

**Gulf of Mexico Fishery Management Council
Standing, Reef Fish, Socioeconomic, and Ecosystem SSC**

**Review of SEDAR 74: Gulf of Mexico Red Snapper
Research Track Assessment
Meeting Summary
February 27 – 28, 2024**

Review of SEDAR 74: Gulf of Mexico Red Snapper Research Track

Dr. Katie Siegfried (SEFSC) provided the SEFSC's response to a review, conducted in December 2023, of the SEDAR 74 Research Track Assessment model for Gulf red snapper. The review panel comprised four SSC representatives and three Council for Independent Experts reviewers (CIE). The overall conclusion of the group was that the presented stock assessment model was not suitable to proceed to an Operational Assessment and that instead a Benchmark Assessment and another full review should be conducted. Dr. Siegfried pointed out that, while the reviewers reported a number of criticisms, they did not provide any feedback on what data gaps may be contributing to those issues and broadly recommended using a simpler modeling approach based on the data available.

One of the main issues identified was the stock structure identification (ID). The Stock ID Working Group recommended a 3-regional model; however, that decision was not unanimous. While building the model, the analysts became aware of a number of data collection limitations for the eastern Gulf region (Cape San Blas to southern Florida). As a result, the stock assessment team had to integrate data streams from the eastern region and the central region (Cape San Blas to the Mississippi River) to parameterize the three-area model. This mirroring approach to the data in two of the three regions resulted in additional inherent uncertainty but allowed for successful convergence of the model. The reviewers suggested this approach may result in an over-parametrized model and recommended instead combining the eastern and central regions resulting in a 2-region model as was done in the previous SEDAR 52 red snapper stock assessment.

The SSC acknowledged that communication between the analysts and stock ID Work Group members could be improved in the future to avoid designing a model structure that was not supported by available data sources. There was agreement that the Assessment Development Team (ADT), which comprised a number of SSC representatives, was helpful in allowing for continuous feedback during the assessment process. Despite a lack of consensus, several SSC members stated that partitioning the model into 3 areas was helpful in elucidating regional population dynamics that were hypothesized to exist.

The SSC was opposed to the reviewers' suggestion of inputting recreational landings data without considering any error parameters. One SSC member stated that National Standard 1 requires transparency in handling uncertainty in stock assessment modeling. The SSC considered the reviewer's findings for exploring other approaches to integrating information from the Great Red Snapper Count (GRSC). Several SSC members stated that abundance estimates for the artificial reef and hard bottom habitats calculated from the GRSC were likely very aligned to abundance

estimates generated from SEDAR 52. In general, the SSC concluded that the CIE reviewers appeared unfamiliar with the red snapper stock and the realized high uncertainty of regional data sources within the Gulf. As such, the SSC determined that they would consider all of the reviewers' recommendations and provide rationale for any recommendation the Committee decided not to consider further in the next phase of the stock assessment process.

The SSC discussed the merits of the 2 versus 3-area model based on the review. The SSC sentiment was mixed with a few members stating that a 2-area model would be appropriate and result in less uncertainty. Others argued that, absent any direct comparison between two different models, it is impossible to actually test for utility of the regional differences in stock productivity and abundance. Instead, they contended that the 3-area model had been recommended by the Stock ID Work Group, and since the model was able to converge, should be pursued for management advice.

The SSC discussed the type of stock assessment pathway and next steps for SEDAR 74. Many SSC members agreed that further review and exploration of the reviewers' comments was warranted. However, they contended another Stock ID Work Group determination was unlikely to result in a different outcome. There was also concern among some members that expected changes to MRIP-FES estimations procedures, with a report due sometime in 2026, could have implications for interpreting results from SEDAR 74. An SSC member disagreed with the reviewers' recommendation of not fixing steepness at 0.99 and estimating natural mortality within the model as estimating these parameters within the assessment model has been consistently difficult and those decisions have a lot of influence on the model results.

SEFSC staff indicated that an operational-style assessment for red snapper could be tailored to achieve some of the potential Terms of Reference (TORs) the SSC had discussed. Such as inclusion of topical working groups to address some of the reviewer's concerns including an additional review process at the end of the assessment. Several SSC members agreed with creating a few topical working groups but stated there was not a need to conduct another CIE review. Specifically, the SSC thought it prudent to create a topical working group to explore how to better include information gathered from the GRSC in the stock assessment process. The SSC recommended that some of the principal investigators, or other available contributors from the GRSC could participate in the workgroup. The results of these deliberations would be made available, so that documentation of how or when GRSC data is integrated could be reported out. The SSC also agreed that a recreational working group would be helpful. The SSC will review potential TORs for SEDAR 74 at its May meeting and provided the following direction to SEFSC staff:

Motion: The SSC moves that the SEDAR 74 process move forward with a 3-area Gulf red snapper stock assessment, taking into account review panel, including CIE, concerns and criticisms to improve the model where appropriate and possible.

Motion carried 14 – 9 with 1 abstention.

Review of SEDAR Process Recommendations from SEDAR 74

Dr. Siegfried reviewed the recommendations regarding the SEDAR assessment process (Item 9a) from the SEDAR 74 Review Workshop. The peer-review team made a number of recommendations, specifically about the Research Track process. The SSC noted that the SEFSC and the Council are currently in discussions about how to modify the current SEDAR process to better serve SEDAR cooperators and analytical partners. An SSC member stated that this process will be further developed at the upcoming SEDAR Steering Committee meeting (March 25-26, Charleston, SC) and the SSC could likely provide better guidance at the May SSC meeting in light of the outcomes of the SEDAR Steering Committee meeting. The SSC did provide some initial feedback based on the presentation.

Dr. Shannon Cass-Calay (SEFSC) noted that the current SEDAR process would benefit from additional flexibility. In particular, she noted that establishing statements of work two years in advance is very challenging and would prefer to establish a list of key stocks to be assessed on a regular schedule with additional stock assessment completed as permissible. She also stated a preference to avoid specific types of stock assessments (e.g., benchmark, operational) and instead, prefers to work with the Council to develop an appropriate scope of work and timeline for each assessment.

Dr. Cass-Calay and Council staff stated that the Research Track Assessment process has not been as useful as intended in that the gains in efficiency and throughput have not been realized and has created more workload on the data provisioning process. The SSC and SEFSC staff also discussed the need for independent peer-review of particular stock assessments (e.g., CIE review) and agreed that this could be determined on a case-by-case basis for each assessment and included in the Terms of Reference (TORs) for each stock assessment. A similar approach could be used to determine if Topical Working Groups or other panels are necessary for each assessment. The SSC plans to continue this discussion at its next meeting.

Meeting Participants

Standing SSC

Luiz Barbieri, *Vice Chair*
Harry Blanchet
David Chagaris
Roy Crabtree
Doug Gregory
David Griffith
Paul Mickle
Trevor Moncrief
Jim Nance, *Chair*
Will Patterson
Dan Petrolia
Sean Powers
Steven Scyphers
Jim Tolan

Special Reef Fish SSC

Special Socioeconomic SSC

Luke Fairbanks
Cindy Grace-McCaskey
Jack Issacs

Council Representative

Billy Broussard

Special Ecosystem SSC

Mandy Karnauskas
Josh Kilborn
Steven Saul

Jason Adriance
Mike Allen
John Mareska

[A list of all meeting participants can be viewed here.](#)