Joint Meeting of the
Gulf Standing, Reef Fish, Mackerel, Ecosystem, and Socioeconomic SSC
and the South Atlantic SSC
Webinar Meeting Summary
July 21-23, 2020

The webinar meeting of the Gulf of Mexico (Gulf) Fishery Management Council's (Council) Standing, Reef Fish, Mackerel, Ecosystem, and Socioeconomic Scientific and Statistical Committees (SSC) was convened at 9:00 AM on July 21, 2020. The first day of this meeting served as a joint meeting of the Gulf and South Atlantic Council SSCs. The agenda for this webinar meeting was modified to accommodate presenter schedules on July 22, and summarily approved. The minutes from the Gulf SSC's June 29, 2020, and July 8-9, 2020, webinar meetings were approved as written. Verbatim minutes from past SSC meetings can be reviewed here.

Dr. Joe Powers volunteered to be the SSC representative at the August 24-28, 2020, virtual Gulf Council meeting.

Review of SEDAR 64 – Southeastern US Yellowtail Snapper Stock Assessment

Ms. Shanae Allen and Mr. Christopher Swanson of the Florida Fish and Wildlife Conservation Commission reviewed the data inputs, model development and results, diagnostic analyses, and yield stream projections from the SEDAR 64 stock assessment for southeastern U.S. yellowtail snapper. The distribution of yellowtail snapper includes the jurisdictions of the Gulf Council and South Atlantic Council, and apportionment of the stock annual catch limit (ACL) between the two regions is currently established at 25% and 75%, respectively. The majority of biological and landings data were observed in south Florida including the Florida Keys. Additionally, the fishery is primarily prosecuted in south Florida, so the stock assessment model was constructed as a single area model that considered data only from Florida. The terminal year of data for SEDAR 64 was 2017.

Data

Mr. Swanson reviewed the data input updates from SEDAR 27A (2012) that were incorporated in SEDAR 64. The stock assessment model was changed from ASAP version 2 to Stock Synthesis (SS) version 3.30.14. Recreational data collected from the Marine Recreational Information Program (MRIP) were fully adjusted to account for the transition to the Fishing Effort Survey (FES). Prior to 1992, high uncertainty in yellowtail snapper recreational landings and discards was observed. Additionally, age composition data by fleet and indices of biomass are not annually available prior to 1992. Due to these constraints, the SEDAR 64 Assessment Panel recommended the base model be run using data inputs collected from 1992-2017. Most life history parameters such as maximum size, maturity schedule, and natural mortality were only slightly modified or retained from SEDAR 27A. Fleet selectivity was characterized as commercial, headboat, and MRIP with index selectivity characterized as commercial catch-per-unit-effort (CPUE), fishery-independent Reef Visual Census (RVC; for both juvenile and adult life stages) data, and MRIP

CPUE. Both commercial and recreational discard mortality rates were set at 10% with slight modifications to that input run for each sector in sensitivity runs.

Results

Results from the base model indicated general agreement between observed and expected values for commercial and recreational landings. Estimates of commercial and recreational discards were highly variable. No discernable patterns in model residuals were evident in the MRIP and headboat indices; however, some minor residual trends were evident in the commercial abundance index, and some temporal residual patterns were also observed in the abundance estimates from the RVC survey. The length composition estimates by fleet agreed strongly between observed and modeled results. A steepness of 0.8 was estimated by the resulting stock recruitment curve but was not well informed due to a lack of observations near the origin. Model results for fishing mortality (F) indicated that the stock has not undergone overfishing for most of the time series and spawning stock biomass (SSB) has generally increased since 1996, remaining constant since 2015. The model resulted in SSB estimates that were over two times the minimum stock size threshold (MSST), with the majority of the biomass being represented by fish aged between zero and four years. Uncertainty analyses were performed using Markov Chain Monte-Carlo methods and resulted in a determination that the model was robust in determining stock status. In summary, the model results determined that southeastern U.S. yellowtail snapper is not undergoing overfishing and is not considered to be overfished as of 2017. The SSC determined the results of the stock assessment to represent the best scientific information available.

Subsequent sensitivity runs were conducted to determine model performance to permutations in model inputs. Specifically, model inputs examined were commercial and recreational discard mortality rates, starting the model time series at 1981, removing the Francis-weighting consideration, increasing maximum age to 28 years to match observations from the Carolinas, and adjusting the shape of the selectivity curves. Results of sensitivity analyses did indicate some small changes in model estimates but none of these analyses indicated a different determination in stock status. Additionally, retrospective analyses and several examinations to assess model convergence indicated that the model was robust to removal of recent years in the time series and changes to model inputs.

Projections

Four deterministic projections varying values for F were run for years 2020-2037 where the stock-recruitment relationship was held constant. Current F was defined as the geometric mean from the last three years of the time series (2015-2017), and projections were also run at F at a 30% spawning potential ratio ($F_{SPR30\%}$), 0.75*$F_{SPR30\%}$, and $F_{SPR40\%}$. Due to constraints within SS, landings from headboats and MRIP had to be input into projections as metric tons rather than numbers of fish, which increased F in earlier years. None of the four projection scenarios varying F resulted in a situation where the stock would be undergoing overfishing or be considered overfished.

Motion: The SSCs determined that the SEDAR 64 assessment of southeastern U.S. yellowtail snapper represents the best scientific information available on the stock and based on the assessment results the stock is not overfished and not undergoing overfishing.

Motion carried without opposition.

The SSC asked for clarification as to why only biological and landings data collected in Florida were used in SEDAR 64. There was a consensus among the data workshop and assessment workshop participants that using Florida-specific data inputs was appropriate, since the majority of the observations were from Florida (>99%) and most fishing activity for yellowtail snapper occurs in Florida (>98%). Observations of older-aged fish encountered in the Carolinas were not input in the base model, but were used to inform the maximum age sensitivity analysis.

The SSC inquired as to why projection results from the Stock Assessment Executive Summary differed from the presentation. Ms. Allen indicated that the presentation incorporated the most recent analyses that allowed for the inclusion of the gap years between the end of the assessment (2017) and the beginning of the projections (2020), or 2018 and 2019. She indicated that she could update the Stock Assessment Executive Summary to reflect this change and could distribute a tabular version of the projections for the SSC's review. The SSC followed up by asking why the projections were run for 20 years, since variability in projections greatly increases over time. Ms. Allen agreed that anything beyond 5 years can be problematic to interpret, but ran the projections for a long enough time period to capture stabilization in the projection estimates.

A question was asked about consideration of potential changes to allocation for yellowtail snapper based on the results of SEDAR 64. The Gulf Council has a combined overfishing limit (OFL) and acceptable biological catch (ABC) for recreational and commercial harvest; however, the South Atlantic Council uses fishing sector allocations for yellowtail snapper. Ms. Allen indicated that the model was constructed as a single area model so there was no ability to input sector-specific allocations by region. If sector-specific allocations were considered in the model, those considerations would have to be applied identically across both the Gulf and South Atlantic.

<u>Stock Assessment Executive Summary</u>

The SSC reviewed the Stock Assessment Executive Summary for SEDAR 64. The SSC noted that the term "target" was not accurate for defining MSST, and that $SSB_{SPR30\%}$ should be used in place of SSB at the proxy for maximum sustainable yield ($SSB_{MSYPROXY}$). The SSC asked whether the base model was run using recreational data collected from the Marine Recreational Fisheries Statistics Survey (MRFSS). Mr. Swanson indicated that several comparison model runs were conducted to ascertain changes in model estimates resulting from changes to input recreational data derived from MRFSS and MRIP-FES. The results from those runs indicated a scaling difference with increased landings when using MRIP-FES. The SSC discussed the appropriate time scale for setting yield streams. Mr. Ryan Rindone reminded the SSC that the last year for the yield stream definition will be retained until changed, so it is important to consider how often an assessment is conducted for a species when recommending future yields. The SSC asked when

yellowtail snapper might be assessed again. Mr. Rindone indicated that healthy stocks are often not examined as frequently as others that may be undergoing a rebuilding plan.

Catch Recommendation

The SSC inquired as to whether there was any information about recent stock recruitment or effort that could help inform the selection of values for OFL and ABC. There is little information to quantify recruitment for yellowtail snapper, and this data gap has been acknowledged by including investigations of recruitment in the SEDAR 64 research recommendations. Mr. Rindone indicated that the state of Florida has preliminary recreational effort estimates that suggest an increase in effort in 2020 relative to 2019, which may be due to behavioral shifts related to the COVID-19 pandemic. The SSC agreed that none of the projection scenarios indicated stock status would be compromised.

To better inform the SSC about setting OFL and ABC, discussion of the economic concerns and implementation of the ABC Control Rule were considered. Regarding economic concerns, only the commercial fishery in the South Atlantic has met or exceeded its sector ACL in recent years. Neither the recreational fishery in the South Atlantic and or the combined recreational and commercial fishery in the Gulf have exceeded their respective catch limits. These observations and the results of SEDAR 64 indicated that yellowtail snapper have been sustainable with the current level of harvest across the Gulf and South Atlantic. When discussing the ABC Control Rule, in the past for southeastern U.S. yellowtail snapper, the South Atlantic ABC Control Rule was used to define a probability of overfishing estimate (P*) to buffer the ABC from the OFL. The SSC agreed that if the selected yields streams were defined outside of the determination resulting from implementing the ABC Control Rule, that decision should be justified by comparing results from the ABC Control Rule and the presented projections scenarios.

Dr. Mike Errigo (South Atlantic Council Staff) presented the results of applying the South Atlantic ABC Control Rule for yellowtail snapper, which indicated a P* value of 0.375, or 37.5%. Ms. Allen presented the corresponding updated yield streams and indicated that the probability density function about the OFL was very narrow, resulting in an ABC that is 97.2% of the OFL. The SSC asked why the projected OFL was different between this presentation and the one given the day before. Ms. Allen indicated she was unsure of how to incorporate the P* scenario using the defaults in SS, and had to reach out to staff at the Southeast Fishery Science Center (SEFSC) for clarification. The SEFSC supplied a method to generate the projections, but this method allowed for gap years to be input in both biomass (in metric tons) and number of fish, a difference which can affect the projections. Additionally, this method allows for constant fleet allocations over time while the SS default does not. The SSC also noted that while projections were being presented on an annual scale, harvest monitoring corresponds to a season start in August with the season ending at the end of July, so that any closure is more likely to occur during peak yellowtail spawning activity. The SSC was concerned about the possibility of a period in the projections when the ABC would exceed the OFL. Ms. Allen indicated that those values get very close over time and that projections out to 2057 are when an equilibrium is achieved.

Subsequent discussion focused on drafting a motion to define values for the yellowtail snapper OFL and ABC. Several SSC members noted that while there existed a consensus that the stock

was healthy and could likely sustain increased harvest, the proposed yield streams all represented a reduction relative to recently observed landings (observed in MRFSS). The SSC was unsure as to what might be contributing to the dichotomy. Mr. Swanson suggested that the ASAP version 2 model used for SEDAR 27A did not allow for the ability to construct fleet-specific weight-at-age matrices, and this limitation likely caused an overestimation of SSB and an underestimation of F. The transition from ASAP to SS allows for an accounting of these fleet-specific characterizations, which has resulted in yield stream estimates that more closely align to those from SEDAR 3 and more recent empirical observations of SSB. Confounding interpretation of the differences in the current and projected catch limits further, recreational yellowtail snapper harvest is presently monitored in MRIP-FES, and those data are then converted back to MRFSS for quota monitoring. However, the SEDAR 64 projection results are derived from and presented in MRIP-FES. There was concern among SSC members that projection results required further clarification before OFL and ABC values could be recommended. There were also concerns that buffers between projection scenarios and from the ABC Control Rule were not sufficiently capturing the uncertainty about the OFL. Due to these concerns, the SSC decided to hold a subsequent joint meeting of the Gulf and South Atlantic SSCs before defining OFL and ABC for southeastern U.S. yellowtail snapper.

Review of SEDAR 28 Update – Gulf of Mexico Migratory Group Cobia Stock Assessment

Ms. Adyan Rios from the SEFSC presented the SEDAR 28 Update stock assessment ("Update") for the Gulf migratory group of cobia (Gulf cobia). This assessment was completed using SS, building upon SEDAR 28 (2013) which used a terminal year of 2011, to now include data through 2018. This Update found Gulf cobia to be undergoing overfishing, but not overfished (Table 1, from the Update stock assessment report).

Table 1: Summary of Magnuson-Stevens Reauthorization Act benchmarks and reference points for the SEDAR 28 Update. SSB is in metric tons, whereas F is a harvest rate (total biomass killed / total exploitable biomass).

Reference Point Criteria		**Current Benchmarks**	
Base natural mortality (M)	0.38	SSB_{2018}	3,725
Steepness	0.789	$F_{Current\ (geom.\ mean:\ 2016\text{-}2018)}$	0.332
Generation Time	5.51	SSB_{2018} / SSB_0 (SPR_{2018})	0.21
SSB_0 (Unfished)	18,016	SSB_{2018} / $SSB_{SPR30\%}$	0.69
Target SSB = $SSB_{SPR30\%}$	5,406	SSB_{2018} / MSST	1.11
MSST = (1-M)*$SSB_{SPR30\%}$	3,352	--MSST Overfished?	No
F_{MSY}	Not Estimable	$F_{Current}$ / MFMT	1.44
MFMT = $F_{SPR30\%}$	0.231	--Overfishing?	Yes
F_{OY} (F at optimum yield)	0.18		

Data

The Update incorporated MRIP-FES calibrated recreational landings and effort, with growth and shrimp selectivity estimated externally and fixed within the model. Length-weight conversions, reproduction, natural mortality (M), and discard mortality remained the same as previously used in SEDAR 28. Recreational landings and discards were 1.5-3 times higher in the Update after converting recreational catch and effort from MRFSS to MRIP-FES. Length frequency for recreational landings were similar between assessments, with more than 90% of fish being five years old or younger. Recreational CPUE trends between CHTS and MRIP-FES data for Gulf cobia were similar when relativized about the index means, and appeared relatively flat since 2000. The same was observed with the Southeast Regional Headboat Survey (SRHS) CPUE, which has declined since 2012. Commercial landings were unchanged for overlapping years between SEDAR 28 and the Update. Commercial discards were updated using new best practices and are much lower in the Update compared to SEDAR 28. Commercial Trip Interviewer Program length frequencies were largely unchanged; however, the Reef Fish Observer Program showed a shift to smaller fish from SEDAR 28. A "super-year" approach was used again in the Update for modeling shrimp bycatch, and was largely unchanged from SEDAR 28, as was CPUE for the shrimp fleet.

The model (Table 2) incorporated MRIP-FES recreational catch and effort data into the SEDAR 28 base model, which increased SSB and decreased steepness. Updating all data through 2018 increased steepness but decreased SSB. Fixing steepness at 0.8 slightly decreased SSB. Shrimp selectivity maximum length (L_{Max}) and the time constant (K) in the Von Bertalanffy growth function were fixed, which resulted in increased steepness but decreased virgin recruitment. This step was followed by Francis reweighting and variance adjustments. Finally, the model was transitioned to SS3.3 (from SS3.24) with no other significant changes.

Results

The Update base model results reflected the observed landings data for the commercial and recreational sectors. The fit for discards was slightly different from observations, but still largely within confidence intervals. Fits to MRIP, headboat, and shrimp CPUE indices also performed well. Fits to age data showed strong evidence of year classes moving through the fishery. Landings and discards predominantly come from the recreational sector. Selectivity by both sectors is knife-edged at the minimum size limit (i.e., 33 inches FL, before the change to 36 inches FL in CMP Framework Amendment 7). Shrimp bycatch has remained low.

The model found the spawner recruitment relationship to be poorly defined, given the data. Analysis of the geometric mean of F from 2016-2018 ($F_{Current}$)/MFMT defines Gulf cobia as undergoing overfishing (see Table 1), and that overfishing has occurred every year from 1975 through 2018, with the exception of 1993 and 2009. The estimate of SSB for 2018 ($SSB_{Current}$) is below MSY, but not MSST, defining the stock as not overfished. Ms. Rios reminded the SSC that the Update SSB is about twice that seen in SEDAR 28 as a result of converting the recreational catch and effort data from MRFSS to MRIP-FES.

Analysis estimating virgin recruitment produced robust results. Convergence of ΣR and steepness estimates suggested the model is stable, with steepness values above 0.6 and ΣR below 0.6 being equally probable. Retrospective analyses illustrated a strong level of consistency in model results as successive years of data were removed. Jitter analyses suggested the model is fairly stable, converging on the same solution 94% of the time. Model run using a high M scenario showed minimal change in exploitation rate and SSB.

A question was asked about model sensitivity to commercial landings as reduction in commercial landings seemed to coincide with the red snapper derby days of the mid-2000s. Ms. Rios responded that the lower coefficient of variance for the commercial landings data suggests less uncertainty in the model (these data are collected via trip tickets), and that higher uncertainty is generally observed for recreational landings.

Projections

Ms. Rios presented the projections at $F_{SPR30\%}$ and at F_{OY}. Because overfishing is occurring, projected yields show an initial reduction in the beginning of the projection period (2020) followed by a slow increase to the asymptotic yield after recovering from overfishing. The SEFSC did not support setting the ABC based on projections using the previous P* of 0.434, which was based on the SSC's previous review of SEDAR 28 in 2013. This Update, using MRIP-FES recreational landings and effort resulted in an increase in the estimate of virgin SSB, recruitment, and projected yields.

The transition of recreational effort surveys from the MRIP Coastal Household Telephone Survey (CHTS) to MRIP-FES contributed to the majority of the change in projected yields in the Update when compared to SEDAR 28 (Table 2). The SEFSC recommended revisiting the Update projections regularly to account for changes in recruitment dynamics. At current harvest levels, the stock has seen its biomass depressed to approximately 21% of its virgin biomass level. As reflected in the summary from the Gulf Council's *Something's Fishy* tool, most respondents reported negative trends in Gulf cobia abundance. Most respondents also identified themselves as participating in the recreational sector.

Table 2. Comparisons of projections that achieve an SPR of 30% in equilibrium and the results of including MRIP-FES data for the recreational private and charter-for hire fleets. Equilibrium yield is shown in millions of pounds whole weight (ww). SSB is represented in metric tons (mt).

Model	Terminal Year	SSB	R	$F_{SPR30\%}$	SSB_0	$SSB_{SPR30\%}$	Equilibrium Yield
SEDAR 28	2011	1896	751.5	0.378	7235	2065	2.66
SEDAR 28 FES	2011	3643	1429.5	0.094	17642	5280	4.87
SEDAR 28 Update	2018	3956	1270.9	0.231	18016	5406	3.43

After the presentation, the SSC commended Ms. Rios for the way the information was presented, specifically referencing the detailed progression of model development and the comparison of model results using the MRFSS and MRIP-FES data currencies.

Motion: The SSC determined that the SEDAR 28 Update assessment of Gulf Migratory Group Cobia represents the best scientific information available on the stock and based on the assessment results the stock is not overfished, but is undergoing overfishing.

Motion carried without opposition.

Catch Recommendation

The SEFSC noted the definition of MSST for Gulf cobia as (1-M)*$SSB_{SPR30\%}$, with M for Gulf cobia equal to 0.38. Recruitment in the projections period was fixed at the mean of the years 2005-2014, since including the more recent years of recruitment data (2015-2018) can insert unnecessary uncertainty for data without sufficient contrast. Fleet selectivity was fixed at 2018 values, and shrimp bycatch was fixed using the mean bycatch from 2016-2018. Provisional commercial and recreational landings from the NMFS Southeast Regional Office were used for 2019, and the mean landings from 2017-2019 were used for 2020. The SSC worked through the Gulf Council's ABC Control Rule Tier-1 evaluation to determine a P* for Gulf cobia. The SSC decided to categorize the data as not accounting for the uncertainty of the effects of unknown environmental factors, since the Update does not evaluate the 2010 *Deepwater Horizon* MC-252 oil spill or the 2018 West Florida Red Tide event. Rerunning the ABC Control rule, accounting for this consideration, resulted in a new P* for Gulf cobia of 0.398. This new P* value was then used to generate new yield projections for Gulf cobia. However, the SEFSC cautioned that projections generated with the P* approach may not adequately account for the uncertainty inherent in the projections, due to the fixing of certain input parameters. As such, the SEFSC recommended consideration of the projected yield at 0.75*$F_{SPR30\%}$ for setting the ABC for Gulf cobia.

Motion: The SSC estimates OFL to be 3.03, 3.21, and 3.31 million pounds ww for the Gulf Cobia stock during fishing years 2021-2023, respectively, based on results of the SEDAR 28 update assessment and assessment projections. The SSC sets ABC for the same years to be 2.34, 2.60, and 2.76 million pounds ww, respectively, with annual ABC being the projected yield at 0.75$F_{SPR30\%}$.

Motion carried 18-3 with 4 absent.

The SEFSC is improving consistency in the length, format, and information included in stock assessment presentations and the Stock Assessment Executive Summaries. The SSC was pleased with the Update presentation, noting that the inclusion of outlines, comparison tables, and summary slides made it easier to follow the information and encourage discussions. Similarly, the SSC found the Stock Assessment Executive Summary to be of appropriate length. The SSC understands it to be used by a variety of interested parties and that it should find a balance in the inclusion of scientific jargon and abbreviations.

IFQ Capacity and Technical Efficiency Study

Dr. Christopher Parmeter of the University of Miami gave a presentation about Gulf of Mexico IFQ fleet capacity dynamics. The study examined the performance of Gulf of Mexico IFQ programs under to arrangements. The first arrangement considered the red snapper IFQ as a fishery on itself, and the second arrangement considered red snapper part of the Gulf reef fish IFQ fishery (red snapper plus grouper-tilefish). For the red snapper IFQ (only) arrangement, the model only considered the vertical line fleet since it accounts for most of the red snapper landings whereas for the Gulf reef fish IFQ arrangement, the model considered both the vertical line and longline fleets because these fleets land both red snapper and grouper-tilefish species. The model employed a stochastic output distance frontier setup that allowed from both vessel-specific heterogeneity and time constant vessel inefficiency. Data from NMFS Logbook program and from the Permits Information Management Systems (PIMS) were used in this study.

Study findings suggest that time-varying technical efficiency improved following the implementation of the IFQ programs. In the red snapper fishery, time-varying technical efficiency increased by about 6%. In the reef fish fishery, time-varying technical efficiency improved by 5%. However, overall technical efficiency appears to have decreased post-IFQ. This result may be due to the inability of the model to fully account for persistent technical efficiency prior to the implementation of the IFQ programs. Overall technical efficiency equals persistent technical efficiency times time-varying technical efficiency.

The study also estimated that about 20% of the red snapper vertical line fleet could harvest the totality of the red snapper commercial quota (red snapper IFQ fishery only arrangement). A similar estimate was not available for the Gulf reef fish IFQ fishery (combined fleets) because the fleets were not been able to harvest the total combined red snapper and grouper tilefish quota. Nonetheless, the study indicated that there was excess capacity in the Gulf reef fish IFQ fishery.

Drs. Parmeter and Agar, the study authors, then answered questions from SSC members. SSC members asked about the criteria used to include trips in the data used to estimate the red snapper model. The study authors replied that, in any given year, if a vessel caught at least one pound of red snapper during one of its trips, all trips completed by the vessel during that year were included in the data. SSC members asked about possible justifications for persistent inefficiency. Study authors replied that there are inherent differences in skills between captains; some captains at simply better than others do when it comes to fishing. SSC members asked whether labor and leisure trade-off considerations were part of the model presented. Study authors replied that the models presented did not make behavioral assumptions. SSC members asked whether the models accounted for biomass changes. Study authors replied annual biomass estimates were included in the set of explanatory variables. SSC members inquired about potential models using revenues instead of landings as dependent variables. Study authors replied they were not aware of any study using revenues in the context of technical efficiency evaluations. In response to an inquiry about the availability of a final report, the authors indicated that their final report will be available to the SSC in the future. SSC members commented that researchers who model biological parameters such as indices of abundance could garner insights from the type of explanatory variables included in the analytical approach presented.

Update on Operational Assessment Process

Dr. Julie Neer (SEDAR) detailed modifications from the SEFSC on the process for conducting operational assessments (OAs). The efficacy intended for the OA process is at the expense of some transparency. If a more transparent and thorough assessment is needed, the research track process is designed to deliver that type of assessment, which is always followed by an OA to generate management advice. To the extent practical, and to ensure timeliness, the OA should be limited to updating new years of data already used in the previous assessment. Additional changes from the previously accepted model will result in a more time-consuming process. Further, the SEFSC did not intend for every OA to have a workshop panel, which the SEFSC sees as detrimental to the goal of increasing throughput by delivering more stock assessments every year. As such, the SEFSC recommends eliminating assessment panels for all future OAs. Instead, the SEFSC will use "topical working groups" (TWGs) to address very specific facets of an assessment (e.g., selectivity, discard mortality). These TWGs would work only on their specific topic and would not review the assessment in total. TWGs would be appointed by the SEDAR cooperators (Councils, Commissions); be comprised of SSC members, academia, and stakeholders; and would operate using prescribed statements of work through a team-style approach with webinars and/or conference calls. These TWGs would produce documentation detailing their discussions and recommendations for inclusion in the assessment materials, which would then be reviewed during plenary sessions during the assessment. SEDAR would be responsible for organizing scheduling and participation for TWGs. SSC members should expect to provide guidance on which issues require a TWG, TWG statements of work, participate in TWGs for assessments, and review TWG findings during formal OA reviews. These modifications to the OA process, specifically the TWG approach, would begin in 2022. Many details remain outstanding and will be resolved as the process evolves.

The SSC was told that the number of TWGs for an assessment will vary. If a topic is not covered by a TWG, and needs further review, the SSC will have to request such work as part of the formal assessment review. Statements of work (SOWs) for TWGs will need to be developed two years in advance of the OA; no guidance was presented on how to resolve discovering a need for a TWG during the assessment process.

The SSC noted that SEDAR has been encouraged by cooperators for 20 years to increase transparency and participation, while also trying to increase throughput. Modifications to the SEDAR assessment process seem to occur every 3-5 years through rebranding, with only minor or incremental changes actually being made to stated shortcomings. An SSC member suggested looking to the former stock assessment panel approach that was used for coastal migratory pelagics and reef fish species prior to SEDAR, which boasted ample expertise and efficiency, but at the expense of transparency. Unless a radical change is made in how SEDAR functions, great strides in timeliness and throughput may prove elusive. Data-processing automation at the SEFSC is in progress, but is not yet fully operational.

The SEFSC added that they are trying to find efficiencies wherever possible. The SOWs will be important to planning workflow as that is when the various TWGs should be identified. Further, including new items once a stock assessment begins is detrimental to the timeliness of any assessment. Strict adherence to the SOWs for TWGs will be critical to achieving better throughput

and timeliness. However, it was recognized a TWG may be needed after a stock assessment has been started and that could in fact slow the process down.

Review of Proposed Timelines and Stock Identification Process for SEDAR 74: Gulf of Mexico Red Snapper

Currently, red snapper is assessed using separate eastern and western Gulf models, which are then combined for Gulf-wide management. The objective of the SEDAR 74 Stock Identification (ID) process is to further investigate red snapper stock structure. The SSC reviewed the terms of reference (TOR) for SEDAR 74 to determine if any changes were necessary. Discussions included questions regarding previous assessments and resulting management implications. Following the first benchmark assessment (SEDAR 7) in 2005, the SSC recommended that east and west stocks should be assessed and managed separately; this was also the recommendation from the 2009 SEDAR 7 Update assessment, in part due to a lack of recruitment data in the eastern Gulf. SSC members also discussed the process goals and TOR language regarding differences among the terms "stock structure" and "population structure", leading to TOR language modifications.

> **Motion**: The SSC recommends that the TORs for SEDAR 74 stock ID process be accepted as amended.
>
> *Motion carried without opposition*.

Mr. Rindone briefly highlighted the SEDAR 74 Milestone Schedule, noting that it is preliminary with forecasted deliverables into 2023. The Stock ID process will involve data webinars, a Data Workshop, assessment webinars, and a Review Workshop, before the assessment is rendered to the SSC for final consideration. This work should be concluded by early 2023 to coincide with the start of the red snapper OA, which will ultimately yield management advice for consideration by the Council.

> **Motion**: The SSC endorses the milestone schedule for SEDAR 74 as presented.
>
> *Motion carried without opposition*.

Finally, Council staff solicited volunteers for the Stock ID process. A list of volunteers from academia, and state and federal agencies has already been compiled for consideration. Mr. Rindone mentioned that participation from the SSC would also be beneficial. Jason Adriance and Drs. Will Patterson, Benny Gallaway, Jim Tolan, and Luiz Barbieri volunteered.

Review of Shrimp Stock Assessment Terms of Reference

Staff reviewed the flow chart of the penaeid shrimp research/assessment plan, which includes the SEFSC establishing and convening special working groups in 2020, holding a Gulf Council assessment workshop in 2021 and a SEDAR research track in 2022-2023. Staff reviewed the five

SEFSC statements of work. Dr. Shannon Cass-Calay (SEFSC) clarified that, for the second bullet point of the SEAMAP Trawl SOW, the indices pertained to shrimp abundance. Dr. Cass-Calay stated that the SSC could draft an additional bullet point for any of the draft SOWs for the SEFSC to review. During the review of the effort estimation draft SOW, Dr. Michelle Masi (SEFSC) noted that the models being developed to predict effort should be robust enough to handle electronic logbook data as well as other inputs. Dr. Jim Nance (Gulf SSC) noted that the observer data draft SOW addresses shrimp bycatch and catch, rather than the stock assessment. Dr. Masi responded that all of these draft SOWs are dealing with shrimp data in general. Dr. Benny Gallaway (Gulf SSC) emphasized the importance of the objective in the shrimp catch estimation draft SOW, which suggests that landings be reported earlier in the calendar year and monthly landings estimates be produced in a timelier fashion. Dr. Masi asked that individuals contact her if there are any recommendations for participants in the working groups.

Request for a Volunteer: Technical Chair for SEDAR 68: Gulf and South Atlantic Scamp Assessment Workshop

The SEDAR 68 research track assessment of Gulf and South Atlantic Scamp has been delayed until August 2020 due to COVID-19. SEDAR and the SEFSC are requesting a volunteer for the position of Technical Chair for SEDAR 68, who will help lead panel deliberations through the Data and Assessment process. No volunteers were put forward at the meeting.

Other Business

No public comments were offered to the SSC.

The meeting was adjourned at 4:00 pm on July 22, 2020. The Committees completed the agenda and were not reconvened the last day on July 23rd.

SSC Participants

Gulf Standing SSC
Joe Powers, *Chair*
Kai Lorenzen, *Vice Chair*
Lee Anderson
Luiz Barbieri
Dave Chagaris
Benny Gallaway
Bob Gill
Doug Gregory
Walter Keithly
Robert Leaf
Camp Matens
Jim Nance
Will Patterson
Sean Powers
Ken Roberts
Steven Scyphers
Jim Tolan

Gulf Special Reef Fish SSC
Jason Adriance
Judd Curtis
John Mareska

Gulf Special Mackerel SSC
Jason Adriance
John Mareska

Gulf Special Socioeconomic SSC
Jack Isaacs
Andrew Ropicki

Gulf Special Ecosystem SSC
Paul Sammarco

South Atlantic SSC
Dustin Addis

Walter Bubley
Scott Crosson
Churchill Grimes
Anne Lange
Genny Nesslage
Amy Schueller
George Sedberry
Fred Serchuk
Alexei Sharov

A list of all meeting participants can be viewed here.