SEDAR SouthEast Data, Assessment, and Review

South Atlantic Fishery Management Council Gulf of Mexico Fishery Management Council Caribbean Fishery Management Council NOAA Fisheries Atlantic States Marine Fisheries Commission Gulf States Marine Fisheries Commission ^c/_o SAFMC 1 Southpark Circle #306 Charleston SC 29407 Phone (843) 571-4366 Fax (843) 769-4520

MEMORANDUM

- TO: Wayne Swingle, GMFMC
- From: John Carmichael, SEDAR Coordinator
- RE: SEDAR 9: Draft Terms of Reference and review of workshop responsibilities
- Date: April 25, 2005

According to the SEDAR guidelines, Councils should review and approve the Terms of Reference for each workshop. Attached are draft Terms of Reference for SEDAR 9, which will address greater amberjack, vermillion snapper, and gray triggerfish in the Gulf of Mexico.

Please review the Terms of Reference in accordance with the Gulf of Mexico Council's SEDAR procedures and provide comments by May 27, 2005.

The SEDAR Steering Committee approved a suite of responsibilities for data and assessment workshops and identified the cooperating partner expected to fill each role. Enclosed is a listing of these roles to assist the Council in making workshop appointments. Please indicate on the appointment list any individuals the Council nominates to fill specific roles.

SEDAR 9 is the first SEDAR to incorporate a fully independent review panel. All review panelists will be appointed through the Center for Independent Experts (CIE). The Council may continue to appoint representatives of the Council, SSC, AP, or others on its SEDAR Advisory Panel as it sees fit to serve as observers. However, as these appointees will not be review panelists, they are no longer required to differ from those appointed to the data and assessment workshops.

SEDAR 9. Data Workshop Draft Terms of Reference

- 1. Characterize stock structure and develop a unit stock definition.
- 2. Tabulate available life history information (e.g., age, growth, natural mortality, reproductive characteristics). Provide models to describe growth, maturation, and fecundity by age, sex, or length as appropriate; recommend life history parameters (or ranges of parameters) for use in population modeling; evaluate the adequacy of life-history information for conducting stock assessments.
- 3. Provide indices of population abundance. Consider fishery dependent and independent data sources; develop index values for appropriate strata (e.g., age, size, area, and fishery); provide measures of precision; conduct analyses evaluating the degree to which available indices adequately represent fishery and population conditions. Document all programs used to develop indices, addressing program objectives, methods, coverage, sampling intensity, and other relevant characteristics.
- 4. Characterize commercial and recreational catches, including both landings and discard removals, in weight and numbers. Evaluate the adequacy of available data for accurately characterizing harvest and discard by species and fishery sector. Provide length and age distributions if feasible.
- 5. Evaluate the adequacy of available data for estimating the impacts of current management actions.
- 6. Recommend assessment methods and models that are appropriate given the quality and scope of the data sets reviewed and management requirements.
- 7. Provide recommendations for future research in areas such as sampling, fishery monitoring, and stock assessment. Include specific guidance on sampling intensity and coverage where possible.
- 8. Prepare complete documentation of workshop actions and decisions (Section II. of the SEDAR assessment report).

Data Workshop Responsibilities:

- *Chair*: (SEDAR Coordinator) Runs the workshop, schedules work and plenary sessions, ensure Terms of Reference are addressed.
- *Workgroup Leaders:* (SEFSC and Council appointees) Lead individual workgroups, coordinate initial data analyses and working papers, present group recommendations during plenary sessions, serve as lead author for group's report section.
- *Workgroup Rapporteur*: (SEFSC and Council appointees) Take notes during group work sessions, help leader draft report text and plenary reports.
- *Workshop Rapporteur*: (Council staff) Take notes during plenary sessions to ensure discussion items are reflected in the workshop report. Assists chair in ensuring all Terms of Reference are met and all Council-required products are provided.
- *Chief Editor*: (SEFSC): Responsible for compiling group document segments into the final workshop report, distributing document to the workshop panel for review, and submitting the final workshop report to the SEDAR coordinator.

SEDAR 9. Assessment Workshop Draft Terms of Reference

- 1. Select several appropriate modeling approaches, based on available data sources, parameters and values required to manage the stock, and recommendations of the Data Workshop.
- 2. Provide justification for the chosen data sources and for any deviations from Data Workshop recommendations.
- 3. Estimate stock parameters (fishing mortality, abundance, biomass, selectivity, stock-recruitment relationship, etc); include appropriate and representative measures of precision for parameter estimates and measures of model 'goodness of fit'.
- 4. Characterize uncertainty in the assessment, considering components such as input data, modeling approach, and model configuration.
- 5. Provide yield-per-recruit and stock-recruitment analyses.
- 6. Provide complete SFA criteria. This may include evaluating existing SFA benchmarks or estimating alternative SFA benchmarks (SFA benchmarks include MSY, Fmsy, Bmsy, MSST, and MFMT). Develop stock control rules.
- 7. Provide declarations of stock status relative to SFA benchmarks: MSY, Fmsy, Bmsy, MSST, MFMT.
- 8. Estimate the Allowable Biological Catch (ABC).
- 9. Project future stock conditions and develop rebuilding schedules if warranted; include estimated generation time. Projections shall be developed in accordance with the following:
 - A) If stock is overfished:
 - F=0, F=current, F=Fmsy, Ftarget (OY),
 - F=Frebuild (max that rebuild in allowed time)
 - B) If stock is overfishing
 - F=Fcurrent, F=Fmsy, F= Ftarget (OY)
 - C) If stock is neither overfished nor overfishing
 - F=Fcurrent, F=Fmsy, F=Ftarget (OY)
- 10. Evaluate the results of past management actions and probable impacts of current management actions with emphasis on determining progress toward stated management goals.
- 11. Provide recommendations for future research and data collection (field and assessment); be as specific as practicable in describing sampling design and sampling intensity.
- 12. Fully document all activities: Draft Section III of the SEDAR Stock Assessment Report; provide complete tables of estimated values; prepare the Stock Assessment Summary Report (may be completed by the Chief Editor after the review workshop). Reports are to be finalized within 3 weeks of the conclusion of the Assessment Workshop.

Assessment Workshop Responsibilities:

- *Workshop Chair*: (SEDAR Coordinator) Responsible for conducting the workshop, scheduling workshop sessions, and ensuring the Terms of Reference are addressed.
- *Workshop Rapporteur*: (Council Staff) Responsible for taking notes during plenary sessions to ensure that discussion items are reflected in the workshop report, assists chair in ensuring Terms of Reference and Council requirements are addressed.
- *Chief Editor*: (SEFSC) Responsible for the overall workshop report, compiling and editing text developed during the workshop, submitting draft report to panel for review, submitting final report to SEDAR coordinator.
- *Lead Analyst:* (SEFSC) Leader of the assessment team, responsible for preparing population models and making presentations to the assessment panel. May be the same as the Chief Editor. Also responsible for presenting assessment to the Review Panel.
- *Data Validation:* (SEFSC or Council) Responsible for ensuring the data entered into the model code is correct and reflects data and assessment workshop panel recommendations
- *Code Validation:* (SEFSC or Council) Responsible for reviewing model code for errors when customized models are used.
- *Analytical Team:* Core group of assessment analysts responsible for conducting model runs, providing results of their models to the Chief Editor, and presenting results and possibly conducting further analyses during the Review Workshop.

SEDAR 9. Review Workshop Draft Terms of Reference

- 1. Evaluate the adequacy and appropriateness of all data used in the assessment and state whether or not the data are scientifically sound;
- 2. Evaluate the adequacy, appropriateness, and application of methods used to assess the stock and state whether or not they are scientifically sound;
- 3. Evaluate the adequacy, appropriateness, and application of methods used to estimate population benchmarks and management parameters (*e.g., MSY, Fmsy, Bmsy, MSST, MFMT, or their proxies*) and state whether or not the methods are scientifically sound;
- 4. Evaluate the adequacy, appropriateness, and application of the methods used to project future population status and, if appropriate, evaluate stock rebuilding; state whether or not the methods are scientifically sound;
- 5. Ensure that all relevant stock assessment results are clearly and accurately presented in the Stock Assessment Report. In the event assessment results are modified during the workshop through recommendations of the Review Panel, the Panel should provide guidance to the analytical team on the appropriate means to incorporate the updated results in the report.
- 6. Evaluate the performance of the Data and Assessment Workshops with regard to their respective Terms of Reference, and state whether or not the Terms of Reference for those previous workshops are adequately addressed in the Stock Assessment Report;
- 7. Consider research recommendations provided by the Data and Assessment workshops and make any additional recommendations warranted;
- 8. Prepare a Peer Review Consensus Summary summarizing the Panel's evaluation of the stock assessment and addressing each Term of Reference. (Drafted by the Panel during the Review Workshop with a final report due three weeks after the workshop ends.)

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