SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

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March 23, 2010

MEMORANDUM

TO: Dale Theiling

FROM: John Carmichael

SUBJECT: SAFMC SEDAR 24 Atlantic Red Snapper Approvals

The South Atlantic Fishery Management Council approved the SEDAR 24 benchmark stock assessment of Atlantic red snapper project schedule as provided in the March 2010 meeting Briefing Book.

The Council approved the SEDAR 24 Terms of Reference with the modifications shown in Attachment 1.

The Council appointed participants to the SEDAR 24 data, assessment and review workshops as noted in Attachment 2. This listing includes both appointments made during the March 2010 SAFMC meeting, as well as several additional appointments of state agency personnel necessary to ensure adequate representation of all jurisdictions and data sources.

Attachment 1. SAFMC Modified Terms of Reference for SEDAR 24.

Data Workshop Terms of Reference

Modifications indicated in italics

1. Review stock structure and unit stock definitions and consider whether changes are required.
2. Review, discuss, and tabulate available life history information (e.g., age, growth, natural mortality, reproductive characteristics); provide appropriate models to describe growth, maturation, and fecundity by age, sex, or length as applicable. Evaluate the adequacy of available life-history information for conducting stock assessments and recommend life history information for use in population modeling. *Provide a written description of the biological sampling programs.*
3. Compare and contrast life history parameter recommendations between the Gulf and South Atlantic populations of red snapper, and consider whether greater consistency between assessments of Gulf and South Atlantic stocks is appropriate.
4. Evaluate expanded otolith sampling efforts conducted during 2009 and consider which samples are appropriate as indicators of fishery and population age structure. Consider whether revisions of growth models are justified based on these additional samples.
5. Review available research and published literature on discard mortality rates, considering efforts for red snapper and similar species from the Atlantic as well as other areas such as the Gulf of Mexico, and considering recommendations on discard mortality provided through SEDAR 7 (Gulf of Mexico Red Snapper). Provide estimates of discard mortality rates by fishery, gear type, depth, and other feasible strata. *Include thorough rationale for recommended discard mortality rates. Provided justification for any recommendations that deviate from the range of discard mortality provided in available research and published literature.*
6. Provide measures of population abundance that are appropriate for stock assessment. Consider and discuss all available and relevant fishery dependent and independent data sources. Document all programs evaluated, addressing program objectives, methods, coverage, sampling intensity, and other relevant characteristics. Provide maps of survey coverage. Develop CPUE and index values by appropriate strata (e.g., age, size, area, and fishery); provide measures of precision and accuracy. Evaluate the degree to which available indices adequately represent fishery and population conditions. Recommend which data sources are considered adequate and reliable for use in assessment modeling.
7. Review the application of pre-MRFSS recreational catch records in the SEDAR 15 benchmark assessment and recommend appropriate use of pre-MRFSS data for assessment of red snapper.
8. Characterize commercial and recreational catch, including both landings and discards in both pounds and number. Evaluate and discuss the adequacy of available data for accurately characterizing harvest and discard by species and fishery sector. Provide observed length and age distributions if feasible. Provide maps of fishery effort and harvest. *Provide a written description of the discard sampling programs.*
9. Review SEDAR 15 and SEDAR 7 approaches to selectivity of red snapper, post-SEDAR 15 evaluations of fishery selectivity patterns for Atlantic red snapper, and available length and age composition information to develop recommendations for addressing

fishery selectivity in the assessment model. Specifically address the degree to which domed shape selectivity should be applied to hook and line fisheries.

10. Provide recommendations for future research in areas such as sampling, fishery monitoring, and stock assessment. Include specific guidance on sampling intensity (number of samples including age and length structures) and appropriate strata and coverage.
11. Develop a spreadsheet of assessment model input data that reflects the decisions and recommendations of the Data Workshop. Review and approve the contents of the input spreadsheet by June 4.
12. No later than June 18, 2010, prepare the Data Workshop report providing complete documentation of workshop actions and decisions (Section II. of the SEDAR assessment report). Develop a list of tasks to be completed following the workshop

Assessment Workshop Terms of Reference

Assessment Process I

1. Review any changes in data following the data workshop and any analyses suggested by the data workshop. Summarize data as used in each assessment model. Provide justification for any deviations from Data Workshop recommendations.
2. Develop population assessment models that are compatible with available data and recommend which model and configuration is deemed most reliable or useful for providing advice. Document all input data, assumptions, and equations. Include a model configuration consistent with the SEDAR 15 base run and additional recent data observations.
3. Provide estimates of stock population parameters (fishing mortality, abundance, biomass, selectivity, stock-recruitment relationship, etc); include appropriate and representative measures of precision for parameter estimates.
4. Characterize uncertainty in the assessment and estimated values, considering components such as input data, modeling approach, and model configuration. Provide appropriate measures of model performance, reliability, and 'goodness of fit'.
5. Provide yield-per-recruit, spawner-per-recruit, and stock-recruitment evaluations including figures and tables of complete parameters.
6. Provide estimates for SFA criteria consistent with applicable FMPs, proposed FMPs and Amendments, other ongoing or proposed management programs, and National Standards. This may include evaluating existing SFA benchmarks, estimating alternative SFA benchmarks, and recommending proxy values; specific criteria for evaluation will be specified in the management summary.
7. Provide declarations of stock status relative to SFA benchmarks, considering both existing and proposed management parameters.
8. Perform a probabilistic analysis of proposed reference points and provide the probability of overfishing at various harvest or exploitation levels and, if the stock is determined to be overfished, the probability of rebuilding within mandated time periods as described in the management summary.
9. Project future stock conditions (biomass, abundance, and exploitation) and develop rebuilding schedules if warranted; include estimated generation time. Stock 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. Provide recommendations for future research and data collection (field and assessment); be as specific as practicable in describing sampling design and sampling intensity and emphasize items which will improve future assessment capabilities and reliability.
11. Prepare an accessible, documented, labeled, and formatted spreadsheet containing all model parameter estimates and all relevant population information resulting from model

estimates and any projection and simulation exercises. Include all data included in assessment report tables and all data that support assessment workshop figures.

12. No later than August 27, 2010, complete the Draft Assessment Workshop Report for Review (Section III of the SEDAR Stock Assessment Report).

Assessment Process II

1. Review comments submitted during the open pre-review period and review prior recommendations and assessment results in light of submitted comments.
2. Consider whether corrections, revisions, or additional analyses are justified.
3. Address submitted comments as appropriate and document results through working papers, addenda to the draft assessment report, or corrections to the draft assessment report.
4. No later than September 27, 2010, complete the Assessment Workshop Report (Section III of the SEDAR Stock Assessment Report).

Review Workshop Terms of Reference

1. Evaluate the adequacy, appropriateness, and application of data used in the assessment.
2. Evaluate the adequacy, appropriateness, and application of methods used to assess the stock.
3. Recommend appropriate estimates of stock abundance, biomass, and exploitation.
4. Evaluate the methods used to estimate population benchmarks and management parameters (*e.g., MSY, Fmsy, Bmsy, MSST, MFMT, or their proxies*); recommend appropriate management benchmarks, provide estimated values for management benchmarks, and provide declarations of stock status.
5. Evaluate the adequacy, appropriateness, and application of the methods used to project future population status; recommend appropriate estimates of future stock condition (e.g., exploitation, abundance, biomass).
6. Evaluate the adequacy, appropriateness, and application of methods used to characterize uncertainty in estimated parameters. Provide measures of uncertainty for estimated parameters. Comment on the degree to which methods used to evaluate uncertainty reflect and capture the significant sources of uncertainty. Ensure that the implications of uncertainty in technical conclusions are clearly stated.
7. Ensure that stock assessment results are clearly and accurately presented in the Stock Assessment Report and that reported results are consistent with Review Panel recommendations.*
8. Evaluate the SEDAR Process as applied to the reviewed assessment and identify any Terms of Reference which were inadequately addressed by the Data or Assessment Workshops.
9. Consider the research recommendations provided by the Data and Assessment workshops and make any additional recommendations or prioritizations warranted. Clearly denote research and monitoring needs that could improve the reliability of future assessments. Recommend an appropriate interval for the next assessment, and whether a benchmark or update assessment is warranted.
10. Prepare a Peer Review Summary summarizing the Panel's evaluation of the stock assessment and addressing each Term of Reference. Develop a list of tasks to be completed following the workshop. Complete and submit the Peer Review Summary Report no later than November 1, 2010.

* The panel shall ensure that corrected estimates are provided by addenda to the assessment report in the event corrections are made in the assessment, alternative model configurations are recommended, or additional analyses are prepared as a result of review panel findings regarding the TORs above.

Attachment 2. SAFMC Appointments to SEDAR 24

Name	Affiliation	DW	AW	RW
SSC				
John Boreman	SSC			X
Matt Cieri	SSC			X
Chip Collier	SSC	X	X	
Marcel Reichert	SSC	X		
Andy Cooper	SSC		X	
Luiz Barbieri	SSC		X	
Scott Crosson	SSC (RW Chair)			X
State Agency & Data Programs Representatives				
Kathy Knowlton	GA DNR	X		
Julie DeFilippi	ACCSP	X		
Erik Robilliard	GA DNR	X		
Jack Holland	NC DMF	X		
Dave Wyanski or Laurie DiJoy	SC DNR	X		
Stephanie McInerny or Alan Bianchi	NC DMF	X		
Julie Califf	GA DNR	X		
David Player	SC DNR	X		
Richard Cody	FL FWC	X		
Julie DeFilipi	ACCSP	X		
Jessica Stephens	SC DNR	X		
Mike Murphy or Behzad Mahmoudi	FL FWC		X	
Doug Mumford	NC DMF	X		
Chris Wilson	NC DMF	X		
Beverly Sauls	FL FWCC	X		
Janet Tunnell	FL FWCC	X		
Steve Brown	FL FWCC	X		
SAFMC AP				

Zack Bowen	Charter/Headboat GA	X	X	X
Steve Amick	Charter/Headboat GA	X	X	X
Rodney Smith	FL, Recreational	X	X	X
Bobby Cardin	FL, Commercial	X	X	X
Kenny Fex	NC, Commercial	X	X	X
AP Alternates (eligible to fill in if an above appointee cannot attend a workshop)				
Gregg DeBrango	FL, Commercial	X	X	X
Rob Harris	FL, Recreational	X	X	X
Scott Osbourn	FL, Commercial	X	X	X
Andy High	NC, Commercial	X	X	X
Mark Brown	SC, Commercial	X	X	X
Other Fishery and Constituent Representatives				
Robert Johnson	Charter/Headboat N FL	X	X	
Rusty Hudson	Sustainable Fisheries	X		
Frank Hester	Industry Scientist	X	X	
David Crisp (Rick Ryals, Alternate)	FL, Rec	X		
Council Representatives				
George Geiger		X	X	X
Charlie Phillips		X	X	X
Ben Hartig		X		