



SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

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Jessica McCawley, Chair | Mel Bell, Vice Chair
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Ecopath with Ecosim Model of the South Atlantic Region: A Path Forward – September 2019

Roger Pugliese, SAFMC

A SAFMC **Ecopath Modeling Team** comprised of FWRI staff, Council staff, and other technical experts as needed is established. This team will coordinate with members of the original Ecosystem Modeling Workgroup as needed, to maintain and further refine the South Atlantic EwE Model. FWRI in cooperation with SAFMC will maintain the model and support the Ecospecies online species information system as the long-term repository for the processed inputs and outputs associated with the South Atlantic Ecopath with Ecosim model.

An **Ecopath Model Review Workgroup** comprised of selected members of the SSC and Modeling Workgroup will, provide an initial review of the model focusing on: the overall base model including the appropriateness of data and decisions made; providing input on what analyses/applications the model should/can be used for; and direction on the formulation of more focused dynamic simulations or sub-models.

The development of the Terms of Reference (TOR) for the Workgroups review has been initiated and will be developed, refined and focused for approval at the June or September Council meeting.

A South Atlantic **Ecosystem Modeling Workgroup** will be maintained to continue to engage regional partners (e.g., SECOORA, NCSU, HBOI, etc.) and provide input on overall South Atlantic Ecopath/Ecosystem modeling activities including linking oceanographic models with the EwE, developing Ecospace and linking inshore and ocean models as supported in the foundational funding through SALCC to inform regional conservation blueprints (e.g., SALCC/SECAS).

Members of the Ecopath Model Review Workgroup (SSC members identified and Modeling team) and invite participants met 1/2 day July 24 and all day July 25 with two very focused tasks: 1) Develop recommendations on collection of diet information for the EwE model for the South Atlantic Region. Lauren Gentry, FWRI working with the South Atlantic model diet matrix new structure will conduct a sensitivity analyses supporting prioritization of species whose diet would further refine the model. The group reviewed, refined and provided priority research need recommendations for fishery programs (e.g., SEAMAP MARMAP and State programs) supporting EwE refinement. 2) Prioritized mapping needs and spatial layers that would support development/ refinement of Ecospace for the SA EwE model. Tina Udouj, FWRI reviewed spatial information for species and habitat (mapped/unmapped) from Web Services etc. using

South Atlantic Map Strategy depth contour framework to support developing priorities. Council Habitat Ecosystem Web Services were drawn on as a baseline to develop priorities for spatial information needs for the development of Ecospace for the SA EwE. Luke McEachron, FWRI who engaged the International Ecopath Consortium in development of the Ecospace for a Florida Keys EwE model, provided additional guidance in the effort to develop it for the South Atlantic EwE model.

The SSC will meet the week of October 15 and receive a report out on the outcome and recommendations developed during the July session providing diet and spatial guidance and the approved TOR to be used for the SA EwE review.

In November/December 2020, an Ecopath Model Review Workgroup Webinar will be set up in coordination with FWRI staff on the model team to start the review.

The SA EwE model balanced and ready in advance of Ecopath Model Review Workgroup Webinar which will initiate the review and accomplishment of tasks identified in SA EwE TOR for the review.

2-3 Webinars will follow the Model Review Workgroup Webinar and if needed, an in-person meeting in February 2020. Additional Webinars will be conducted as needed to complete the tasks identified in the TOR for presentation at the April 2020 SSC meeting. In addition, a report on Ecospace advancement and Ecospecies structure refinement to support EwE processed products may be available. The Outcome of the Review will subsequently be presented to the Council at their June 2020 meeting.

SAFMC South Atlantic Ecopath Modeling Team

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