



# SEDAR

## SouthEast Data, Assessment, and Review

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### SEDAR 53 South Atlantic Red Grouper Assessment\*

#### Terms of Reference

1. Update the approved SEDAR 19 South Atlantic red grouper base model with data through 2015. Provide a model consistent with the SEDAR 19 base assessment configuration and revised configurations as necessary to incorporate and evaluate any changes in model inputs or parameterization approved during this assessment.
2. Evaluate and document the following specific changes in input data or deviations from the benchmark model. (List below each topic or new dataset that will be considered in this assessment.)
  - Consider the inclusion of the SERFS video index
  - Incorporate the latest BAM model configuration
3. Document any changes or corrections made to the model and input datasets and provide updated input data tables. Fully document and describe the impacts (on population parameters and management benchmarks) of any changes to the model structure, methods, application or fitting procedures made between this assessment and the SEDAR 19 assessment. Provide commercial and recreational landings and discards in pounds and numbers.
4. Update model parameter estimates and their variances, model uncertainties, and estimates of stock status and management benchmarks. Compare population parameter trends and management benchmarks estimated in this assessment with values from the previous assessment (SEDAR 19), and comment on the impacts of changes in data, assumptions or assessment methods on estimated population conditions and benchmarks.
5. Provide stock projections, including a pdf for biological reference point estimates and yield separated for landings and discards reported in pounds and numbers. Projection results are required through 2020. Projection criteria:
  - To determine OFL: apply an annual probability of overfishing = 50%.
  - To evaluate the existing rebuilding plan: base on fixed exploitation at 75% Fmsy. In addition to reporting yield and stock status as described above, for this projection also report the probability that  $SSB > SSB_{msy}$ .
    - Potential Alternative Rebuilding: If results of this projection indicate that the stock is not rebuilt by 2020 (as evidenced by  $SSB > SSB_{msy}$  at 50% probability), provide an additional projection based on a fixed exploitation rate (Frebuild) where Frebuild is defined as the maximum exploitation rate that provides 0.70 probability of rebuilding ( $SSB > SSB_{msy}$ ) by 2020.
5. Develop a stock assessment update report to address these TORS and fully document the input data, methods, and results of the stock assessment update.

\*NOTE: This assessment will follow a Standard Assessment Approach.

