Guidance to Stock Assessment Workshop Working Groups (SAW WG) on Preparation/Format of SAW Reports for Peer Review

J. Weinberg, SAW Chairman (last revised: 10/16/2014)

Stock Assessment Terms of Reference (TORs) are established, with NRCC approval, for benchmark stock assessments in the SAW/SARC process. SAW WGs are responsible for carrying out analyses and reporting results based on those TORs. Although SAW WGs are often comprised of 5-10 members, the SAW WG chair and lead assessment scientist have primary responsibility for completing these tasks.

1. **Produce two reports**: Assessment Report and the Assessment Summary Report.

2. **Assessment Summary Report.**

   This is the shorter report. It is based on, and should be entirely consistent with, the larger Assessment Report (see Section 3). In the text, state the values of older Biological Reference Points as well as the new values, if you have re-estimated them (see Section 4).

   Do not include management advice beyond what is called for in the assessment Terms of Reference.

   See (http://www.nefsc.noaa.gov/saw/reports.html) for recent examples of acceptable format and style to use in an Assessment Summary Report. Your Assessment Summary Report should include all of the Sections shown in these recent examples. The figure that shows the F estimates through time should also include a line showing $F_{threshold}$. The figure that shows the B estimates through time should also include a line showing $B_{threshold}$. The targets can also be indicated.

   A good practice in the text, is to express weight in metric tons, followed in parentheses by the weight in millions of pounds. Example: "Landings of 14,969 mt (33.0 million lbs) and discards of 1,400 mt (3.1 million lbs) …". You might want to include an extra axis so that one axis is in metric tons and the other is in millions of lbs.

   In the Catch and Status Table, include the most recent 10 years, as well as the long-term min, mean and max, in that order. Definitely give actual estimates of F and B (extra rows with ratios such as F/Fmsy and B/Bmsy can be shown *in addition* to the F's and B's). Authors sometimes forget to include rows for discards and recruitment, but these should be included.

Be clear about whether the stock status is based on total biomass, spawning stock biomass, males, females, certain ages, etc. These criteria can vary among assessments and can cause confusion.

In general, text should include all of the significant digits that are estimated and should be reported the same way in the Assessment Summary Report and the Assessment Report. Rounding is often necessary in the Catch and Status Table to make it fit on the page.

Bibliography. Use the style shown in reference sections of NEFSC CRD 14-07 (http://nefsc.noaa.gov/publications/crd/crd1407/).

Page numbering. Number all pages.

Disclaimer #1. Put the following disclaimer on the first page of your report:

> "This information is distributed solely for the purpose of pre-dissemination peer review. It has not been formally disseminated by NOAA. It does not represent any final agency determination or policy."

Disclaimer #2. Put the following disclaimer on all subsequent pages of your report:

> "Draft Report for peer review only."

3. Assessment Report.

This is the larger report with the entire assessment. ***Write a separate section for each Term of Reference, and the order of the Assessment Report should follow the order of the Terms of Reference. This is necessary because the Independent Reviewers are asked to evaluate whether each TOR has been completed successfully. Those TORs that have been completed successfully (as judged by the review panel) will be published in the Center Reference Document.*** Failure to follow this instruction makes it extremely difficult to peer review and to edit the final report.

If you have additional analyses that support the assessment, but are not directly related to a TOR, put that information into an appendix. Appendices can be published along with the main report. Additional analyses that are done during the SARC peer review are often collected and put into a separate Appendix.

Executive Summary. Include an Executive Summary at the beginning of the Assessment Report that summarizes the major findings for each Term of Reference. Include the numerical values of the major results related to stock status. (Do not paste in the Assessment Summary Report, which is different). It may be useful to indicate where to look in the report for the details on each result.

Introduction. Include an Introduction that gives a brief history of past assessments, a description of the biology of the species, and something about the approach you have taken in this assessment. State whether the stock was formerly declared overfished and is now in a rebuilding plan. Other information including the management history may also be included.

Throughout the report, use the metric system (or use both systems as described above). If only metric values are given, then include a table with the relevant conversion coefficients from the metric system to lbs, miles, etc.

Present enough data (e.g., survey indices, commercial landings, etc.) and description of your methods so that the reviewers are able to evaluate your results and conclusions.

Figure and Table numbers. If your assessment is given the letter "A", for example, then label tables and figures consecutively as Table A1, Table A2, etc., Figure A1, Figure A2 etc. (Until you know the letter, just stick in a place holder like "Z"). Appendices should be labeled: "Appendix A1" for example:, and Tables and figures in that Appendix should be labeled: "Appendix A1, Table 1", etc.

Bibliography. Use the style shown in NEFSC CRD 14-09 (http://nefsc.noaa.gov/publications/crd/crd1409/).

Page numbering. Number all pages.

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4. <u>Build bridges from "old" to "new" results.</u>

a. In both reports, state what the estimates of the Biological Reference Points (BRPs) were before this new assessment, and give a citation for those older values (such as a past SARC report or Amendment to an FMP). Then state what the updated BRP estimates are, based on the new assessment. Likewise, if you have new estimates of fishing mortality rate and/or biomass for recent years, state what the old estimates were, with a citation, and then give the new updated estimates.

b. In both reports, when evaluating stock status, compare the estimates of current B and F based on the previously accepted model as well as based on any new model to both the old and the new estimates of the BRPs from these models. In cases where it is inappropriate to compare new stock B or F estimates to old BRPs, say so.

c. If a new model is being used in this assessment, point that out and justify why you are using it. It is often appropriate to present results from the old model and then move on to the newer preferred model showing steps along the way so the peer reviewers can appreciate and understand the connections and new developments.

5. Presenting models in the Assessment Report.

For any TOR in which one or more models are explored by the WG, give a detailed presentation of the "best" model, including inputs, outputs, diagnostics of model adequacy, and sensitivity analyses that evaluate robustness of model results to the assumptions. In less detail, describe other models that were evaluated by the WG and explain their strengths, weaknesses and results in relation to the "best" model. When selection of a "best" model is not possible, present alternative models in detail, and summarize the relative utility each model, including a comparison of results. (Also see Section 4c).

For the "best model", include one or more detailed tables that describe the model structure (for example: model type or name, age or length based, separate sexes?, types of landings data, length weight parameters, maturity parameters, length bins, time bins, m, surveys used, model years for surveys and catch, etc.)

6. Maps. Include maps showing where the stock is located and/or captured. This helps the reviewers who are often from other countries.

7. Submit your files in a format that can be edited by the Chairman. The editor will convert them to pdf's and send them out to the reviewers 2 weeks before the SAW.

8. Make your text and tables using Word (.docx).

9. Figures and their legends must be pasted into a single Word file, or included as part of the main text and tables file (see 8 above). After the SAW/SARC meeting, the SAW Chairman will work with you to edit the figures for the final report.

10. File names. The files that are submitted to the SAW chairman should be named something like this:

speciesname_SAW53_AssessmentReport.doc

speciesname_SAW53_AssessmentReportFigures.doc

speciesname_SAW53_AssessmentSummaryReport.doc

(etc for additional files)

11. After the SARC meeting. We will receive a report from the SARC Review Panel, which will be made public. Based on the comments of the reviewers, the SAW Chairman will edit the Assessment Summary Report and the Assessment Report. For assessment results that have been rejected by the reviewers, the SAW Chair will add an Editor's Note in the report(s) stating that particular results were rejected but are included in the report(s) simply to show the work that was considered for peer review. To facilitate this editing process, Working Groups are required to organize/write their draft reports with a separate section for each Term of Reference (See: 3.Assessment Report.). The assessment scientists will assist the SAW Chairman with the final editing, when requested to do so.

12. Direct questions to: Dr. James Weinberg, SAW Chairman, NMFS/NEFSC, 166 Water St., Woods Hole, MA, 02543. James.weinberg@noaa.gov, (phone 508.495.2352).

Refer to the SAW website for information: http://www.nefsc.noaa.gov/nefsc/saw/

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