

SAFMC SSC WORKGROUP APPROACH

DRAFT – August 2024

Purpose

Detail the approach for the formation of Scientific and Statistical Committee (SSC) workgroups tasked with providing more efficient and comprehensive evaluation and discussion of complex technical analyses, before presentation to the full SSC for formal recommendations.

Overview

As the primary peer review body of the Council, the SSC is expected to provide review of a wide range of materials with varying levels of complexity. Stock assessments are typically the most complex analyses to come before the SSC. Effective SSC peer review of assessments is addressed by dedicated assessment processes, such as the Southeast Data, Assessment, and Review (SEDAR), which provides for SSC involvement throughout their development. This enables SSC members to become well informed on the methods, data, and assumptions involved.

While assessment peer review remains an important SSC task, analytical methods applied to management alternative evaluations are becoming increasingly complex, and, therefore, more time consuming and demanding for peer review. Some of the methods recently applied to management option evaluations are arguably as involved and data intensive as the stock assessments from years past. Yet, unlike assessments, there is no SSC involvement in the development or data selection and application of such analyses. Nonetheless, the SSC is expected to review such analyses, with a high degree of excellence and from many perspectives, including adequacy of the analytical techniques, accuracy and appropriateness of the input data, consequences of assumptions, uncertainties, and risks associated with the various outcomes.

Additionally, the SSC peer review often comes relatively late in the process, when any changes to fundamental assumptions or approaches could trigger significant extra work on behalf of the analysts and lead to delays in amendment schedules and management advice. This tends to stifle exploration by the SSC of alternative assumptions and can result in resigned acceptance of an analysis despite concerns with methods or inputs, and lead to suggestions for improvements and changes “to be considered next time”.

It is likely that this situation will only worsen in the future. Today’s management actions tend toward multiple alternatives and sub-alternatives, the impacts of which can vary according to the input dataset or time series of a dataset chosen to establish baseline conditions and evaluate effects. Moreover, the management program is heading toward greater complexity, through greater use of area and seasonal restrictions and more intricate stock definitions, which will lead to further complexity in efforts to predict how future changes will impact a population and fishery. It is unrealistic to expect the SSC to review all aspects of complex management actions or detailed evaluation of management

alternatives adequately and effectively in a few hours, or often even less time. Therefore, the Council directed staff to develop an approach to improve the SSC's ability to peer review complex analyses.

The intent of this document is to describe the workgroup approach that will allow the SSC to take a greater role in complex analyses. Desired outcomes are increased support and buy-in of the SSC in analyses, greater involvement of the SSC in influencing methods, approaches for novel analyses, and increased efficiency in final SSC review.

Workgroup Goals

- Implement a “workgroup” approach to increase SSC involvement in analyses and increase efficiency of the required peer review of such works by the full SSC.
- Ensure SSC involvement early in the analytical process.
- Provide opportunities for SSC and expert guidance on data decisions, analytical approaches and assumptions.
- Provide adequate opportunity and time for the SSC to evaluate outcomes, uncertainties, and risks.
- Present workgroup report to the full SSC prior to making formal recommendations.

Proposed SSC Workgroup Approach

1. SSC executive committee (Chair, Vice-Chair, Former Chair, and SEP Chair) and Council staff decide if an analysis is likely to require the workgroup approach.
 - The SSC executive committee and Council staff will prepare a *workgroup proposal* with brief (1/2 page) justification to be approved by the Council before the workgroup is formed.
2. Upon Council approval for the workgroup approach, the SSC executive committee and Council staff will prepare a formal *scope of work* that defines the workgroup specific objectives, tasks, and timelines.
3. The *scope of work* is presented to the full SSC and SEP and the workgroup is populated.
4. Workgroup Composition:
 - Workgroups will be composed of a subset of SSC or SEP members, and Council staff, with other invited experts as needed. All workgroups should include at least 2 SSC or SEP representatives. Including outside experts is encouraged.
 - Workgroup members will be appointed based on expertise, availability, and interest.
 - The Workgroup will select a Chair from the membership, or have the chair assigned by the SSC executive committee. The workgroup chair will provide updates on workgroup progress during in-person SSC meetings. An SSC member should serve as the chair for ease of providing progress reports

to the full SSC.

5. Workgroups work informally with the analytical team, consultants, or Inter-disciplinary Planning Team (IPT), on an as-needed basis; activities will be coordinated by the Workgroup chair and Council staff.
 - Include SSC workgroup participation and milestone reviews in planning related to the analysis. The intent is to allow the SSC workgroup adequate time to provide guidance.
 - Workgroups meet via conference call, webinar, or in-person as needed; and as funding allows for travel to in-person meetings.
 - Review preliminary results and analytical efforts as needed to provide guidance regarding assumptions and alternatives and ‘best’ analytical techniques, to enable their consideration for the analysis.
 - Workgroup prepares a working paper to submit to the SSC that documents their activities and recommendations.
6. Workgroup generates a final report with recommendations that are vetted through the full SSC.
 - The Workgroup Chair will present the final report to the full SSC at the next available meeting.
 - Workgroup report and recommendations are provided to the full SSC whereupon the analysis is reviewed for final recommendations.

Example Scope of Work

Catch Level Projections Workgroup Statement of Work

Analysis Type: Development of Recommendations for Recruitment Assumptions Used in Catch Level Projections

Justification: The SSC has recently recommended different approaches to making recruitment assumptions in catch level projections for different stocks. To date, these recommendations have been made on a case-by-case basis in response to trends or new patterns in recruitment relative to the historical productivity of the stock. The SSC requested an opportunity to comprehensively review recent SSC decisions and available literature on the topic, and to develop recommendations for how recruitment assumptions be made in projections used to provide catch level recommendations. Ideally, recommendations should be informed by the SEFSC’s working group on this topic.

Goal: Develop a set of recommendations for SSC consideration when making projection requests used to set catch levels.

Analyst: Assistance of an SEFSC analyst may be required. Council staff will be needed to

assist in gathering information for the workgroup.

Members: SSC – Amy Schueller (chair), Fred Scharf, Jie Cao, Scott Crosson, Chris Dumas, Other – Representative from SEFSC’s working group on incorporating recruitment in projections (Erik Williams, SEFSC Beaufort), Council Staff (Chip, Judd)

Tasks:

1. Review recent literature on recruitment assumptions and summarize key findings for the SSC.
 - a. Review of other regions (Gulf, Mid-Atlantic, and Northeast) to determine process for projecting recruitment in projections
 - i. GOM: SSC uses expert judgement to determine whether it is appropriate to use mean long-term recruitment (overall time series) or mean recent (e.g., 10 yr) values for recruitment when S-R relationship is unavailable.
 - b. Setup Google drive to share literature
 - c. Share relevant literature
2. Summarize recent SSC decisions regarding recruitment assumptions in projections used to set catch level recommendations. Case studies should include, but not be limited to, red grouper, red snapper, red porgy, golden tilefish, gag grouper, and black sea bass.
 - a. Review minutes and summaries of previous SSC meetings
 - b. Gather appropriate figures, parameters, and data for the species of interest provided the decisions that were made in the review above
3. With the assistance of the SEFSC, explore the performance alternative recruitment assumptions and summarize the impact on catch level advice for key example stocks.
 - a. Examine possible mechanisms for minimizing variation in forecasting recruitment including possible correlations in: similar species, time series periodicity, and across data sources
4. Draft recommendations for SSC consideration.
 - a. Would like outcome of this workgroup to include a decision-making framework, as well as a list of tasks to improve the framework in the future and provide science to develop best practices

Timeline:

Initial Meeting or Scoping – Aug/Sept 2021
Meetings – late Sept/early Oct 2021 - TBD
Progress Report to SSC – Oct 2021
Meetings – Nov and Dec 2021
Status Report to Council (in SSC Overview) – Dec 2021
Meetings – Jan and Feb 2022
Final Report – 2 weeks prior to Spring (typically April) 2022 Meeting