

SUMMARY MINUTES

Scientific and Statistical Committee

Pacific Fishery Management Council
DoubleTree by Hilton Hotel San Diego – Mission Valley
Great Room 1/2
7450 Hazard Center Drive
San Diego, CA 92108
Phone 619-297-5466

June 7-8, 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. Cameron Speir (SSC Vice-Chair), National Marine Fisheries Service Southwest Fisheries Science Center, Santa Cruz, CA
Dr. Tien-Shui Tsou, Washington Department of Fish and Wildlife, Olympia, WA

Members Absent

None

SSC Recusals for the June 2024 Meeting		
SSC Member	Issue	Reason
Dr. William Satterthwaite	E.1 Sacramento River Fall Chinook (SRFC) Workgroup – Progress Report	Dr. Satterthwaite serves as Chair of the SRFC Workgroup.
Dr. Cheryl Barnes	F.4 Stock Definitions for Species Assessed in 2025 & 2027 – Range of Alternatives	Dr. Barnes supervises the scientific literature review under PFMC contract.
Dr. Matthew Reimer	H.2 NMFS Regional Equity and Environmental Justice (EEJ) Plan and EEJ Committee Update	Dr. Reimer is a co-author on the NAS report.
Dr. Kristin Marshall	F.3 Final Stock Assessment Plan and Terms of Reference	Dr. Marshall is a co-author on a portion of the stock assessment prioritization tool.

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 June 2024 SSC agenda was approved, with the acknowledgement that time was being reallocated from Salmon Agenda Item E.2 to Agenda Item E.1, and an option to move Groundfish Agenda Item F.4 to the following morning (June 8). Several suggested edits were made to the April 2024 SSC Minutes and adopted as final. Thus, the June 2024 briefing book version of the April 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. Galen Johnson will serve as the SSC Salmon Subcommittee chair. The SSC role on the Salmon Model Evaluation Workgroup (MEW) was noted as a follow-up discussion for a future meeting.

Open discussion included identification of final attendees to the Council Coordination Committee’s (CCC) Scientific Coordination Subcommittee meeting (SCS8) to be held in August 2024. SSC member attendees were identified for PFMC sub-themes presentations, and plans were discussed for updating regional Council content within planning documents. The SSC staff officer communicated the final attendee list to the host Council to facilitate travel invitations, etc.

Per suggestion in March 2024, a public comment period was conducted at the beginning of the day to allow for relevant public comments to be made and considered prior to the SSC taking up an Agenda Item. No public comments were made during this period.

C. Administrative Matters

6. Membership Appointments and Council Operating Procedures
 - a. Membership Appointments (SSC Closed Session)

b. Council Operating Procedures – 2025-27 Advisory Body Composition and Respectful Workplace Policies

The Scientific and Statistical Committee (SSC) discussed its current composition as described in Agenda Item C.6 Attachment 3. The SSC workload is increasing and a reduction in membership would reduce the Committee's ability to respond to Council requests. Furthermore, the current membership of 18, including 9 at-large members, is necessary to reflect the range of expertise needed for all Council Fishery Management Plans (FMPs). The at-large members are essential to the success of the review process, particularly for groundfish, because many of the appointed members have conflicts of interest relative to the Stock Assessment Teams. Restricting the number of terms for which at-large members can serve on the SSC would limit the SSC's effectiveness. For example, topics that the SSC reviews and comments on often span multiple meetings and years. Discussions surrounding these topics benefit from consistency in SSC membership. The SSC notes that these positions are generally held by those volunteering their expertise and time. Frequent changes in these positions may result in lessening of applicant interest and willingness to volunteer.

E. Salmon Management

1. Sacramento River Fall Chinook Workgroup - Progress Report

Will Satterthwaite (NMFS SWFSC, SSC, Sacramento River Fall Chinook Workgroup [WG] Chair) gave a presentation to the SSC that outlined the WG progress to date. The WG report (Agenda Item E.1.a SRWG Report) evaluates the reference points and management measures currently in place, including S_{MSY} , F_{MSY} , minimum stock size threshold (MSST), F_{ABC} , the harvest control rule, and the conservation objective (CO). The WG report also outlines alternative approaches to improve and/or update specific components of each management measure. The WG did not identify preferred approaches for each metric, but provided a table listing the pros and cons of each approach. It also identified approaches expected to improve the Sacramento Index (SI) forecast, harvest estimation, and post-season run-reconstruction. The SSC commends the WG for producing this report in a short period of time. It can serve as the foundation to explore the alternative approaches to update the currently used management measures, improve the pre-season SI forecast, harvest estimates, post-season run-reconstruction, and the harvest planning model.

The approaches used to derive salmon harvest reference points (e.g., S_{MSY} , F_{MSY}) were developed for natural-origin salmon populations. However, the Sacramento River Fall Chinook (SRFC) is managed as a composite hatchery and wild stock, and the management reference points are based on the combined hatchery- and natural-origin escapement to both hatcheries and natural areas. The SSC emphasizes the need to disentangle production and yield of natural-origin and hatchery-origin fish to reduce the risk of overharvest of the natural-origin component. The SSC encourages moving toward natural-origin reference points while acknowledging that data limitations may restrict the speed at which they can be developed. An age-based cohort re-construction for hatchery and natural fish, as is currently done for Klamath River Fall Chinook, should be the goal. Reference

points from a spawner-recruitment relationship for the natural-origin fish would support management and could reduce risk of listing under the Endangered Species Act.

The SSC recommends the S_{MSY} , F_{MSY} , conservation objective, and other reference points for SRFC be developed for natural-origin fish only. In the interim, some updates can be completed in a short period of time. The SSC recommends that the currently used proxy value for F_{SMY} be updated using recent data from other Chinook stocks that are representative of the SRFC stock under current conditions. The SSC also recommends that S_{MSY} and the CO be updated using one of the indirect approaches proposed by the WG.

The SSC recommends that the WG, with guidance from the Council, prioritize the topics to investigate. This prioritization would consider the cost, in terms of personnel and time, and benefits, in terms of the magnitude of improvement for SRFC assessment and management, of each approach. Once the priorities have been identified, the WG can identify preferred alternatives. In this process, the WG should also identify data gaps/needs of each alternative so programs can be implemented to provide the hatchery- and natural-origin data needed for future assessments. Some of the preferred approaches may be suitable for a salmon methodology review (<https://www.pcouncil.org/documents/2021/06/c-10-a-supplemental-ssc-report-1.pdf/>).

SSC Notes

The SSC noted that it generally supports harvest control rules (HCR) without many break points and does not currently see utility in exploring time-varying reference points. The uncertainty in abundance forecasts, harvest estimates, and environmental conditions increases the risk of being in the “wrong” area of the HCR when there are many breakpoints. Thus a “smooth” HCR is preferred.

The ability to project the variables identified (i.e. flow) in the future may be a stumbling block to implementation of reference points accounting for environmental conditions.

It's challenging to get spawners and recruits in the same units used for management. When it's not possible, “conversion factors” can be developed (i.e. if recruits are fry/smолts, how to convert to age-3 fish).

The Council formed the ad-hoc Sacramento River Fall Chinook Workgroup (WG) in June 2023 and approved a draft Terms of Reference (TOR). The Council tasked the Workgroup to 1) provide a summary report no later than the spring of 2024 to describe scoping of a revised SRFC conservation objective, related harvest control rule, and reference point alternatives, and 2) update the Council on the recommended next steps, timeline, and process to evaluate the conservation objective and related management measures.

E. Salmon Management

2. Queets River Spring/Summer Chinook Rebuilding Plan - Progress Report

It was noted that the Salmon Technical Team (STT) report was posted to the Briefing Book website ([Agenda Item E.2.a, Supplemental STT Report 1, June 2024](#)) too late for review. A statement was not prepared by the SSC for this Agenda Item.

I. Coastal Pelagic Species Management

1. Stock Assessment Terms of Reference and Accepted Practices - Final Action

The Scientific and Statistical Committee (SSC) discussed the revised Terms of Reference (TOR) for the coastal pelagic species (CPS) stock assessment review process and the Accepted Practices Guidelines. Kerry Griffin (Council Staff) was available to provide details on these topics. The SSC CPS Subcommittee met on April 17, 2024, to review the Terms of Reference (TOR) and Accepted Practices Guidelines for CPS Stock Assessments and propose changes. André Punt provided an overview of the SSC CPS Subcommittee report to guide SSC discussion.

The SSC CPS Subcommittee report notes changes made relative to the TOR. The version of the TOR posted to the June advance briefing book (Agenda Item I.1, Attachment 2) is endorsed by the SSC, with minor revisions. The SSC recommends the following substantive changes to the TOR for 2025 captured in the CPS Subcommittee report: 1) highlighting the role of the STAR Panel Chair to ensure adherence to the code of conduct for participants in STAR Panels and other reviews, 2) including bridging analyses in stock assessment reports, 3) allowing the removal of datasets from update assessments with sufficient justification, and 4) clarifying the timelines for submission of validated data. The SSC also concurs with the proposed changes provided by the CPS management team (CPSMT) and endorses their addition to the revised TOR (Agenda Item I.1.a, Supplemental CPSMT Report 1), except that the change to Section 5.4 should be modified to “No changes to catch values will be allowed after submission to the STAT, except with the formal approval of the STAT and the STAR Panel chair”. The SSC notes that currently the TOR is reviewed every other year, but that a more flexible review schedule may be appropriate given the small number of CPS assessments.

In the TOR Section 5.4, the SSC recommends the following language to replace the language in the second paragraph on page 14 of Agenda Item I.1 Attachment 2: “The STAT should work with state data stewards to verify catch information. The STAT should work with state data stewards on a data delivery plan that provides sufficient time (eight weeks preferred) for model development and internal review prior to the STAR Panel. STATs, state agency representatives, the CPSMT, and other data stewards should coordinate early in the process to ensure timely availability of data. The STAT should work closely with the data stewards during model development and review to prevent errors, misunderstandings, etc..”

The SSC also notes that use of the term ‘fishing mortality’ rate with regard to F_{MSY} as it is used in the Overfishing Level and Harvest Guideline harvest control rules is formally incorrect, and recommends changing it to ‘exploitation’ rate in the TOR. This would also require a change to

the CPS Fishery Management Plan (FMP) to allow consistency, although this would be best done as a housekeeping update during the next FMP update.

F. Groundfish Management

3. Final Stock Assessment Plan and Terms of Reference

Chantel Wetzel and Jim Hastie (Northwest Fisheries Science Center, NWFSC) briefed the Scientific and Statistical Committee (SSC) on proposals for stock assessment priorities and scheduling as well as additional considerations related to assessment frequency and capacity.

Selection of stocks to assess in 2025

It will be possible to conduct benchmark assessments for six species (or area models) during 2025, and one or two update assessments as part of a University of Washington graduate class mentored by NWFSC staff. Any data-moderate stock assessments that use age-composition data will require review by a Stock Assessment Review (STAR) Panel and would need to be accommodated within the STAR Panel schedule. Dr. Wetzel outlined two potential schedules for when the STAR Panels could take place given constraints related to data availability and the need to ensure that post-STAR assessment documents are reviewed by the SSC Groundfish Subcommittee (GFSC) and made available for the advanced Briefing Book deadline for the September Council meeting (pages 12 and 13 of Agenda Item F.3 Attachment 1). The SSC agrees with the NWFSC that option 1 (STAR panels in three of the weeks of 19 May, 2 June or 23 June, and 14 July) would be preferable given the need for adequate preparation time for the STAR Panels.

If the Council opts for a May STAR Panel, there are only a few stock assessments that could be reviewed owing to the availability of data. Specifically, a May STAR Panel could review full benchmark assessments for yellowtail rockfish north and south of 40° 10' N. Lat. If yellowtail rockfish north of 40° 10' N. Lat. is an update assessment, full benchmark assessments for yellowtail rockfish south of 40° 10' N. Lat. and California quillback rockfish would be possible. There are many age structures for yellowtail rockfish south of 40° 10' N. Lat. that have yet to be processed. The availability of these data may be important for this stock given the past inability to conduct an assessment. It is currently unclear whether sufficient samples could be aged for yellowtail rockfish south of 40° 10' N. Lat. by the data deadline for a May STAR Panel.

The SSC considered the species identified for potential benchmark assessments for the 2025 assessment cycle.

Species the SSC continues to recommend for assessments during 2025

- California quillback rockfish. A concern with this assessment was the inability to effectively characterize growth and some new age-length data are available. The characterization of growth for younger fish will remain a challenge given that the age data for young fish will remain limited. Remotely operated vehicle (ROV) research is ongoing to provide indices or absolute estimates of abundance for use in the assessment.
- Rougheye and blackspotted rockfish. It should be possible to assess this species group as a benchmark assessment, and the Oregon Department of Fish and Wildlife (ODFW) will conduct the ageing. Given the need for ageing, the assessment of this species group should occur towards the end of the 2025 cycle.

- Sablefish. The assessment of this species should occur towards the end of the 2025 cycle given the need to conduct a substantial amount of ageing.
- Yellowtail rockfish. The northern population was last assessed in 2017, and has a target frequency of four years, so this population is overdue for assessment. There has not yet been an assessment for the southern stock above a category 3 (data poor) model, despite the considerable importance of this species for commercial and recreational fisheries in the southern area.

Species the SSC recommends for assessments during 2027 and onwards

- Chilipepper rockfish. The assessment of this species should be a full benchmark assessment. The SSC recommends that this assessment be conducted during 2027 so that there is sufficient time to age the available structures (either using FT-NIRS or conventional methods).
- English sole. Catch attainment of this species is very low at present, indicating that there is little need for an assessment during 2025.
- Yelloweye rockfish. This species is projected to be rebuilt by 2028. This assessment should be deferred to increase the likelihood of accurately estimating whether the stock is rebuilt. When scheduled, there should be consideration of conducting an update of the previous assessment, rather than a benchmark. If this species is assessed in 2025, it may still be necessary to conduct an assessment (benchmark or update) in 2027 if the stock is not estimated to be rebuilt.
- Petrale sole. The available data do not indicate changes in abundance, and the SSC agrees with the NWFSC that this species should not be assessed during 2025. Deferring the assessment would allow for further work to be conducted on the environmental index sensitivity, as the index presented within the 2023 assessment needs further refinement.

If the Council selects fewer than six species-area combinations that require STAR Panel review from the current list for 2025, it could conduct assessments of redbanded rockfish and/or greenspotted rockfish, both of which have relatively high catch attainment and sufficient structures available for ageing. Greenspotted rockfish was last assessed as a two-area model.

Stock assessment capacity issues

There is an increasing demand for stock assessments to meet target assessment frequencies. The ability to satisfy this demand is constrained by a lack of stock assessment scientists, the increasing number of areas for individual species, and the complex review process that includes STAR Panels, and GFSC and SSC review. The SSC recommends that the Council initiate a process to review and perhaps modify the aims of the STAR process in terms of the amount of time spent on review relative to the number of assessments conducted each year and to consider whether greater use of update assessments could enable the Council to meet target frequencies for assessments with available assessment staff capacity.

There would be value in understanding how other Councils conduct and review stock assessments and how they make use of their Center for Independent Experts (CIE) reviewers and of update assessments. Some other Councils make much greater use of what are essentially update assessments compared to the PFMC, which increases the number of new assessments conducted each assessment cycle. Of the species identified for stock assessment during 2025 or 2027, update assessments could be performed for widow, yellowtail (north), and yelloweye rockfishes.

The SSC could also evaluate and reconsider how management advice for stocks that have not been assessed for more than ten years is provided and explore the use of methods that involve adjusting Overfishing Levels based on changes in survey indices of abundance or other approaches.

Terms of Reference

Only the Terms of Reference (TOR) for the Groundfish Stock Assessment Review Process (Agenda Item F.3, Attachments 3 and 4) was updated this year. Most of the changes are editorial, with the major changes relating to how species with multiple areas are assessed, the expectations for how meetings are chaired, involvement of the Groundfish Advisory Panel (GAP) and Groundfish Management Team (GMT) in STAR Panels, the process for conducting projections after assessments are adopted by the Council, and deadlines for the data used in assessments.

The SSC supports inclusion of the proposed revised text on catch-only or catch-and-climate-only projections (Agenda Item F.3, Supplementary Attachment 7) in the TOR, except that the text “Catch-only projections update the assumed previous removals to actual catches from the Groundfish Expanded Mortality Multiyear (GEMM)” should be modified to “Catch-only projections update the assumed previous removals to actual catches from the Groundfish Expanded Mortality Multiyear (GEMM) and other sources”. The SSC notes that Agenda Item F.3, Supplementary Attachment 7 relates to the post-assessment process, which is currently not well documented. Consequently, there would be value in better documenting this process and for crafting the harvest specifications document.

SSC Notes

- *The benchmark and data-moderate assessments would be reviewed by the GFSC and SSC during the September 2025 Council meeting, with the update assessments reviewed during the June 2025 meeting.*
- *There would be value in introducing the concepts of ‘research’ and ‘management’ assessments into the PFMC process.*
- *For quillback rockfish, indices of abundance for the recreational fishery may be developed if there are sufficient observations, which may not be the case.*
- *Resolution for Sunsetting Assessments Not Otherwise Prioritized*
 - *English Sole: There was 3% ACL attainment on this stock from 2018-2022, thus values from DCAC or DB-SRA or long-term MSY should be sufficient (Agenda Item F3, June 2024 Attachment 1, Table 3).*
 - *Sharpchin Rockfish: There is 15% ACL attainment for this stock between 2018 and 2022, thus values from DCAC or DB-SRA or long-term MSY should be sufficient.*
 - *Splitnose Rockfish: Last assessed in 2009, though only 9% ACL attainment. DB-SRA/DCAC ACLs or long-term MSY should be sufficient.*

- *Longspine Thornyhead: Ageing of thornyheads is particularly difficult, so shortspine thornyheads were assessed using data-moderate methods during 2023. A similar approach seems warranted. The last assessment was conducted during 2013, thus the impetus to conduct another assessment. The ACL for this stock has not been attained as much of its biomass extends out over the slope and abyssal plain extending far offshore, thus DB-SRA/DCAC or a long-term MSY from the assessment with a Category 3 buffer may be sufficient.*
- *Aurora Rockfish: No ACL contribution for the stock. Long-term sustainable yield from the assessment with a Category 3 buffer could be applied.*

F. Groundfish Management

4. Stock Definitions for Species Assessed in 2025 & 2027 – Range of Alternatives

The Scientific and Statistical Committee (SSC) reviewed a report entitled “Stock Definitions for a range of Alternatives and Associated Management Implications for Stocks to be Assessed in 2025 and 2027” (Agenda Item F.4, Attachment 1). The report outlines a range of alternative stock definitions and includes a literature review of the groundfish species under consideration.

The SSC recommends that future versions of the report include additional information, such as:

- Trends in survey abundance for slope species by state or north and south of 40°10' N., as available. Conflicting trends between areas could be used to support multiple stock alternatives.
- Indicators of the quality of information presented in Table 1 (Agenda Item F.4, Attachment 1).
- An updated summary of yelloweye rockfish movement to address inconsistencies in describing adult movement.
- Relevant information on similar species when species-specific data are not available.

The SSC has the following specific recommendations regarding the proposed action alternatives:

- Alt. 2 (State/Region) is not appropriate for chilipepper rockfish, given that only a small fraction of this species is found north of the California-Oregon border. Thus, only Alt. 1 (Coastwide) should be considered for chilipepper rockfish.
- Alt. 2 (State/Region) should also be considered for yelloweye rockfish (i.e. two separate stocks, one for California and one for Washington-Oregon) due to uncertainty in movement rates.
- Alternatives will be needed for any additional species chosen for assessment in the 2025 cycle.

The SSC reiterates the need for a holistic process of defining stocks that follows best scientific practices. The SSC has not had conclusive discussions regarding the biological attributes to consider when providing guidance on stock definitions. The SSC continues to support the establishment of a working group to align the Council process for defining stocks with processes recommended by other expert working groups, such as the [ICES Stock Identification Methods Working Group](#).

The Council may want to reconsider stock definitions periodically, as new scientific information becomes available. This is particularly important given that the lack of evidence for multiple stocks does not necessarily reflect evidence for a single coastwide stock. The Council should consider adopting FMP language so that it is relatively straightforward to change stock definitions as new information becomes available.

SSC Notes

- [Cope and Punt \(2009\)](#) is an example of using spatial indices for defining management units.
- [Kerr et al. 2017](#) (pp 1716-1717), referencing [Cadrin et al. 2014](#), recommend these categories: geographic variation in genetic composition, phenotypic traits, movement patterns, otolith microchemistry, and parasitic infection.

H. Cross FMP

2. NMFS Regional Equity and Environmental Justice (EEJ) Plan and EEJ Committee Update

The Scientific and Statistical Committee (SSC) discussed the National Academies of Sciences, Engineering, and Medicine (NAS) report on data and information availability regarding the distribution of fisheries management benefits in the U.S. (Agenda Item H.2, Attachment 1).

The SSC emphasizes the need for continued collection of social, economic, and demographic data on fisheries participants. The Economic Data Collection (EDC) program and the West Coast Fisheries Participation Survey provide data that could support the kinds of equity analyses described in the NAS report. Data on quota prices, quota transfers, and permit prices also could inform equity analyses. Available data provide useful information on vessel and permit owners, but do not include information about other groups dependent on fisheries, such as crew members or fish processors. There is also a clear need to identify groups that are underrepresented in the Council process and fisheries more broadly. Once the EEJ Implementation Plan for the West Coast Region becomes available and equity goals become more developed, there will be a need for additional social data.

The SSC recommends inclusion of equity and environmental justice (EEJ) experts in Council-related processes. This may involve transitioning the EEJ Committee from *ad hoc* to standing status and focusing recruitment efforts accordingly. Broadening the areas of expertise and demographic diversity of EEJ Committee membership would improve the identification and implementation of EEJ initiatives. Designating a social scientist position with expertise in EEJ on the SSC (e.g., as part of [COP4](#)) would also support effective scientific review of EEJ. Broader participation in EEJ Committee discussions would be possible if meetings did not overlap with those of other advisory bodies.

SSC Notes

Excerpts from September 2023 SSC Statement (Agenda Item H.5)

Implementing the EEJ strategy will require high quality social and economic analyses to better understand the demographics of existing Council participants and regional stakeholders, evaluate the distributional impacts of policy, understand climate impacts on communities, and monitor environmental justice concerns.

Much of the labor related to EEJ is currently being taken on by individuals from historically underrepresented groups already engaged in the Council process.

The SSC reiterates the need to consult outside experts in EEJ to develop and implement a holistic EEJ strategy that includes meaningful participation of the whole community the Council serves.

Excerpts from April 2023 SSC Statement (Agenda Item F.1)

The SSC also concurs with NMFS draft policy regarding the need for new research and data to support this initiative including collection of demographic information to identify and understand the needs of underserved communities and, once identified, engage those communities to identify, develop, and potentially co-produce research relevant to their needs and interests.

Very little information is currently available to the Council regarding the population of underserved communities who are affected by Council decision-making and how members of those communities participate in fishing and seafood industries. Identifying these communities should be a near-term priority.

The SSC also notes a need to better understand the demographic composition of the various Council bodies, which can be compared to recent census data and fishery stakeholders as a way of identifying underserved communities in the Council process (e.g., underrepresentation by race and/or gender.)

There is a large body of knowledge about the topic of EEJ. Experts on the topic should be contracted to examine how EEJ is accounted for in current Council activities, and how the Council can better achieve its EEJ objectives. The Council should expand expertise on EEJ issues on its staff and advisory bodies.

C. Administrative Matters

2. Council Operations and Priorities

The Scientific and Statistical Committee (SSC) discussed issues related to Council operations and priorities raised in the Executive Director's Recommendations for Organizational and Process Refinements report (Agenda Item C.2 Attachment 1) and Council Staff Report on Agenda Topic Prioritization Methods (Agenda Item C.2 Attachment 2), as well the Pacific Council Staff

Advisory Bodies Briefing held virtually May 21, 2024. The SSC has the following comments and recommendations relevant to this topic.

SSC meeting timing and location

In-person SSC meetings are generally preferred because they result in better and fuller exchange when evaluating models, methodologies, data constructs, or other topics that are complex and require extensive discussion. Holding SSC meetings remotely is feasible when the meeting has a short agenda and simpler topics. Remote meetings are now scheduled for once a year and this practice has worked to this point. The April meeting has been the preferred meeting to hold remotely and may continue to be if the SSC agenda for the April meeting remains similar in content and length. Remote SSC meetings could be held non-congruently with Council meetings within constraints of timing issues for the Briefing Book (BB). Consideration could be given to shifting BB deadlines and timing if the SSC meets in advance of the Council. If the BB schedule was earlier with respect to the Council meeting, the SSC could schedule its first day earlier than the day before the Council meeting starts. It is generally preferable to spread a remote meeting over two days rather than a single day, as it is difficult to participate effectively in remote meetings for a full day and to effectively craft and review statements in a single day.

Meeting ahead of the Council meeting rather than overlapping has advantages as it provides more time to review statements. It also avoids the need for SSC members to miss important discussions when they need to be on the Council floor to read a statement while the SSC is in session. Meeting ahead of the Council meeting also enables Council members and staff to attend SSC agenda items they have an interest in.

It can be challenging to prepare and review a statement the same day. The deadline for submitting a statement should be the following day or later.

Efficiencies during SSC meetings and reducing Subcommittee workload

There is a desire to reduce workload for some SSC Subcommittees, particularly the Groundfish Subcommittee, and this might be done by reducing the number of workshops related to improving stock assessments. One way to potentially reduce workload would be for some topics considered for workshops to be carried out independently by technical working groups and then reviewed by SSC Subcommittees. However, this may reduce the transparency in development of new methods and understanding and acceptance by stakeholders. SSC involvement in workshops can also identify problems that can be addressed during the workshop, avoiding the need for the technical working groups to redo work after it is reviewed, which may slow the process. Having SSC review of new methods prior to their use in assessments, rather than during STAR panels, is important to maintain incentives for assessment authors to innovate. Assessment teams may be reluctant to adopt methods not yet reviewed by the SSC if doing so risks rejection of the assessment by a STAR panel. STAR panels also are time-limited relative to reviewing new methods.

The SSC discussed ways to make its workload planning more efficient by doing some workload planning in advance of the meeting either as a webinar or as an online process with input from Subcommittee chairs. The SSC needs guidance on whether holding a remote planning meeting of Subcommittee chairs in advance of the meeting for this purpose would require Federal noticing of the meeting.

SSC Membership and Term Limits

The SSC workload is increasing, and the SSC would be concerned if there were proposals to reduce its membership. A reduction in membership will reduce the Committee's ability to respond effectively to Council requests.

The SSC is concerned about proposals to limit the number of terms at-large members can serve. The tasks of the SSC include review and comment on items stretching across a number of years, which benefits from consistency in reviewer/scientist participation. It was also noted that these positions are generally held by those volunteering their expertise and time. Frequent changes in these positions may well result in lessening of applicant interest and willingness to volunteer. If the Council wishes to implement time limits on service for at-large SSC members, they should be implemented in a staggered manner to help maintain consistency in SSC activities.

Council Priorities and Process

The SSC has some concerns about the categorization of core and non-core activities in Agenda Item C.2 Attachment 2, including the exclusion of activities not directly related to FMPs. Some topics not related to specific FMPs such as ecosystem issues, environmental equity and justice, and other cross-cutting issues are important to meeting the Council's broader responsibilities but are not categorized as core activities in the staff report. It is also unclear why Marine Mammal Protection Act (MMPA) and Endangered Species Act (ESA) related issues are considered core activities.

There are some topics that may not require Council discussion, but would still benefit from review or discussion by the SSC. These include technical reviews of methods and data that may not require a Council agenda item and floor time. The summary of the SSC deliberations on these topics could be provided as informational reports to the Council.

When considering the need for ad hoc committees and work groups, the SSC notes that working groups are informal but valuable to Council work. For example, the Ecosystem Workgroup provides scientific coverage not possible otherwise, and it would be desirable to maintain it.

The SSC statement on Agenda Item F.3 Final Stock Assessment Plan and Terms of Reference notes that a holistic review of the groundfish assessment process, including the types of assessments done and the review process, may provide opportunities to reduce workload and enable the Council to meet target frequencies for assessments with available assessment staff capacity.

Holding meetings in difficult-to-travel-to locations imposes higher costs. Meeting locations not on major travel routes could result in higher travel costs and longer or less convenient travel times for participants. This could place increased time demands on participants, which can have an impact on their other duties. If an SSC meeting is not concurrent with the Council, the SSC could potentially meet in a different location than the Council, which could reduce costs and travel time.

SSC Notes

The Executive director's report proposes that most advisory group members not remain on the Council floor during Council discussion of agenda items which they have reported on. When one

or more committee members are required to be on the Council floor, it may not always be possible or desirable for the committees to continue work. This problem is avoided when committee meetings are not held concurrently with the Council meeting.

C. Administrative Matters

7. Future Council Meeting Agenda and Workload Planning

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

The SSC Ecosystem-Based Management Subcommittee proposes a virtual meeting on August 5, 2024 to review further development of risk tables for groundfish and their applications in support of Fishery Ecosystem Plan Initiative 4 to report to the Council at the September 2024 Council meeting. Anticipated participants include members of the Ecosystem Workgroup (EWG) and the Ecosystem Advisory Subpanel (EAS). The SSC Groundfish Subcommittee will also be invited.

The Council Coordination Committee's (CCC) Scientific Coordination Subcommittee meeting (SCS8) will be hosted by the New England Fishery Management Council and will be held during the week of August 26, 2024 in Boston, MA. Jason Schaffler (SSC Chair), Cameron Speir (SSC Vice-Chair), Cheryl Barnes, Chris Free, and the SSC Staff Officer plan to attend.

The SSC proposes that the full SSC hold a meeting to discuss Phase 2 Stock Definition analyses as an extra day added to the September SSC meeting in Spokane. The SSC notes that a full day may be necessary to review major elements of Phase 2 including 1) a literature review on all remaining undefined groundfish species, and 2) federal/state waters catch proportion methods and analysis. Originally, the SSC Groundfish and Economics Subcommittees were proposed to review methods for the state/federal catch proportion analysis (recreational, commercial, and surveys) in summer of 2024. However, planning indicates that the availability of review materials and SSC timing could more effectively discuss this item during the three-day SSC September Agenda and provide recommendations under the Council Agenda Item for scoping. The ideal timing of these three days would begin two days prior to the Council meeting to allow sufficient time for writing and reviewing statements. This is because it can be challenging to prepare and review a statement the same day. The deadline for submitting a statement should be the following day or later.

If the Council finalizes a list of topics at the September meeting, the SSC proposes the SSC Salmon Subcommittee hold a Salmon Methodology Review with participation from the Salmon Technical Team (STT) and the Model Evaluation Workgroup (MEW) in the week beginning September 30, 2024, at a time and place to be determined. The review would need to take place the week beginning September 30, 2024 to meet the November Advanced Briefing Book deadline. Documentation would need to be complete at the time of the September Council meeting to meet the SSC requirement for two weeks of review time.

The SSC proposes holding a Groundfish Methodology Review to consider the use of the Fourier Transformed Near-Infrared Spectroscopy (FT-NIRS) method for estimating groundfish ages to be

utilized in future stock assessments in the week beginning September 30, 2024. The SSC suggests that this could be a virtual meeting.

The Year-at-a-Glance summary (Agenda Item C.7 Attachment 1) currently indicates the Groundfish Agenda Item “Methodology Review – Preliminary Impact Model Topics & Final Assessment Methods” is scheduled during the September 2024 Council meeting. Due to shifting the Groundfish Methodology Review later in the fall 2024, the SSC proposes to move the sub-portion of this topic “Final Assessment Methods” to the November 2024 Council meeting. Thus, the November 2024 Council meeting Agenda Item would encompass the final action for both the Impact Model Topics and Assessment Methods.

The SSC Ecosystem-Based Management Subcommittee proposes a virtual meeting in Fall 2024 to review krill indicators in the California Current Integrated Ecosystem Assessment Team’s Ecosystem Status Report, as supported by the Council in March 2024. This topic and the risk tables topic were originally envisioned to be reviewed together but the presenters for the krill topic are not available in August.

The SSC proposes holding a workshop in 2024 on use of remotely operated vehicle (ROV) data in stock assessments to facilitate potential inclusion in future groundfish assessments, dependent on proponents readiness and the provision of additional information to review by CDFW. This includes review of abundance estimates for quillback rockfish and consideration of methods for integration of results in future stock assessments. Rather than hold a separate workshop on “Approaches to Deal with Large Closed Areas and Other Spatial Issues in Stock Assessments,” as suggested in earlier planning statements, the SSC proposes to use the ROV meeting as an opportunity to begin discussions of this topic, focusing on a presentation of an ongoing literature review on this topic by NWFSC staff.

The SSC proposes the Groundfish Subcommittee hold a virtual meeting to discuss and prepare the Accepted Practices Guidelines for Groundfish Stock Assessments in 2025 and 2026 document in early 2025 to prepare the final draft document for the Council Agenda Item scheduled for March 2025.

The SSC proposes the CPS Subcommittee conduct a review of the new SWFSC/NWFSC integrated survey in late 2025 in order to identify any issues or any additional analyses to be conducted prior to the use of the results from the survey in CPS stock assessments.

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	Ecosystem-Based Management (EBM) Subcommittee Review of Risk tables	August 5, 2024	Council/Virtual	EBM Subcommittee	NA	EWG EAS	Bellman
2	CCC Scientific Coordination Subcommittee Meeting (SCS8)	August 26-29, 2024	NEFMC/ Boston, MA	Jason Schaffler, Cameron Speir, Christopher Free, Cheryl Barnes	NA	NA	Bellman
3	Review Phase 2 Stock Definition Analysis + Methods for State/Federal Catch Proportion Analysis	Extra SSC day added to September SSC meeting	Council/Spokane	Full SSC	NA	NA	Bellman
4	Salmon Methodology Review	Week of September 30, 2024	Council/TBD	Salmon Subcommittee	NA	STT MEW	Bellman/Ehlke
5	Groundfish Methodology Review of FT-NIRS Method for Estimating Fish Ages Utilized in Stock Assessments	Week of September 30, 2024	NWFSC/Virtual	Groundfish Subcommittee Members	CARE O. Shelton	NA	Bellman
6	Ecosystem-Based Management (EBM) Subcommittee Review of Krill indicators	Fall 2024 TBD	Council/Virtual	EBM Subcommittee	NA	EWG EAS	Bellman
7	<i>Use of ROV Data in Stock Assessments Workshop</i>	<i>November 2024 TBD</i>	<i>TBD</i>	<i>Groundfish Subcommittee Members</i>	<i>NA</i>	<i>NA</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
8 <i>Approaches to Deal with Large Closed Areas and Other Spatial Issues in Stock Assessments</i>	<i>November 2024 TBD</i>	<i>Council/TBD</i>	<i>Groundfish Subcommittee Members</i>	<i>NA</i>	<i>GMT GAP Advisors</i>	<i>Bellman</i>
9 Groundfish Stock Assessment Accepted Practices Guidelines for 2025-2026	Early 2025	Council/Virtual	Groundfish Subcommittee	NA	GMT GAP Advisors	Bellman
10 <i>SWFSC/NWFSC Integrated Survey</i>	<i>Late 2025</i>	<i>TBD</i>	<i>CPS Subcommittee Members</i>	<i>TBD</i>	<i>CPSMT CPSAS</i>	<i>Bellman/ Doerpinghaus</i>

SSC Notes

The SSC had previously proposed holding a Workshop to Develop Alternative Harvest Control Rules for Pacific Spiny Dogfish in 2024, particularly if Pacific spiny dogfish or another elasmobranch species is included in the stock assessment prioritization for 2025 assessments. Given the Council's March 2024 motion regarding the preliminary list of species for assessment in 2025, this workshop should be postponed. However, the preliminary list of species for potential assessment in 2027 does include Pacific spiny dogfish, and therefore the SSC notes this workshop would require that an analysis be completed and available to review.

Increasing overlap between SSC meetings and Council meetings reduces the time some SSC members have to contribute to SSC discussions.

SSC Subcommittee Assignments

Salmon	Groundfish	Coastal Pelagic Species	Highly Migratory Species	Economics	Ecosystem-Based Management
Alan Byrne	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
Owen Hamel	John Budrick	Alan Byrne	John Field	Michael Hinton	John Field
Galen Johnson	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	Cameron Speir	Galen Johnson
Jason Schaffler	Tommy Moore	Will Satterthwaite	Matthew Reimer		Tommy Moore
Ole Shelton	André Punt	Tien-Shui Tsou			André Punt
Cameron Speir	Jason Schaffler				Matthew Reimer
Tien-Shui Tsou	Tien-Shui Tsou				Will Satterthwaite
					Ole Shelton
					Cameron Speir

Bold denotes Subcommittee Chairperson

ADJOURN

PFMC
09/22/24