

Draft SSC Report June 2021



D-4 Risk Table Workshop Report



Overview of Risk Table Report

- Synthesis of information from February Workshop
 - Contributors: Martin Dorn, Bridget Ferriss, Daniel Gothel, Alan Haynie, James Ianelli, Stephen Kasperski, Kalei Shotwell, Elizabeth Siddon, Paul Spencer, Grant Thompson, and Stephani Zador
- SSC Task: Develop preliminary advice to authors for September
 - SSC sub-group: Anne Hollowed, Sherri Dressel, Curry Cunningham, Mike Downs, Brad Harris, Ian Stewart and Alison Whitman

Overview of report

- **Discussion 1:** Introduction to Risk Tables: historical background, conceptual framework, synthesis of applications
- **Discussion 2:** Frameworks for addressing uncertainty
- **Discussion 3:** Quantifying the importance of assessment risk
- **Discussion 4:** Population dynamics risk
- **Discussion 5:** Risk of external changes in ecosystem conditions
- **Discussion 6:** Risk of changes in fishery performance
- **Discussion 7:** Comparing P^* and decision – theoretic approaches
- **Discussion 8:** Joint probability for linking risk table to ABC reduction

Objectives

- Assess the progress and value of species-specific risk tables for all stocks
- Evaluate risk table consistency among species and highlight challenges
- Define “risk” and “uncertainty”
- Compare ABC and OFL buffers for scientific uncertainty with ABC reductions due to the risk table
- Discuss future options

Timeline

Date/Meeting	Action	Who
June 2021	Assemble full workshop report	SSC/Workshop Session leads
June 2021	Preliminary recommendations	SSC/NPFMC
September 2021	Comment and recommendations	CPT/GPT
October 2021	Finalize 2021 recommendations	SSC/NPFMC

Preliminary Guidance and SSC Recommendations

1. The risk table framework is working well. The tables have expanded communication among assessment authors and between assessment authors and ecosystem/process researchers. The framework is intended to provide a clear and transparent basis for communicating assessment-related and stock condition concerns that are not directly captured in model-based uncertainty, the tier system, or harvest control rules.

Preliminary Guidance and SSC Recommendations

2. Within the context of the risk tables, “risk” is the risk of the ABC exceeding the true (but unknown) OFL. The risk tables are intended to inform the process of adjusting the ABC from the maximum permissible when needed. Recommendations of an ABC reduction from the maximum permissible requires justification. The risk tables provide an avenue for articulating that justification.

Preliminary Guidance and SSC Recommendations

3. Risk tables should be produced for all full assessments of groundfish (and perhaps crab) stocks and stock complexes in the fishery. Risk tables can be produced in other years at the discretion of the lead author. The SSC requests that the authors consider if there have been any changes to previous conditions and update the tables accordingly. The SSC recommends that authors of stock complexes consider the most abundant species and any other species of concern within the complex when formulating advice.

Preliminary Guidance and SSC Recommendations

4. Risk scores should be specific to a given stock/stock complex. While comparison across species (e.g., within a tier, with similar life histories) or stocks is useful for consistency, the SSC does not support trying to prescribe a common reduction from the maximum permissible ABC for a given risk score across species/stocks because the processes underlying the score may differ among species/stocks. Considerations of reductions in ABCs below the maximum permissible should be made on a case-by-case basis with justification based on risk scoring. The risk table rankings include qualitative information that requires a certain amount of subjective but well-informed interpretation of the available data by the author(s), the Plan Teams and the SSC, and as such, blanket comparisons across species/stocks for the purpose of explicitly defining reductions in ABC below the maximum permissible are not prudent.

Preliminary Guidance and SSC Recommendations

5. The fishery/community performance column should focus on information that would inform the biological status of the resource (e.g., an unexplained drop in CPUE that could indicate un-modelled stock decline, or a spatial shift indicating changes in species' range), and not the effects of proposed ABCs on the fishery or communities or bycatch-related considerations. The SSC recognizes that the community impact information is critical for informed decision making for TAC setting and recommends this information be included in other Council documents such as the ACEPO and/or the Economic SAFE.
6. The SSC encourages the inclusion of LK/TK/S as a source of knowledge about the condition of the stock.

Preliminary Guidance and SSC Recommendations

7. To avoid double-counting information, authors should avoid inclusion of stock trends/processes that are incorporated in the assessment or reflected in the Tier when scoring the risk tables. For cases where a process external to the assessment is relevant to two or more risk categories, the SSC recommends that the narrative reflect the interconnected relationships that exist between rankings among risk categories.
8. The SSC suggests a potential revision to the category levels: from the existing four (normal, increased, major, extreme) to three categories (normal, increased, extreme).

Preliminary Guidance and SSC Recommendations

9. Reductions in ABC below the maximum permissible should be applied sparingly and that the tier system should be regarded as the primary basis for establishing the ABC. If they begin to become commonplace, that should warrant further review of the assessment and/or the Tier system.