

Terms of Reference for the Peer Review

External Independent Peer Review by the Center for Independent Experts under the Western Pacific Stock Assessment Review framework:

Review of the data available for the Guam Bottomfish Management Unit Species (BMUS)

Benchmark stock assessment

For questions 1-7, reviewers shall provide a "yes" or "no" response with explanations to provide clarification. Only if necessary, caveats may be provided to these yes or no responses, but when provided, they must be as specific as possible to provide direction and clarification.

- 1) Are the catch time-series from creel surveys and other sources well-documented and appropriate to use in stock assessments?
- 2) Are the filtering and data quality criteria used to select the creel survey interviews that will be used to develop the CPUE indices for each BMUS well-documented and appropriate?
- 3) Are the covariates considered in the CPUE standardization appropriate?
- 4) Is the CPUE standardization correctly applied and are the resulting abundance indices appropriate to use in stock assessments?
- 5) Are the selected data sources of length observations appropriate for inclusion in the stock assessments?
- 6) Are the approaches for weighting length-composition data to account for uneven length observations over space and time well documented and appropriate?
- 7) Are the selected biological parameter values and variances well-documented and appropriate (e.g. growth, maturity, longevity, natural mortality, stock-recruitment steepness)?
- 8) As needed, suggest recommendations for future improvements and research priorities to improve collection of catch and length data, and life history information for stock assessments of Guam BMUS. Indicate whether each recommendation should be addressed in the short/immediate term (2 months), mid-term (3-5 years), and long-term (5-10 years).
- 9) Draft a report (individual reports from each panel member and a Summary Report from the Chair) addressing the above TOR questions.