Agenda Item F.2.a
Supplemental SSC Report 1
November 2025

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON GROUNDFISH MANAGEMENT - ADOPT STOCK ASSESSMENTS

The Scientific and Statistical Committee (SSC) reviewed a revised stock assessment for widow rockfish (F.2 Attachment 3) and catch-only projections for Oregon black rockfish (F.2 Attachment 1) and bocaccio (F.2 Attachment 2).

The latter two items used the standard implementation of time-varying sigma to calculate buffers for projections, instead of the approach that allows for a larger time-varying buffer when natural mortality is greater than $0.15\ yr^{-1}$ (*sensu* Wetzel and Hamel 2023). The SSC deemed that the catch-only projections had been conducted correctly and endorses these catch-only projections as best scientific information available. The approach that allows for a faster increase in the time-varying uncertainty buffer for shorter-lived species with faster turnover rates will be implemented to the extent practicable in the 2027-2028 stock assessment cycle.

Most of the SSC discussion related to the supplemental review for widow rockfish. Dr. Cheryl Barnes (SSC Groundfish Subcommittee Vice-Chair) summarized the findings of the Supplemental Review Panel that met on October 14 and 16, 2025. The panel reviewed a model that was modified based on the SSC Groundfish Subcommittee (GFSC) review from August 2025. The stock assessment team (STAT) and NOAA members of the SSC were unable to participate in the supplemental review due to the federal furlough. These absences prevented the ability of the panel to interact with the STAT and limited the degree to which TAT model decisions, assumptions, and interpretations could be evaluated. In addition, a complete revised stock assessment document to accompany the proposed base model was not available. Nonetheless, the panel recommended endorsing the October 2025 model (F.2 Attachment 3) as best scientific information available (BSIA) and recommended a benchmark assessment for widow rockfish during the next biennium to address tensions among the various sources of input data, particularly age and length compositions from the West Coast Groundfish Bottom Trawl Survey (WCGBTS) and the midwater trawl fishery.

The SSC was unable to make a determination on BSIA at this time. Because of the federal furlough, more than half of the GFSC and several SSC members were not available to review the materials. Similarly, most of the STAT was not available to address remaining questions. The SSC agreed that the October 2025 model is an improvement on previous models. The SSC recommends that the October 2025 model be subject to further review to allow 1) all SSC members to evaluate the modified model thoroughly and 2) the STAT to fully respond to all outstanding requests (Table 1). This meeting should be held as two half days in early 2026 to facilitate exchange with the STAT and ensure scientific advice is ready for the March 2026 Council meeting.

The SSC strongly recommends against proceeding with management based solely on the 2019 update assessment or the 2015 benchmark assessment. The 2015 benchmark assessment and 2019 update assessment incorporated a known data error that resulted in over-estimates of stock biomass. Furthermore, these models do not account for the considerable changes to the fishery and to accepted practices in groundfish stock assessment since the models were developed. These

changes were found to be important in the development of the October 2025 model. If the October 2025 model is not endorsed by the SSC as BSIA following additional review, the SSC will consider the application of equilibrium MSY estimates for recommending OFLs and ABCs based on a Category 3 designation.

Table 1 - Requests for the STAT to address prior to SSC review. Requests are given in order.

No.	Request	Rationale
1	Revise the October 2025 model to use the length-fecundity relationship that is specific to *Sebastes entomelas* (Table 6; Dick et al. 2017, however for parameter values in SS3 units, please see github reference in SSC italic notes). [Request 15 from supplemental panel report]	The length-based fecundity parameters used in the October 2025 model pertained to 'unobserved rockfish'. Species-specific values should be used because they are available.
2	To the extent practicable, include content tables commonly included in an update assessment, such as retrospectives, jitters, likelihood profiles, and alternative states of nature, to aid recommendations.	With the additional analyses and review, the assessment has exceeded the detail typically required for an update assessment. While a full benchmark assessment is not feasible at this time, additional sensitivity runs have already been completed and can be included in the report.
3	Present a sensitivity analysis that illustrates the sequential changes in fleet structure and handling of discard data that were made for the October 2025 model. Sensitivity runs should include, sequentially, results from the August 2025 model, results from combining catch from fixed gear fleets (hook-and-line and net) with the bottom trawl fleet, results from removing composition data for the hook-and-line fleet, and results after altering the treatment of discard data as done in the October 2025 model. The assessment report document should also detail the STAT's mechanistic understanding of why hook-and-line data have a seemingly disproportionate effect on model results, as shown in their responses to Requests 1 and 2 from August 2025.	The sensitivity analysis to hook-and-line data [Requests 1 and 2 from August 2025] continue to show unexpectedly large effects on estimates of stock size. Without the STAT present, it was not possible to understand the reason(s) for this. The review panel had questions about the mechanism for an 11% decrease in 2027 ACL between the August 2025 and October 2025 models [see response to Request 1 from August 2025], given that the scale of the stock does not appear to decrease enough to prompt such a considerable change. Table 1 in F.2 Attachment 3 reports a substantial change in ACL and other quantities when the fleet structure and discard data treatment change. These two components should be teased apart to identify whether one or both drive the changes.

		The table at the end of the response to Request 2 in F.2 Attachment 3 reports the large effect of a data error on model outcomes for the 2019 update assessment. The document, however, does not provide a potential mechanistic explanation for these effects.
4	Present a sensitivity analysis that prespecifies *M* using the median of a prior informed by maximum age (*sensu* Hamel and Cope 2022). Include a justification for the estimate of maximum age that is used for the prior.	Older fish identified in the WCGBTS may have an outsized effect on estimates of *M*. This approach is commonly used for West Coast groundfish assessments and would provide additional estimates of stock biomass to evaluate uncertainty.
5	Provide a table of equilibrium MSY from the October 2025 model, the revised model that updates the length-fecundity relationship, and the model that prespecifies *M* using a life history informed prior.	In the event that a BSIA determination is not made, these values will help the SSC set OFLs (e.g., using a Category 3 approach). The table of equilibrium MSY values can be compared to estimates from a corrected 2019 update assessment to illustrate effects of the data error that was identified in August 2025.
6	Expand on the justification for using a length-fecundity relationship and provide a comparison of model estimates with and without the application of this relationship.	This approach leads to a substantial shift in management advice, so using it should be well justified in the text.
7	Clarify how *M* affects recent changes in stock size.	Requests 6 and 8 from the August 2025 GFSC review included a "leave one out" analysis where different data sources were excluded from the assessment, and a 10-year retrospective analysis. Both analyses highlighted a sensitivity of model results to some sources of age data, which were important in estimating *M*. The panel was unable to evaluate how changes in estimates of *M* corresponded to changes in stock biomass.
8	Clarify how changes in model parameters affect changes in management advice.	Some of the changes to the OFLs seem disproportionate relative to associated changes to model parameter estimates. For example, there is a considerable decrease in the 2027 OFL when a length-fecundity relationship is used,

		but estimates of stock size were fairly similar to the model that relied on different assumptions about fecundity. How this relates to a change in "currency" for reproductive output and other potential drivers should be explicitly stated. It would be helpful to clearly articulate how models with similar biomass trajectories can produce very different OFL projections.