

Reef Fish Committee Report October 26-27, 2021 Ms. Martha Guyas – Chair

The Committee adopted the agenda with the addition of a discussion about goliath grouper to Other Business (**Tab B, No. 1**), and the minutes (**Tab B, No. 2**) from the August 2021 meeting were approved as written.

Review of Reef Fish Landings (Tab B, No. 4a) and Review of Reef Fish ACL Figures (Tab B, No. 4b)

Ms. Kelli O'Donnell (NMFS Southeast Regional Office [SERO]) reviewed Gulf reef fish landings so far in 2021. Trends in gag recreational landings have been consistent over the last few fishing years. Red grouper recreational landings were estimated to have exceeded the recreational annual catch limit (ACL) by the end of wave 3, possibly due to increased angler interactions with the recovering stock. Gray triggerfish commercial landings are below the average for the last three years; a commercial quota closure is not expected in 2021 due to the increase in the ACL. Gray triggerfish recreational landings through wave 3 suggested a quota closure would be needed before the end of the fishing year; recreational harvest was closed on September 15. Greater amberjack commercial landings are below the recent three-year average, and below the trip limit step-down trigger; recreational landings follow the three-year average, while remaining under the recreational ACL. Gray snapper, lane snapper, vermilion snapper, and yellowtail snapper landings remain below their respective ACLs for 2021 (through wave 3). Lane snapper landings are on a similar pace as previous fishing years; thus, NMFS issued a closure notice for the stock. However, an increase in the ACL approved by the Council and transmitted to NMFS on March 9, 2021, is in the final stages of rulemaking. Landings for midwater snappers have exceeded their stock ACL for 2021, largely due to a considerable increase in commercial landings in 2021 relative to previous years. Landings for the jacks complex and cubera snapper are also expected to exceed their stock ACLs in 2021, largely due to increased recreational landings.

A Committee member asked about the midwater snapper ACL, noting that the ACL was previously set using an average of landings in the Council's Generic ACLs and Accountability Measures Amendment. Council staff clarified that data from the 2000 – 2008 fishing years were used for midwater snapper, with Tier 3a of the Council's Acceptable Biological Catch (ABC) Control Rule used to set the ABC at the mean of the observed landings plus one standard deviation. The Committee heard that the majority of the midwater snapper commercial landings were harvested via otter trawl, which the Committee thought peculiar, as the species in the midwater snapper complex tend to aggregate around structure, which would be expected to foul trawl gear. SERO staff noted that lane snapper and red grouper landings were being driven by landings from both fishing sectors.

Gray Triggerfish Commercial Landings and Management Review (Tab B, No. 4c)

The Council requested that staff look into the commercial gray triggerfish landings history since the implementation of catch level increases in July 2021. Dr. Carrie Simmons (Council Staff) reviewed the current commercial management measures for gray triggerfish in the Gulf. Presently, commercial vessels have a trip limit of 16 fish and a minimum size limit of 14 inches fork length (FL), with the commercial annual catch target (ACT) set 5% below the commercial ACL. When the commercial ACT is projected to be reached, the commercial fishery for gray triggerfish is closed; if commercial landings exceed the commercial ACL, then an overage adjustment is applied to the following year's commercial ACL. The Reef Fish Advisory Panel (AP) has asked that the commercial trip limit be increased. Dr. Simmons noted that if the Council wants to consider an increase in the commercial trip limit for gray triggerfish, it could be added to the Framework Action: Modifications to Vermilion Snapper Bag Limits and Gray Triggerfish Recreational Fixed Closed Season.

The Committee recommends, and I so move, **to add an action to the Framework Action: Modifications to Vermilion Snapper Bag Limits and Gray Triggerfish Recreational Fixed Closed Season to adjust the commercial gray triggerfish trip limits.**

Motion carried without opposition.

Imputed 2020 Landings for Gulf Managed Species (Tab B, No. 4d)

Dr. Richard Cody from the NOAA Office of Science and Technology (NOAA OST) presented a summary of the imputation methods implemented to account for data not collected by the Marine Recreational Information Program (MRIP) due to COVID-19 restrictions and considerations in 2020. In general, 2020 recreational catch and effort estimates exhibited no unexpected or extreme results, and were viewed by NOAA OST as being typically in line with prior years or recent trends. Impacts of data gaps and imputation were variable across states and fishing modes, but limited at annual and regional levels. Most of the data gaps in 2020 (including lengths and weights) were in the MRIP Access Point Angler Intercept Survey (APAIS), specifically in wave 2 (March and April) and the first half of wave 3 (May and June). Also, for the headboat mode, no dockside sampling was resumed in 2020 post-COVID-19 restrictions; however, data validation, quality assurance visits, and reporting via the Southeast Region Headboat Survey continued. Dr. Cody clarified the difference between the gray cells in the imputed data, which indicated a true loss of sampling, and the white cells, which represent no sampling assignment for that state at that time.

Committee members asked about the disparities between the length and weight sampling data collection in the data displayed. Dr. Cody replied that lengths and weights are collected concurrently, and that sometimes some of these data aren't collected for a variety of reasons. Committee members asked why the cells wouldn't match up if sampling had occurred. He responded that the cells are coded based on the data collected for that cell over the last three years, and that incomplete assignments can affect the data as they are represented in the figure.

Tab B

Dr. Cody described an imputation approach to fill gaps in the data. All APAIS data from 2018 and 2019 collected within the corresponding 2020 data gap periods were combined with available 2020 data, with the original sample weights for 2018 and 2019 data down-weighted by a factor of 2 to account for using two years of data. NOAA OST discussed this method with its MRIP statistical consultants, who thought the method appropriate, and standard 2-month MRIP wave estimates of catch and effort were generated. NOAA OST will revisit the 2020 estimates once sampling is completed for 2021, with an evaluation of changes to 2020 estimates using imputed records from 2019 and 2021 conducted and compared to the same using 2018 and 2019.

Dr. Cody demonstrated the effects of imputation for 2020 landings and releases for different Gulf species. Estimated landings and releases for gag were observed to be similar, with point estimates falling within the standard error of the imputed and observed data. A Committee member thought it necessary to consider the recreational landings and releases in weight instead of numbers, which would be affected by the number of observed weights collected through APAIS. This is because the fisheries are managed by weight, not by numbers of fish. Another Committee member noted that the releases estimated for gag are more than double that observed to have been retained; Dr. Cody replied that it is not atypical for releases to be greater than retained catch, due to management considerations like bag limits and fishing seasons.

The effects of imputation [percent imputed data for 2020] on red grouper [7%], red snapper [0%], gray triggerfish [35%], greater amberjack [7%], and cobia [14%] were observed to be similar to gag [1%], in that differences between imputed and observed data were not significantly different. For king mackerel [17%], more of an effect of using imputed data were observed, and may be attributable to data being over- or under-represented by a wave in the imputed data.

Dr. Cody reviewed differences in effort estimates for the 2020 fishing year compared to previous years. Generally, effort estimates for Mississippi, Alabama, and Florida were not dissimilar between the 2018, 2019, and 2020 fishing years. The MRIP Fishing Effort Survey (FES) continued unencumbered by COVID-19 restrictions; however, the APAIS survey does help inform effort by region, as it helps capture effort by nonresident anglers. The Committee noted that the effort estimates for 2020 were somewhat dissimilar in trend compared to the 2018 and 2019 fishing years, in that fishing effort was observed to increase from wave 2 through wave 5, perhaps because fishing was one of the few activities relatively open to stakeholders while other terrestrial recreational activities were more limited.

FINAL ACTION: Framework Action: Modification of Gulf of Mexico Red Grouper Catch Limits (Tab B, No. 5)

Ms. Muehlstein reviewed the public comments for the draft framework action. Dr. Freeman then reviewed the purpose and need statements, as well as the alternatives. He noted that the Council selected a preferred alternative at its August 2021 meeting and that the overfishing limit (OFL), ABC, ACLs, and ACTs would all increase with the preferred alternative. A Committee member inquired why there was a significant change in mean weight of Gulf red grouper landed by the recreational sector pre-1990 and post-1990. SERO staff replied that there was a minimum size

limit implemented around 1990, which may have led to the recreational sector landing larger red grouper.

SERO staff reviewed the red grouper landings for 2020, as well as 2021 landings as of October 13, 2021 (Tab B, No. 4b). NOAA General Counsel then reviewed the codified text.

The Committee recommends, and I so move, **to recommend approval of Framework Action: Modification of Gulf of Mexico Red Grouper Catch Limits and that it be forwarded to the Secretary of Commerce for review and implementation, and deem the codified text as necessary and appropriate, giving staff editorial license to make the necessary changes in the document. The Council Chair is given the authority to deem any changes to the codified text as necessary and appropriate.**

Motion carried without opposition.

Presentation on SEDAR 70: Greater Amberjack Stock Assessment Report (Tab B, No. 6)

Dr. Jim Nance (Chair, Scientific and Statistical Committee [SSC]) described the SSC's review of the revised projections for Gulf greater amberjack, which now use a revised projections code. This revision supplements the forecasting abilities of Stock Synthesis, and allows for the consideration of a variety of sector allocation scenarios. Parameterizing the projections required several decisions to be made, including: years for averaging fishing mortality, selectivity, and recruitment; retention parameters; treatment of interim landings; and, sector allocation ratio(s), if applicable. The SSC noted in its review that future recruitment defines expectations of stock productivity, and that fleet selectivity and retention functions can have varying effects on the projections based on the sector allocations assumed. These factors can ultimately affect the estimation of management benchmark targets, and estimates of stock status determination criteria. The SSC thought that the lower recent recruitment was likely more representative of the greater amberjack stock in the near-term, and acknowledged that a longer time period of recruitment could be used to inform the OFL. Importantly, the SSC did not want to set overly optimistic catch advice based on potentially implausible higher average recruitment, and thought that setting the ABC using a more recent recruitment level better reflects contemporary stock and fishery dynamics. Ultimately, the SSC decided to maintain setting the ABC equivalent to 75% of the spawning stock biomass (SSB) at the proxy for maximum sustainable yield (MSY), which is set at a 30% spawning potential ratio (SPR; $SSB_{SPR30\%}$), as was done when the SSC last revised SEDAR 70.

Dr. Nance continued, stating that projections for ABC still aim to rebuild the greater amberjack stock by 2027. Generally, as fish are allocated to the recreational sector, the yields decrease to account for additional dead discards by that sector. The SSB for greater amberjack has oscillated, but remained generally consistent, since the 1990s. The SSC thought it most appropriate to continue using the current fishing mortality (F) at MSY proxy of $F_{SPR30\%}$, while also using the current stock-recruit relationship (SRR) curve to inform recruitment. The SSC recognized the yield reductions necessary for greater amberjack, and thought that careful

consideration would be needed in determining future management. The SSC recommended to continue with the 30% SPR reference point in the rebuilding projections, using the SRR-informed recruitment, with the ABC based on the low recruitment scenario (2009-2018). Further, the SSC determined that SEDAR 70 represents the best scientific information available, and that as of the terminal data year of 2018, the stock is overfished and is undergoing overfishing.

Generally, the uncertainty observed in the later years of the recent recruitment period is attributable to the lack of data to inform what may happen beyond the terminal year of data. When the projections are parameterized, assumptions are made about future conditions for the stock, and this information is fed back into the model to help refine final estimates for management benchmarks. The SSC will review the finalized projections under the various sector allocation scenarios being considered by the Council at its November 18, 2021, hybrid meeting in Tampa, Florida.

Presentation on SEDAR 72: Gag Grouper Stock Assessment Report (Tab B, No. 7)

Dr. Nance presented the SSC's deliberations about the SEDAR 72 assessment of gag grouper. SEDAR 72 incorporated MRIP-FES recreational catch and effort data, updated data inclusions, adjustments to fleet selectivities, red tide analyses, and model variability. Some SSC members contended that data estimated prior to the MRIP time period (pre-1981) should be excluded due to their lack of precision and plausibility. The SEFSC replied that removing the pre-1981 recreational catch and effort data does not have a substantial effect on the stock status, but does help with tuning the model to the initial estimates of exploitation rates. Further, commercial data from pre-1981 are thought to be plausible.

A sensitivity run was conducted to examine the recreational catch and effort data generated by the Florida Fish and Wildlife Conservation Commission's Gulf Reef Fish Survey (now called the State Reef Fish Survey [SRFS]). Hindcasting for the data (calibrated to MRIP-FES) was available back to 1981; prior to 1981, mean catch per unit effort (CPUE) for 1981 – 1985 was used to estimate the historical CPUE. Trends in model outputs were observed to be commensurate using SRFS; however, the lower level of landings reported through SRFS compared to MRIP-FES does result in a lower estimate of SSB, exploitation rate, and age-0 recruits. The SSC discussed the merits and feasibility of using SRFS for monitoring recreational catch and effort for gag grouper in the future. SRFS has increased precision and reporting frequency compared to MRIP, and may be more appropriate for monitoring gag private angler landings. Gag is a Florida-centric stock, and almost all harvest is recorded by SRFS. The SSC recommended that the SRFS sensitivity run receive the full suite of model performance and diagnostics, just like MRIP-FES. The SEFSC countered, recommending the use of a scalar to convert the recreational portion of the recommended catch limits into SRFS data currency instead. The justification for this recommendation was a preference to have full suite modeling efforts work through the SEDAR process. Following this, the SSC requested a review of the proposed scalar method.

Dr. Nance stated that SSB can be characterized by female-only or combined male and female SSB. Female-only SSB provides best estimates of biological reference points if the potential for

Tab B

decreased fertilization is weak. Combined SSB is best when the potential for decreased fertility is moderate or unknown. Increasingly skewed sex ratios for gag may result in reduced fertilization rates and, as a consequence, reduced population growth. Recent research estimates that males account for ~1% in the fished stock and ~5% in the Madison-Swanson Marine Protected Area. Further, the last strong year class was in 2006/2007, and the relationship between sex ratio and fertilization success is poorly understood. Under both the females-only and sexes-combined scenarios for SSB, SEDAR 72 estimates that gag has been overfished since 2006, with overfishing occurring since 2001. The SSC discussed using the sexes-combined estimate for SSB, considering the currently skewed sex ratio and poor recruitment since 2006/2007. Ultimately, the SSC recommended that the SEDAR 72 stock assessment be considered the best scientific information available.

In exploring the parametrization of the projections, the SSC evaluated three red tide scenarios: 10% of the intensity of the 2005 red tide (low); 30% (medium); and, 72% (high). These estimates assume that the 2021 red tide dissipates in mid-November 2021, based on historical patterns and Ecospace modeling. All red tide mortality scenarios predict that gag is still overfished and undergoing overfishing; however, at $F_{SPR30\%}$, the degree to which the stock is overfished is much greater than at F_{MAX} . The SSC recognized that closing the fishery would deprive fishery managers of critical fishery-dependent age and length composition data from the directed fleets; data which are critical for monitoring rebuilding. The current F_{MSY} proxy is F_{MAX} ; changing that proxy would require a plan amendment. The SSC supported using the medium severity red tide scenario (30%) based on the Ecospace model, which was viewed as more precautionary than the low severity value (10%). Due to time constraints at the September 2021 SSC meeting, the SSC will revisit gag projections at its November 18, 2021, hybrid meeting in Tampa, Florida.

The Committee asked about the change in stock status and the manner in which the SSB was estimated between the SEDAR 33 Update from 2016, and the SEDAR 72 assessment. Dr. Nance described that the SEDAR 33 Update used females-only, and the recommendation from SEDAR 72 is to use sexes-combined. Although SEDAR 33 Update estimated that the stock was healthy under the females-only estimate of SSB, SEDAR 72 estimates that even using that metric for SSB, the stock would have been overfished and undergoing overfishing. Dr. Nance explained that changes in the data used, and the subsequent years of poor recruitment, may be contributing to the revised estimates of stock status. Another Committee member asked whether the landings in 2020 and 2021 are as low as they are because the fishermen are not fishing in areas with red tide, or if it is estimated that gag are in fact being negatively affected by the red tide bloom. A Committee member replied that based on the life history of gag, the current red tide bloom is likely affecting juveniles and young adult females in nearshore and shallower offshore areas on the West Florida Shelf.

A Committee member asked about the red tide index used for red grouper, which had an episodic mortality index informed by previous events, with estimates made to inform future red tide blooms. For gag, an index was created using the Ecospace model, which represents a newer ecosystem-based approach for incorporating this type of mortality. The Committee also asked about the justification for selecting the sexes-combined SSB estimate over the female-only SSB estimate. Dr. Nance clarified that the females-only SSB estimate treats the population such that

the proportion of males is inconsequential as it relates to future recruitment. Conversely, the sexes-combined SSB estimate is more considerate of the proportion of the population that is male, which may be more appropriate if a lack of males is thought to be a limiting factor for future recruitment.

A Committee member questioned whether it was appropriate to assume sperm limitation in the gag population, when in most other cases with protogynous hermaphrodites, the transition to male is socially mediated and based on the proportion of males present in an area. The Committee member asked about any change in the length at which females reach maturity, and asked whether that length has changed recently. Council staff replied that the estimate of the length at which 50% of gag reach sexual maturity has remained generally unchanged, with the estimate still being commensurate with the current minimum size limit (24 inches total length). Council staff then asked about the justification for using metric tons to characterize biomass for gag, compared to the use of number of eggs for red grouper. The SEFSC replied that more data exist for red grouper that allow for the estimation of SSB using number of eggs; whereas, comparatively, less is known about the reproductive characteristics of gag.

A Committee member asked why the SRFS data were not used in the assessment like the MRIP-FES data. The SEFSC replied that the SRFS data were explored as a sensitivity analysis. After the assessment was underway, a historical calibration was made available for the SRFS data back to 1981; however, the SEFSC contended that the calibration had not yet been adequately peer-reviewed. Thus, the MRIP-FES data were used to estimate recreational catch and effort. The Committee member countered that MRIP-FES does not capture offshore fishing effort nearly as well as SRFS, and given that gag is a Florida-centric species, it seems appropriate to use SRFS for the purpose of estimating recreational catch and effort. SERO staff replied that additional work was necessary to establish a process for calibrating and incorporating state-generated survey data for all species. The Committee member responded by noting that state survey data are used to inform the red snapper stock assessment in the South Atlantic, but not in the Gulf, and that the disparate application of process between regions is inconsistent and confusing.

A Committee member questioned the dire condition of the gag stock estimated by the SEDAR 72 stock assessment, noting that the fishermen have not been coming to the Council and describing a similarly dire situation. The Committee member continued that using the SRFS data for a complete model for gag would be appropriate, based on the modifications to the MRIP data collection methods made by SRFS to improve on certain aspects of the MRIP survey design. Further, the Committee member added that they were opposed to closing a fishery under any reasonable circumstances. Another Committee member suggested creating an accelerated schedule for evaluating the state survey data, based on the attributes of those surveys, especially compared to the MRIP-FES data. Other Committee members expressed support for considering the SRFS data, especially given the gravity of the outcome of the SEDAR 72 stock assessment. They thought it most important to analyze all the information available before accepting the results of the assessment. The SEFSC repeated that SRFS was analyzed as a sensitivity analysis, but did not receive the full suite of model diagnostics; however, the SRFS data was observed to show a similar trend to the MRIP-FES data. A Committee member replied that the magnitude of differences in the interannual changes in the data were likely different, and asked if the SRFS

data would result in a different estimate of stock status. The SEFSC replied that the stock status may not change, but the estimates of SSB may vary based on the data currency used.

A Committee member brought up the concept of fishery closures. They thought that the process for being considerate of the possibility of fishery closures should begin as early in the review of a stock assessment as possible. They further elaborated that the intention should be to avoid a fishery closure however possible. The Committee discussed the effects of closing a fishery on the fishermen, supporting businesses, the science generated on those species, and the ability to reopen the fishery later. A Committee member recalled the examples of goliath grouper and red drum, and the difficulties associated with trying to reopen those stocks to any sort of harvest. Another Committee member expressed concern about how the Council communicates to the stakeholders that it will do what it can to avoid a fishery closure. A Committee member added that there may be limitations on what the Council can do with respect to the requirements of it under the Magnuson-Stevens Fishery Conservation and Management Act, and that the catch recommendations begin with the SSC, not the Council. Committee members supported the idea of asking the SSC to present options to the Council for ways to rebuild the gag stock without closing the fishery. SERO staff recommended considering the broader approaches being considered for reef fish management as a whole, as opposed to just avoiding a closure, and added that contemporarily, data collection seemed to be at the heart of that larger issue.

Individual Fishing Quota (IFQ) Programs (Tab B, No. 9)

[Presentation from the National Academy of Sciences on *The Use of Limited Access Privilege Programs in Mixed-Use Fisheries*](#)

The Committee received a presentation on the National Academies of Sciences (NAS) study on the Use of Limited Access Privilege Programs (LAPPs) in Mixed-Use Fisheries from Dr. Bonnie McCay, the NAS Committee Chair, and Dr. Marty Smith, an NAS Committee member (Tab B, No. 9a). The presentation reviewed the charge to the NAS Committee, its methodological approach, and the overall findings of the study, and highlighted the main finding of little discernable impact from LAPPs on recreational fisheries in the Gulf of Mexico. Drs. McCay and Smith highlighted the major information gaps that prevented the NAS Committee from fully examining economic and social impacts, noting the scarcity of data as the biggest obstacle to enabling a clearer picture of how these fisheries interact. Dr. Smith summarized that the Gulf LAPPs were effective in doing what they were designed to do, adding that there is always room for improving program performance.

A Committee member asked about ways to facilitate participation for new entrants to the programs. Dr. Smith noted that quota set-asides could be used, but added that it can be challenging to decide who qualifies and that set-asides are easier to incorporate into the initial design of a program than into an existing program. Dr. McCay added that the issue of new entrants exemplifies the importance of having transparency in the share and allocation markets, so that those wanting to get involved have an idea of prices and of how difficult entry would be. The existing markets are not centralized, making it difficult to know where quota is available and whether the prices are reasonable.

Discussion: Focus Group Formation

Mr. Strelcheck presented the proposed process document for establishing an IFQ focus group (Tab B, No. 9d). The Committee discussed the proposal, including a suggestion to expand the focus group's charge to incorporate a review of the IFQ programs' goals and objectives alongside their recommendations.

The Committee recommends, and I so move, **that the charge of the IFQ Focus Group be expanded to require a review of the current IFQ programs goals and objectives and recommend their replacement/retention. The revised goals and objectives shall serve as the bases for the Focus Group recommendations.**

Motion carried 9 to 5.

The Committee discussed the potential membership positions on the focus group, including whether to retain the public participant role. It was suggested to add a position for someone who knows a lot about the IFQ programs and how they work, but who is not financially invested in the programs. The idea is to include someone who can take a broader view of the programs, in contrast to the remaining positions that represent a particular participation role with a financial interest in the fishery. This additional membership position could potentially be an academic or someone who works for an NGO.

The Committee recommends, and I so move, **to add to the membership of the IFQ Focus Group a person who is well versed in the program but does not hold shares or allocation.**

Substitute Motion carried with one in opposition.

The Committee discussed the timeline for establishing the IFQ focus group and the status of Reef Fish Amendment 36B, which considers modifications to the IFQ programs. The Committee decided to move forward with forming the focus group and to further postpone holding public hearings for Amendment 36B.

The Committee recommends, and I so move, **that the process document provided be utilized to advertise and solicit members of the IFQ Focus Group.**

Motion carried with one in opposition.

Discussion: SSC Recommendation on Final GRSC Report and LDWF Red Snapper Abundance Studies (Tab B, No. 11)

Dr. Nance reviewed the SSC's discussions on a project commissioned by the Louisiana Department of Wildlife and Fisheries to estimate absolute abundance of red snapper off Louisiana (LGL Study). The study area was divided into three regions (West, Central, and East), and each zone was divided into four depth zones (10 – 25 m, 25 – 45 m, 45 – 100 m, and 100 –

150 m). Sampling of 106 sites (37 sites on the West, 33 on the Central, and 36 on the East Region) occurred during the summer and fall months of 2020. Hydroacoustics were used to identify red snapper and estimate abundance, with submersible rotating video sampling deployed at discrete sites near structure and paired with the hydroacoustic sampling. A generalized additive model was used to quantify total fish density, while a generalized additive mixed model was constructed to quantify the proportional density of red snapper. The LGL study estimates an absolute abundance of 6,027,890 red snapper in Louisiana offshore waters (95% CI: 4,665,675 – 7,787,825 red snapper), with a coefficient of variance (CV) for this estimate of 13.1%. Most of the biomass of red snapper is thought to occur over the uncharacterized bottom (UCB). Red snapper abundance and biomass estimates from the LGL study were markedly less than that estimated by the Great Red Snapper Count (GRSC) for Louisiana. Several SSC members commented that the difference could be heavily influenced by the catch rates observed between the two studies. The SSC discussed the limitations of interpreting the LGL study results without more information on the sampling design, and requested a written document from LDWF detailing that sampling design. The next steps for the SSC would be to evaluate LGL study sampling design; determine if the LGL study should supplement the GRSC for Louisiana; and, compare these independent study abundance estimates with the NMFS bottom longline survey.

Dr. Greg Stunz reviewed the final results of the GRSC and the response to reviewer comments received during the independent peer-review of the study in March and April of 2021. A stratified random sampling design was used in place of the original random forest approach, and additional variability was captured (including adding a ‘variance buffer’). Estimators and calibrations were refined, and the contribution of the UCB was re-evaluated. An alternate estimator of variance to capture additional uncertainty, and another to reduce bias, were developed. The final results of the GRSC estimated that 118 million Gulf red snapper (age-2+) were present in the U.S. Gulf, with a CV of 15%.

The SSC discussed how to get from an estimate of absolute abundance to a point where a catch level could be recommended. SSC members thought that having the GRSC move through the SEDAR process for thorough consideration was most appropriate, and clearly stated that the GRSC and LGL studies should be treated completely separately, and not be directly compared. Ultimately the SSC recommended that the design and data from the GRSC are suitable for consideration in the SEDAR 74 process, with further evaluation of the estimates of absolute abundance and the methods and analysis used for estimation of the red snapper population.

A Committee member asked what the path forward was for the LGL study and the GRSC. Council staff and Dr. Nance concurred that the SSC needed to review the sampling design for the LGL study before it could be considered further. Dr. Nance stated that the SSC thought it was best for the GRSC to move through the SEDAR process.

Draft Framework Action: Modification of Vermilion Snapper Catch Limits (Tab B, No. 10)

Council staff noted that the vermilion snapper framework action is a follow-up to the latest vermilion snapper stock assessment (SEDAR 67). Following its review of SEDAR 67, the SSC determined that the stock was not overfished or experiencing overfishing and could support higher catch levels.

Staff reviewed the purpose and need for the framework action and discussed the two management alternatives considered. Staff noted that the no action alternative (Alternative 1) is not a viable alternative because the catch limits, which are expressed in MRIP-CHTS units, do not represent the best scientific information available. Alternative 2 would modify the OFL, ABC, and ACL for vermilion snapper based on the recommendation of the SSC. Committee members suggested that the need statement be modified to be consistent with the need statement included in the current red grouper framework action.

The Committee recommends, and I so move, **in Action 1, to make Alternative 2 the preferred alternative.**

Alternative 2: Modify the OFL, ABC, and ACL for vermilion snapper based on the recommendation of the Scientific and Statistical Committee (SSC) for a constant catch yield for 2021 to 2025, and then maintains the ACL at the 2025 level for subsequent fishing years or until changed by management. The stock ABC equals OY and the ACL equals the ABC.

Year	OFL	ABC	ACL
2021-2025+ (MRIP-FES)	8,600,000	7,270,000	7,270,000

Note: Values are in pounds whole weight.

Motion carried without opposition.

Discussion: Draft Snapper Grouper Amendment 44 and Reef Fish Amendment 55: Modifications to Southeastern U.S. Yellowtail Snapper Jurisdictional Allocations, Catch Limits, and South Atlantic Sector Annual Catch Limits (Tab B, No. 8)

Council staff reviewed a presentation describing possible actions to be included in a joint amendment between the Gulf and South Atlantic Councils addressing southeastern U.S. yellowtail snapper. This stock is jointly managed by the Councils, with a jurisdictional allocation of 75% to the South Atlantic Council and 25% to the Gulf Council, based on historical fishing years during which the fishery operated without ACLs. This jurisdictional allocation used recreational catch and effort data from the Marine Recreational Fisheries Statistics Survey, which predated MRIP. The most recent stock assessment of yellowtail snapper, SEDAR 64, determined that the stock was not overfished or undergoing overfishing as of 2017. Current actions directly affecting the Gulf Council include revising the jurisdictional allocation based on applying MRIP-FES data to the current or revised time series, and setting the Gulf ACL with or without using the Gulf Council’s ACL/ACT Control Rule.

Committee members inquired how the joint amendment process would work for this species. Staff replied that the Councils would need to agree on certain actions affecting both Councils, such as the jurisdictional allocations. Staff will use explicit labeling in the amendment to demarcate which actions are joint, and which apply to a specific Council. However, agreement on a joint preferred alternative for the jurisdictional allocation is imperative, as it affects almost all other actions in the document, regardless of Council. A Committee member mentioned looking into a joint Council working group, or some other avenue, for seeking consensus on joint actions. Staff will work with Council leadership to explore options for this idea.

A Committee member expressed a desire to see a constant catch scenario proposed for the stock ABC and Council-specific ACLs. Staff replied that developing a constant catch scenario was possible, and would need to be reviewed and recommended by the Councils' SSCs. Staff noted that the projections would need to be redone, and also noted the dated terminal year of the assessment as 2017.

A Committee member asked about the use of SRFS data for evaluating yellowtail snapper. Another Committee member replied that yellowtail snapper was just added to SRFS in 2020, along with the Atlantic coast of Florida and the Florida Keys. Therefore, there may not be much data to evaluate at this point, but what has been collected thus far can certainly be provided. The Committee discussed the high variability and uncertainty about the MRIP-FES estimates of recreational catch and effort observed in the last several years for the Gulf, and requested that any information to help describe that catch and effort be provided. In addition to any SRFS data, the Committee asked that data on the number and results of APAIS intercepts specific to the Gulf also be furnished and examined.

A Committee member questioned the use of the historical period of 2000 – 2008 for evaluating the jurisdictional allocation. They noted the range expansion of yellowtail snapper up the west coast of Florida to regions like Tampa Bay, and the increasing trend in the recreational landings as the stock expands to areas of greater recreational fishing effort. This range expansion, which may be attributable to climate change and/or other environmental factors, should be considered in the time series options evaluated for determining the jurisdictional allocation. Another Committee member expressed a desire to see the comparisons of the landings to the ACLs for the South Atlantic recreational and commercial sectors, which they thought may be informative for the jurisdictional allocation discussion.

A Committee member recounted the recommendation from the Gulf Council's Reef Fish AP, which was "To recommend maintaining status quo fishing conditions/levels for yellowtail snapper in the Gulf of Mexico considerate of any changes due to MRIP-FES or declining yield streams." Staff added that a discussion of the proposed actions and alternatives for SG44/RF55 will be held with the Gulf Council's Reef Fish AP during its in-person meeting in Tampa, Florida, on January 5, 2022.

A Committee member recommended adding an action for Gulf commercial trip limits. They noted that many fishermen in Monroe County, Florida, hold permits in both Councils' jurisdictions, and likely fish in both regions for yellowtail snapper. Thus, it may be appropriate to establish commensurate regulations with respect to commercial trip limits between the

regions. An initial examination of options could be based on those developed by the South Atlantic Council, with consideration of other modifications after it becomes clear how those proposed alternatives affect Gulf commercial fishermen. Commensurate regulations here may also reduce compliance and law enforcement burdens.

Other Business

Goliath Grouper

This item will be discussed during Full Council.

Mr. Chair, this concludes my report.