

SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

SCIENTIFIC AND STATISTICAL COMMITTEE



SSC Meeting Overview

April 29 - May 1, 2014

Crowne Plaza

North Charleston, SC

**FINAL VERSION
Revised 6/10/14
SSC Report**

PURPOSE

Topics to address during this meeting:

- SEDAR planning and update
- SAFMC Assessment Priorities
- Assessments of gag grouper, snowy grouper and wreckfish
- Projections of blueline tilefish
- Annual research priorities
- Oculina closed area evaluation
- Annual fishery independent sampling update
- Current FMP Amendments

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Documents:

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- Attachment 3. Draft AM/Accountability Amendment
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- Attachment 5. Assessment Planning Workshop Overview
- Attachment 6. SEDAR Assessment List
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- Attachment 8. 2015 SEDAR Projects Summary
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- Attachment 25. Blueline Tilefish Projections
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ADDENDA:

Appendix 1. Report of the Socio-Economic Panel Meeting, April 28, 2014

Appendix 2. Blueline Tilefish Projections Interpolation Method and Results.

Appendix 3. Revised Gag Grouper Projections.

Revisions and Updates

June 10, 2014: Added snowy grouper projected yield at Fmsy (OFL).

Corrected snowy grouper projected ABC discards in numbers.

Added note indicating method of allocating snowy grouper projected yield into discards and landings.

SAFMC PUBLIC COMMENT PROCESS

Written comment:

Written comment on SSC agenda topics is to be distributed to the Committee through the Council office, similar to all other Council briefing materials. Written comment to be considered by the SSC shall be provided to the Council office no later than one week prior to an SSC meeting. For this meeting, the deadline for submission of written comment is 12:00 pm Tuesday, April 22, 2014.

SAFMC
4055 Faber Place Drive
Suite 201
North Charleston, SC 29405

Oral comment:

Two opportunities for comment on agenda items will be provided during SSC meetings. The first will be at the beginning of the meeting, and the second near the conclusion, when the SSC reviews its recommendations. Those wishing to comment should indicate such in the manner requested by the Chair, which may be through a show of hands or a written list if the number of interested parties is extensive, who will then recognize individuals to come forward and provide comment. All comments are part of the record of the meeting.

1. INTRODUCTION

1.1. Documents

Agenda

Attachment 1. Minutes of the October 2013 meeting

1.2. Action

Introductions

Review and Approve Agenda

Approve Minutes

The SSC meeting was called to order at 1:00p.m., as scheduled.

The agenda was adopted without change and the minutes of the October 2013 meeting were adopted without further comment or changes. Member introductions were made. The Chair reviewed the agenda and outlined the general format and conduct of the meeting as discussed in the overview document.

2. PUBLIC COMMENT

The public will be provided two opportunities to comment on SSC agenda items during this meeting. The first at the start of the meeting, and the final will be provided at the end during the review of recommendations. Those wishing to make comment should indicate their desire to do so to the Committee Chair.

Accordingly, at this point in the meeting the Chair opened the floor for the first opportunity for public comment. Public comments were provided by Captain Mark Brown (SC charter boat Captain), and Captain Russell "Rusty" Hudson (Directed Sustainable Fisheries).

3. SOCIAL AND ECONOMIC SCIENCES PANEL REPORT

3.1. Documents

Attachment 2. SEP Agenda

3.2. Overview

The SEP will meet prior to this SSC meeting. A general report will be given on the meeting, while specific recommendations will be discussed under the appropriate SSC agenda item.

3.3. Action

- None required

SSC RECOMMENDATION:

Recommendations of the Social and Economic Sciences Panel (SEP) are presented in the SEP report attached to the end of this report (Appendix 1).

4. GENERIC ACCOUNTABILITY MEASURES/DOLPHIN ALLOCATION

4.1. Documents

Attachment 3. Draft AM/Accountability Amendment

4.2. Presentation

Overview: Brian Chevront
SEP Comments: John Whitehead

4.3. Overview

The Generic Accountability Measures and Dolphin Allocation Amendment considers changes in accountability measures for golden crab and snapper grouper species to determine when ACL overages need to be paid back and to bring consistency to accountability measures. The amendment also considers making changes in regards to how dolphin are allocated between commercial and recreational sectors. A scoping webinar was held in February 2014 and the Council reviewed the amendment at their March 2014 meeting. The Council approved the Purpose and Need and revised the range of alternatives. The Council also clarified that payback of an ACL overage would apply only to the amount above the total ACL, not the sector ACL. The amendment will continue to be developed for the Council to review at their June 2014 meeting with the intent of approving for public hearings in August 2014.

4.4. Action

- No specific actions required.

SSC RECOMMENDATION:

The SSC had a question regarding whether commercial fishermen can retain the bag limit. If that's the case, how do these fish get counted? MRIP typically discontinues interviews when they encounter commercial trips, regardless if bag limit fish are on board or not.

Additional SSC recommendations regarding this item are presented in the Social and Economic Sciences Panel Report attached to this report (Appendix 1).

5. DOLPHIN WAHOO A7/SNAPPER GROUPE A33

5.1. Documents

Attachment 4. Draft DW-A7/SG-A33

5.2. Presentation

Overview: Brian Chevront
SEP Comments: John Whitehead

5.3. Overview

At the September 2013 meeting the Council directed staff to develop an action that consider options related to bringing dolphin and wahoo fillets into the U.S. EEZ from The Bahamas similar to what is currently allowed for snapper grouper species. At the December 2013 meeting the Council began to consider modifying how fishermen may bring snapper grouper fillets back from The Bahamas. Currently, fishermen are allowed to bring back up to 60 lbs of snapper grouper fillets. However, there is no way to identify what species those fillets came from.

At the March 2014 Council meeting, the Council received input on the proposed actions and alternatives from the Law Enforcement Advisory Panel and the Law Enforcement Committee, Dolphin Wahoo Committee, and Snapper Grouper Committee. The Council made revisions to the Purpose and Need and revised actions and alternatives. The Council will review the amendment at their June 2014 meeting with the intent to approve it for public hearings in August 2014.

5.4. Action

- No specific actions required.

SSC RECOMMENDATION:

Specific SSC recommendations regarding this item are presented in the Social and Economic Sciences Panel Report attached to this report (Appendix 1).

6. ASSESSMENT PLANNING WORKSHOP REPORT

6.1. Documents

Attachment 5. Assessment Planning Workshop Overview

6.2. Presentation

Workshop Summary: Luiz Barbieri

6.3. Overview

The SSC will hold a workshop devoted to assessment planning and prioritization prior to this SSC meeting, as requested when this topic was first discussed in October 2013. Recommendations from the workshop will be discussed by the SSC. In addition to scheduling and priorities, the workshop is expected to consider strategies for dealing with the many unassessed stocks managed by the South Atlantic.

6.4. Action

- Recommend assessment priorities
- Recommend a long-term scheduling strategy.

SSC RECOMMENDATION:

The Assessment Planning Workshop was conducted immediately preceding the April 2014 SSC meeting (April 28-29), as scheduled. As part of the workshop the Committee received a presentation by Dr. Rick Methot, NMFS, on assessment planning and prioritization at the national level. The SSC also reviewed and discussed a draft South Atlantic assessment prioritization table developed by Dr. Mike Errigo. The main discussion points and recommendations provided by the SSC were:

- *The SSC found the draft national assessment prioritization being developed by NMFS to be well-aligned with the principles and criteria we had previously identified for South Atlantic stocks. Therefore, instead of proceeding with the development and implementation of our own long-term assessment prioritization plan the SSC decided to wait until the national plan is finalized so the two can be better integrated. It is likely that the SEFSC and the SEDAR Steering Committee will be attempting to operate in alignment with the national plan, so that SSC long-term assessment planning and prioritization recommendations are likely to be more productive after the national plan is completed.*
- *In the meantime, the SSC will continue providing recommendations for short-term assessment prioritization (2015-2016 SEDAR schedule). Some of these suggestions and recommendations are described under the SEDAR Activities item below, as well as with SSC recommendations for the gag and snowy grouper assessments.*

7. SEDAR ACTIVITIES

7.1. Documents

Attachment 6. SEDAR Assessment List
Attachment 7. 2014 SEDAR Projects Summary
Attachment 8. 2015 SEDAR Projects Summary

- Attachment 9. Black grouper update TORs
- Attachment 10. Blueline tilefish schedule options, SEFSC
- Attachment 11. Procedures Workshop 7: SA Shrimp Data

7.2. Overview

The Committee is provided project overviews for the 2014 SEDAR assessments and updates on various SEDAR items currently underway.

1) Review of 2015 Schedule

A preliminary schedule for 2015 workshops was developed by SEDAR staff in conjunction with principle analytical teams and data providers. It is provided for SSC review, and any comments will be considered by the Steering Committee in May. The purpose of this review is to consider any major schedule or terminal data availability impediments. Detailed project schedules will be prepared and approved by the appropriate cooperators once this framework is finalized by the Steering Committee in May 2014.

2) Black grouper TORS

FL FWCC will conduct an update of the black grouper assessment. This stock was last assessed in 2009, through SEDAR 19. TORS are based on the SEDAR update framework.

3) Next Blueline tilefish assessment

The Council requested an update of blueline tilefish as soon as possible, based on some unexpected results in the projections based on the P* recommendations of the SSC from October 2013. The projections will be discussed during a later agenda topic; this item pertains to the schedule alternative recommended by the SEFSC. The Council requested an update based on Alternative 1, with blueline replacing vermilion snapper and beginning in the second half of 2015.

4) Shrimp Data Procedures workshop

A SEDAR procedures workshop devoted to identifying shrimp data and its application to stock assessment and bycatch estimation will be held July 22 - 24 in Charleston SC.

5) SEFIS Video Index Working Group

During discussion of the Southeast Fishery Independent Survey in October 2013, the SSC recommended convening a workgroup to consider approaches to developing indices from the new video data in preparation for detailed consideration during SEDAR data workshops where these indices will be considered for assessment input. SSC representatives on the work group are Luiz Barbieri and Jeff Buckel. The group will meet May 20 - 22 at the SEFSC Beaufort lab.

6) Gray Triggerfish Ageing

Age interpretation discrepancies identified during SEDAR 32 led to a halt in assessment efforts for gray triggerfish. An age workshop was held recently to investigate age interpretation difficulties and develop a way to move forward to provide age data for the rescheduled benchmark during SEDAR 41.

Table 1. Assessment Projects for the South Atlantic, 2014-2016.

SEDAR #	Stocks	Type	Terminal Data	Assessment Complete
NA	Wreckfish	Benchmark	2010	April 2014
U	Gag	Update	2012	April 2014
U	Mutton snapper	Update	2012	June 2014
37	Hogfish	Benchmark	2013	June 2014
38	King mackerel	Benchmark	2012	September 2014
U	Red grouper	Update	2013	April 2015
U	Black grouper	Update	2013	May 2015
41	Red snapper & Gray triggerfish	Benchmark	2013	August 2015
U	Blueline tilefish	Update/STD	2014	April 2016
U	Tilefish	Update	2014	April 2016
B	Scamp & Gray snapper	Benchmark	2015	April 2016
U	Yellowtail Snapper	Update	2014	May 2016

7.3. Action

- Review 2015 SEDAR Project Schedule
- Approve black grouper update TORs
- Recommend assessment type for blueline tilefish

SSC RECOMMENDATIONS:

- Review 2015 SEDAR Project Schedule:

The 2015 SEDAR project schedule was reviewed by the Committee and approved with the following suggestions and modifications:

- *The SSC supports replacing the vermilion snapper update assessment with a blueline tilefish standard assessment. The Committee felt that an update of blueline tilefish would be insufficient to resolve some of the data issues (e.g., limited indices of abundance) identified in this last benchmark assessment. A standard assessment would allow the use of new data without incurring the time and resources required for a benchmark assessment.*
- *Further, the SSC recommends that the Council and SEDAR Steering Committee consider the following stocks as priorities for assessments in*

2016-2017: White Grunt (Benchmark), Red Porgy (Standard), Vermilion Snapper (Update), Dolphin (Benchmark).

- Approve black grouper update TORs:

The SSC reviewed the black grouper update TORs and approved them with following modification:

- *Make sure the analytical team updates both the base model (age-structured model) as well as the production model (i.e., secondary or supporting model).*

- Recommend assessment type for blueline tilefish:

The SSC recommends that the next blueline tilefish assessment be a 'standard assessment'. The Committee felt that an update assessment would be insufficient to resolve some of the data issues (e.g., limited indices of abundance) identified in this last benchmark assessment. A standard assessment would allow the use of new data without incurring the time and resources required for a full benchmark assessment

- SEFIS Video Index Working Group:

The SSC expressed disappointment that the timing of this workshop (May 20-22) did not give the Committee a chance to be informed and discuss the workshop results prior to the SEDAR 41 Data Workshop.

8. WRECKFISH ASSESSMENT REVIEW

8.1. Documents

Attachment 12. Wreckfish benchmark assessment report

Attachment 13. Wreckfish Peer Review report

Attachment 14. Wreckfish Proposal and AW background

8.2. Overview

An assessment of wreckfish was recently completed and reviewed through the SAFMC peer review process. The SSC is asked to review the assessment and provide fishing level recommendations.

8.3. Presentation

Assessment Overview: Doug Butterworth (via webinar)

8.4. Action

- Review wreckfish benchmark assessment and consider whether it represents Best Scientific Information Available.
- Identify and discuss assessment uncertainties
- Provide fishing level recommendations

SSC RECOMMENDATION:

The SSC reviewed the wreckfish assessment presented by Dr. Doug Butterworth. In general, the Committee found this assessment to be an improvement over the DCAC analysis conducted the last time around but noticed that this is still a relatively data poor assessment. More specific comments and discussion points brought up during the SSC meeting included:

- *Both the SSC and the review panel expressed concerns about the difference in results between using a Beverton-Holt (B-H) vs. a Ricker Stock-Recruitment (S-R) function. However, there is no evidence of wreckfish having a Ricker S-R relationship and there is some support for B-H in the form of the estimate of steepness (h) lining up very well with the input of h for the base run.*
- *The question of where recruitment is coming from is critical to this assessment, but there is circumstantial evidence suggesting that the local spawning stock is producing the recruits that are entering the South Atlantic fishery. Juveniles are not commonly seen in the South Atlantic. Mostly are seen in the Eastern Atlantic and some off the northeast US. It is very likely that juveniles in the Eastern Atlantic are undergoing fishing mortality but levels are unknown.*
- *The SSC acknowledged and echoes the RP's remarks that this assessment should be viewed as what it is, a data limited assessment. However, the SSC concluded that the assessment package as a whole (i.e., base run plus sensitivities) provides the best scientific information available as opposed to just the base case or a single sensitivity. The sensitivities capture important uncertainties not addressed in the base run.*
- *Another large point of uncertainty is the fact that 33% of the landings were confidential. However, an alternative run was done with a trend from the actual data and the model was insensitive to these changes.*
- *Members of the Committee expressed concern that the assessment's estimate of MSY was heavily influenced by landings history. Wreckfish CPUE has been extremely consistent through the history of the ITQ despite wide fluctuations in landings and research indicates that the magnitude of landings has been driven almost exclusively by economic rather than biological factors. If fisheries-dependent stock assessment models assume MSY and MEY (maximum economic yield) are equivalent, then resulting estimates may significantly underestimate MSY, particularly for transient stocks.*

After much discussion the SSC accepted this benchmark assessment as representing the best available scientific information on the current status of wreckfish in South Atlantic waters and considers it appropriate for SAFMC management decisions.

Since this assessment falls under Tier 1 of our ABC control rule, ABC was obtained according to a P value. The SSC recommends that projections be developed from the base run but use sensitivities to help inform the P* process.*

A summary of results from applying the ABC control rule is presented below:

- 1. Assessment Information: Tier 2 (-2.5%): since steepness parameter was fixed (instead of estimated by the model)*
- 2. Uncertainty: medium (-7.5%): since not all uncertainties were carried forward into projections. Also, major uncertainties not characterized explicitly in the model and projections (i.e., not in the PDF's for the major benchmark estimates)*
- 3. Stock Status: Not Overfished and Overfishing not occurring (-2.5%): although there is a lot of uncertainty most sensitivities show no overfishing and not overfished.*
- 4. Productivity-Susceptibility Analysis: High Risk (-10%)*

In total, these results provide for an adjustment score of 22.5% and a P of 27.5%.*

Table 2. wreckfish recommendations

Criteria	Deterministic	Probabilistic
Overfished evaluation	No ($SSB/75\%SSB_{msy}=2.11$)	
Overfishing evaluation	No ($F/F_{msy}=0.583$)	
MFMT	0.065	
SSB _{msy} (unit)	1,809 tons (3,988 klb)	
MSST (75%)	1,357 tons (2,992 klb)	
MSST (1-M)	1,743 tons (3,843 klb)	
MSY (1000 lb)	279	
Y at 75% F _{msy} (1000 lb)		
ABC Control Rule Adjustment		22.5%
P-Star		27.5%
OFL (1000 lb)	Projections at $F=F_{msy}$	
ABC RECOMMENDATIONS: Projections at P*, 5 years		

ABC Projections (P*=27.5%)	
Year	Landings (1000 Lbs)
2014	443.8
2015	433.0
2016	423.7
2017	414.2
2018	406.3
2019	396.8
2020	389.1

OFL Projections		
Year	Yield at Fmsy (1000 lbs)	
	Deterministic	Probabilistic (P*=50%)
2014	439.7	571.5
2015	429.4	553.3
2016	419.7	536.7
2017	410.6	521.9
2018	402.0	507.3
2019	394.0	493.7
2020	386.6	481.2

Deterministic Projections at F=75%Fmsy	
Year	Yield at 75%Fmsy (1000 lbs)
2014	329.7
2015	326.7
2016	323.7
2017	320.8
2018	318.1
2019	315.5
2020	313.1

9. REVIEW OF SAFMC PEER REVIEW PROCESS

9.1. Documents

Attachment 15. SAFMC peer review process

9.2. Overview

The SSC is asked to review the recently approved SAFMC peer review process and its initial application to the wreckfish assessment.

The process as applied to wreckfish consisted of several components:

- 1) Proposal submission (August 2013)
- 2) SSC Proposal review (September 2013, webinar)
- 3) Preparer requested assessment workshop (November 2013)
Supported by SSC and Council, but not required by the Peer Review process
- 4) SSC approval of review approach and TORs, reviewers identified (January 2014, webinar)
- 5) Council approval of approach, TORs, reviewer appointments (March 2014)
- 6) Peer Review (March 2014, webinar)
- 7) SSC report review and recommendations (April 2014)

9.3. Action

- recommend modifications and clarifications to the process

SSC RECOMMENDATION:

The SSC reviewed the SAFMC Peer Review Process. Comments and discussion points brought up during the SSC meeting included:

- *The Committee felt that the hybrid wreckfish Data Workshop/Assessment Workshop conducted last November added value to the process, benefited the conduct of the assessment, and perhaps the process used should be considered for all future third-party assessments to be reviewed by the SSC.*
- *The additional meetings (both in person and through webinars) increased the transparency of the process and the ultimate buy-in of all parties involved.*
- *This assessment highlighted the issue with data confidentiality, which was found to hinder the process. The SSC discussed the possibility of establishing a 'confidential data subcommittee' composed of SSC members who can gain access to confidential data and report back to the full committee. The rationale for going this route is that individuals may have an easier time getting access to confidential data than the blanket approval required for the full SSC and third party assessment analysts.*
- *The SSC briefly discussed the implications of the issue of confidential information for future assessments. Dr. Cadrin reminded the RP in the report that according to Magnuson Act (Section 402(b)): Nothing in [the confidentiality of information] subsection shall be interpreted or construed to prevent the use for conservation and management purposes by the Secretary, or with the approval of the Secretary... of any information submitted in compliance with any requirement or regulation under this Act. This assessment and discussions on this topic prior to this assessment, including those relative to the DCAC illustrate that the Wreckfish is a case where knowledge of the landings is essential for conservation and management.*

10. GAG GROUPEL ASSESSMENT REVIEW

10.1. Documents

Attachment 16. SEDAR 10 Summary, South Atlantic Gag

Attachment 17. Update report for gag grouper

Attachment 18. SAFMC ABC Control Rule

10.2. Overview

An update of the SEDAR 10 assessment of gag grouper will be provided for review. The SSC is asked to apply the ABC control rule and provide fishing level recommendations.

Gag grouper was last assessed in 2006 by SEDAR 10. The stock was overfishing and approaching overfished. The assessment summary from SEDAR 10 is provided for reference.

When reviewed during initial ABC control rule development, gag was assigned a P* of 30%.

10.3. Presentation

Assessment Overview: SEFSC

10.4. Action

- Review gag grouper assessment update and consider if it represents Best Scientific Information Available.
- Identify and discuss assessment uncertainties
- Provide fishing level recommendations
- Provide guidance on the next assessment type and timing

SSC RECOMMENDATION:

The SSC reviewed the gag assessment update conducted by the SEFSC. Comments and discussion points brought up during the SSC meeting included:

- *The SSC expressed concern regarding the implications of having the steepness parameter fixed at the mode of the prior distribution developed by Shertzer and Conn (2012). Although this represents a sound methodological approach (i.e., from a scientific point of view), the SSC felt the Council should be advised that using this approach results in more conservative management of the gag stock—the estimate of F_{MSY} corresponds to $F_{57\%SPR}$. In other words, the F used for MFMT corresponds to the value of F that produces 57% of unexploited SSB. In the past the Council has used values of MFMT corresponding to $F_{30\%SPR}$, $F_{35\%SPR}$, or $F_{40\%SPR}$.*
- *The SERFS video survey may be a source for development of a fishery-independent index for this assessment in the future.*

The SSC recommends this assessment as the best scientific information available and considers it can be used for management of the gag resource in the South Atlantic. Revisions in the data and methods are reasonable and this assessment can be used for catch level recommendations.

Since this assessment falls under Tier 1 of our ABC control rule, ABC was obtained according to a P^ value. A summary of results from applying the ABC control rule is presented below:*

- 1. Assessment Information: Tier 2 (-2.5%): since steepness parameter was fixed (instead of estimated by the model). An evolution of thinking in SPR and steepness has led to the understanding that fixing steepness equates to using SPR proxies for MSY benchmarks.*
- 2. Uncertainty: high (-2.5%): The uncertainties are well documented in the report and the presentation given at the meeting. The use of MCB and the P^* analysis represent improvements not used in SEDAR10 (since these techniques were not available at the time).*
- 3. Stock Status: Not Overfished but Overfishing is occurring (-5.0%): After considering a plot of F/F_{MSY} with confidence intervals from the MCB runs, the large amount of uncertainty in the values of F coupled with the fact that there is a higher degree of certainty that the F rates are not lower than they are, has caused the SSC to recommend using the geometric mean F over the last 3 years when determining stock status. However, the SSC wants to note that the regulatory closure in 2012 may have prevented overfishing from occurring. Also, F_{MSY} is equivalent to the F that produces SPR of 57%, which may be considered very conservative.*
- 4. Productivity-Susceptibility Analysis: High Risk (-10%): based on the MRAG report.*

In total, these results provide for an adjustment score of 20%, and a P^ of 30%.*

The SSC recommends using 5-year projections at $P^=50\%$ for OFL and at $P^*=30\%$ for ABC. There are now preliminary 2013 landings available and the Council would like to see projections using 2014 landings at the ACL. The SSC concurs and requests these projections be done so Table 3 below can be completed. Complete projection results are provided in Appendix 3.*

Regarding the next assessment of gag, the SSC recommends that it be conducted within the next 3-4 years and at least as a 'Standard Assessment'. The possible addition of the video index and a different approach to indices development may require a benchmark.

Table 3. gag grouper recommendations

Criteria		Deterministic	Probabilistic	
Overfished evaluation SSB/MSST(1-M)		1.13	1.21	
Overfished evaluation SSB/MSST(75%)		1.29	1.38	
Overfishing evaluation Fcurrent/Fmsy		1.23	1.37	
MFMT		0.29	0.27	
SSBmsy (unit)		1831.7 mt	1806.8 mt	
MSST (1-M)		1575.3 mt	1546.3 mt	
MSST (75%)		1373.8 mt	1355.1 mt	
MSY (1000 lb gw)		938.2	900.4	
Y at 75% Fmsy (1000 lb gw)		921.1	883.6	
ABC Control Rule Adjustment			20%	
P-Star			30%	
OFL RECOMMENDATIONS: P*=50%				
Year	Landed 1000 LBS (gw)	Discard 1000 LBS (gw)	Landed Number 1000s	Discard Number 1000s
2015	782	107	55	25
2016	765	105	55	24
2017	792	104	57	24
2018	813	104	58	24
2019	825	104	59	24
ABC RECOMMENDATIONS: P*=30%				
Year	Landed 1000 LBS (gw)	Discard 1000 LBS (gw)	Landed Number 1000s	Discard Number 1000s
2015	666	90	47	21
2016	671	89	48	21
2017	713	88	51	20
2018	748	89	53	21
2019	773	89	55	21

Note: The SSC recommends using deterministic results for reference values and status determinations (see October 2013 SSC report for discussion and recommendation).

Fcurrent is based on the average of the last 3 years: 2010-2012.

11. SNOWY GROUPER ASSESSMENT REVIEW

11.1. Documents

Attachment 19. SEDAR 36 SAR, snowy grouper

11.2. Overview

The Committee is asked to review the snowy grouper standard assessment prepared through SEDAR 36 and provide fishing level recommendations. The SSC declined to review this assessment when provided in October 2013 due to the lack of an overview presentation.

Snowy grouper was last assessed in SEDAR 4, and was determined to be overfished and experiencing overfishing. This led to the Council developing a rebuilding plan in Amendment 15A. Rebuilding began in 2006 and ends in 2039. Commercial accountability measures specified in Amendment 17B include in-season closure ability and payback of overages. The recreational season will be reduced if the average landings over the prior 2 years exceeds the recreational ACL.

During initial reviews of assessed stocks, the SSC calculated a P* of 30% for snowy grouper, and a probability of rebuild of 70%. However, since rebuilding of snowy grouper began prior to existence of the P* approach, the rebuilding plan is based on a 50% chance of reaching SSB_{msy} by the end of the rebuilding period. This is the first assessment of snowy grouper under both the Reauthorized MSA and the P* methodology, thus the Council may consider revising the rebuilding approach but is not obligated to do so. One alternative the Council is considering is basing rebuilding on a fixed exploitation strategy, with F-rebuild set at 75% F_{msy}. In some recent examples, such as red grouper, this approach proved adequately conservative.

11.3. Presentation

Assessment Overview: SEFSC

11.4. Action

- Consider whether the assessment represents Best Scientific Information Available.
- Identify and discuss assessment uncertainties
- Consider the Council alternative to modify the rebuilding strategy to an approach based on fixed exploitation at 75% F_{msy}.
- Provide fishing level recommendations
- Provide guidance on the next assessment - type and timing.

SSC RECOMMENDATION:

The SSC reviewed the snowy grouper standard assessment conducted by the SEFSC. Comments and discussion points brought up during the SSC meeting included:

- *Similar to the comments and concerns provided for the gag update assessment the SSC expressed concern regarding the implications of having the steepness parameter fixed at the mode of the prior distribution developed by Shertzer and Conn (2012). Although this represents a sound methodological approach (i.e., from a scientific point of view), the SSC felt the Council should be advised that using this*

approach results in a potentially less conservative management of snowy grouper in South Atlantic waters—the estimate of F_{MSY} corresponds to $F_{26\%SPR}$. In other words, the F used for MFMT corresponds to the value of F that produces 26% of unexploited SSB (unusually low for a long-lived, deepwater species). In the past the Council has used values of MFMT corresponding to $F_{30\%SPR}$, $F_{35\%SPR}$, or $F_{40\%SPR}$.

- *Nevertheless, the SSC felt that the data updates and revisions associated with this assessment were based on newer, accepted methodologies and consistent with previous SEDAR methodologies.*
- *The Committee expressed some concern that the most recent recruitment deviations are negative. Retrospective analysis shows uncertainty in terminal estimate of recruitment (consistently over-estimated).*

The SSC recommends this assessment as the best scientific information available and considers it appropriate for management of snowy grouper in the South Atlantic. The revisions in the data and methods are reasonable and this assessment can be used for catch level recommendations.

Since the South Atlantic snowy grouper stock is under a rebuilding plan the SSC discussed catch level recommendations consistent with this plan (i.e., set ABC = yield at $F_{REBUILD}$). However, since the yield at $75\%F_{MSY}$ is very similar to yield at $F_{REBUILD}$ (which has a 50% probability of rebuilding) the SSC recommends that ABC be set as the yield at $75\%F_{MSY}$.

Further, the SSC recommends that the next assessment of snowy grouper should be an Update, conducted within the next five years.

Table 4. snowy grouper recommendations

Criteria	Deterministic	Probabilistic		
Overfished evaluation SSB/MSST	0.65	0.50		
Overfishing evaluation Fcurrent/Fmsy	0.59	0.70		
MFMT	0.14	0.12		
SSBmsy (unit)	872.3 mt	1177 mt		
MSST (unit)	654.2 mt	882.7 mt		
MSY (1000 lb)	418.6	441.4		
Y at 75% Fmsy (1000 lb)	407.3	427.6		
ABC Control Rule Adjustment				
P-Star	N/A	N/A		
OFL (1000 lb)	418.6	441.4		
OFL RECOMMENDATIONS: F=Fmsy				
Year	Landed LBS	Discard LBS	Landed Number	Discard Number

2015	216,894	32,241	51,726	759
2016	229,595	34,195	54,755	805
2017	242,296	35,172	57,784	828
2018	253,043	37,126	60,347	874
2019	265,744	38,103	63,376	897
ABC RECOMMENDATIONS: F=75%Fmsy				
Year	Landed LBS	Discard LBS	Landed Number	Discard Number
2015	164,136	39,144	24,425	575
2016	178,791	42,639	26,379	621
2017	192,469	45,901	28,333	667
2018	205,170	48,930	29,310	690
2019	218,848	52,192	31,264	736

Notes:

- The SSC recommends using deterministic results for reference values and status determinations (see October 2013 SSC report for discussion and recommendation).
- Fcurrent is based on the average of the last 3 years: 2010-2012.
- Projected yield for OFL and ABC is provided in the SEDAR 36 Stock Assessment Report as total removals, landings and discard, in pounds and numbers. Reported total removals allocated to landings and discards reported here are based on assuming 97.7% of total removals are landings (as reported in SEDAR 36); this ratio is used for adjusting yield in both pounds and numbers.

12. BLUELINE TILEFISH PROJECTIONS REVIEW

12.1. Documents

- Attachment 20. Blueline P* Projections December 2013
- Attachment 21. SAFMC Memo update and projection options December 2013
- Attachment 22. SAFMC Memo, Emergency Rule, December 2013
- Attachment 23. SEFSC Reply, January 2014
- Attachment 24. SAFMC Memo, further projections, February 2014
- Attachment 25. Blueline Tilefish Projections

12.2. Overview

Projections of blueline tilefish, based on recommendations of the review panel and the SSC P* values, were not available when the SEDAR 32 benchmark was reviewed in October 2013.

Projections provided to the Council in December 2013, including updated 2012 landings and P* recommendations of the SSC, indicated extremely high fishing mortality values for 2014. The Council directed that the projections should be reviewed by the SSC, while recommending an emergency action to reduce the ACL to a level consistent with the equilibrium yield at 75% Fmsy. At that time the Council also requested that the SEFSC evaluate options for a timely update of the blue line assessment and consideration of factors that could explain the extremely high mortality projections.

The Emergency Rule will allow the Council to quickly reduce landings while actions are developed to end overfishing. Although the Council and agency have 2 years to develop and implement regulations to end overfishing, the emergency rule can only last for a total of 360 days (two 180 day periods). Therefore, once the emergency rule ends the ABC and ACL will revert to the current levels, which are much higher than the MSY values estimated from the assessment, unless the Council has other actions in place within 360 days.

In February 2014 the Council learned that the least disruptive option for an update would be for blue line to replace the 2015 update of vermilion snapper, leading to a request by the Council to prepare further projections that maintained the 75% Fmsy equilibrium landings until the update can be completed and reviewed by the SSC.

The SSC is asked to review these latest projections and provide a fishing level recommendation to the Council. The Council requests that, given the uncertainty exhibited in the various projections provided so far, the SSC consider the interim recommendation of setting ABC at the equilibrium yield expected from fishing at 75% Fmsy until an assessment update can be prepared and the current uncertainty in terminal fishing mortality rates is better understood.

12.3. Presentation

Updated projections: SEFSC

12.4. Action

- Review blue line projections
- Identify and discuss uncertainties
- Provide fishing level recommendations
- Consider the feasibility and discuss the risks associated with establishing ABC at the equilibrium yield at 75% Fmsy until the expedited update is complete (scheduled for SSC consideration in April 2016)

SSC RECOMMENDATION:

The SSC reviewed the revised and updated blue line tilefish projections produced by the SEFSC as a follow up to the SEDAR 32 assessment. Specific comments and discussion points brought up during the SSC meeting included:

- *The blue line tilefish assessment and projections have a number of uncertainties that may not be properly addressed by an update assessment. Specifically, there*

are indications that available abundance indices do not include the full range of the stock. The fishery is recently operating north of Cape Hatteras and this may be an unexploited part of the stock with different abundance and size/age composition. Further, given that blueline are long-lived and older maturing, an update after only two additional years of data is not likely to show any appreciable change. Therefore, the SSC recommends that instead of an 'Update' the next assessment of blueline tilefish be conducted as a 'Standard Assessment'.

- *We need better information on the age composition of blueline tilefish. There seem to be very few older fish represented in the current age comps. However, this could be due to: (1) age truncation from overexploitation or (2) the fact that older fish are not available to the fishery and are therefore severely under-sampled.*
- *Given the fact that the stock seems to be well below equilibrium the use of yield at $75\%F_{MSY}$ as an interim ABC is not feasible and will lead to overfishing ($F > F_{MSY}$). Instead, the SSC recommends the use of projections at $P^* = 0.3$ for ABC and $P^* = 0.5$ for OFL.*
- *The projections were conducted using 2013 general recreational landings provided from the Science Center and 2013 landings that were an imputed average of landings from 2010 and 2012 (see Tables 5 and 6 below). This was due to the fact that the landings in 2013 were an order of magnitude higher than in previous years. Also, the landings of blueline tilefish are typically driven by landings north of Cape Hatteras, NC. However, the spike in recreational landings in 2013 is driven by landings in FL. These factors indicate there may be an issue with the 2013 landings provided by the Science Center, so the imputed average of 2010 and 2012 was used for comparison.*
- *After much deliberation, the SSC decided to use the landings estimate for the general recreational fleet generated by MRIP for ABC and OFL projections (Tables 5 and 6 below). It was determined that the trend line of the new projections would fall between the two projections already available since all other landings and discards would remain constant, and since the MRIP landings are intermediate between the Science Center estimate and the imputed average. In the interest of time, and since all other data is unchanged, it was decided to simply interpolate the new projections using the new level of landings from MRIP and the already available projections presented to the SSC during the April 2014 meeting. The methodology for this interpolation is described below.*
- *Originally, the interpolation was to be kept simple and just take the percentage that the MRIP landings are of the Science Center landings and then carry that through the projections. So the analyst first determined the percentage that the MRIP landings were of the Science Center landings (~79%). Then, when interpolating the projections, the analyst made the MRIP projections ~121% of the Center projections. This is because lower initial landings in 2013 lead to higher projected landings during the projection period. However, this caused the trend in the interpolated projections to change from the trend in both the Science Center*

and the imputed average projections (Fig. 1). Documentation on the interpolation is provided as Appendix 2.

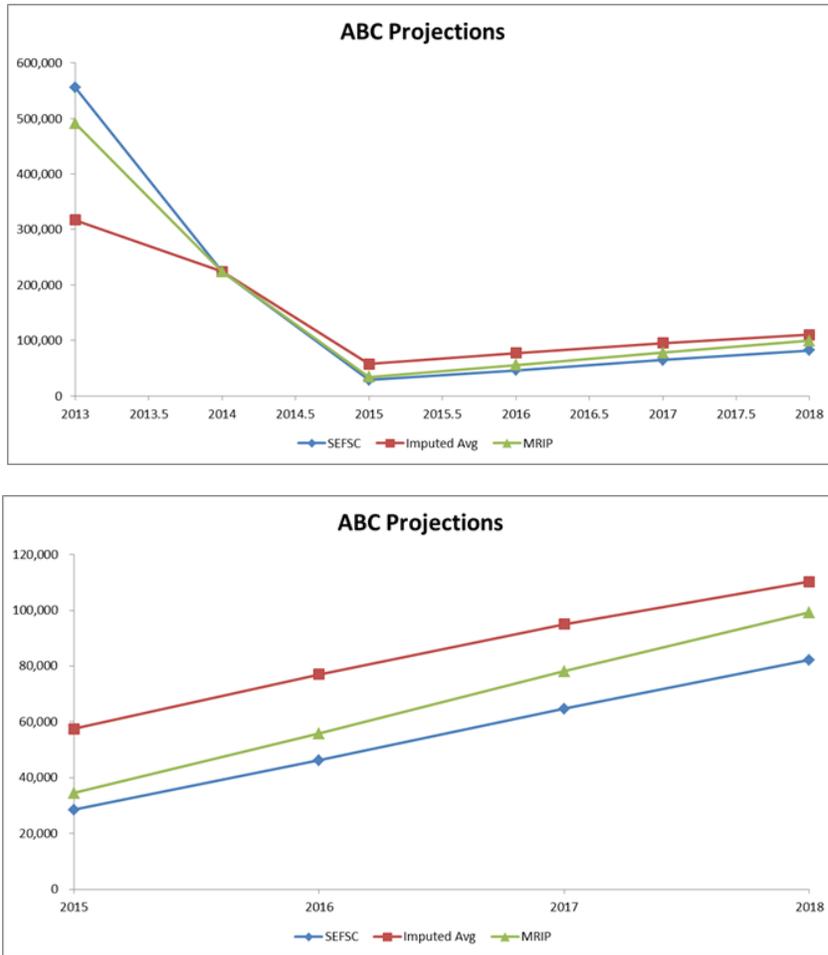


Fig. 1. Blueline tilefish landings projections for the ABC. SEFSC are the projections using the general recreational landings estimates provided from the Southeast Fisheries Science Center, Imputed Avg are the projections using the imputed average general recreational landings from 2010 and 2012, and MRIP are the projections using general recreational landings estimates from the MRIP website. Methodology for interpolation holds the MRIP line at a constant percentage of the SEFSC line based on the percentage the MRIP landings are of the SEFSC landings (~121%). The lower panel is a close-up of the projection years, showing that the MRIP line does not have the same trend as the other two projections.

- To remedy this issue, the analyst decided to hold the percent difference between the MRIP landings and the Center landings as a percentage of the difference between the Center landings and the imputed average, constant through the projections. This preserved the trend in the projection line, causing it to follow the same trend in the Center projection and the imputed average projection (Fig. 2). Tables 5 and 6 have the landings used for projections in 2013 and 2014, and the projected values for landings and discards from 2015-2018 in both lbs whole weight and numbers of fish.

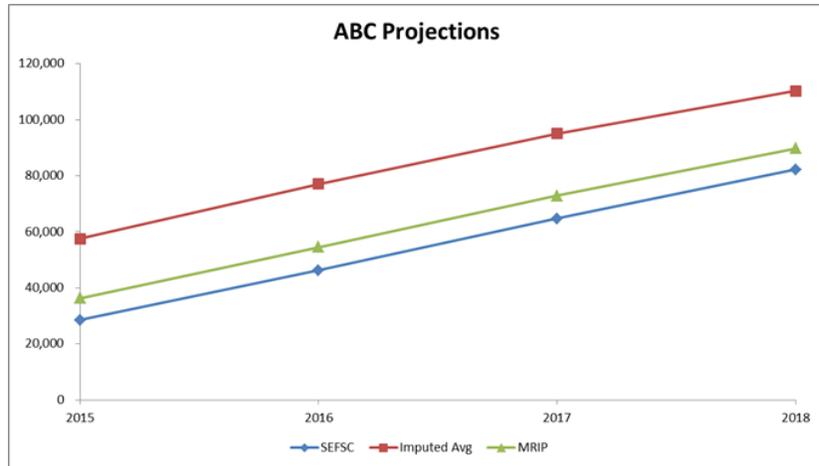
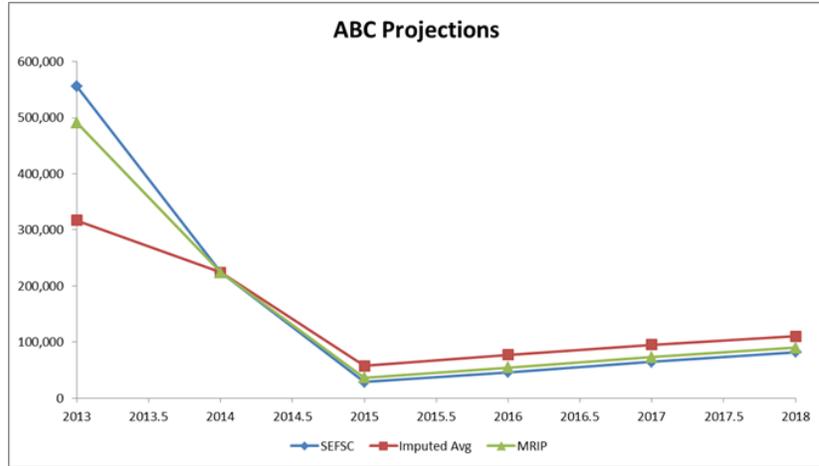


Fig. 2. Blue line tilefish landings projections for the ABC. SEFSC are the projections using the general recreational landings estimates provided from the Southeast Fisheries Science Center, Imputed Avg are the projections using the imputed average general recreational landings from 2010 and 2012, and MRIP are the projections using general recreational landings estimates from the MRIP website. Methodology for interpolation holds the difference between the MRIP line and the SEFSC line as a percent of the difference between the SEFSC line and the Imputed Avg line constant over the projections (~27%). The lower panel is a close-up of the projection years, showing that the MRIP line does have the same trend as the other two projections using this methodology.

Table 5. Projections for the ABC at P=0.3. 2013 and 2014 were input landings and 2015-2018 are projection years. SEFSC are the projections using the general recreational landings estimates provided from the Southeast Fisheries Science Center, Imputed Avg are the projections using the imputed average general recreational landings from 2010 and 2012, and MRIP are the projections using general recreational landings estimates from the MRIP website. The SSC's recommendation for ABC are the MRIP values.*

Table 5. Projections for the blueline tilefish ABC at P*=0.3.

Year	ABC Landings lb ww			ABC Discards lb ww			ABC Landings num fish			ABC Discards num fish		
	SEFSC	Imputed Avg	MRIP	SEFSC	Imputed Avg	MRIP	SEFSC	Imputed Avg	MRIP	SEFSC	Imputed Avg	MRIP
2013	556,018	317,116	491,642	8,277	8,277	8,277						
2014	224,100	224,100	224,100									
2015	28,546	57,541	36,359	31	62	39	6,355	11,474	7,734	7	12	8
2016	46,238	77,075	54,548	50	83	59	9,530	14,698	10,923	10	16	12
2017	64,768	95,051	72,928	70	102	79	12,593	17,419	13,893	14	19	15
2018	82,189	110,317	89,769	89	119	97	15,249	19,576	16,415	16	21	17

Table 6. Projections for the OFL at P=0.5. 2013 and 2014 were input landings and 2015-2018 are projection years. SEFSC are the projections using the general recreational landings estimates provided from the Southeast Fisheries Science Center, Imputed Avg are the projections using the imputed average general recreational landings from 2010 and 2012, and MRIP are the projections using general recreational landings estimates from the MRIP website. The SSC's recommendation for OFL are the MRIP values.*

Table 6. Projections for the blueline tilefish OFL at P*=0.5.

Year	OFL Landings lb ww			OFL Discards lb ww			OFL Landings num fish			OFL Discards num fish		
	SEFSC	Imputed Avg	MRIP	SEFSC	Imputed Avg	MRIP	SEFSC	Imputed Avg	MRIP	SEFSC	Imputed Avg	MRIP
2013	556,018	317,116	491,642	8,277	8,277	8,277						
2014	224,100	224,100	224,100								18	
2015	44,271	82,648	54,612	48	89	59	9,885	16,549	11,681	11	22	13
2016	67,118	104,862	77,289	73	113	84	13,943	20,189	15,626	15		17
2017	89,598	124,378	98,970	97	134	107	17,627	23,161	19,118	19	25	21
2018	109,542	140,423	117,863	118	152	127	20,642	25,414	21,928	22	27	23

13. ANNUAL RESEARCH PRIORITIES

13.1. Documents

Attachment 26. Draft 2014 Research Priorities

13.2. Overview

The SSC is asked to review the annual SAFMC research prioritization plan

13.3. Action

- provide comments on research priorities

SSC RECOMMENDATION:

The SSC reviewed the draft 2014 SAFMC Research Priorities document and found it to be satisfactory and in line with research priorities needed to address data and assessment needs for management of South Atlantic stocks. Some comments, suggestions, and recommendations provided by the SSC include:

- *The Committee would like to have a better understanding of why ACLs are not (?) being exceeded and AMs triggered for some stocks.*
- *Regarding the Fishery Sampling Workshop being planned the SSC would like to make the following suggestions:*
 - *Have the workshop focus expanded to include both fishery-dependent and fishery-independent data collection programs.*
 - *Try and develop an inventory of current data collection programs in the South Atlantic region. We need better documentation of existing programs.*
 - *Involve ACCSP so they are aware of our needs and are involved in the process.*
 - *Although the workshop will be more general, try to take this opportunity to identify potential sources of data to inform the application of data-poor methods for stocks that cannot be assessed through standard quantitative methods.*

14. UPDATE ON MRIP PROGRAM CHANGES

14.1. Documents

None

14.2. Overview

The SSC will receive an update on recent changes to the MRIP program.

14.3. Presentation

MRIP changes: Dave Van Vorhees, MRIP

14.4.Action

None required

SSC RECOMMENDATION:

The SSC appreciated the presentation and discussion by Dr. John Foster, NMFS, MRIP. The only suggestion the Committee had to offer is that MRIP explores the possibility of collecting trip-level depth information during the conduct of intercepts.

15. COASTAL MIGRATORY PELAGIC AMENDMENT 2415.1.Documents

Attachment 27. CMP amendment 24 draft

15.2.Overview

Staff Contact: Kari MacLauchlin

The Gulf of Mexico and South Atlantic Councils are considering ways to increase the opportunity for the total ACL to be reached for Gulf migratory group king mackerel and Atlantic migratory group Spanish mackerel. In multiple fishing seasons over the past ten years in both the Gulf migratory group king mackerel fishery and the Atlantic migratory group Spanish mackerel fishery, the commercial sector has exceeded the commercial ACL while the recreational sector has landed increasingly lower proportions of the recreational ACL. Scoping meetings were held in January 2014, and the Council has directed staff to prepare an options paper for the June 2014 meeting.

15.3.Presentation

Overview: Kari MacLauchlin, SAFMC

15.4. Action

- Review and provide input on options

SSC RECOMMENDATION:

Specific SSC recommendations regarding this item are presented in the Social and Economic Sciences Panel Report attached to this report (Appendix 1).

General comments and recommendations from the full Committee included:

- *Make sure to conduct a thorough analysis of feasibility due to data lag issues associated with recreational data.*

- *This is a seasonal fishery in different areas of the South Atlantic and in season shifting of allocation may impact different areas in different ways depending on when the shift occurs.*

16. SNAPPER-GROUPER AMENDMENT 29

16.1. Documents

Attachment 28. Snapper-Grouper Amendment 29 Draft

16.2. Overview

Staff Contact: Myra Brouwer

The purpose of Amendment 29 is to update the South Atlantic Council's ABC control rule to incorporate methodology for determining the ABC of "Only Reliable Catch Species" (ORCS); adjust ABCs for the affected species; and establish management measures for gray triggerfish in federal waters of the South Atlantic region.

Proposed actions include: (1) update the South Atlantic Fishery Management Council's (South Atlantic Council) acceptable biological catch (ABC) control rule to incorporate methodology for determining the ABC of "Only Reliable Catch Species" (ORCS); (2) adjust ABCs for the affected unassessed species; and (3) establish management measures for gray triggerfish in federal waters of the South Atlantic region.

16.3. Presentation

Overview: Myra Brouwer, SAFMC

16.4. Action

- Provide fishing level recommendations for white grunt ABC given that the SSC assigned a different risk of overexploitation to the "north" and "south" portions of the South Atlantic stock whereas management at this time remains based on a single stock.
- The Council approved using a risk tolerance scalar of 0.70 for white grunt and requested the SSC provide guidance on whether two separate ACLs are needed for this species.
- Provide comments/recommendations on other actions in the amendment as appropriate.

SSC RECOMMENDATION:

The SSC reviewed the latest version of Amendment 29. The main comments and discussion points brought up by the Committee included:

- *The SSC agrees with the current approach taken for white grunt, i.e., use the most conservative estimate of risk of over-exploitation until a stock assessment can be conducted and the issue of stock structure can be fully explored.*
- *The change in size limit for gray triggerfish affects the selectivity in future projections. This change in selectivity should be addressed when projections are developed after the next stock assessment.*
- *Although a few members expressed concern and one member requested his position be presented as a minority report (see below), the SSC reaffirmed its consensus opinion regarding application of the ORCS methodology and the catch level recommendations contained in Amendment 29. Further, the Committee confirmed that the ORCS approach as applied for Amendment 29 still represents the best scientific information available and considered the associated catch level recommendations appropriate for management. The minority position on the application of the ORCS approach for development of the catch level recommendations contained in Amendment 29 is presented below.*

SSC Minority Report:

- *The methodology used by the SAFMC's ORCS Workshop (i.e., the choice of catch statistics and associated scalars) for application of the ORCS approach does not provide a sufficient uncertainty buffer between the OFL proxy and ABC within the tiered control rule structure. Combining the use of maximum value for the summary statistic and a scalar greater than one would seem to provide less of a buffer for uncertainty than that prescribed for species at higher tiers. This is not logical or appropriate. Therefore, application of the ORCS approach as described in Amendment 29 no longer represents the best available science and the associated catch level recommendations should not be used for fisheries management. It appeared that at least some SSC members were willing to stay with the current approach knowing that all of our control rules would be reexamined during the October meeting.*

17. OCLINA CLOSED AREA EVALUATION

17.1. Documents

Attachment 29. Oculina evaluation report

17.2. Overview

Staff Contact: Gregg Waugh

Snapper Grouper Amendment 13A (2003) removed the sunset clause for the Oculina Experimental Closed Area and implemented a timeline for assessing the snapper grouper regulations in this area. Fishing for or possession of snapper grouper is prohibited in or from the Experimental Closed Area, and the regulations were set to expire in 2004 prior

to implementation of Amendment 13A. Amendment 13A also required development of an Evaluation Plan to include research and monitoring, enforcement, and outreach goals for this area, and required a ten year re-evaluation of the Oculina Experimental Closed Area.

Oculina Evaluation Plan (March 22, 2005) established an evaluation team and deliverables/timing. The Evaluation team will meet as necessary. This team will have representatives from the following groups who are knowledgeable of the *Oculina* Experimental Closed Area:

- Law Enforcement
- Research scientists
- Commercial fishermen
- Recreational fishermen
- Outreach experts
- Non-governmental Organizations
- Council staff

A report, written by the team, will be presented to all relevant Advisory Panels (Habitat, Coral, Snapper Grouper, Information and Education, Law Enforcement, and Marine Protected Areas Advisory Panels) and the Council's Scientific and Statistical Committee. Those groups will be asked to forward their recommendation to the Council.

Timing

The Evaluation Team will deliver its first report to the Council by the **March 2007** Council meeting in order for the Council to make its determination on whether or not it is necessary to change the size and configuration of the Closed Area. The Team will submit its second report by **March 2014** in order for the Council to re-evaluate all regulations within *Oculina Experimental Closed Area*.

Oculina Evaluation Team to prepare OECA Evaluation Report in 2014. This report is a follow-up to the first Oculina Evaluation Team Report completed in June 2007. The 2014 report is to provide an update on accomplishments addressing the following components as specified in Final Evaluation Plan for OECA to allow the Council to reevaluate all regulations within the Oculina Experimental Closed Area:

- a. Outreach
- b. Research/Assessment
- c. Law Enforcement

17.3.Presentation

Overview of Draft Report: Gregg Waugh, SAFMC

17.4.Action

- Provide comments on the draft report, particularly considering the research and assessment components.

SSC RECOMMENDATION:

The SSC received an overview of the Oculina Experimental Closed Area report. The Committee did not have any specific comments or suggestions regarding this item.

18. FISHERY INDEPENDENT REEF FISH SAMPLING18.1. Documents

Attachment 30. SERFS Monitoring Report

18.2. Presentation

Overview: Marcel Reichert, SC DNR

18.3. Overview

The Committee will be provided an update and summary presentation on efforts to monitor reef fish populations in the South Atlantic. Fishery independent monitoring of reef fish in the South Atlantic is provided by two programs, MARMAP and SEFIS. MARMAP has been conducted by SC DNR since 1990. In 2010 monitoring was expanded with additional funding by the SEFSC through the addition of the SEFIS, Southeast Fishery Independent Survey. Collectively the two programs are now known as "SERFS", the Southeast Reef Fish Survey.

18.4. Action

Review and comment as necessary

19. PROJECT UPDATES19.1. Documents

Attachment 31. NS2 Rule

19.2. Presentation

NONE

19.3. Overview

The Committee will receive updates on various ongoing projects.

1) SAFMC Fishery Dependent Sampling Workshop:

In discussing fishery dependent sampling targets during the October 2013 meeting, the SSC requested a presentation on sampling programs for this meeting. During that time the Council was having similar discussions on sampling programs and targets, leading to a recommendation to convene a workshop devoted to comprehensive fishery dependent sampling. After some follow-up with Center staff and further consideration by the Council, it was recommended in March 2014 that the workshop focus on identifying and inventorying fishery dependent data collection programs throughout the South Atlantic. This effort will consider federal, state, and university programs. The Council will consider workshop objectives, timing, and participants in June 2014. SSC guidance on these topics is requested here.

SSC RECOMMENDATION:

- *The title of this workshop should change to reflect the inclusion of fishery-independent data (i.e., besides fishery-dependent data).*
- *The Committee wants this workshop to make a special effort to identify previously unused data on data poor species to facilitate application of new and developing data poor assessment methods for these stocks. This would facilitate moving beyond ORCS whenever possible.*
- *Organizing Committee (not necessarily attending the workshop):*
 - *George Sedberry, Churchill Grimes, Steve Turner/Dave Gloeckner, Chip Collier, and a representative TBD from ACCSP.*
 - *This Organizing Committee is to discuss when, where, and who will be involved in the workshop and report back to the full committee before the Oct 2014 SSC meeting.*

2) National Standard 2 Revisions

A final rule implementing NS2 revisions was published in the Federal Register in July 2013. NMFS is in the process of reviewing regional peer review programs (e.g., SEDAR and SARC) and determining their compliance with the latest NS2 guidelines.

SSC RECOMMENDATION:

The SSC provided the following comments regarding this item:

- *The revised NS2 document redefines the SSC's role as the body that determines BSIA, i.e., all science-related products must be vetted through the SSC before they can be used by the Council.*
- *With these latest revisions the SSC has full review authority to accept or reject assessments and other analytical products submitted to or related to the Councils. If an assessment is rejected, the SSC must provide documentation supporting its decision to do so.*

3). ABC Control Rule Workshop

The SSC requested a workshop in October 2014, prior to the SSC meeting, to consider revisions to the ABC control rule. The workshop will consider how the current rule has performed and how continuing advances in assessments, particularly methods for data limited stocks, can best be incorporated. A subcommittee was formed in October 2013 to develop a timeline and topic suggestions. Members include Steve Cadrin, Luiz Barbieri, and Marcel Reichert. The SSC is asked to consider TORs and briefing materials for the workshop.

19.4. Action

- Discuss objectives, timing and participants for a South Atlantic fishery dependent sampling workshop
- Discuss TORs and briefing materials for the ABC control rule workshop.

SSC RECOMMENDATION:

Luiz Barbieri, Steve Cadrin, and Marcel Reichert met to discuss this issue and develop a draft list of workshop goals and objectives for full Committee consideration. The SSC is asked to review and provide input on the draft goal and potential list of topics below.

Workshop goal: *to consider how the current ABC control rule has performed and how continuing advances in assessments, particularly methods for data-limited stocks, can best be incorporated.*

Topics to be considered for development of TORs:

- *Evaluate the performance of recent assessments, i.e., benchmark vs. subsequent update. Did the estimates of exploitation and biomass pan out? In other words, what was the realized performance of the control rule for avoiding overfishing and achieving the expected yield when applied to different assessments?*
- *Discuss the scoring criteria of each of the factors within control rule dimensions. For example, recently published analyses demonstrate that fixing steepness is equivalent to choosing a spawner-per-recruit proxy.*
- *Discuss revamping of the scoring system to be more Tier-specific, allowing more refinement of the dimensions used to provide the adjustment in ABC for each tier.*
- *Evaluate use of the PSA score (keep, remove, modify?). Consider use only for data-poor stocks?*

Draft list of briefing book materials:

- *Table of recent assessments with control rule tier assignments plus associated P^* values. Ideally, also have a brief justification for the P^* assignments.*
- *Copies of recent publications evaluating control rule performance and or assessment uncertainty (e.g., Carruthers et al. 2014, Mangel et al. 2013,*

Wiedenmann et al. 2013, Thorson et al. 2012, Bentley and Stokes 2009, MRAG PSA paper, etc.)

20. COUNCIL WORKPLAN UPDATE

20.1. Documents

Attachment 32. SAFMC Work Plan, March 2014

Attachment 33. SAFMC Amendments Overview, March 2014

20.2. Overview

The Committee is provided these documents at each meeting to stay informed of Council activities. Regular detailed reviews of each amendment are no longer requested of the SSC as amendments are developed, instead the Committee is asked to comment on specific technical items that may arise. However, members are welcome to review any ongoing amendments and to provide comments and suggestions directly to staff. Current versions of each amendment are included in the Council Briefing Books distributed to SSC members. Questions or comments about specific items should be addressed to the staff assigned to each FMP, as summarized below.

- Coastal Migratory Pelagic - Kari MacLauchlin
- Corals - Gregg Waugh
- Fishery Ecosystem Plan - Roger Pugliese
- Snapper Grouper - Myra Brouwer
- Snapper Grouper Regulatory Amendment 17 (MPAs) - Gregg Waugh
- Spiny Lobster - Kari MacLauchlin
- Golden Crab - Brian Chevront
- Dolphin-Wahoo - Brian Chevront

21. OTHER BUSINESS

SSC RECOMMENDATION:

The SSC provided the following comments and recommendations regarding items discussed under Other Business:

- *That a representative from the SEFSC Beaufort Laboratory attend all SAFMC SSC meetings, ideally someone with authority to commit resources to tasks related to fulfilling SSC requests.*
- *The Council should consider having the APs prepare annual fishery performance reports to help the SSC with discussion of different fisheries managed by the Council.*

22. REPORT AND RECOMMENDATIONS REVIEW, PUBLIC COMMENT

The public is provided an additional opportunity to comment on SSC recommendations and agenda items.

- *Public comments were made by Captain Russell "Rusty" Hudson (Directed Sustainable Fisheries) and Ms. Leda Dunmire (The Pew Charitable Trusts).*

The Committee is provided an opportunity to review its report and final recommendations.

The Final SSC report should be provided to the Council by 9 am on Tuesday, May 20, 2014 for inclusion in the first briefing book for the June 9 - 13 Council meeting.

23. NEXT MEETINGS

23.1. SAFMC SSC MEETINGS

2014 Dates

October 28 - 30, 2014; Crowne Plaza, North Charleston
ABC Control Rule Workshop: October 27 – 28

- *The SSC suggests that in planning for these meetings effort be made to allocate more time for the ABC control rule workshop and less for the SSC meeting due to its relevance and the amount of material to be covered in the workshop.*

2015 TENTATIVE Dates

April 28-30.
October 20-22.

23.2. SAFMC Meetings

2014 Council Meetings

June 9 - 13, Ponte Vedra Beach, FL
September 15 - 19, Charleston SC
December 1 - 5, New Bern, NC

24. CHAIR AND VICE-CHAIR ELECTIONS

The SSC conducted nominations and elections of Chair and Vice-Chair. Results of this process were:

- *Chair: Luiz Barbieri*
- *Vice-Chair: Marcel Reichert*

25. ADJOURN

The SSC meeting was adjourned ahead of schedule given that discussion of several agenda items took less time than originally expected.

Addenda

Appendix 1.
Report of the Socio-Economic Panel
Meeting
April 28, 2014

Appendix 2.
Blueline Tilefish Projections Interpolation
Method and Results

Appendix 3.
Revised Gag Grouper Projections.

Addenda

Appendix 1.
Report of the Socio-Economic Panel
Meeting
April 28, 2014

SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

SOCIO-ECONOMIC PANEL OF THE SCIENTIFIC AND STATISTICAL COMMITTEE



SEP Meeting Report

April 28, 2014

Crowne Plaza

4831 Tanger Outlet Boulevard

North Charleston, SC

PURPOSE

The Socio-Economic Panel of the SSC convened on April 28, 2014, to:

- Review Dolphin Wahoo Amendment 7/ Snapper Grouper Amendment 33
- Review possible actions in Coastal Migratory Pelagics Amendment 24
- Review the General Accountability Measures/ Dolphin Allocation Amendment
- Discuss economic efficiency/net efficiency analysis for allocations decisions
- Discuss social and economic research needs for the South Atlantic region

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3.	Coastal Migratory Pelagics Amendment 24	4
4.	Generic Accountability Measures/Dolphin Allocation Amendment.....	4
5.	Potential Methodologies for Evaluating the Economic Efficiency of Fishery Allocations.....	5
6.	Research Needs.....	6
7.	Other Business	7

DOCUMENTS

Attachment 1. Draft Dolphin Wahoo Amendment 7/ Snapper Grouper Amendment 33

Attachment 2. Discussion Document for Coastal Migratory Pelagics Amendment 24

Attachment 3. Scoping Document for the Generic Accountability Measures/Dolphin Allocation Amendment

Attachment 4: Allocation of Fishery Harvests under the Magnuson-Stevens Fishery Conservation and Management Act: Principles and Practice (NMFS Tech Memo, February 2012)

Attachment 5: (Draft) Review of Laws, Guidance, Technical Memorandums, and Case Studies Related to Fisheries Allocation Decisions (NMFS Tech Memo Draft, January 2014)

Attachment 6: A Recreation Demand Model for South Atlantic Marine Recreational Private and For-Hire Boat Fishing with an Application to Snapper Grouper Management (Whitehead, 2013)

1. Introduction

1.1. Documents

Agenda
Minutes, October 2012

1.2. Action

Introductions
Review and Approve Agenda
Approve Minutes

2. Dolphin Wahoo Amendment 7/Snapper Grouper Amendment 33- transfer of fillets from Bahamian waters

2.1. Documents

Attachment 1. Draft Dolphin Wahoo Amendment 7/ Snapper Grouper Amendment 33

2.2. Overview

The South Atlantic Council was approached by recreational fishermen who requested a change in the regulations that currently make it illegal to bring filleted dolphin and wahoo into the U.S exclusive economic zone (EEZ) from Bahamian waters. Fishermen contend that storing fish safely with head and fins intact is difficult and impractical due to the size of the fish. The purpose of Dolphin Wahoo Amendment 7 is to allow fishermen to bring dolphin and wahoo fillets from The Bahamas into the U.S. EEZ.

Regulations at 50 C.F.R. § 622.186 (b) currently allow fillets of snapper grouper species from The Bahamas to be brought into the U.S. EEZ. In December 2013, the South Atlantic Council made a motion to address the issue of transporting species under the Snapper Grouper Fishery Management Unit (FMU) from The Bahamas into the U.S. EEZ along similar guidelines as is under consideration for dolphin and wahoo. The need for this action is to increase economic and social benefits to fishermen by removing unnecessary restrictions and implementing regulations for dolphin and wahoo that are consistent with snapper grouper species.

2.3. Presentation

Brian Chevront, Council staff

2.4. Action

Comment and recommendations

SEP RECOMMENDATION: The SEP saw no issues of concern with any of the alternatives. There seems to be little biological, economic or social costs imposed. There may be minor social and economic benefits. The additional enforcement cost might be mitigated with a cap on the number of fillets to measure fish caught.

3. Coastal Migratory Pelagics Amendment 24

3.1. Document

Attachment 2. SEP/SSC Discussion Document for Coastal Migratory Pelagics Amendment 24

3.2. Overview

In the past several years, the commercial sectors of the Atlantic Spanish mackerel and Gulf king mackerel fisheries have come close or exceeded the commercial ACLs, while the recreational sectors of those fisheries have not used a fairly large proportion of the recreational ACL. The Councils are considering ways to increase opportunity to reach the total ACLs for Atlantic Spanish mackerel and Gulf king mackerel, including an in-season ACL shift for Atlantic Spanish mackerel. The amendment was scoped in January 2014.

3.3. Presentation

Kari MacLauchlin, Council staff

3.4. Action

Comment and recommendations

SEP RECOMMENDATION: The SEP believes that the Council needs to clarify the goal and purpose for this Amendment, as increasing the harvest of the mackerel species is not necessarily the same as increasing net economic benefits (e.g., leaving fish in the water could provide value in terms of increasing encounters for catch and release anglers). As such, reallocating fish from the recreational sector to the commercial is not automatically a situation where one sector gains without any cost to the other sector. The SEP does believe, however, that in-season triggers that reallocate fish from the recreational sector would be a useful way of increasing economic yield of the mackerel fishery.

4. Generic Accountability Measures/Dolphin Allocation Amendment

4.1. Documents

Attachment 3. Scoping Document for the Generic Accountability Measures/Dolphin Allocation Amendment

4.2. Overview

With the reauthorization of the Magnuson Stevens Act in 2007 the South Atlantic Council was required to develop accountability measures (AMs) for all of the species it manages that have annual catch limits. Recent plan amendments modified the criteria by which accountability measures would be implemented for a number of species. The Council is

now considering modifying the accountability measure triggering criteria for snapper grouper species and golden crab. Adjusting the accountability measure criteria in this amendment will help to bring consistency across species managed by the Council. The Dolphin Wahoo Advisory Panel requested the Council reconsider how it allocates dolphin between the recreational and commercial sectors.

4.3. Presentation

Brian Chevront, Council staff

4.4. ACTIONS

Comment and recommendations

SEP RECOMMENDATION: The SEP had no comment on the issue of accountability, other than to agree that accountability is important for these additional species. In terms of the dolphin allocation, the SEP has commented on allocation formulas before and we continue to support those earlier comments; without information on the economic value of commercial and recreational sectors, there is little to differentiate between alternative ad-hoc formulas for sector allocations.

5. Potential Methodologies for Evaluating the Economic Efficiency of Fishery Allocations

5.1. Documents

Attachment 4. Allocation of Fishery Harvests under the Magnuson-Stevens Fishery Conservation and Management Act: Principles and Practice (NMFS Tech Memo, February 2012)

Attachment 5: (Draft) Review of Laws, Guidance, Technical Memorandums, and Case Studies Related to Fisheries Allocation Decisions (NMFS Tech Memo Draft, January 2014)

5.2. Overview

Southeast Fishery Science Center staff will lead a discussion on potential methodologies for evaluating economic efficiency of fishery allocations.

5.3. Discussion

Scott Crosson, Southeast Fishery Science Center

5.4. ACTIONS

Comment and recommendations

SEP RECOMMENDATION: The SEP believes that the research provided by the SEFSC is of excellent quality, and, in general, the SEP supports the virtual price approach for commercial sector valuation and the hedonic and stated preference approaches for

recreational fishing valuation. In addition, revealed preference travel cost models using standard NMFS methods should be more fully utilized with existing MRIP data and continuously updated.

The SEP also cautions that there is no single methodology that is applicable to analyzing all potential changes in allocation-related Council decisions. Allocation-related decisions are implemented with specific regulatory changes, and analyzing the economic effects of those regulatory changes may require tightening or loosening assumptions such as holding the number of trips or fishermen constant. When possible, running analysis with and without changes in those parameters would aid the SEP in assessing variability around the projections.

In terms of the process, if neither sector is reaching its portion of the ACL, then the SEP supports first lessening non-biologically based regulations (e.g., bag limits) in order to increase economic benefits without cost before discussing potential changes in sector allocation. If one or both sectors are reaching their portions of the ACL, then a more in-depth analysis is necessary before reallocation is considered since a variety of exogenous factors could cause a fishery to harvest less than the ACL in any particular season or region.

As in the comments on Coastal Migratory Pelagics Amendment 24, the SEP also notes that reallocating “unused” ACL from one sector to another could, for example, affect the probability that fishermen will encounter the fish for harvest or catch-and-release and as such is not automatically a costless decision, even though the net economic benefits still may make such a decision desirable.

The SEP believes the process would be improved by utilizing the panel for peer review of allocation analysis in ways that the full SSC provides for stock assessment, and supports setting up such a system.

6. Research Needs

6.1. Document

Attachment 6. A Recreation Demand Model for South Atlantic Marine Recreational Private and For-Hire Boat Fishing with an Application to Snapper Grouper Management (Whitehead, 2013)

6.2. Overview

The SEP will discuss social and economic research needs for the South Atlantic and use of existing data in research, and use of recreational data in snapper grouper management.

6.3. Presentation and Discussion

John Whitehead, SEP Chair

6.4. ACTIONS

The SEP did not review the document but several aspects were addressed during discussion of Agenda Item 5.

SEP RECOMMENDATION:

7. Other Business

The SEP is interested in taking on a strong review role. There are a number of reports that might impact south Atlantic fisheries and the SEP feels it would be useful for the SEP to read and review these to help the SAFMC better understand the technical aspects.

SEP RECOMMENDATION: Begin development of a process to institutionalize a more formal review role for the SEP.

Appendix 2.
Blueline Tilefish Projections Interpolation
Method and Results

Blueline Tilefish Interpolated Projections

Prepared by Mike Errigo, SAFMC Staff

May 15, 2014

At their April 2014 meeting, the South Atlantic SSC reviewed landings projections for blueline tilefish from SEDAR 32. They were presented with projections using 2013 general recreational landings provided from the Science Center and 2013 landings that were an imputed average of landings from 2010 and 2012 (Tables 1-2). This was due to the fact that the landings in 2013 were an order of magnitude higher in 2013 than they were in previous recent years. Also, the landings of blueline tilefish are typically driven by landings north of Cape Hatteras, NC. However, the spike in recreational landings in 2013 is driven by landings in FL. These factors indicate there may be an issue with the 2013 landings provided by the Science Center, so the imputed average of 2010 and 2012 was used for comparison.

After much deliberation, the SSC decided to use the landings estimate for the general recreational fleet generated by MRIP in the projections for ABC and OFL (Tables 1-2). It was determined that the trend line of the new projections would fall between the two projections already available since all other landings and discards would remain constant, and since the MRIP landings are intermediary between the Science Center estimate and the imputed average. In the essence of time, and since all other data is unchanged, it was decided to simply interpolate the new projections using the new level of landings from MRIP and the already available projections presented to the SSC during the April 2014 meeting. The methodology for this interpolation is described below.

Methodology for Interpolation of Projections

Originally, the interpolation was to be kept simple and the mean or median value between the projections using the Science Center provided landings and the imputed average was going to be used as the interpolated projections. However, we had an estimate of landings from MRIP in 2013, which could help scale the interpolated projections within the space between the Science Center projections and the imputed average projections. Therefore, it was decided to use this piece of information that was available to give a more informative interpolation of the projected landings.

The first approach was to take the percentage that the MRIP landings are of the Science Center landings and then carry that through the projections. So I first determined the percentage that the MRIP landings were of the Science Center landings (~79%). Then, when interpolating the projections, I made the MRIP projections ~121% of the Center projections. This is because lower initial landings in 2013 lead to higher projected landings during the projection period. However, this caused the trend in the interpolated projections to change from the trend in both the Science Center and the imputed average projections (Figure 1).

In order to remedy this issue, I decided to hold the percent difference between the MRIP landings and the Center landings, as a percentage of the difference between the Center landings and the imputed average, constant through the projections. This preserved the trend in the projection line, causing it to

follow the same trend in the Center projection and the imputed average projection (Figure 2). Tables 1 and 2 have the landings used for projections in 2013 and 2014, and the projected values for landings and discards from 2015-2018 in both lbs. whole weight and numbers of fish.

Table 1. Projections for the ABC at P*=0.3. 2013 and 2014 were input landings and 2015-2018 are projection years. SEFSC are the projections using the general recreational landings estimates provided from the Southeast Fisheries Science Center, Imputed Avg are the projections using the imputed average general recreational landings from 2010 and 2012, and MRIP are the projections using general recreational landings estimates from the MRIP website. The SSC's recommendation for ABC are the MRIP values.

Year	ABC Landings lb ww			ABC Discards lb ww			ABC Landings num fish			ABC Discards num fish		
	SEFSC	Imputed Avg	MRIP	SEFSC	Imputed Avg	MRIP	SEFSC	Imputed Avg	MRIP	SEFSC	Imputed Avg	MRIP
2013	556,018	317,116	491,642	8,277	8,277	8,277						
2014	224,100	224,100	224,100									
2015	28,546	57,541	36,359	31	62	39	6,355	11,474	7,734	7	12	8
2016	46,238	77,075	54,548	50	83	59	9,530	14,698	10,923	10	16	12
2017	64,768	95,051	72,928	70	102	79	12,593	17,419	13,893	14	19	15
2018	82,189	110,317	89,769	89	119	97	15,249	19,576	16,415	16	21	17

Table 2. Projections for the OFL at P*=0.5. 2013 and 2014 were input landings and 2015-2018 are projection years. SEFSC are the projections using the general recreational landings estimates provided from the Southeast Fisheries Science Center, Imputed Avg are the projections using the imputed average general recreational landings from 2010 and 2012, and MRIP are the projections using general recreational landings estimates from the MRIP website. The SSC's recommendation for OFL are the MRIP values.

Year	OFL Landings lb ww			OFL Discards lb ww			OFL Landings num fish			OFL Discards num fish		
	SEFSC	Imputed Avg	MRIP	SEFSC	Imputed Avg	MRIP	SEFSC	Imputed Avg	MRIP	SEFSC	Imputed Avg	MRIP
2013	556,018	317,116	491,642	8,277	8,277	8,277						
2014	224,100	224,100	224,100								18	
2015	44,271	82,648	54,612	48	89	59	9,885	16,549	11,681	11	22	13
2016	67,118	104,862	77,289	73	113	84	13,943	20,189	15,626	15		17
2017	89,598	124,378	98,970	97	134	107	17,627	23,161	19,118	19	25	21
2018	109,542	140,423	117,863	118	152	127	20,642	25,414	21,928	22	27	23

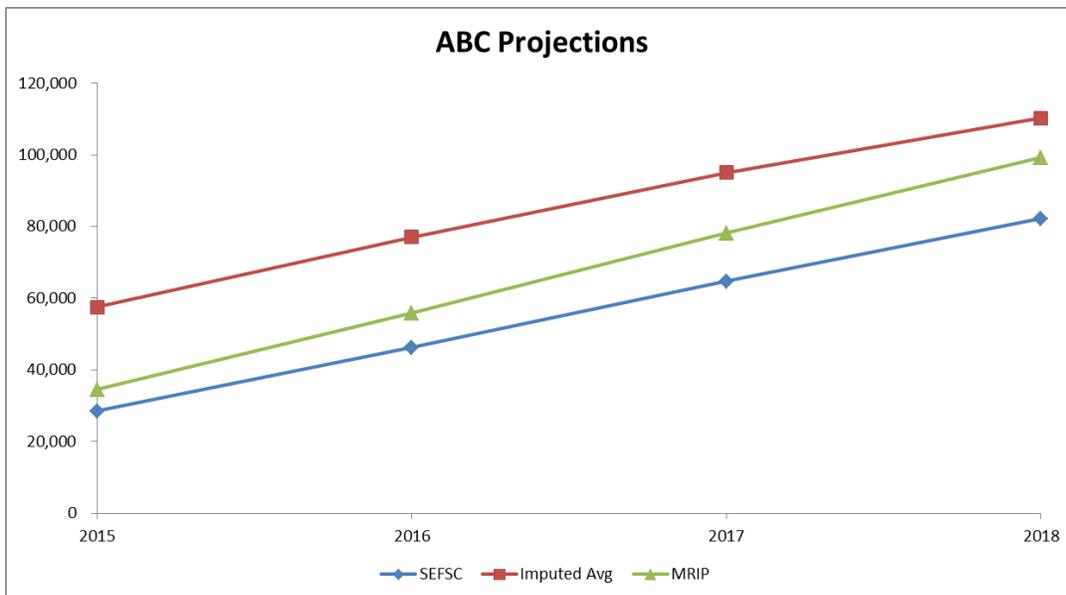
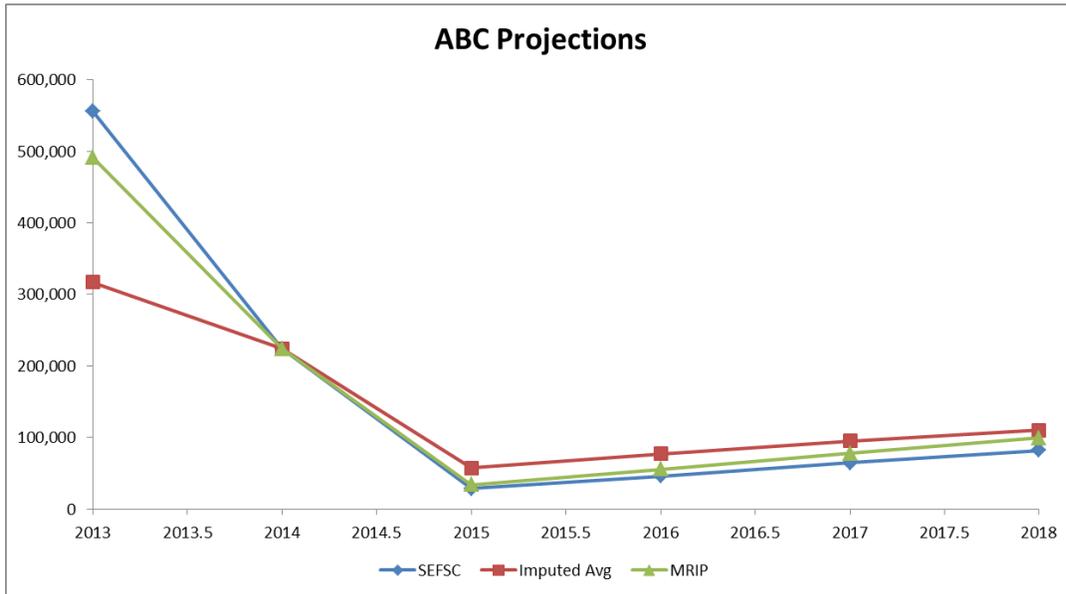


Figure 1. Blueline tilefish landings projections for the ABC. SEFSC are the projections using the general recreational landings estimates provided from the Southeast Fisheries Science Center, Imputed Avg are the projections using the imputed average general recreational landings from 2010 and 2012, and MRIP are the projections using general recreational landings estimates from the MRIP website. Methodology for interpolation holds the MRIP line at a constant percentage of the SEFSC line based on the percentage the MRIP landings are of the SEFSC landings (~121%). The lower panel is a close-up of the projection years, showing that the MRIP line does not have the same trend as the other two projections.

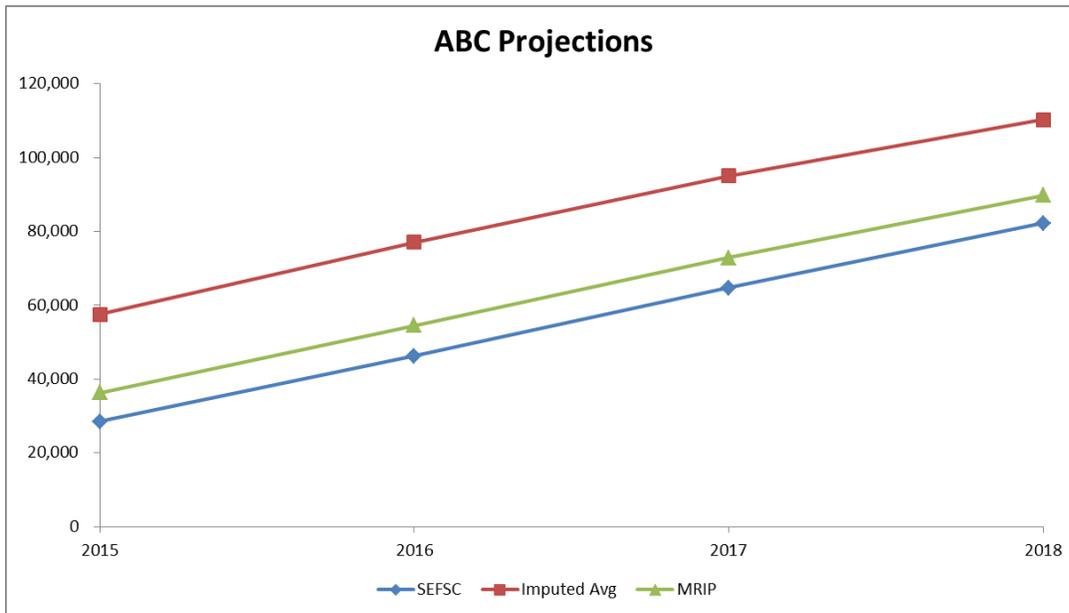
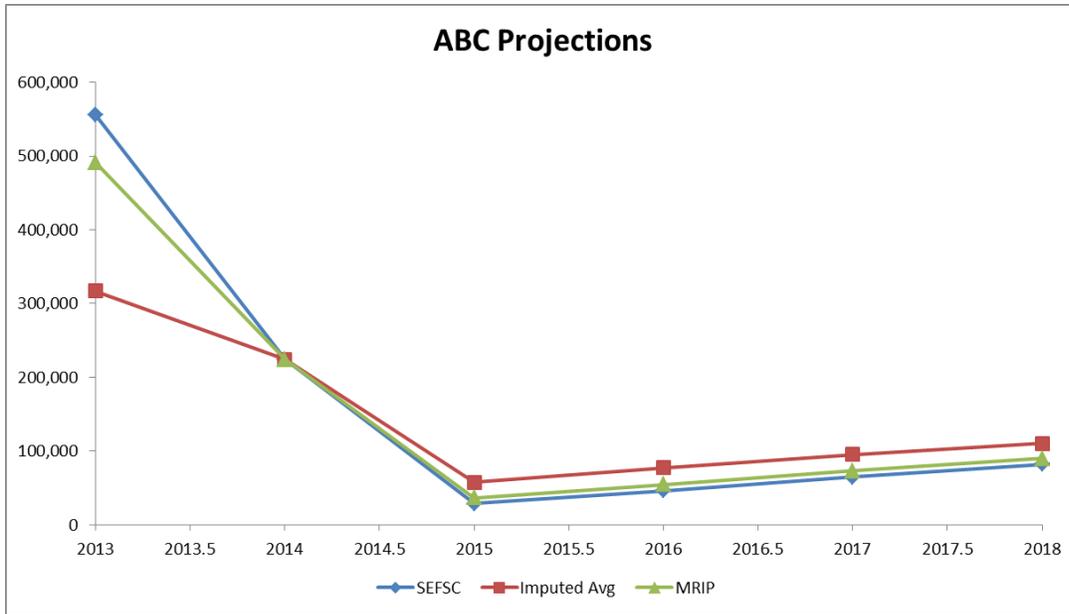


Figure 1. Blueline tilefish landings projections for the ABC. SEFSC are the projections using the general recreational landings estimates provided from the Southeast Fisheries Science Center, Imputed Avg are the projections using the imputed average general recreational landings from 2010 and 2012, and MRIP are the projections using general recreational landings estimates from the MRIP website. Methodology for interpolation holds the difference between the MRIP line and the SEFSC line as a percent of the difference between the SEFSC line and the Imputed Avg line constant over the projections (~27%). The lower panel is a close-up of the projection years, showing that the MRIP line does have the same trend as the other two projections using this methodology.

Appendix 3.
Revised Gag Grouper Projections.

Gag Projections

Prepared by NMFS Southeast Fisheries Science Center

Issued: 23 May 2014

1 Description of projections

This report describes gag projections requested in a memorandum dated 12 May 2014 from Bob Mahood to Dr. Bonnie Bonwith (see Appendix).

In these projections, the methods were identical to those described in the 2014 update assessment report, with the exception that the interim period (2013, 2014) prior to new management (2015) was fitted to current landings, whereas the previous projections applied the current fishing mortality rate. This entailed first obtaining the estimates of 2013 landings, and second developing a reasonable approximation of 2014 landings.

For 2013, estimates of landings were obtained from three different sources (Table 1). An estimate of total commercial landings was provided by ACCSP. An estimate of headboat landings was provided by analysts of the SRHS. An estimate of MRIP landings was provided by analysts at NMFS-Miami. If landings were provided in whole weight, they were converted to gutted weight using the relationship $GW=WW/1.059$. The total 2013 landings were estimated to be 497,868 lb GW.

For 2014, estimates of landings were assumed according to the following logic. The commercial landings were assumed equal to the ACL of landings only (326,722 lb GW). The recreational landings were assumed equal to the arithmetic average over the previous three years, 2011–2013. The total 2014 landings were estimated to be 469,048 lb GW.

Two different projections scenarios were considered: $P^*=0.3$ and $P^*=0.5$.

2 Results

Results for $P^*=0.3$ are shown in Table 2. Results for $P^*=0.5$ are shown in Table 3.

3. Comments on projections

As usual, projections should be interpreted in light of the model assumptions and key aspects of the data. Some major considerations are the following (reproduced verbatim from the assessment report):

- In general, projections of fish stocks are highly uncertain, particularly in the long term (e.g., beyond 5–10 years).

- Although projections included many major sources of uncertainty, they did not include structural (model) uncertainty. That is, projection results are conditional on one set of functional forms used to describe population dynamics, selectivity, recruitment, etc.
- Fisheries were assumed to continue fishing at their estimated current proportions of total effort, using the estimated current selectivity patterns. New management regulations that alter those proportions or selectivities would likely affect projection results.
- The projections assumed that the estimated spawner-recruit relationship applies in the future and that past residuals represent future uncertainty in recruitment. If future recruitment is characterized by runs of large or small year classes, possibly due to environmental or ecological conditions, stock trajectories may be affected.
- Projections apply the Baranov catch equation to relate F and landings using a one-year time step, as in the assessment. The catch equation implicitly assumes that mortality occurs throughout the year. This assumption is violated when seasonal closures are in effect, introducing additional and unquantified uncertainty into the projection results.
- The gag projections showed an initial drop in spawning biomass. This was due in part to the F_{current} rate of fishing that exceeds F_{msy} , but occurred primarily because of poor estimated recruitment in 2010 and 2011. Although recruitment events near the end of the time series are typically less informed than those that occur earlier, the data do support that recruitment in these years was poor, as evidenced by a well-defined minimum of a negative log likelihood profile on 2011 recruitment.

Table 1. Estimated gag landings in 2013 (lb gutted weight).

	Commercial	Headboat	General recreational	Total
2013	405,731	14,571	77,566	497,868

Table 2. Projection results with fishing mortality rate such that $P^*=0.3$ starting in 2015. R = number of age-1 recruits (in 1000s), F = fishing mortality rate (per year), S = spawning stock (mt), L = landings expressed in numbers (n, in 1000s) or gutted weight (w, in 1000 lb), D = dead discards expressed in numbers (n, in 1000s) or gutted weight (w, in 1000 lb), ABC=Acceptable Biological Catch (total removals) expressed in numbers (n, in 1000s) or gutted weight (w, in 1000 lb), pr.M = proportion of stochastic projection replicates with $SSB \geq MSST$ using the 1-M definition of MSST, and pr.75=proportion of stochastic projection replicates with $SSB \geq MSST$ using the 75% definition of MSST. All values except year and probabilities are medians from the stochastic projections.

year	R	F	S(mt)	L(n)	L(w)	D(n)	D(w)	ABC(n)	ABC(w)	pr.sdmsst	pr.sdmsst75
2013	205	0.18	1700	37	498	14	53	–	–	0.845	0.99
2014	203	0.15	1537	33	469	14	57	–	–	0.511	0.833
2015	202	0.23	1569	47	666	21	90	69	762	0.53	0.748
2016	200	0.23	1634	48	671	21	89	70	769	0.593	0.781
2017	201	0.23	1716	51	713	20	88	73	808	0.67	0.833
2018	202	0.23	1776	53	748	21	89	75	844	0.721	0.866
2019	204	0.23	1803	55	773	21	89	77	870	0.749	0.885
2020	204	0.23	1823	56	792	21	89	78	889	0.766	0.893
2021	203	0.23	1832	57	806	21	90	79	903	0.773	0.9
2022	203	0.23	1839	57	816	21	89	80	914	0.783	0.906

Table 3. Projection results with fishing mortality rate such that $P^*=0.5$ starting in 2015. R = number of age-1 recruits (in 1000s), F = fishing mortality rate (per year), S = spawning stock (mt), L = landings expressed in numbers (n, in 1000s) or gutted weight (w, in 1000 lb), D = dead discards expressed in numbers (n, in 1000s) or gutted weight (w, in 1000 lb), ABC=Acceptable Biological Catch (total removals) expressed in numbers (n, in 1000s) or gutted weight (w, in 1000 lb), pr.M = proportion of stochastic projection replicates with $SSB \geq MSST$ using the 1-M definition of MSST, and pr.75=proportion of stochastic projection replicates with $SSB \geq MSST$ using the 75% definition of MSST. All values except year and probabilities are medians from the stochastic projections.

year	R	F	S(mt)	L(n)	L(w)	D(n)	D(w)	ABC(n)	ABC(w)	pr.sdmsst	pr.sdmsst75
2013	205	0.18	1700	37	498	14	53	50	551	0.845	0.99
2014	203	0.15	1537	33	469	14	57	47	526	0.511	0.833
2015	202	0.27	1569	55	782	25	107	82	898	0.53	0.748
2016	200	0.27	1596	55	765	24	105	81	880	0.558	0.753
2017	200	0.27	1649	57	792	24	104	83	904	0.612	0.796
2018	201	0.27	1683	58	813	24	104	84	924	0.649	0.819
2019	202	0.27	1692	59	825	24	104	85	939	0.668	0.834
2020	202	0.27	1700	60	833	24	105	86	945	0.671	0.839
2021	202	0.27	1701	60	838	24	105	86	951	0.672	0.842
2022	201	0.27	1703	60	842	24	104	86	955	0.675	0.847

Appendix



SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

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Ben Hartig, Chair

Robert K. Mahood, Executive Director

Dr. Michelle Duval, Vice Chair

Gregg T. Waugh, Deputy Executive Director

May 12, 2014

MEMORANDUM

TO: Bonnie Ponwith

FROM: Bob Mahood *RKM*

SUBJECT: Requests and Actions from the April 2014 SAFMC SSC meeting

This memo is provided to request information necessary to evaluate recommendations of the SSC and to provide notification of other actions taken at the SAFMC Scientific and Statistical Committee meeting of April 28 - May 1, 2014.

1. The SSC accepted the gag stock assessment update, while noting that the projections using average fishing mortality during the interim period (2013 and 2014) result in total removals exceeding both the ACL and recent removals. The SSC requests that revised projections be prepared that are based on removals rather than exploitation during the interim period.

The assessment update indicates that the management program is successfully restricting the fishery to the ACL. In the most recent year, 2012, total removals were 99% of the ACL, and over the last 3 years removals averaged 107% of the ACL. However, because the projection model is configured to fit landings and estimate associated discards, simply fitting the projections to the total ACL could result in total removals in excess of both ACL and recent removals, although by an amount considerably less than that observed in the projections considered at the meeting. While using actual landings in 2013 to inform the projections is

preferred, such data may not be available at this time for the headboat sector, and some alternative approach would still be required for 2014. After discussions between SEFSC and SAFMC staff, the following guidance is provided for interim period landings: Base commercial landings during 2013 and 2014 on the ACL implemented in Regulatory Amendment 15: 326,722 pounds gw, and recreational landings (all sectors) on the average observed during the last 3 years of the assessment period (2010-2012): 176,630 pounds gw.

- Provide projections of yield and stock conditions for 2013 to 2022, with management changes taking place in 2015, based on P* values of 30% for ABC and 50% for OFL. Report annual landings and discards by sector in both pounds and numbers.
 - These projections are requested for consideration by the Council at its June meeting. Briefing materials for this meeting are due to the Council office no later than May 30, 2014.
2. The SSC much appreciated SEFSC staff participation at the April meeting, and notes that assessment and other technical discussions benefitted from in-person interaction between the Committee and SEFSC staff. Therefore, the SSC formally requests that a SEFSC representative of the Beaufort assessment team attend all future SSC meetings. In addition, the SSC requests that this representative have authority to commit to completing SSC requests and tasks that may arise as a result of SSC discussions. Having such authority at the meeting will help to reduce delays that are inevitable with the formal communication path illustrated by this memo.

Please contact John Carmichael if there are any questions regarding this request.

cc: Ben Hartig
Michelle Duval
Luiz Barbieri
Monica Smit-Brunello
Theo Brainerd
Tom Jamir