



**Mid-Atlantic Fishery Management Council  
Sub-Group of the Scientific and Statistical Committee**

**Peer Review of Recreational Fishery Model**

September 20, 2021

**Terms of Reference**

- 1) Are the theoretical and statistical model specifications consistent with professional standards?
  - a. Was the model's design and specification clearly described?
  - b. Are the underlying data sufficient to derive model estimates?
- 2) How does the scale at which the model is operating (coast, regional, or state; wave or annual; fishing mode) affect the results?
  - a. ii) How does data availability, uncertainty, and variability affect model results, interpretation, and application?
  - b. What key assumptions affect the underlying statistical analysis and interpretation of the results? Were these assumptions and relevant uncertainties identified and characterized?
- 3) Is the model appropriate for estimating and predicting the impacts of bag, size, and season limits on recreational catch or harvest? Are the methods in the Recreational Economic Demand Model appropriate for estimating changes in recreational effort or fishing demand?
  - a. Does the modeling approach represent an improvement over current methods used to estimate impacts of management measures?
  - b. What are the strengths/limitations of the modeling approach for informing management measures, especially at the regional, state, wave, or mode level? Are there specific recreational fishing measures for which use of the model would not be recommended?
  - c. What are the implications of using the model to predict future catch/harvest based on historical data? Are there limits on the magnitude of change in catch/harvest or stock status beyond which use of the model would not be recommended?
  - d. Can the modeling approach support development of multi-year bag, size, and season limits? If so, what criteria should be applied or developed to assess the reliability of the multi-year projections?
- 4) Provide guidance for the following future model use considerations:
  - a. Could the model be modified to incorporate other species (e.g., scup, bluefish)?
  - b. Could future model runs be conducted by other individuals (e.g., Council/ASMFC staff or Monitoring/Technical Committee members) without major modifications?
  - c. How easily could the model be updated with additional years of data or additional variables?

Recreational Fleet Dynamics Model - summer flounder and black sea bass (Dr. Jason McNamee, RI DEM)

Recreational Economic Demand Model – summer flounder (Dr. Lou Carr-Harris, NEFSC)