from the participation of Alaska Fisheries Science Center staff, in particular, Thomas Helser, and members of the Committee of Age Reading Experts (CARE).

The SSC reviewed the [GFSC report](#) and endorsed its key research recommendations, and recommends that:

- FT-NIRS age estimates should not be included in groundfish update assessments in 2025 because benchmark assessments provide more opportunity to evaluate the use of FT-NIRS ages.
- The 2025 assessment of sablefish should include a relatively small number of FT-NIRS ages, with sensitivity of assessment results provided to assess the effects of inclusion of these data.
- The 2025 assessment of rougheye/blackspotted rockfish should not include FT-NIRS ages owing to the low agreement between FT-NIRS and traditional age estimates.
- FT-NIRS ages could be considered for inclusion in the 2025 assessment for chilipepper rockfish if appropriate FT-NIRS models can be developed.
- The pre-assessment workshops should include a presentation or update of FT-NIRS model diagnostics and results for any stock for which FT-NIRS ages may be included in an assessment.
- Fish length or weight should not be used as covariates in models used to develop FT-NIRS age estimates owing to the potential for “double use” of length and weight data in the assessments.

While use of FT-NIRS is likely to increase the number of age estimates available for assessments, the SSC highlights that information from traditional ages is still needed to calibrate the model and refine the FT-NIRS algorithms due to changes in environmental conditions.

SSC Notes

Key research recommendations

- *Quantify the proportion of otoliths that are excluded from scanning and any potential impact on bias in age compositions.*
- *Evaluate the impact of replacing primary ages by FT-NIRS ages on uncertainty estimates, perhaps using Markov chain Monte Carlo (MCMC) sampling.*
- *Evaluate why the ageing error estimation method failed to detect what appears visually to be a bias associated with the FT-NIRS estimates for sablefish.*
- *Develop a procedure to calculate ageing error when combining FT-NIRS and traditional age estimates.*
- *Consider providing age estimates based on a distribution of continuous ages if the assessment framework allows for the use of continuous ages.*
- *Conduct further research for rougheye/blackspotted rockfish before FT-NIRS will be useful for production ageing given the low percent agreement between FT-NIRS and traditional ages.*

- *FT-NIRS provides continuous ages while current stock assessment methods use integer ages. Rounding of FT-NIRS should occur only at the end of the calculation process. The impact of rounding age estimates on quantification of error and ageing error matrices should be conducted.*

C. Administrative Matters

6. Future Council Meeting Agenda and Workload Planning

The Scientific and Statistical Committee (SSC) discussed workload planning and has the following updates to its September 2024 statement under this agenda item.

The SSC Groundfish Subcommittee plans to hold a two day in-person/hybrid meeting to discuss and prepare the Accepted Practices Guidelines for Groundfish Stock Assessments in 2025 and 2026 document on December 2-3, 2024. An updated version of the document will be available and posted shortly after the meeting for stock assessment scientists, and provided to the full SSC and the Council in March 2025. Representatives of the Groundfish Management Team (GMT) and the Groundfish Advisory Subpanel (GAP) will also participate in the meeting as advisers. The meeting will also include presentations on two associated topics, which had previously been discussed as potential workshops, a.) use of remotely operated vehicle data in stock assessments (from the California Department of Fish and Wildlife [CDFW]) and b.) results of a literature review of methods addressing large area closures within stock assessments. This meeting may also discuss guidance on the inclusion of risk tables in 2025 groundfish stock assessment reports.

In addition to the Accepted Practices Guidelines document, a report from the meeting will be available at the March 2025 Council meeting. The SSC notes that by the March meeting, analysis and modeling for the 2025 assessments will be ongoing. Consequently, there will be no scope to alter any of the guidelines or recommendations made by the Groundfish Subcommittee at that time. This is consistent with how the guidance provided by this meeting and document has been previously developed and adopted, which is somewhat less prescribed than the terms of reference for stock assessment review and other more formal protocols regarding the stock assessment review process.

The groundfish Pre-Assessment Data Workshop 1 (virtual) for quillback rockfish off California and chilipepper rockfish is anticipated for January 23 or 24, 2025.

The groundfish Pre-Assessment Data Workshop 2 (virtual) for yellowtail rockfish North 40°10' N. Lat. is anticipated for January 29 or 30, 2025.

The CPS Subcommittee will conduct a review of the update stock assessment for Pacific sardine on February 26, 2025. This meeting will also discuss ongoing work related to a potential revision to the E_{MSY} for Pacific sardine.

The SSC is proposing an additional half day prior to the March 2025 Council meeting (March 4, in-person Vancouver, WA) to start on its regular agenda and allow time to prepare for Research

and Data Needs recommendations, including engagement with other advisory bodies, prior to the April 2025 agenda item.

The groundfish Pre-Assessment Data Workshop 3 (virtual) for rougheye/blackspotted rockfish and sablefish is anticipated for March 18 or 19, 2025.

STAR Panel 1 will cover the yellowtail rockfish North 40°10'N. Lat. benchmark assessment on May 19-23, 2025 in Seattle, WA. The schedule will be for a full day on Monday and half days thereafter. The SSC anticipates a final decision on the STAR Panel chair within the next several weeks, and as only one CIE reviewer is anticipated for this Panel, two additional STAR Panel reviewers with knowledge of West Coast groundfish assessments are requested. Representatives from the GMT and GAP are requested.

The SSC Groundfish Subcommittee should meet in-person in Rohnert Park, CA to review update stock assessments on June 11, 2025, the day prior to the full SSC at the June 2025 Council meeting. Representatives from the GMT and GAP are requested.

STAR Panel 2 will cover benchmark assessments for chilipeper rockfish and California quillback rockfish on June 23-27, 2025 in Santa Cruz, CA. The STAR Panel chair will be Cheryl Barnes and one additional STAR Panel reviewer with knowledge of West Coast groundfish assessments is requested. Representatives from the GMT and GAP are requested.

STAR Panel 3 will cover rougheye/blackspotted rockfish and sablefish on July 14-18, 2025 in Seattle, WA. The meeting chair will be John Field and one additional STAR Panel reviewer with knowledge of West Coast groundfish assessments is requested. Representatives from the GMT and GAP are requested.

After the STAR Panels, the SSC Groundfish Subcommittee should meet to review stock assessments (and rebuilding analyses [as needed]) and to prepare harvest specifications before the September 2025 Council meeting. The SSC suggests a 1.5 to 2 day virtual meeting in mid-August 2025.

The SSC Groundfish Subcommittee meeting (commonly referred to as “mop-up”) for further review of stock assessments not recommended by STAR Panels and rebuilding analyses (as needed) is anticipated during the week of Sept 29-Oct 3, 2025 with a potential hybrid (in-person and online) format.

The SSC discussed the potential external review of PFMC stock assessment process (Agenda Item A.4, Supplemental Attachment 1), and has some concerns related to the accelerated pace being contemplated for this process. One key concern is that discussions or interviews with assessment analysts could be disruptive to those analysts during the time period in which they are most actively compiling data, developing assessment models and documenting the results. The SSC also suggests that any review of the assessment development and review process would be better informed if the reviewers had the opportunity to participate in most if not all of the key activities within this process, particularly with respect to the STAR Panel reviews, which the SSC regards as a fundamental strength of the PFMC assessment review process. Finally, the SSC noted that if

a highly compressed or accelerated review was undertaken and a report produced prior to conducting the 2025 STAR Panels, there would be no opportunity to alter the current process nor to respond to recommendations, which could undermine confidence in the process and in the assessment results by some stakeholders. The SSC recommends that if this review moves forward, it does so with a more measured pace, and includes scope for the review body to participate in data workshops and STAR Panels, with any report or recommendations to be delivered after conclusion of the review panels and adoption of the 2025 assessments.

The SSC Ecosystem Subcommittee anticipates conducting its annual review of Ecosystem Status Report Science Topics in Fall 2025 (virtual), pending proposals by the California Current Integrated Ecosystem Assessment team in March 2025.

The SSC proposes the Coastal Pelagic Species (CPS) Subcommittee conduct a review of the new SWFSC/NWFSC integrated survey in early 2026 to identify any issues or additional analyses to be conducted prior to use of the results from the survey in CPS stock assessments.

The SSC Economics Subcommittee proposes conducting a review of the Trawl Catch Share Program Review in advance of the September 2025 Council meeting so that final action can address findings of the SSC Economics Subcommittee and the SSC. This review could occur in the summer of 2025.

SSC statements need to be clear, complete, and accurate to provide scientific advice to the Council. The SSC appreciates having a full day to draft and review statements following their review of a topic, as it did at this meeting. To ensure adequate time for statement development and review by the SSC and as well as time for Council members and advisory bodies to consider the finished statements ahead of an agenda item reaching the Council floor, some changes in how the SSC approaches reviews could be warranted, especially given the desire for shorter Council meetings and flexibility in the SSC for taking up items not on the advanced briefing book agenda. Possible changes include starting a half day earlier (1.5 days prior to the first day of the Council meeting), reviewing some items a meeting ahead of when SSC statements are needed, moving items that need SSC input to later in the Council meeting agenda, or moving SSC meetings to be fully ahead of the Council meeting.

An additional challenge previously identified is review of Pre-Season Report I for salmon management. While key pieces of this document are provided to the SSC with as much advanced notice as possible, the complete document is typically not available until just days prior to the start of the March Council meeting. Only a few pieces of information in this document routinely change, so scheduling additional review of this document for accuracy could be completed outside of the March Council meeting.

Proposed Workshops and SSC Subcommittee Meetings for 2024 and Beyond

Italic items are noted as potential or preliminary

Shaded rows indicate newly added items since the prior statement

	Workshop/Meeting	Potential Dates	Sponsor/ Tentative Location	SSC Reps.	Additional Reviewers	AB Reps.	Council Staff
1	Groundfish Stock Assessment Accepted Practices Guidelines for 2025-2026, including topics: ROV data in stock assessments and approaches to deal with large closed areas	December 2-3, 2024	PFMC Office – Portland, OR /Hybrid	Groundfish Subcommittee	NA	GMT GAP	Bellman
2	Pre-Assessment Data Workshop 1: Chilipepper Rockfish Quillback Rockfish - California	<i>January 23-24, 2025 (tentative)</i>	Council/Virtual	Groundfish Subcommittee	NA	GMT GAP	Bellman
3	Pre-Assessment Data Workshop 2: Yellowtail Rockfish North of 40°10'N.Lat.	<i>January 29-30, 2025 (tentative)</i>	Council/Virtual	Groundfish Subcommittee	NA	GMT GAP	Bellman
4	Sardine Update Stock Assessment Review Meeting	February 26, 2025	Council/Virtual	CPS Subcommittee	NA	CPSMT CPSAS	Bernaus/ Waller
5	<i>SSC Preparation for Research and Data Needs</i>	<i>March 4, 2025 (half-day prior to full SSC)</i>	<i>Council/ Vancouver, WA</i>	<i>SSC/SSC Subcommittee Chairs</i>	<i>NA</i>	<i>NA</i>	<i>Bellman</i>
6	Pre-Assessment Data Workshop 3: Rougheyeye/Blackspotted Rockfish Sablefish	<i>March 18-19, 2025 (tentative)</i>	Council/Virtual	Groundfish Subcommittee	NA	GMT GAP	Bellman

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	Workshop/Meeting	Potential Dates	Sponsor/ Tentative Location	SSC Reps.	Additional Reviewers	AB Reps.	Council Staff
7	Groundfish STAR Panel 1: Yellowtail Rockfish North of 40°10'N.Lat.	May 19-23, 2025 (half-days)	Seattle, WA/ Hybrid	<i>XXXX – Chair, XX - Reviewer</i>	CIE (TBD), <i>XX - Invited Reviewer</i>	GMT GAP	Bellman
8	<i>Groundfish Subcommittee Review: Update Stock Assessments</i>	<i>June 11, 2025 (day prior to full SSC)</i>	<i>Council/ Rohnert Park, CA</i>	<i>Groundfish Subcommittee</i>	<i>NA</i>	<i>GMT GAP</i>	<i>Bellman</i>
9	Groundfish STAR Panel 2: Chilipepper Rockfish Quillback Rockfish - California	June 23-27, 2025	Santa Cruz, CA/ Hybrid	Barnes – Chair	CIE (TBD), <i>Invited Reviewer: Dorn (proposed)</i>	GMT GAP	Bellman
10	Groundfish STAR Panel 3: Rougheye/Blackspotted Rockfish Sablefish	July 14-18, 2025	Seattle, WA/ Hybrid	Field – Chair, Free - Reviewer	CIE (TBD)	GMT GAP	Bellman
11	<i>Economic Subcommittee Meeting: Trawl Catch Share Program Review</i>	<i>Summer 2025</i>	<i>Virtual</i>	<i>Economics Subcommittee</i>	<i>NA</i>	<i>GMT GAP</i>	<i>Bellman</i>
12	<i>Groundfish Subcommittee Meeting: Stock Assessment/Rebuilding Review and Prepare Harvest Specifications</i>	<i>Mid-August 2025 (Before Sept CM)</i>	<i>Council/Virtual</i>	<i>Groundfish Subcommittee</i>	<i>TBD</i>	<i>GMT GAP</i>	<i>Bellman</i>
13	<i>Further Review of Groundfish Stock Assessments/Rebuilding Analyses</i>	<i>Sept 29-Oct 3, 2025 (tentative) (After Sept CM)</i>	<i>Council/ Hybrid: Location TBD</i>	<i>Groundfish Subcommittee</i>	<i>TBD</i>	<i>GMT GAP</i>	<i>Bellman</i>
14	<i>Ecosystem Subcommittee Review: Ecosystem Status Report Science Topics</i>	<i>Fall 2025</i>	<i>Council/Virtual</i>	<i>Ecosystem Subcommittee</i>	<i>TBD</i>	<i>EWG EAS</i>	<i>Bellman</i>

Proposed Workshops and SSC Subcommittee Meetings for 2024 and Beyond

Italic items are noted as potential or preliminary

Shaded rows indicate newly added items since the prior statement

	Workshop/Meeting	Potential Dates	Sponsor/ Tentative Location	SSC Reps.	Additional Reviewers	AB Reps.	Council Staff
15	<i>Salmon Methodology Review</i>	<i>October 2025</i>	<i>Council/ Portland, OR</i>	<i>Salmon Subcommittee</i>	<i>TBD</i>	<i>STT</i>	<i>Bellman/ Forristall</i>
16	<i>CPS Methodology Review: SWFSC/NWFSC Integrated Survey</i>	<i>Early 2026</i>	<i>TBD</i>	<i>CPS Subcommittee</i>	<i>TBD</i>	<i>CPSMT CPSAS</i>	<i>Bellman/ Bernaus</i>

C. Administrative Matters

5. Membership Appointments and Council Operating Procedures – Including Final 2025-27
Advisory Body Appointments

b. Briefing on NMFS guidelines for National Standards 4, 8, and 9 (Open Session)

The Scientific and Statistical Committee (SSC) received a presentation from Katrina Bernaus (Council Staff) on the formation and adoption of an ad hoc committee tasked with preparing comments on the proposed revisions to the National Standard Guidelines 4, 8, and 9.

The SSC sees value in this ad hoc committee and recommends Chris Free, Galen Johnson, and Matthew Reimer for consideration due to their expertise across a broad range of topics related to these National Standard Guidelines.

SSC Subcommittee Assignments

Salmon	Groundfish	Coastal Pelagic Species	Highly Migratory Species	Economics	Ecosystem-Based Management
Galen Johnson	John Field (Chair)	André Punt	Michael Hinton	Dan Holland	Kristin Marshall
John Budrick	Cheryl Barnes (Vice-Chair)	John Budrick	Cheryl Barnes	Chris Free	Cheryl Barnes
Alan Byrne	John Budrick	Alan Byrne	John Field	Michael Hinton	John Field
Owen Hamel	Chris Free	John Field	Dan Holland	André Punt	Chris Free
Tommy Moore	Owen Hamel	Owen Hamel	Kristin Marshall	Matthew Reimer	Dan Holland
Will Satterthwaite	Kristin Marshall	Michael Hinton	André Punt		Galen Johnson
Jason Schaffler	Tommy Moore	Will Satterthwaite	Matthew Reimer		Tommy Moore
Ole Shelton	André Punt	Tien-Shui Tsou			André Punt
Tien-Shui Tsou	Jason Schaffler				Matthew Reimer
	Tien-Shui Tsou				Will Satterthwaite
					Ole Shelton

Bold denotes Subcommittee Chairperson

ADJOURN

PFMC
12/09/24