

UNITED STATES DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration National Marine Fisheries Service Southeast Fisheries Science Center 75 Virginia Beach Drive Miami, Florida 33149 U.S.A. (305) 361-4204 Fax: (305) 361-4499

21 April, 2017

TO:

Gregg Waugh, Executive Director, SAFMC

Michelle Duval, Ph.D., Chair, SAFMC

FROM:

Bonnie J. Ponwith, Ph.D.,

Science and Research Director

SUBJECT:

Red Snapper Guidance Request

The SEFSC concurs with the SEDAR Review Panel and SAFMC SSC's approval of SEDAR 41, the red snapper stock assessment. The SSC developed ABC recommendations based on the projection analysis that allowed the stock to reach a rebuilt status in the time allowed by the rebuilding plan (by 2044). The use of an ABC based primarily on fishery discards for monitoring the effectiveness of management action is likely ineffective due to the high level of uncertainty in measures of discards and the change in the effort estimation methodology that will be implemented in the MRIP survey.

Monitoring progress toward rebuilding will require a departure from the traditional techniques. SEFSC analysts are exploring an Index Projection Methodology as an alternative approach for monitoring stock response to management measures. They plan to discuss this with the SSC at their upcoming meeting to get input on the method. They will also discuss how these results may be used by the SSC to generate future catch level advice, given updated projections have not been provided. Information for the SSC regarding this is attached.

At the last SAFMC meeting we discussed holding a workshop to discuss ways to characterize the uncertainty of MRIP estimates (landings, discards) to provide guidance on: 1) at what point the uncertainty is sufficiently high to warrant alternative methods for accounting for catch; 2) what those alternative methods might be; 3) means to improve the precision of MRIP catch estimates; and 3) means to augment MRIP sampling to improve data quality. The SAFMC recognized this is a region-wide issue so a presentation was made to the GMFMC to request involvement of their SSC, and the GMFMC has agreed to participate. It has also been suggested that representation from the Mid-Atlantic Fishery Management Council may be advisable. We'll begin to stand up a steering committee to refine the workshop objectives, define the deliverables and begin work on the agenda. One deliverable from the workshop could evaluate the precision of red snapper discard estimates to help advise on their use for monitoring stock status when discards are the predominant contributor to fishing mortality. The target timeline for the workshop is this fall, however, we'll have more clarity on the timeline for delivery of advice to the SSC once the steering committee is stood up and begins their work on workshop planning.

Attachment

cc: Roy Crabtree, Jack McGovern, and Rick DeVictor

Monica Smit-Brunello

John Carmichael, Kari MacLauchlin, and Chip Collier

Theo Brainerd and Trika Gerard

SSC Input for April 2017 Meeting

The SAFMC SSC reviewed and approved the SEDAR 41 Red Snapper stock assessment in May 2016. The SSC developed ABC recommendations based on the projection analysis that allowed the stock to reach a rebuilt status in the time allowed by the rebuilding plan (by 2044). In our memo of February 15, 2017, the SEFSC indicated reasons why any further proposed projections would not be appropriate for management. These reasons revolve around the uncertainty and methodology changes for future estimates of discards from the MRIP survey. Non-traditional methods and data sources may need to be used to monitor management action effectiveness and progress toward rebuilding.

The SEFSC proposes creating and an Index Projection Methodology that uses trends in the fishery-independent survey to monitor rebuilding progress and serve as the basis for the SSC's future ABC advice to the Council.

The SEFSC would like to get feedback from the SSC on this proposed approach. Specifically:

- The SEFSC is actively working on research into using SERFS video data to monitor future
 effectiveness of management actions, i.e. progress toward rebuilding. We ask the SSC to provide
 input on this proposed approach and its potential utility for determining management action
 effectiveness.
- 2. Discuss options for the appropriate baseline against which to compare the Index Projection.
- 3. Discuss how the index may be used by the SSC to develop ABC advice.

Dr. Erik Williams will be preparing a brief summary of the proposed approach and will be on hand to answer any questions the SSC may have at their next meeting.

We appreciate the SSC taking time to provide input on new methodology that has the potential to benefit management.



SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

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Dr. Michelle Duval, Chair | Charlie Phillips, Vice Chair Gregg T. Waugh, Executive Director

April 3, 2017

TO: Bonnie Ponwith

FROM: Gregg Waugh & Michelle Duval SUBJECT: Red Snapper Guidance Request

At its March 2017 meeting, the South Atlantic Council requested that its SSC and the SEFSC work together to obtain an ABC for Red Snapper. This request was in response to two letters from NMFS addressing the status of Red Snapper. The first letter, from the SEFSC dated February 15, 2017 (attached), indicated that projections the Council requested in January 2017 could not be completed due to uncertainty in the assessment and the MRIP discard estimates. This letter also indicated that a complete evaluation of MRIP changes on the Red Snapper assessment (SEDAR 41) is necessary before it can be useful to management. The second letter, from SERO dated March 3, 2017 (attached), noted the SSC's concerns with uncertainty in the SEDAR 41 assessment and the resulting inability to reliably determine the degree of overfishing. In addition, NMFS noted that the assessment indicated overfishing was occurring during its terminal year of 2014 but the Council's actions to limit harvest since 2010, including harvest prohibitions in effect since 2015, have addressed overfishing and allowed the stock to continue rebuilding.

The SSC reviewed the SEDAR 41 Red Snapper assessment in May 2016 and considered it Best Scientific Information Available. However, because the Council has been informed in the past that SSC conclusions on BSIA are in fact recommendations, and that NMFS is actually responsible for the BSIA determinations, the Council requests the following:

- 1. The SEFSC concur with our determination that alternative methods are necessary to specify ABC and MSY for red snapper and that SEDAR 41 (original and revised) cannot be used to specify ABC or MSY for 2017 and beyond for the reasons outlined in your memo to Michelle Duval dated February 15, 2017. This is necessary to inform the SSC on the status of its existing ABC recommendation and to determine which sources of information used in the SEDAR 41 assessment can be considered for future ABC recommendations.
- 2. The SEFSC provide an evaluation of data limited techniques that can be considered by the SSC to develop an index-based ABC.
- 3. The SEFSC provide additional details on the proposed evaluation of the effect of MRIP changes on the Red Snapper assessment, particularly the types of evaluations to be considered and when they will be available for SSC review.

Given that the SEFSC will be providing the SSC a revised SEDAR 41 Red Snapper assessment to correct errors with some of the headboat input data, it is critical that a response to these issues

also be provided to the SSC. This will help inform the SSC on how to view the revised assessment.

Please provide this information needs to Council staff by noon on April 10, 2017 to be distributed to the SSC for review at their April 25-27, 2017 meeting. This is a complex matter and the SSC needs adequate time to review the revised assessment and responses prior to their meeting.

Please contact John Carmichael to address any questions concerning this request.

cc: Roy Crabtree, Jack McGovern, and Rick DeVictor Monica Smit-Brunello John Carmichael, Kari MacLauchlin, and Chip Collier Theo Brainerd and Trika Gerard



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National Oceanic and Atmospheric Administration National Marine Fisheries Service Southeast Fisheries Science Center 75 Virginia Beach Drive Miami, Florida 33149 U.S.A. (305) 361-4200 Fax: (305) 361-4499

15 February, 2017

MEMORANDUM FOR:

Gregg Waugh, Executive Director

South Atlantic Fishery Management Council

FROM:

Bonnie J. Ponwith, Ph.D.

Science and Research Director

SUJBECT:

Red Snapper Projections

On January 18, 2017, you sent a memo requesting, "Provide projections to 2044 (the end of the rebuilding period) based on fixed fishing mortality rates at Fmax, F20%SPR, F27%SPR, F30%SPR, and F40%SPR under the assumptions that all fish caught at each F level are subsequently discarded and the scenario mortality level is the total mortality (i.e., there are no additional discard mortalities). For each scenario, provide the full suite of projection outputs as provided for SEDAR 41 projections."

In working on those projections, Southeast Fisheries Science Center staff have advised, and I concur, that the proposed projections are not appropriate for management use for the following reasons:

- The uncertainty in the assessment is already large, and will increase due to the MRIP discard data, especially for the interim period (2015-16), the upcoming changes to MRIP from the new effort survey. For some background: the uncertainty in projections is generally high after 3-5 years, and these projections would have 2-3 years of an interim period (depending on whether 2017 or 2018 was the effective year of regulations).
- The SAFMC SSC has indicated that overfishing for this stock is occurring, but cannot
 quantify by how much. Fishing mortality rates in the last few years of the assessment
 are very sensitive to 2014 data and retrospective analyses indicate fishing mortality
 rates are considerably lower if these data are excluded. This uncertainty in the stock
 assessment inhibits the ability to set an ABC that can be effectively monitored.
- Fishing mortality in the interim period is calculated using actual landings and discards in 2015, though the status was determined using fishing mortality when there was a fishery occurring during mini-seasons (2012-2014). There were no fishing seasons for red snapper in 2015 or 2016 and final 2016 MRIP data are not yet available.
- The MRIP telephone survey will end this year and be replaced by a new mail-based effort survey. The new effort survey will be calibrated with the old telephone survey and undergo peer-review this summer. Preliminary results from the calibration study will be available in late-2017 and final results incorporating all three years of side-by-

- side surveys will be available in 2018. Projections timed to benefit from the completed calibration study would be stronger than if based on the preliminary results.
- We feel that a more complete evaluation of the effect of the upcoming changes to MRIP on the Red Snapper assessment is needed before it can be useful to management.
 - We further recommend a thorough investigation, possibly through a workshop, into the reliability and utility of mail survey based MRIP estimates of catch and discards for many of our offshore species, which are known to have low intercept rates relative to other species covered by MRIP.

cc: Roy Crabtree
Andy StreIcheck
Jack McGovern
Theo Brainerd
Trika Gerard
Erik Williams



UNITED STATES DEPARTMENT OF COMMERCE

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F/SER25:FH

Dr. Michelle Duval, Chair South Atlantic Fishery Management Council 4055 Faber Place Drive, Suite 201 North Charleston, South Carolina 29405

MAR **0 3** 2017

Dear Dr. Duval:

The most recent South Atlantic red snapper stock assessment (SEDAR 41) was completed in April 2016 and indicated that the stock is undergoing overfishing and is overfished, but is rebuilding. The South Atlantic Fishery Management Council's (Council) Scientific and Statistical Committee (SSC) reviewed the assessment and determined the assessment is based on the best scientific information available. However, the SSC noted there is considerable uncertainty in the exploitation status, and thus, the degree of overfishing is highly uncertain. The uncertainty in exploitation status inhibits the Council's ability to set an acceptable biological catch that can be effectively monitored. Additionally, in the February 15, 2017, response to a Council request for red snapper projections, Dr. Bonnie Ponwith, Director of the National Marine Fisheries Service (NMFS) Southeast Fisheries Science Center noted that the overfishing determination was based on fishing mortality levels during 2012-2014 when a limited amount of harvest was allowed. Landings during 2012-2014 represented a high fraction of the overall fishing mortality, but since that time, harvest has been prohibited. Dr. Ponwith also noted that the uncertainty in the assessment is large and is predicted to increase as catch and effort estimates are updated through the new Marine Recreational Information Program (MRIP) effort survey.

NMFS has determined that the latest assessment identified the South Atlantic red snapper stock as undergoing overfishing, and adequate management action has been taken to address overfishing and continue to rebuild the stock through a harvest prohibition in 2015 and 2016. Due to uncertainty in the level of overfishing associated with the assessment and the new MRIP effort survey, data poor assessment methods for the red snapper stock, such as use of fishery independent indices, may be appropriate in the future. I look forward to continuing work with the Council on Amendment 43 to the Fishery Management Plan for the Snapper-Grouper Fishery of the South Atlantic Region to reduce discards of red snapper in the South Atlantic and continue to rebuild the stock.

Sincerely,

Xoy E. Crabtree, Ph.D. Regional Administrator

cc:

F/SEC - Bonnie Ponwith F/SER2 - Jack McGovern F/SER25 - Rick DeVictor

