SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

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Trish Murphey, Chair | Jessica McCawley, Vice Chair
John Carmichael, Executive Director

SEDAR (TBD)
Atlantic Spanish Mackerel
Terms of Reference

Draft: 2/18/26

1. Update the SEDAR 78 Atlantic Spanish Mackerel assessment model with data using a terminal year of the 2026-2027 fishing year. Data providers may include preliminary or partial data for more recent years that could be used in the stock assessment model or projection analyses, with inclusion in the stock assessment model determined by the lead analyst based on the quantity and quality of the most recent data.
2. Incorporate the latest BAM model configurations and data calculation methods, detailing the changes made between the SEDAR 78 operational assessment model and the proposed assessment model. Provide a model run using the SEDAR 78 assessment configuration, including recent years' data (following NMFS Procedure 01-101-11).
3. Consider new and updated information on life history, natural mortality, discard mortality, the stock-recruit relationship, commercial and recreational landings and discards. Document any changes or corrections made and provide updated input data tables.
    a. Provide commercial, recreational, and combined landings and discards in pounds and numbers.
    b. Consider MRIP recommended approaches for recreational catch data to reduce PSEs below 50%. Investigate potential outliers for wave-specific estimates of catch throughout the time series and consider statistically valid methods for modifying the data to limit potential outlier influence on stock assessment model estimates.
    c. Consider the newest and best methods for estimating natural mortality. Consider estimation of natural mortality within the stock assessment model.
4. Evaluate and document the following specific changes in input data or deviations from the previous assessment model:
    a. Provide sensitivity analyses as needed to compare assessment results between new values in this assessment and values from the SEDAR 78 stock assessment model.
    b. Incorporate fishery-dependent and fishery-independent data streams north of Cape Hatteras, NC. Investigate the use of fishery-independent data to develop a relative abundance index for the coastwide stock.
    c. Apply the best method to estimate commercial discards, considering observer program and commercial discard logbook information.
    d. Use data from the Northeast Fisheries Science Center observer program to expand bycatch observations in the gillnet fishery.

5. Update model parameter estimates and their variances, model uncertainties, estimates of stock status and management benchmarks, and provide the probability of overfishing occurring at specified future harvest and exploitation levels.
    a. Explore the use of recent average recruitment with recruitment deviates instead of model-derived recruitment from the stock-recruit relationship. Determine an appropriate MSY proxy and timeseries for average recruitment.
    b. Determine the best estimate to use as a management benchmark (e.g., direct estimate of MSY or a proxy). Include appropriate characterization of the uncertainty for the chosen management benchmark. If a proxy is chosen:
        i. Include sufficient justification for the decision to use a proxy.
        ii. Provide range of plausible proxy values and their associated uncertainties.
        iii. Provide run using the default proxy value or direct estimate of MSY (if available) as specified in the FMP.
    c. Provide F, yield, discards, biomass, SSB, and recruitment levels and associated uncertainty levels that correspond to MSY or its chosen proxy.

6. Compute short-term and long-term population projections as necessary to provide OFL estimates and ABC advice. Provide additional population projections as necessary to address overfishing or overfished stock conditions (e.g., rebuilding). Address as many of the recommendations as possible of the South Atlantic SSC Catch Level Projections workgroup outlined on page 16 of the final workgroup report found here.

7. Convene a virtual data workshop or data webinar that includes NEFSC, Mid-Atlantic state representatives, industry representatives, and other technical experts to discuss a comprehensive inclusion of relevant data sources north of Cape Hatteras.

8. Convene an Assessment Technical Team, including SSC and industry representatives and outside technical experts, to meet via webinar or in person as needed to review model development and provide guidance.

9. Schedule a pre-decisional briefing (i.e., SSC “check-in”) to review model development and discuss assessment uncertainties.

10. Develop a stock assessment report to address these TORs and fully document the input data, methods, and results. Discuss assessment outcomes, primary uncertainties, and any problems encountered during the assessment process.

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SEDAR (TBD)
South Atlantic King Mackerel
Terms of Reference

DRAFT: 2/25/2026

1. Update the 2020 SEDAR 38 Update base model for South Atlantic King Mackerel with data using a terminal year of 2026-2027 fishing year. Data providers may include preliminary or partial data for more recent years that could be used in the stock assessment model or projection analyses, with inclusion in the stock assessment model determined by the lead analyst based on the quantity and quality of the most recent data.

2. Update the model to the current stock synthesis version and model configurations using current best practices. Provide a model run using the SEDAR 38 configuration including recent years data (following NMFS Procedure 01-101-11).

3. Consider new and updated information on life history, natural mortality, discard mortality, the stock-recruit relationship, commercial and recreational landings and discards. Document any changes or corrections made and provide updated input data tables.
    a. Provide commercial, recreational, and combined landings and discards in pounds and numbers.
    b. Consider MRIP recommended approaches for recreational catch data to reduce PSEs below 50%. Investigate potential outliers for wave-specific estimates of catch throughout the time series and consider statistically valid methods for modifying the data to limit potential outlier influence on stock assessment model estimates.
    c. Consider the newest and best methods for estimating natural mortality. Consider direct estimation methods such as telemetry or conventional tagging approaches, if available. Consider estimation of natural mortality within the stock assessment.

4. Evaluate and document the following specific changes in input data or deviations from the previous assessment model:
    a. Provide sensitivity analyses as needed to compare assessment results between new values in the current assessment and values from the SEDAR 38 Update.
    b. Provide sensitivity run exploring the impact of varying mixing zone classifications.
    c. Explore alternative age references or age-specific time series for the SEAMAP fishery independent survey.
    d. Evaluate model sensitivity to the age-data and explore alternative parameterizations (such as inverse age-length keys).

e. Explore the cause of high max gradient for the model. Describe the cause and implement improvements, as feasible.
f. Explore the inclusion of FISHstory data as a sensitivity run, where feasible.

5. Update model parameter estimates and their variances, model uncertainties, estimates of stock status and management benchmarks, and provide the probability of overfishing occurring at specified future harvest and exploitation levels.
    a. Explore the use of recent average recruitment with recruitment deviates instead of model-derived recruitment from the stock-recruit relationship. Determine an appropriate MSY proxy and timeseries for average recruitment.
    b. Determine the best estimate to use as a management benchmark (e.g., direct estimate of MSY or a proxy). Include appropriate characterization of the uncertainty for the chosen management benchmark. If a proxy is chosen:
        i. Include sufficient justification for the decision to use a proxy.
        ii. Provide range of plausible proxy values and their associated uncertainties.
        iii. Provide run using the default proxy value or direct estimate of MSY (if available) as specified in the FMP.
    c. Provide F, yield, discards, biomass, SSB, and recruitment levels and associated uncertainty levels that correspond to MSY or its chosen proxy.

6. Compute short-term and long-term population projections as necessary to provide OFL estimates and ABC advice. Provide additional population projections as necessary to address overfishing or overfished stock conditions (e.g. rebuilding). Address as many of the recommendations as possible of the South Atlantic SSC Catch Level Projections workgroup outlined on page 16 of the final workgroup report found here.

7. Convene an Assessment Technical Team, including SSC and industry representatives and outside technical experts, to meet via webinar or in person as needed to review model development and provide guidance.

8. Schedule a pre-decisional briefing (i.e., SSC “check-in”) to review model development and discuss assessment uncertainties.

9. Develop a stock assessment report to address these TORs and fully document the input data, methods, and results. Discuss assessment outcomes, primary uncertainties, and any problems encountered during the assessment process.

SEDAR 104 South Atlantic Dolphin MSE
Review Workshop Terms of Reference

DRAFT: 2/25/2026

1. Evaluate the types and ranges of uncertainty used in the MSE. Explicitly consider uncertainty in data, life history, process error, nonstationarity, and if appropriate, fishery dynamics.
    a. Were selected axes of uncertainty relevant to the stock and fishery and appropriately characterized? If relevant, were uncertainties highlighted by managers and stakeholders included?
    b. Were levels of uncertainty for each axis meaningful and reasonably encompass plausible uncertainty?
    c. Were uncertainties appropriately classified into reference (primary) or robustness (secondary) set and sufficiently explained?
2. Evaluate strengths and weaknesses of methods used to simulate the stock.
    a. Are methods to generate operating models scientifically sound?
    b. Did methods meet the needs of stakeholders and/or research questions (i.e., appropriate spatial resolution, time-step, ability to measure key performance statistics)?
    c. If data were unavailable to parameterize the model, were the assumptions used to overcome this limitation reasonable and/or multiple assumptions included as an axis of uncertainty?
    d. Was plausibility weighting of reference operating models appropriate and sufficiently justified?
    e. Does the robustness operating model grid allow the management procedure to fail?
3. Evaluate operating model conditioning.
    a. Did conditioning the operating model on available data result in simulated data with reasonable statistical properties relative to what would be available to the management procedure?
4. Evaluate MSE projections.
    a. Did the operating models project data that would be available to the management procedure?
    b. Were projection assumptions reasonable and appropriate for the stock (e.g., decisions about future parameter estimates and uncertainty; resampling approaches to generate future data; future nonstationarity, productivity, etc.)?
5. Evaluate performance metrics.
    a. Do performance metrics include all legally mandated management objectives as outlined in the Magnuson-Stevens Fishery Conservation and Management Act (i.e., to include status determination criteria with suitable risk tolerance to measure probability of overfishing and overfished status; and rebuild overfished stock in accordance with rebuilding requirements)?
    b. Did performance metrics sufficiently capture additional manager and/or stakeholder objectives to achieve optimum yield, if relevant (i.e., to include

desired management objectives such as: total catch, catch rate, catch size, fishing opportunity/season length, etc.)?

6. Evaluate candidate management procedures.
    a. Did the candidate management procedures only utilize data available for the stock in practice?
    b. Did the management procedure explore management tools and controls that are applicable to the stock (e.g., appropriate management procedure archetype)?
    c. Were top-performing management procedures tuned to minimally achieve all satisficing criteria?
    d. If empirical management procedure, does the MSE include a mechanism to periodically update stock status?
7. Provide or comment on recommendations to improve the MSE.
8. Prepare a Review Workshop Summary Report describing the Panel's evaluation of the MSE and addressing each TOR.