

SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

SCIENTIFIC AND STATISTICAL COMMITTEE



Joint South Atlantic and Gulf of Mexico SSC

August 04, 2022

MEETING REPORT

FINAL

VERSION
FINAL
8/25/22

CONTENTS

1. JOINT SSC INTRODUCTIONS	5
2. PUBLIC COMMENT	5
3. SOUTHEASTERN U.S. YELLOWTAIL SNAPPER INTERIM ANALYSIS	5
4. OTHER JOINT COMMITTEE BUSINESS	8
5. JOINT CONSENSUS STATEMENT AND RECOMMENDATIONS	8
6. INTRODUCTION	8
7. SEDAR 78: SOUTH ATLANTIC SPANISH MACKEREL OPERATIONAL ASSESSMENT	9
8. OTHER BUSINESS	18
9. PUBLIC COMMENT	18
10. CONSENSUS STATEMENT AND RECOMMENDATIONS.....	19
11. NEXT MEETINGS.....	19

FIGURES

None

TABLES

Table 1. Joint SSC catch level recommendations for Southeastern Yellowtail Snapper. Projected landings in millions of pounds under $F_{30\%SPR}$ (MFMT/OFL), the fishing mortality rate that corresponds to a P^* value of 0.375 (ABC), 90% of $F_{30\%SPR}$, and 75% of $F_{30\%SPR}$ from 2021 – 2031.....	7
Table 2. SSC catch level recommendations for South Atlantic Spanish Mackerel (Values to be added after refitting of the model).....	18

DOCUMENTS

Attachment 1: SSC August 2022 Agenda.....	5
Attachment 3a: Stock Assessment Report for Yellowtail Snapper	5
*Attachment 3b: Presentation for Yellowtail Snapper	5
Attachment 3c: Terms of Reference for Yellowtail Snapper.....	5
Attachment 3d: October 2020 Joint SSC Report	5
Attachment 3e: South Atlantic ABC Control Rule for Yellowtail Snapper	5
Attachment 6: Minutes from April 2022 SSC Meeting.....	8
Attachment 7a: Stock Assessment Report for Spanish Mackerel.....	9
Attachment 7b: Presentation for Spanish Mackerel.....	9
Attachment 7c: Terms of Reference for Spanish Mackerel.....	9
Attachment 7d: S78 WP03, General Recreational Catch	9
Attachment 7e: South Atlantic ABC Control Rule.....	9

* Indicates documents not available for the Briefing Book. These will be distributed as they become available and added to Recent Documents section of the webpage.

SAFMC PUBLIC COMMENT PROCESS

Written comment:

Written comment on SSC agenda topics is provided to the Committee through an online form, similar to all other Council briefing materials. Written comment can be submitted at [this link](#). For this meeting, the deadline for submission of written comment is 9:00 a.m. August 4, 2022.

Verbal comment:

Two opportunities for comment on agenda items will be provided at set times during SSC meetings. The first will be at the beginning of the meeting, and the second near the conclusion. Those wishing to comment should indicate such in the manner requested by the Chair, who will then recognize individuals to provide comment.

An opportunity for comment on specific agenda items will also be provided as each item comes up for discussion. Comments will be taken after all the initial presentations are given and before the SSC starts the discussion of the agenda topic. As before, those wishing to comment should indicate such in the manner requested by the Chair, who will then recognize individuals to provide comment. All comments are part of the record of the meeting.

Meeting Format:

This meeting will be held as a webinar on August 4, 2022. Registration for the meeting can be found at the Council's website: <https://safmc.net/scientific-and-statistical-committee-meeting/>

1. JOINT SSC INTRODUCTIONS

1.1 Documents

Attachment 1: SSC August 2022 Agenda

1.2 Action

- Introductions
- Review and Approve Agenda
 - *Meeting agenda approved*
- Meeting Procedures
 - *South Atlantic is lead Council for this Joint meeting*
 - *Jeff Buckel will Chair, Fred Scharf is Vice-chair*
 - *SA operates by Consensus: no motions or voting*
 - *Use SA ABC Control Rule*

2. PUBLIC COMMENT

The public is provided this comment period for any general comments pertaining to any items on the agenda. There will also be time provided for public comment during each specific agenda item as they are discussed. Those wishing to make comment should indicate their desire to do so to the Committee Chair.

3. SOUTHEASTERN U.S. YELLOWTAIL SNAPPER INTERIM ANALYSIS

3.1 Documents

Attachment 3a: Stock Assessment Report for Yellowtail Snapper

*Attachment 3b: Presentation for Yellowtail Snapper

Attachment 3c: Terms of Reference for Yellowtail Snapper

Attachment 3d: October 2020 Joint SSC Report

Attachment 3e: South Atlantic ABC Control Rule for Yellowtail Snapper

3.2 Presentation

Shanae Allen and Chris Swanson, FWC-FWRI

3.3 Overview

An interim analysis was conducted for Yellowtail Snapper following the Benchmark SEDAR 64 (S64) stock assessment. This analysis applied updated landings and discards data for each fleet (commercial, headboat, and MRIP [a combination of charter, private, and shore modes]) to the S64 base model from 2018 – 2020. Adjusted projections of spawning stock biomass, recruitment, and retained yield to inform the Acceptable Biological Catch (ABC) and the Annual Catch Limit (ACL) account for the updated landings and discards. The interim analysis found that Yellowtail

Snapper was not overfished nor undergoing overfishing in the terminal year 2020. The MFMT (defined as $F_{30\%SPR}$) was estimated to be 0.429 yr^{-1} and F_{current} was estimated to be 0.292 yr^{-1} ; therefore, the F ratio ($F_{\text{current}}/\text{MFMT}$) was equal to 0.68. The $\text{SSB}_{F30\%SPR}$ for this interim analysis was estimated at 1,915.86 metric tons (4,223,743 pounds) and the MSST (defined as $0.75 * \text{SSB}_{F30\%SPR}$) was therefore defined as 1,436.90 metric tons (3,167,807 pounds). $\text{SSB}_{\text{current}}$ was estimated to be 2,810.33 metric tons (6,195,718 pounds); therefore, the SSB ratio ($\text{SSB}_{\text{current}}/\text{MSST}$) was equal to 1.47.

Previous meetings of the Joint SSCs in July and October 2020 deemed the SEDAR 64: Southeastern Yellowtail Snapper is consistent with the best scientific information available and useful for management advice. The SSCs recommended using the calculated P* value of 0.375 to produce ABCs using the South Atlantic Council's ABC Control Rule, and also recommended that the Council consider adjusting the ACL or ACT for management uncertainty (e.g., $0.75 * F_{30\%SPR}$; see Attachments 3d and 3e). Due to the length of time elapsed between the terminal year and management action, this interim analysis was conducted using updated data streams to inform projections. The SSCs are asked to review the interim analysis of Southeastern U.S. Yellowtail Snapper, discuss, and provide feedback on projections and uncertainties, and make catch level recommendations.

3.4 Public Comment

3.5 Action

➤ **Review Interim Analysis**

- Does the interim analysis address the TORs to the SSCs satisfaction?
 - *Yes, all TORs were addressed to the SSC's satisfaction.*
- Are there any issues with the interim analysis that would prevent it from providing fishing level recommendations?
 - *No issues*
- Is the Yellowtail Snapper interim analysis consistent with the best scientific information available?
 - *The Interim Analysis is consistent with BSIA as specified by the TORs for this assessment.*
 - *However, the interim analysis process has not yet been vetted by the SA-SSC. The SA-SSC is awaiting further information and evaluation to determine under what circumstances interim analyses can be considered BSIA. The GOM-SSC has apparently accepted some types of interim analyses in the past. There was some confusion in the terminology and configuration of this interim analysis when compared to an assessment. The interim analysis provided by the FWC for yellowtail snapper was different from past interim analyses provided to the GOM-SSC from the SEFSC.*
 - *Research recommendation: Compare the different types of interim analyses provided by the SEFSC and the FWC.*

Provide ToRs for the guidance of this comparison. Determine robustness of the analyses for providing catch advice.

- *Yuying Zhang offered advice on this research based on their results from a customized MSE approach that is in development*
- *Other research recommendations to be explored to address identified uncertainties for the yellowtail snapper assessment (in next FWC assessment):*
 - *Update indices (as these were not updated in this interim analysis).*
 - *Update MRIP catch per trip estimates*
 - *Re-emphasize previous research recommendations from S64 Benchmark assessment review*

➤ **Provide fishing level recommendations**

- Complete the catch level recommendations table and make recommendations for OFL and ABC.
- Comment on any difficulties encountered in applying the Control Rule, including any required information that is not available.
 - *Increased level of uncertainty surrounding the use of P^* from the benchmark assessment for the interim analysis projections given the time elapsed since setting the initial P^* from the benchmark assessment and the fact that the characterization of uncertainty in the projections did not account for natural mortality and discard mortality.*
 - *The SSCs had considerable discussion about reducing P^* given the above considerations.*
 - *The SSCs recommend setting OFL at the yield achieved at $F_{30\%SPR}$ and ABC at the yield achieved at $P^* = 0.375$*
 - *P^* to remain unchanged from 0.375, but recommend Council select ACL or ACT to account for additional uncertainty that is described above (90% or 75% of $F_{30\%SPR}$)*

Table 1. Joint SSC catch level recommendations for Southeastern Yellowtail Snapper. Projected landings in millions of pounds under $F_{30\%SPR}$ (MFMT/OFL), the fishing mortality rate that corresponds to a P^* value of 0.375 (ABC), 90% of $F_{30\%SPR}$, and 75% of $F_{30\%SPR}$ from 2021 – 2031.

Year	$F_{30\%SPR}$ (OFL)	$P^* = 0.375$ (ABC)	90% of $F_{30\%SPR}$	75% of $F_{30\%SPR}$
2023	3.922	3.887	3.733	3.432
2024	3.774	3.749	3.635	3.401
2025	3.684	3.665	3.576	3.385
2026	3.625	3.610	3.537	3.375
2027	3.584	3.572	3.510	3.367

4. OTHER JOINT COMMITTEE BUSINESS

- Update on the Joint South Atlantic and Gulf of Mexico SSC Workgroup for Unassessed Stocks
 - *SA SSC members appointed to workgroup: Kai Lorenzen (chair), Wally Bublely, Amy Schueller, Genny Nesslage, and Anne Lange*
 - *GOM SSC members appointed to workgroup: Trevor Moncrief, Jason Adriance, Luiz Barbieri, Roy Crabtree, and David Griffith*
 - *Will convene a short webinar meeting this fall to discuss TORs, schedule, etc.*
 - *Original workgroup scope of work and objectives to be reviewed and considered by Joint workgroup members before meeting*
 - *Work may focus initially on addressing Goliath grouper stock ABC as requested by SA and GOM Councils.*

5. JOINT CONSENSUS STATEMENT AND RECOMMENDATIONS

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

JOINT MEETING ADJOURNED AT 12:05 P.M. EDT

--- LUNCH BREAK ---

(Following agenda items addressed by South Atlantic SSC only)

6. INTRODUCTION

6.1 Documents

Attachment 6: Minutes from April 2022 SSC Meeting

6.2 Action

- Introductions
 - *Agenda approved*
 - *Welcomed returning member, Marcel Reichert*
- Approve Minutes
 - *Minutes approved*

7. SEDAR 78: SOUTH ATLANTIC SPANISH MACKEREL OPERATIONAL ASSESSMENT

7.1 Documents

Attachment 7a: Stock Assessment Report for Spanish Mackerel

Attachment 7b: Presentation for Spanish Mackerel

Attachment 7c: Terms of Reference for Spanish Mackerel

Attachment 7d: S78 WP03, General Recreational Catch

Attachment 7e: South Atlantic ABC Control Rule

7.2 Presentation

Dr. Erik Williams, Southeast Fishery Science Center (Beaufort)

7.3 Overview

Spanish Mackerel was last assessed during the 2012 SEDAR 28 Benchmark, which indicated the stock was not overfished and not undergoing overfishing. For this SEDAR 78 assessment, data compilation and assessment methods were guided by methodology of SEDAR 28, as well as by current SEDAR practices and recommendations by the SEDAR 28 review panel. The assessment period is 1986–2020. The base-run estimate of terminal (2020) spawning stock was above the MSST ($SSB_{2020}/MSST = 1.40$), as was the median estimate from the MCBE ($SSB_{2020}/MSST = 1.42$), indicating this stock is not overfished. The estimated fishing rate has been at or below the maximum fishing mortality threshold (MFMT), represented by F_{MSY} with the exception of the terminal year (2020). The terminal estimate, which is based on a three-year geometric mean, was below F_{MSY} in the base run ($F_{2018-2020}/F_{MSY} = 0.77$) and in the median of the MCBE ($F_{2018-2020}/F_{MSY} = 0.74$). Thus, this assessment indicated that the stock is not experiencing overfishing. However, this result requires caution: if the overfishing rate of 2020 continued in 2021, the geometric mean would indicate overfishing. The SSC is asked to review the SEDAR 78: South Atlantic Spanish Mackerel Operational Assessment, comment and discuss projections and uncertainties, apply the South Atlantic Council's ABC Control Rule, and make catch level recommendations.

SSC General Comments:

- *Age comps and state/federal harvest breakdown is not accounted for in the assessment for all sectors (e.g. lack of age comps for commercial cast net). Substantial regional differences in how fishery is prosecuted, and lack of adequate sample sizes across sector type create large data gaps in the assessment and the need to pool age comps across years.*
- *10 years since last assessment → Given the time since the last assessment, further flexibility should have been provided for the operational assessment to make updates. Given this, a research track should be considered for next assessment.*

- *Several data (e.g. MRIP data) and model inputs (e.g. natural mortality, steepness, selectivity) that need to be explored more thoroughly (see below) and not under OA framework.*

7.4 Public Comment

- *See meeting transcript for public comment*
 1. *Ben Hartig*
 2. *Thomas Newman*
 3. *Dewey Hemilright*

7.5 Breakout Groups

- *Breakout group discussions recorded separately*
- *Breakout Group 1*
 - *SSC members: Chris Dumas (Rapporteur), Fred Scharf, Fred Serchuk, Jared Flowers, Jeff Buckel, Kai Lorenzen*
 - *Other: Julie Neer*
- *Breakout Group 2*
 - *SSC members: Dustin Addis (Rapporteur), Jie Cao, Marcel Reichert, Amy Schueller, Jennifer Sweeney-Tookes, Anne Lange*
 - *Other: Chip Collier*
- *Breakout Group 3*
 - *SSC members: Genny Nesslage (Rapporteur), Eric Johnson, George Sedberry, Scott Crosson, Wally Bublely, Yan Li*
 - *Other: Mike Schmidtke, Carolyn Belcher, Christina Wiegand, Emilie Franke, Jacob Espittia, Jeff Renchen*

7.6 Action

➤ **Review Assessment:**

- Does the assessment address the ToRs to the SSCs satisfaction?
 - Growth models shifted by one year between SEDAR 28 and SEDAR 78. Explain the cause of the shift and discuss the implications (status, productivity).
The SSC doesn't know why the growth model was shifted by one year, nor the effect on the status and productivity of stock.
 - Steepness was fixed at 0.75 (same as in SEDAR 28). Is this appropriate for Spanish mackerel? Describe the impact of fixed steepness in general, and this fixed value in particular on Spanish Mackerel productivity estimates, reference points, and recruitment estimation in projections.
The stock-recruitment (SR) data did not allow for an updated estimate of steepness in SEDAR 78; there was a cluster of points in the NE quadrant of the SR graph providing no information for a steepness estimate (no points were located in the SW area of the

graph). Steepness estimates from similar species do not appear to be available. The steepness value used in the SEDAR 78 (same as SEDAR 28) has high uncertainty as indicated by likelihood profiles.

- Assess uncertainties within the recreational data sources:
 - Are PSEs for the recreational catch estimates acceptable? *Not addressed*
 - Does the model fully incorporate the reported recreational catch estimation uncertainty? *Not addressed*
 - What is the impact of recreational catch uncertainty on stock status and productivity estimates? *Not addressed*
 - Recreational catch data from 2020 appears highly influential to model results. Does the 2020 data suggest a shift in fishing pressure or patterns, or is it an artifact of estimation uncertainty? Discuss the implications, to status and projected yield, of the sudden increase in recreational catch in the terminal year.
Given that a 3-year average of fishing mortality was used, the 2020 estimate of catch is not currently influential; however, given that the 2021 estimate is similar or larger, the 3-year average may begin to affect stock status in the next few years. In contrast, the 2020 estimate does, already, affect projections. During the pandemic, total fishing effort was increased, which indicates that the increases seen for Spanish mackerel are not unexpected.
 - Describe the impact of the revised MRIP estimates on stock productivity measures.
The revised MRIP estimates increase uncertainty. The model's estimates of stock size are going down in recent years while the observed landings are increasing. The increased landings could be driving the population down but there is uncertainty if this is the case given information provided during public input that suggests the potential for an increased stock size that could promote greater landings with no change in effort (e.g. questions about the accuracy of recent MRIP data, commercial quotas being met earlier in year during recent years). Shore-mode landings (these were higher than private boat mode which doesn't match on the water observations) appear to be important and driving changes in increased recreational landings.

- Are there any issues with the assessment configuration or uncertainties in the input data that limit the use of this assessment for providing stock status and supporting fishing level recommendations?
 - Discuss the predictive ability of the stock-recruit relationship for estimating MSY and F_{msy} and supporting stock projections.
 - *Parameters describing the SR curve were not updated from the 2012 assessment. The analysts were constrained in exploring this in more detail because SEDAR 78 was an OA.*
 - *The SR data do not show a clear pattern (a cluster of points in the NE quadrant of graph) and estimates of steepness from these data were unreliable. Steepness estimates from similar species are not available.*
- Does the assessment represent Best Scientific Information Available?
 - *The constraints of the OA and the poor quality/lack of data were a concern. Data/assessment concerns include:*
 - *The declining trend in biomass estimated by the OA was not reflective of what stakeholders described or observed in fishery-independent data sampling further north (NEAMAP).*
 - *Not clear that the current sampling program represents the current geographic distribution of the fishery (increased occurrences to the north suggests that the stock boundaries may have shifted).*
 - *There were questions regarding the recreational landings in recent years, especially shore-based mode (What is driving the increase in shore landings in recent years? Is it real?).*
 - *There have been large changes in the fishery (e.g. commercial cast-net landings have increased in importance), but large portions of the OA are based on the 2012 SEDAR 28 Benchmark that is now over a decade old.*
 - *The steepness estimate for the stock-recruitment curve was based on the 2012 assessment; this constrained the analysts.*
 - *The OA imposed constraints on the analysts. The SSC recommends a research track assessment be considered for the next assessment.*
 - *SEDAR 78 was sensitive to the same parameters (e.g., natural mortality--affected by changes made to growth model, negative t_0 , but little data to inform estimates of v -Bert curve; steepness) as those found for SEDAR 28.*

Changes in these parameters can change stock status as indicated by sensitivity analyses.

- *Jumps in recreational landings may reflect increases in recreational effort, increases in stock size or a combination of both.*
- *Over the last several years, commercial fisheries have been meeting quotas earlier in the year: is this because of increased effort or increased stock size?*
- *Because the evidence for a change in stock status is not strong, there is a concern that projections are not sufficiently robust. Projections (unlike current stock status) are influenced greatly by terminal year (2020), and terminal year is highly uncertain.*
- *The assessment model is estimating a decrease in spawning stock size as a result of the increases in catch and this is driving need for future catch reductions in the projections; however, other sources of evidence suggests that the stock size could be increasing.*

➤ **Identify, summarize, and discuss assessment uncertainties**

- Review, summarize, and discuss the factors of this assessment that affect the reliability of estimates of stock status and fishing level recommendations.
 - Characterize these factors in terms of their influence on assessment uncertainty and fishing level recommendations.
 - *As is common in many assessments, steepness and natural mortality are uncertain:*
 - *Steepness not estimable, and was fixed from previous assessment – SEDAR 28. There was no signal from data to inform steepness. This would apply to the ABC control Tier I.*
 - *Natural mortality was fixed from previous assessment – SEDAR 28. Natural mortality was found to have a significant impact on stock status. Likelihood profiles showed that natural mortality could be much higher (>0.5), which, if true, would indicate stock size is higher than currently estimated.*
 - *Lack of adequate representation of length and age samples from each fishery (most fleets) to inform fishing mortality.*
 - *Uncertainty of the Shrimp bycatch estimates was high (pdf pg 73). The observer coverage is extremely sparse and effort data are questionable.*

- *Lack of a pelagic fishery independent index of adult abundance*
 - *Commercial Handline index fits were poor (severe underfitting/overfitting)*
 - *Model ignored initial year of MRIP CPUE index (which was a relatively extreme value)*
 - Address potential impacts of COVID events on input data series. For example:
 - How might the missing 2020 SEAMAP survey value affect abundance or mortality estimates?
 - *The influence of the lack of SEAMAP 2020 will be difficult to determine until additional years of data are collected.*
 - How did the interruptions in MRIP sampling impact 2020 estimates and their uncertainty?
 - *Somewhat addressed due to imputations used by MRIP to account for reduced sampling in 2020. The influence of the lack of SEAMAP 2020 data and the value of 2020 MRIP data will be difficult to determine until additional years of data are collected. We must evaluate the congruencies or incongruencies of these data to previous or future years' data.*
 - List the risks and describe potential consequences of assessment uncertainties with regard to status, fishing level recommendations, and future yield predictions.
 - *When stock biomass is decreasing and fishing mortality is increasing in the terminal year, increased uncertainty can lead to overfished or overfishing stock status.*
 - Are methods of addressing uncertainty consistent with SSC expectations and the available information?
 - *The methods of addressing uncertainty are consistent with SSC expectations and the available information. Dimension II – (2) Environmental variables are not considered.*
- **Review the assessment projections and provide fishing level recommendations**
- Apply the ABC control rule and complete the fishing level recommendations table.
Pending SSC decision to accept the assessment for mgmt.:
 - **ABC-CR Dimension Tiers for SEDAR78:**
 - *I. Assessment Information → Tier 2 (2.5%)*
 - *II. Uncertainty Characterization → Tier 2 (2.5%)*
 - *III. Stock Status → Tier 1 (0%)*

- *IV. Productivity and Susceptibility (PSA) – Risk Analysis → Tier 2 (5%)*
 - *Total ABC adjustment = 10.0%*
 - *P-star value = 40.0%*
- Review the projection methods and the assumptions applied for the interim period (between the terminal year and the first year of management)
 - Do the projections and interim assumptions adequately capture uncertainty in the model and data? Uncertainty in recruitment?
 - *No, the SSC has several concerns with the assessment, including:*
 - *Commercial age sampling possibly inadequate*
 - *MRIP – high PSEs, uncertainty in terminal year data point*
 - *Influence of bad fit to initial year REC index (high value GR) on SSB*
 - *Uncertainty in steepness*
 - *Model likelihood profiling points to potentially higher natural mortality*
 - *YOY index missing terminal year data*
 - *Effect of removing early years with higher landings*
- Concerns have been expressed about the declining stock abundance and yield in the projection years, particularly since catch has been held below the current ABC and ACL and overfishing has not occurred.
 - Are the projected F rates in 2021-2022 reflective of the fishery?
 - *Given the concern with this OA, more attention should be paid to 2021-2022 MRIP estimates used in projections given the large sudden change in magnitude. Major source of uncertainty in setting catch levels. Would indicate a large increase in shore-based effort, which may or may not be realistic. With COVID, perhaps more shore-based angler effort, but in 2022 inflation may have decreased angler effort – TBD. More investigation is needed.*
 - How do the projected catch levels compare to catch levels observed in recent years in the model?
 - *Higher than 2020*
 - Comment on the implications of the expected spawning stock biomass in the projections falling outside the range of observed values.

- *If model is overestimating F in last few years, SSB decline is overestimated. However, if the Fs are truly that high, this response is to be expected.*
 - Comment on any difficulties encountered in applying the Control Rule, including any required information that is not available.
 - *No difficulties were encountered.*
- **Provide guidance for information to include in the Coastal Migratory Pelagic (CMP) SAFE report.**
 - OFL/ACL monitoring: Discuss any potential issues in monitoring the commercial and recreational Spanish mackerel fishery.
 - *Potential movement of the stock northward in terms of ACL monitoring*
 - Catch level reports: What threshold of change in landings/discards should be used for the SSC to receive additional analyses to describe the estimate?
 - *Not addressed*
 - Population trends: Discuss which index of abundance is most suitable for monitoring the stock for inclusion in future SAFE report.
 - *Not addressed*
- **Provide research recommendations and guidance on the next assessment:**
 - Review the included research recommendations and indicate those most likely to reduce risk and uncertainty in the next assessment.
 - *The research recommendations that will most likely reduce risk and uncertainty in the next assessment include those that address the issues with SEDAR 78 described above (e.g. steepness, natural mortality, age comps).*
 - Provide any additional research recommendations the SSC believes will improve future stock assessments.
 - *Based on public comments from commercial fishermen, the stock may be moving northward, so research on stock distribution is warranted*
 - *Recreational discards – better characterization of age/size composition and mortality of discarded fish*
 - Provide guidance on the next assessment, addressing its timing, need for topical working groups, and assessment type.
 - *Reminder: More than 2-3 topical working groups indicates that the assessment should be considered for a research track.*
 - *Not addressed specifically in terms of working groups, but the SSC recommends a research track consideration.*

- Provide comments for the development of the scope of work for the next assessment (if operational assessment recommended)
 - *See comments above. An operational assessment is not recommended for the next assessment.*

CONSENSUS STATEMENT:

- *The SSC has several concerns with this OA before deeming consistent with BSIA:*
 - *The assessment model is appropriate, but inputs need to be more thoroughly investigated.*
 - *There are several concerns with certain aspects of the data quality that should be more thoroughly investigated before setting catch level recommendations*
 - *The operational assessment TORs constrained the modeling approach and there could be alternative data inputs that would benefit future assessments (something for future deliberation by the SSC)*
 - *Stock status classification has great deal of uncertainty because of terminal year data; this uncertainty leads into little confidence in projections.*
 - *Specific investigations into certain data inputs or model components (see lists above) should occur before management advice can be provided:*
 - *Technical group/subset of SSC members to compile specific list of recommendations to the SEFSC to improve upon assessment in order to achieve stock status determination and catch level recommendations.*
 - *Dustin Addis*
 - *Marcel Reichert*
 - *Yan Li (joined after the meeting)*

Table 2. SSC catch level recommendations for South Atlantic Spanish Mackerel (**Values to be added after refitting of the model**).

Criteria		Deterministic		Probabilistic	
Overfished evaluation (SSB/MSST)					
Overfishing evaluation (F/F _{MSY})					
MFMT (F _{MSY})					
SSB _{MSY} (metric tons)					
MSST (metric tons)					
MSY (1000 lbs.)					
Y at 75% F _{MSY} (1000 lbs.)					
ABC Control Rule Adjustment					
P-Star					
SSC recommended P _{Rebuild}					
M					
OFL RECOMMENDATIONS					
Year	Landed (lbs ww)	Discard (lbs ww)	Landed (number)	Discard (number)	
2023					
2024					
2025					
ABC RECOMMENDATIONS					
Year	Landed (lbs ww)	Discard (lbs ww)	Landed (number)	Discard (number)	
2023					
2024					
2025					

8. OTHER BUSINESS

9. PUBLIC COMMENT

The public is provided one final opportunity to comment on SSC recommendations and agenda items.

See meeting transcript for public comment:

1. *Dewey Hemilright*
2. *Ben Hartig*

10. CONSENSUS STATEMENT AND RECOMMENDATIONS

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

The Final SSC report will be provided to the Council by 9:00 a.m. on Friday, August 26, 2022 (approximately 3 weeks from the end of the meeting) for inclusion in the briefing book for the September Council meeting.

11. NEXT MEETINGS

11.1 Scientific and Statistical Committee Meetings

- October 25-27, 2022 in Charleston, SC
- February (TBD webinar as needed)
- April 18-20, 2023 in Charleston, SC
- October 24-26, 2023 in Charleston, SC

11.2 South Atlantic Fishery Management Council Meetings

- September 12-16, 2022 in Charleston, SC
- December 5-9, 2022 in Wrightsville Beach, NC
- March 6-10, 2023 in Jekyll Island, GA
- June 12-16, 2023 in PonteVedra, FL

ADJOURNED AT 6:21 p.m.