

## **DRAFT**

### **Wreckfish Assessment Peer Review**

#### **Terms of Reference**

**(Based on SEDAR TORS, for consideration and review by the SAFMC SSC)**

1. Consider the strengths and weaknesses of data sources, and address the following:
  - a) Are data decisions documented, and are they sound and robust?
  - b) Are data uncertainties acknowledged, reported, and within normal or expected levels?
  - c) Are data applied properly within the assessment model?
  - d) Are input data series reliable and sufficient to support the assessment approach and findings?
  
2. Evaluate the methods used to assess the stock, considering strengths and weaknesses of the approach and taking into account the available data.
  - a) Are methods scientifically sound and robust?
  - b) Are assessment models configured properly and used consistent with standard practices?
  - c) Are the methods appropriate for the available data?
  
3. Evaluate the assessment findings with respect to the following:
  - a) Are abundance, exploitation, and biomass estimates reliable, consistent with input data and population biological characteristics, and useful to support status inferences?
  - b) Is the stock overfished? What information helps you reach this conclusion?
  - c) Is the stock undergoing overfishing? What information helps you reach this conclusion?
  - d) Is there an informative stock recruitment relationship? Is the stock recruitment curve reliable and useful for evaluation of productivity and future stock conditions?
  - e) Are the quantitative estimates of the status determination criteria for this stock reliable? If not, are there other indicators that may be used to inform managers about stock trends and conditions?
  
4. Evaluate the stock projections, considering the strengths and weaknesses of approaches and available information, and consider the following:
  - a) Are the methods consistent with accepted practices and available data?
  - b) Are the methods appropriate for the assessment model and outputs?

- c) Are the results informative and robust, and useful to support inferences of probable future conditions?
  - d) Are key uncertainties acknowledged, discussed, and reflected in the projection results ?
5. Consider how uncertainties in the assessment, and their potential consequences, are addressed.
    - a) Comment on the degree to which methods used to evaluate uncertainty reflect and capture the significant sources of uncertainty in the population, data sources, and assessment methods
    - b) Ensure that the implications of uncertainty in technical conclusions are clearly stated.
  6. Consider the research recommendations provided by the Data and Assessment workshops and make any additional recommendations or prioritizations warranted.
    - a) Clearly denote research and monitoring that could improve the reliability of, and information provided by, future assessments.
    - b) Provide recommendations on possible ways to improve the SEDAR process.
  7. Provide guidance on key improvements in data or modeling approaches which should be considered when scheduling the next assessment.
  8. Prepare a Peer Review Summary summarizing the Panel's evaluation of the stock assessment and addressing each Term of Reference.