

## SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON STOCK ASSESSMENT TERMS OF REFERENCE (TOR)

The Scientific and Statistical committee (SSC) discussed the draft Terms of Reference (TOR) for stock assessments of coastal pelagic species (CPS), as well as upcoming proposed workshops on Pacific sardine. Ms. Jessi Doerpinghaus (Council Staff) was available to provide details on these topics. The SSC CPS Subcommittee met on May 5<sup>th</sup>, along with some members of the CPS Management Team (CPSMT) and the CPS Advisory Subpanel, to develop a draft TOR for CPS stock assessments. In recent years, there has been a single combined TOR for CPS and groundfish, and thus the task involved removing terminology and sections that did not apply to CPS and modifying language to reflect current practices in the CPS assessment process. The SSC agrees that the current version of the TOR is ready for public review. The SSC expects to revisit this draft TOR prior to the September Council meeting, so that a revised version can be provided in the advance November briefing book.

The version of the TOR posted to the June advance briefing book is the one endorsed by the CPS Subcommittee. The CPS Subcommittee report appended to this statement notes changes made relative to the previously combined TOR, including those changes that might be considered for the groundfish TOR. In relation to the seven issues raised in that report, the SSC recommends:

1. A combined, living accepted practices document for both CPS and groundfish that can be updated as appropriate be developed;
2. Post-assessment cycle meetings that includes CPS and groundfish analysts and reviewers be conducted. In cases where substantial fishery management plan (FMP)-specific issues arise, an additional separate meeting for that FMP would be appropriate;
3. The scientific uncertainty, sigma, used to calculate the scientific uncertainty buffer should increase with the age of the assessment for CPS. The current approach for groundfish has been endorsed and should currently be implemented for CPS. However, CPS-specific rates of increase need to be developed, as they are expected to be higher than those for groundfish;
4. Given that the amount of work associated with some of the expectations for Panel members and stock assessment teams is substantial, capacity to meet these expectations needs to be considered in prioritization and meeting scheduling;
5. As with groundfish, it is important to ensure that data and document deadlines are met, and mechanisms to achieve this should be discussed further;
6. Members of review bodies should take implicit bias training, with Council staff indicating the need for the training in the material sent to reviewers; and
7. A TOR for CPS rebuilding analysis should be developed by the SSC and the CPSMT.

The SSC recommends moving forward with the two proposed workshops: A Pacific sardine stock structure workshop in Fall 2022 and a Council-sponsored Methodology Review with the goal of improving estimates of the abundance of the Northern Subpopulation of Pacific Sardine, which is proposed for Winter 2023. The CPS Subcommittee is willing to participate in these workshops.

## REPORT OF THE SCIENTIFIC AND STATISTICAL COMMITTEE COASTAL PELAGIC SPECIES SUBCOMMITTEE

The SSC's Coastal Pelagic Species (CPS) Subcommittee (CPSSC) met via webinar on May 5, 2022 to discuss revisions to a draft Terms of Reference (TOR) for CPS Assessments, as well as plans for proposed CPS workshops in late 2022 and early 2023. Members of the CPS Management Team (CPSMT), CPS Advisory Subpanel (CPSAS), past Stock Assessment Review (STAR) Panels and Stock Assessment Teams (STATs) were present.

### **CPS Stock Assessment Terms of Reference**

The draft CPS TOR for 2023-2024 was adapted from the previous combined TOR for groundfish and CPS assessments. In reviewing the draft TOR, the CPSSC identified several changes necessary to tailor the TOR to CPS and incorporated these into a revised draft. The CPSSC also identified several changes that might merit incorporation into the groundfish TOR as well and incorporated these changes while flagging them for full SSC review. Finally, the CPSSC identified several issues, many with the potential to affect both TORs, which merited discussion by the full SSC before implementing changes to the draft TOR. These different categories of TOR changes or potential changes are discussed below in turn.

### ***CPS-specific changes***

- The introduction to the CPS TOR acknowledges that until recently a combined groundfish-CPS TOR was used (although there was a separate CPS TOR before that) and summarizes the major changes.
- Material describing data-moderate and data-limited assessments was removed, as these have only been applied to groundfish, and most accepted approaches are not well suited to CPS life histories.
- It was noted that catch reports for CPS “may be” reviewed by the SSC but have not been to date.
- Reference to ecosystem dynamics as a particular topic for methodology review was removed, though the incorporation of ecosystem expertise in STAR Panels as appropriate was retained.
- Reference to a rebuilding TOR was removed because no rebuilding TOR exists for CPS. The need for a rebuilding TOR has been highlighted by CPS STAT and should be discussed by the full SSC (see below).
- Language suggesting that update assessments were only done for stocks with relatively “stable” full assessments was removed.
- Description of the CPS stock assessment prioritization process and the anchovy management framework was added.
- It was noted that STAR Panels should, if appropriate, raise concerns about the continued suitability of any of the parameters driving harvest control rules (e.g., temperature dependence, distribution terms) and not just  $F_{MSY}/E_{MSY}$  values.
- The equation for calculating sigma from an assessment's internal estimate of uncertainty was removed.
- Descriptions of timelines and document deadlines were revised to be consistent with the CPS assessment schedule. For example, final completion of assessment documents was

changed from “the November briefing book deadline” to “following the meeting in which the assessment is adopted.”

- For catch-only projections, primary responsibility for catch streams was assigned to the STAT, in consultation with the CPSMT.
- The sample table for catch-only projections will be revised to reflect the projection periods and quantities needed for CPS.
- References to “actively managed” versus “monitored” stocks were removed as this terminology is no longer used by the Council.
- The description of category 3 assessments was revised to reflect situations other than data-limited assessments.
- With respect to developing assessment prioritization guidance (section 5.5), National Marine Fisheries Service “NMFS” was changed to “NMFS/ the CPSMT.”
- Although CPS Management Team responsibilities were trimmed relative to the Groundfish TOR, the CPSMT still has concerns, and will provide a draft replacement paragraph.
- With respect to assessment updates, it was noted that Council Operating Procedure 9 outlines the schedule for update assessments by species.

#### **Changes made to CPS TOR that may merit consideration for groundfish TOR as well**

- The reference to the TOR being included in the Council’s Statement of Organization, Practices and Procedures (SOPP) was removed because it is not true for the CPS TOR. It should be verified that this remains true for groundfish, or if the groundfish TOR should be revised accordingly.
- Language about the Federal Advisory Committee Act (FACA) is not relevant to how reviews are actually conducted and so was dropped from the CPS TOR, it might merit removal from the groundfish TOR as well.
- The language describing methodology review panel reports was modified because the review panel report does not necessarily reflect the decisions of the SSC; the SSC reviews the panel report and may or may not adopt its recommendations. A similar change in the groundfish TOR may be warranted.
- Language describing the calculation of sigma was revised to clarify that the STAT and Council Staff have a role in initial recommendations of methods to determine sigma, but the final decision on sigma lies with the SSC. The corresponding language in the groundfish TOR may need revision as well.
- To the extent that pre-assessment workshops are held for CPS, it was the CPSSC’s position that the STAR Panel Chair should be encouraged, but not expected or required, to attend. A similar change may be warranted to the groundfish TOR, or it may become harder to find STAR Panel Chairs.
- Language on detailed comments from advisors (CPSMT and CPSAS) in STAR Panel Reports versus separate advisory body reports was removed from the CPS TOR. Similar language in the groundfish TOR might merit revisiting.
- CPSSC members are not expected to attend pre-assessment workshops. It may be worth revisiting expectations of the Groundfish Subcommittee for pre-assessment workshop attendance.
- Language was added clarifying the definition of “competing STATs” and when such a scenario might arise. This could be suitable for inclusion in the groundfish TOR as well.

- With respect to “within STAT” disagreements, the CPSSC suggested leaving the existing language, recognizing that it is impossible to anticipate every potential scenario and resolution regarding conflicts and disagreements.
- With respect to new data sources or methods, the language that such changes “should ideally be reviewed by a methodology review panel” was changed to “should typically be reviewed...”
- Language “requiring” Council staff to enforce data deadlines was removed, due to absence of meaningful enforcement mechanisms. Language regarding STAT responses to CPSMT or Council Staff requests regarding annual catch limit alternatives for forecasts was amended to add the words “prior to the end of the STAR panel.”
- The workshop clarified that catch reports are reviewed by the SSC.

### **Issues identified for discussion by the full SSC**

- The merits of a combined stock assessment “best practices” for both groundfish and coastal pelagic species versus separate documents for each FMP, and their respective schedules for updating, warrants discussion.
- The merits of combined versus separate post-assessment process review meetings (a.k.a. post-mortems) should be discussed.
- It was unclear whether the SSC intended to adopt the practice of increasing sigma over the course of projection periods for CPS in the same manner as groundfish. This should be clarified, and SSC guidance should be clearly communicated and followed in the future.
- The implications of workload creep (e.g., CPSSC attendance at pre-assessment workshops, expectations for STAR Panel Chairs to be available for CPSMT and Council meetings) should be considered relative to the continued availability of reviewers.
- Deadlines, and means of enforcing them, may be needed for provision of data and requests for projections, as well as the preparation of supplemental reports and rebuttals should be clarified.
- The appropriateness of the recommendation that STAR Panelists participate in implicit bias training should be discussed.
- A TOR for CPS rebuilding analysis should be developed.

### **Proposed Sardine Workshops**

Mr. Dale Sweetnam (Southwest Fisheries Science Center) discussed two Pacific Sardine Workshops, tentatively scheduled for Fall 2022 and February 2023. The workshops were designed to address research and data needs that were previously identified by the SSC, CPSMT, and CPSAS.

The first workshop is designed to address the sardine stock structure to better delineate the Northern Sub-Population (NSP) and Southern Sub-Population (SSP) and improve the catch on which NSP assessments are based. The currently-used methods will be reviewed and alternative approaches explored. Mr. Sweetnam stated that NMFS would host this workshop. However, the issue of reimbursing attendees was raised if NMFS hosted the meeting, which raises the question of whether this should be a Council-sponsored workshop.

The second Workshop, proposed for 2023, is intended to be a methodology review and would be sponsored by the Council. The goal of this review is to improve estimates of NSP abundance. If the first Workshop recommends new methods be adopted to improve the delineation of the NSP and SSP stocks, these will need a review prior to use in a new assessment. Other potential topics

include acoustic trawl method survey revisions, nearshore acoustic methods, and aerial survey methods and how to include these in the assessment.

PFMC  
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