

**Suggested topics for the assessment cycle review
(post-mortem) meeting on 2023 assessments
from the Science Centers' stock assessment teams**
January 4, 2024

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Data

Increased effort during this cycle around data was greatly appreciated. This contributed to more issues being addressed well in advance of data deadlines, better communication on data values, and ultimately an improved process to meeting data deadlines.

1. Pre-assessment data workshops

Issue: Pre-assessment data workshops remain sparsely attended, yet provide opportunities to communicate initial data questions, and engage with those who have knowledge of the data and the fishery.

Suggestion: Discuss ways to enhance attendance and engagement during these workshops. Would changing the timing to be around a council meeting, or increased communication about these meetings help increase participation?

Review and documentation

2. Establish and review ground rules

Issue: STAR panels lack a formal code of conduct and clear pathways for holding individuals accountable to said code of conduct.

- Comments from students/course participants regarding one panelist's behavior at first STAR panel (anonymized, with emphasis added):
 - "I'm finding myself fighting against wanting to let the whole incident go. Maybe for fear of coming across as sensitive as an early career scientist preparing for a career in stock assessment science... I do worry about the comments from [panelist] and impact on aspiring assessment scientists in a community that is largely very supportive of students and the learning process."
 - "Even virtually I found [panelist]'s behavior to be unprofessional and demeaning... Rude comments or out-bursts create a psychologically unsafe environment, which in turn can be damaging to the person leading the assessment (e.g., making them less likely to be transparent about short-comings in their data or model, and potentially discouraging innovation), to fellow reviewers (generating unnecessary tension or hostility and making it less likely for a model to be supported by the review body), and between the audience and the assessment author (by normalizing and even promoting disrespectful commentary)... I would encourage establishing a code of conduct for review bodies in the future and that rules/norms are articulated at the opening of a panel review. I personally think this would go a long way to setting expectations and promoting accountability among all parties involved."
 - "Personally, I don't do well in tense interrogations like that and so it was a bit daunting and dissuading as I've been considering stock assessment positions as a career. But, tense questioning is something that I can get over and try to work on. What really took me back was probably a little more subtle but still insidious were some of the comments he made between those questions. Things like "I would never lead a presentation without knowing every single output of the model" and other somewhat degrading, comparative, and unhelpful comments... which... felt like an attack on us as scientists and not at all about the stock assessment. What I hope would be integrated into the code of conduct for the panel is to emphasize that discussions should remain about the stock assessment and not about the stock assessment scientists. I feel

like the moderator should've stepped in during those instances. So, another addition to the code of conduct I would suggest is to hold the moderator partially responsible for implementing and upholding the code of conduct."

- "[Panelist]'s suggestions at the STAR panel improved the [species] model, but his delivery was harsh. In our case, perhaps a reminder that the STAR panel is also a learning opportunity (especially to first timers) may help. In our case, I think a teacher-student type of interaction would have been more encouraging and productive. I understand all are colleagues, but there is a power dynamic between STAT and STAR panel. What helped was other STAR panel members moderating each other. [Other meeting participants] did well in softening [panelist]'s comments."

Suggestion: Develop a STAR panel code of conduct (distinct from and that goes beyond the PFMC harassment policy). Provide this to all STAR panel participants in advance of the meeting, read the policy at the start of the meeting, and enforce any violations. To enforce violations, the PFMC staffer or panel chair should read a prepared statement reminding participants of the code of conduct that everyone agreed to follow, so that no one is forced to improvise a response in the moment.

- Example of a scripted response from NWFSC ESSR for meetings with public participants: "The PFMC's policy is that personal or organizational attacks or insults will not be tolerated. This is your only warning. Any further attacks will result in you being asked to leave the meeting."

3. Update text in ToR to clarify requirements and guidance

Issue: There are a number of elements of an assessment report that are either not required prior to the STAR panel (e.g. executive summary, projection tables, decision tables) or not required at all (one page summaries), yet are considered beneficial by reviewers and readers and so have been produced in reports in the past. This complicates the preparations by the STATs due to the perception that an assessment is incomplete if these elements are not produced, especially when other assessments include them.

- Current ToR language says:
 - "K. Harvest projections and decision tables (groundfish only). *Not required in draft assessment undergoing review."
 - "A. ... The executive summary is not required (though is useful) in a draft assessment undergoing review"

Suggestion: Hold discussions with Council committees (e.g. GMT and GAP) to better understand the value of the executive summary and projection and decisions tables for the pre-STAR panel report, and the one-page summaries for the final report. If these elements are highly valuable for discussion by the committees between the time the report is available and the next report is due, then specify in the ToR that such elements are required. If not, maintain current language in the ToR that these are optional for the specific report, but remove the language implying that such materials should be done. This will lead to greater consistency among STATs, clearer expectations, and more efficient communication during the assessment process.

Issue: ToR appendices B and D do not align and at times say conflicting things (e.g. Appendix B says that an “unresolved problems” section is not required but Appendix D lists that section and does not say is not required). Sections E and F of these two appendices are particularly hard to follow.

Suggestion: Suggest reorganizing Appendices B and D to align with one another and be easier to read.

Issue: A few elements of the ToR are not clear. These include:

- Clarification: The approaches to calculating the states of nature, especially with regard to states that are based on structural uncertainty rather than a single parameter as an axis of uncertainty, are unclear. In the case of structural uncertainty, it’s not really possible to choose low and high states that represent 25% probabilities. More language could be added about when to choose structural vs parametric uncertainty and the role of the probabilities in each case.
- Clarification: ToR for data moderate assessments are vague.
 - It is not clear what major elements (tables, figures) should be there.
 - The following section should clarify what “may be possible” means in the following text (from ToR page 34). Is it at the discretion of the authors, the reviewers? This led to unnecessary stress during the 2023 STAR for D-M assessments.
 - “Life history values (i.e., steepness, growth parameters (k , L_{∞} , t_0), natural mortality, fecundity, maturity) are initially pre-specified (some degree of this does happen in many standard Stock Synthesis models), but estimation of some values may be possible.”
- New addition: have the ToR instruct the STAT to update the assessment with explicit statements about the Category (1, 2, or 3) of the assessment once the SSC has recommended it. This was a request from the regional

office who noted that the stock assessment is the primary resource for determining a stock's overfished status but, per the fishery management plan, Category 3 assessments do not have applicable overfished status determination criteria. The assessment, if it is deemed a Category 3 by the SSC, should be updated so that its results are not misleading readers to think that there should have been an overfished or not overfished status determination by NMFS.

Suggestion: Refine the ToR text on states of nature, and requirements for data-moderate assessments, and add text on assessment categories.

Issue: There was a lot of confusion during this cycle around the reasons for why results changed from past assessments, despite concerted efforts by the STATs to communicate this through bridging analyses and in the one-page summaries.

Suggestion 1: Add a required section to the executive summary for describing reasons for changes in results from past assessments.

Suggestion 2: Reconvene the evening session during the Council meetings for members to ask questions about the stock assessments. This was not done this cycle, but has been done in the past. Having the evening session might have reduced some of the confusion about the assessments during floor discussion.

Issue: The choice to exclude the environmental recruitment index from the 2023 petrale assessment was driven, in part, by a concern that if petrale were recommended for an update and an extended index didn't fit well with the other new data, then it would require a full assessment to remove the index. The review of the [2011 Bocaccio update](#) was complicated due to an extremely strong 2010 year class inferred from the length frequency data of the WCGBT Survey, causing those length data to no longer fit.

Suggestion: Expand the list of exceptions noted in the ToR (page 28) to include adding or removing a data source when there is a compelling reason to do so.

The following language (from page 27) would continue to apply.

Alterations to the assessment can be considered as long as the update assessment clearly documents and justifies the need for such changes and provides a step-by-step transition (via sensitivity analysis) from the last full assessment to an update assessment under review. If more substantial changes to the model are contemplated by the STAT, the SSC Groundfish Subcommittee may recommend that the update be subject to further review at the mop-up STAR panel meeting to evaluate the proposed method more thoroughly.

4. Engagement during review process

Issue: STAT participation was requested at the GFSC subcommittee meeting in late August for reviewing the STAR panel reviews. Few questions were asked of the STATs, and apart from panel chairs, engagement by GFSC members seemed limited in general, especially when compared to the level of discussion about the assessments by council members on the council floor at the September Council meeting. STAT participation in the August meeting seemed unnecessary and the meeting seemed to be an extra and unneeded step in an otherwise busy time period.

Suggestion: Revisit the format and timing for this meeting. With respect to meeting format, consider recommending that GFSC members prepare and disseminate questions on the reviews in advance of the meeting. If no questions are provided then participation by the STATs would not be required. With respect to meeting timing, discuss whether a separate GFSC meeting in August is even needed each cycle. If it is expected that there will be significant discussion about the reviews, schedule a meeting in August. If it is expected that there will be limited discussion about the reviews, or that alternative timing would provide for a better review, consider adjusting the timing of the meeting to be just prior to the SSC meeting at the beginning of the September Council meeting, as was typically done up until a few cycles ago.

Process

5. Roles and Deadlines

Issue: There seemed to be confusion on the role of GAP and GMT members during STAR panels. Improved GAP and GMT understanding of their roles at the STAR Panel will aid in onboarding newer members who have not experienced a STAR Panel.

Suggestion: Add to the ToR clear duties for STAR panel GAP/GMT representatives. Include in STAR panel protocols that during each day, time is set aside where GAP and GMT representatives can ask questions.

Issue: Data acquisition and preparation currently holds back modeling opportunities.

Suggestion: Earlier data deadline. Once the stocks are determined for the assessment cycle, data for all years except the most recent year should be made available by 1 December. It should then be determined when it would be reasonable to expect the most current year's data. This is likely most applicable

to catch streams, indices of abundance and length data. Ages may need further consideration given ages from past years may not already be available.

Issue: There was some consternation expressed during the reviews about holidays falling within review windows. The same is true of other ToR deadlines such as reporting deadlines.

Suggestion: Add language (for example, “(inclusive of any holidays)” or “(full calendar weeks)”) to text about deadlines within the ToR to clarify how holidays should be treated (e.g. that 3 weeks is 3 weeks, not 15 business days).

6. Process around requests and clarification on final documentation

The first issue is copied, with slight adjustment, from the 2021 cycle assessment review document. The issue remains relevant although there has been improvement. The second and third issues are new for this cycle.

Issue: Apart from STAR panel reviews, requests for additional analyses (model runs, extra analysis, projections) can come from many different individuals. Because of this, it is unclear if “requests” from an individual are formal and have the full weight of the respective body on which the individual sits, particularly when that individual serves in multiple roles. Furthermore, requests do sometimes occur during meetings and show up in committee reports or decision statements rather than being sent directly to the STATs. In these cases, unless the STATs are alerted to the requests, it is easy for requests not to reach the proper individuals and therefore be unaddressed.

Suggestion: All requests should be sent in writing from a single individual to a single individual (with the entire STAT cc'd, perhaps) and be identified as a formal request, as is done in STAR panels. The Council SSC staffer, would be a potential candidate for sending the notice to the appropriate supervisor(s) of the STAT lead, or to the STAT lead themselves. Alternatively, communications can be between the Council's Executive Director and Science Center's Science Directors. There should be confirmation of reception and understanding of the request as well.

Issue: Sometimes additional projection runs are requested in the autumn after the STAR panel but before the document is finalized. It is not clear if these runs are used in management, in which case they should be included in the decision table for the final published document, or if they are just explorations and perhaps should be added as an appendix, or not included at all in the final document.

Suggestion: Clearly communicate (e.g. from GMT or PFMC staff) the set of projections that should appear in the final published document and how they should be reported. Possible ways to report include:

- as part of the decision table,
- added as an appendix,
- an exploration sent back to the requester directly or through the proper channels if that is setup

Issue: There were a number of requests related to projections that were made over multiple council meetings. Whether these materials need to be added to the final assessment document is unclear, which adds uncertainty on when to start finalizing 508 compliance steps.

Suggestion: Consider adding a deadline for when the final version of the assessment (after STAR review and adoption by the Council) needs to be provided to the Council.

7. Stress and workload

Issue: STAR panels involve heavy workloads for both STAT and reviewers, with the potential of 12-15-hour work days for STATs. This can lead to burn-out and increases opportunities for errors to be introduced by fatigued staff. This is especially relevant when multiple species-area assessment models are presented within a single STAR panel by the same individuals.

Suggestions: Discuss whether there are improvements that can be made to the STAR panel review process and consider implementing them. Assessment reviews occur nationally, and presumably processes that work well can be shared across regions. Updates to language within the ToR about allowing STAT's sufficient time to address requests was helpful, as was guidance that the number of models reviewed per panel should ideally be two (page 10), but as pointed out by the common CIE reviewer, the number of models reviewed in the first two panels was 4 each.

Other topics

8. Research and data needs database

Issue: Compiling the Council's [Research and Data Needs](#) database seems to run on a 5 year cycle. Research and Data needs are therefore not responsive to the most recent needs, especially as the cycle nears the end. Having an up to

date searchable dataset of council priorities provides a resource to support funding requests and drive research ideas.

Suggestion: Consider having a separate searchable database that lists the most recent research and data recommendations (since the last five-year cycle) from completed assessments and advisory body recommendations. Providing a separate database could be a way to stay up-to-date for users as well as Council members conducting the five-year review, while not disrupting the existing five-year review process and website.