## Gulf of Mexico Fishery Management Council and South Atlantic Fishery Management Council Joint Workgroup for Section 102 of the Modernizing Recreational Fisheries Management Act of 2018

# Webinar II September 10, 2020 9 AM – 4 PM, eastern time

The Committee adopted the agenda (**Item I**) and approved the minutes from the May 18, 2020, Workgroup webinar (**Item II**) as written.

# Scope of Work (Item III)

Staff reviewed the Scope of Work with the Workgroup, outlining the items and the anticipated actions and deliverables pertinent to each item.

Mr. Chester Brewer (SAMFC) thought that being constrained to the requirements of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act ) would make the testing and implementation of many of the proposed management measures on the agenda difficult. Mr. Steve Poland (SAFMC) thought more clarity in what was possible would come out through review of the agenda items, and asked the Workgroup to keep this in mind during discussions.

## Alternative Approaches to Collect Recreational Catch and Effort Data (Item IV)

## Gulf of Mexico State Data Collection Programs

## Florida (Item IVa)

Ms. Martha Guyas (GMFMC) of the Florida Fish and Wildlife Conservation Commission (FWC) presented their State Reef Fish Survey (SRFS), formerly called the Gulf Reef Fish Survey. Data collection focuses on reef fish anglers, with the goal of increasing precision. The SRFS uses a monthly mail survey, combined with angler intercepts and at-sea observers on charter for-hire trips. The SRFS is supplemental to, and certified by, the Marine Recreational Information Program (MRIP), and is funded by an annual \$3 million legislative appropriation. Recreational anglers must register with a State Reef Fish Designation for their fishing license every year, which comes at no cost to the angler. Species included in the SRFS are: mutton, red, vermilion, and yellowtail snapper; black, gag, and red grouper; greater and lesser amberjack, banded rudderfish, and almaco jack; gray triggerfish; and hogfish. Recreational anglers are supportive of the SRFS, as it has improved the timeliness and precision of the data collection process. FWC also conducts intensive targeted data collection during the Atlantic red snapper mini-season(s), including boat counts, angler intercepts, and charter for-hire logbooks and a telephone survey. This effort helps the National Marine Fisheries Service (NMFS) better track Atlantic red snapper landings.

## Alabama (Item IVb)

Ms. Marie Head from the Alabama Department of Conservation and Natural Resources (ALDNR) provided an overview on the state's red snapper recreational data collection program, Snapper Check. A variety of recreational vessel operators are required to participate in Snapper Check including federal charter for-hire, headboat, state for-hire, and private anglers. Snapper Check uses both a dockside survey and reported landings to assess catch and estimate the number of non-reporting vessels. Recently, the program has added gray triggerfish and greater amberjack to the survey, provided survey options to document unpowered vessels (i.e., kayaks), improved connectivity through the reporting application, and streamlined reporting by using electronic methods exclusively.

The Workgroup inquired as to how much Snapper Check costs the state to run and asked if any additional seasonal staff were needed to collect data for the program. ALDNR staff indicated that the program costs approximately \$60,000 annually, and that the total cost was dependent on the red snapper fishing season duration. The majority of staff used to collect data from Snapper Check are permanent employees, but temporary hires are also used to help during the peak summer months.

## Mississippi (Item IVc)

Mr. Eric Gigli from the Mississippi Department of Marine Resources (MDMR) presented information on the state's mandatory red snapper reporting program, Tails n' Scales (TNS). Mississippi's red snapper fishery is comparatively small to other Gulf states' fisheries due, in part, to the relatively small community of offshore anglers and for-hire captains, as well as the number of artificial reef zones ("Fish Havens") that provide habitat to aggregate red snapper and other reef fish in distinct areas. Most anglers frequent these Fish Havens that are accessible through a few narrow passes between barrier islands, thereby increasing the effectiveness of law enforcement on TNS trips. Mandatory reporting of all red snapper landed in Mississippi by private recreational and for-hire anglers began in 2015. Anglers can report their trip information through a smartphone app, web portal, or a call center. A defining feature of the TNS system is the requirement for anglers to declare their intention to fish for red snapper and obtain a trip authorization number prior to fishing. This authorization number is later used by MDMR Fisheries staff and law enforcement for validation purposes. After trip completion, anglers may abandon their trip and provide a reason for not fishing, or provide trip information such as number of anglers, number of red snapper harvested and released, and habitat fished. Trip validations are made by MDMR Fisheries staff and MDMR Marine Patrol through dockside intercept surveys and on-the-water enforcement stops, which allows some validation measures on anglers returning to private access sites. Mr. Gigli provided some preliminary results for the 2020 season, during which approximately 3,900 trips were authorized with 78 dockside intercepts completed for biological sampling and 587 law enforcement validations occurring. Additional analyses of angler behavior indicate that the bulk of anglers harvest fish from artificial reef habitat, as opposed to oil rigs or natural bottom. The majority of trips occur Friday through Sunday. Mr. Gigli concluded by stating that the success of the TNS program has led to longer seasons and higher compliance rates, while allowing Mississippi anglers more opportunity to access the fishery.

The Workgroup inquired about penalties for non-compliance. Mr. Gigli stated anglers are given a citation for not having an authorization number, which includes a fine, and possessed red snapper are confiscated. Due to the strict repercussions, non-compliance issues have greatly decreased over time. Mr. Gigli was also asked about costs associated with operating the program. Initial costs for developing the smartphone app were estimated between \$50,000 to \$100,000; this included developmental updates and software changes as the program progressed. Additionally, at least \$10,000 to \$30,000 is spent each year on program maintenance and directed staff time. Mr. Gigli also answered questions regarding habitat fished and trip validations. Anglers can self-report whether they fished artificial reef, oil rig, or natural bottom, but more information on specific location is asked of anglers during dockside-intercepts. Due to COVID-19, fewer validations have been completed by MDMR staff and Marine Patrol in 2020 but on average, at least 5% of trips are validated separately through dockside surveys and enforcement stops.

#### Louisiana (Item IVd)

Ms. Nicole Smith of the Louisiana Department of Wildlife and Fisheries (LDWF) discussed the development of the LA Creel program. In 2014, Louisiana ended its participation in the MRIP survey and began developing LA Creel with the goals of improving the precision of landings data, increasing angler participation, and collecting landings data at a regional level by water basin. The LA Creel has been MRIP-certified since 2017 and is currently in the process of having calibration ratios developed from LA Creel to MRIP's Coastal Household Telephone Survey (CHTS) currency. LA Creel location data are stratified by inshore and offshore sites, have a separate biological data collection component, and allow for weekly landings estimates. Recreational landings data are collected via access-point surveys, while phone/email surveys are used to estimate total effort. Ms. Smith highlighted that evaluating trips by area (5 inshore basins and offshore) allows for ease of comparison among sites which could then feed into making the appropriate management decisions.

In 2015, the LA Creel and MRIP-CHTS were conducted side-by-side for benchmarking and calibration purposes. Relative standard errors were higher for MRIP data on offshore species, but relatively similar for inshore species. Private angler landing rates (i.e., landings/angler trip) for spotted seatrout and red drum were similar for both programs, although combined estimates for number of fish landed were higher for MRIP. Differences were found when evaluating offshore data, where private angler landing rates for reef fish and highly migratory species were higher for LA Creel than MRIP-CHTS. Combined estimates for number of fish landed were also higher with LA Creel for reef and highly migratory species. Ms. Smith emphasized the benefits of LA Creel survey methods, which increased the estimate precision relative to MRIP, and provide near-real time estimates that allow for timely management information, as well as capturing the effects of episodic events (e.g., flooding, responses to pandemics) on fishing activities.

The Workgroup inquired about the collection of discard data. Ms. Smith mentioned that discard data for twelve species have been collected since 2016/2017. Mr. Mel Bell (SAFMC) asked if there were any significant changes in costs and staff time as a result of the incorporation of the LA Creel. Ms. Smith replied that the department did not incur significant staff changes and that the program is funded in part with federal funding and revenue from Louisiana's saltwater fishing license fees. When asked about plans to calibrate to FES, Ms. Smith indicated that they recognized the need to re-benchmark to the FES survey is something that may be considered

down the line. The Workgroup inquired about any difficulties when simultaneously collecting biological and catch rate data. Mr. Chris Schieble (LDWF & GMFMC) clarified that angler intercepts were not being missed due to the collection of biological samples.

### Texas (Item IVe)

Dr. Mark Fisher and Ms. Tara Topping of the Texas Parks and Wildlife Department (TPWD) reviewed the TPWD Marine Recreational Fishing survey, which began in 1974. The survey uses a stratified design based on the Texas bay systems, surveying angler catch and effort. Trip intercepts are combined with boat, trailer, and wet slip counts, as opposed to phone or mail surveys. Recreational trips originating from private access points are not counted and not corrected for with the TPWD survey. Data collection fall into one of two seasons: high use (May 15 – Nov 20) and low use (Nov 21 – May 14). Sampling is stratified by day type (weekday or weekend), bay system, and between 10:00 am and 6:00 pm, with approximately 15,000 trips interviewed per year. Only about 25 boat ramps are thought to be used by anglers to access federal waters; these sites are sampled specifically to capture federal fishing trips. iSnapper, a smartphone app used to collect recreational fishing harvest and effort data, was created in 2011 by TPWD and Texas A&M University Corpus Christi. The app was originally designed to collect catch and effort data from the for-hire fleet but was expanded in 2015 to include private vessels. In 2018, modifications were made in the sampling methodologies to reduce error rates in comparison to previous iterations of iSnapper. In the iSnapper app, anglers register a trip, record their catch, and then "end" their trip once fishing has concluded. Many data points are collected by the app, including discards and release condition, and socioeconomic information. Angler intercepts are used to validate angler-reported data through the app. Reporting rates by all Texas anglers through iSnapper has historically been below 5%. Differences in iSnapper and TPWD Marine Recreational Fishing survey data typically show higher estimates from iSnapper, which may be the result of reports coming in after the 6:00 pm survey cutoff time for the TPWD angler intercepts.

## Workgroup Discussion

The Workgroup asked about the reporting requirements, including discards, in the state data collection apps. Mr. Moncrief (MDMR) noted that angler reporting through TNS is mandatory during Mississippi's red snapper season. Ms. Guyas said that the 13 species in Florida's SRFS are surveyed year-round; the data for Atlantic red snapper are collected during the mini-season, with discards collected by MRIP. Ms. Smith added that LA Creel collects data on all species encountered year-round. Ms. Topping said that all species caught in the Gulf can be voluntarily reported through iSnapper. Mr. Anson (GMFMC/ALDNR) added that Snapper Check reporting is mandatory during the season and that out-of-season discard data are not collected.

## HMS Angler Reports (Item IVf) -

Dr. Clifford Hutt from NOAA's Atlantic Highly Migratory Species (HMS) Division presented information on the Atlantic HMS data collection program for tunas, sharks, swordfish, and billfish. Given the reduced quota for certain Atlantic HMS species, such as bluefin tuna, reporting of landings and dead discards must occur within 24 hours. Reporting can be submitted online, through the Atlantic HMS application, and by telephone. Additionally, the states of

Maryland and North Carolina provide anglers with state catch cards that can be filled out and logged with the state, and both states share this information with Atlantic HMS weekly. Atlantic HMS continues to work with the NOAA Greater Atlantic Regional Fisheries Office and the Atlantic Coastal Cooperative Statistics Program to incorporate reports through eVTR and eTrips by 2021. For Atlantic HMS-registered tournament reports, bluefin tuna landings must still be reported at the vessel-level. The Workgroup asked how the Atlantic HMS reporting programs relate to MRIP. Dr. Hutt stated that reports from the programs can be combined including through the large pelagic survey. Rarely, Atlantic HMS species are reported through the MRIP-Access Point Angler Intercept Survey. The Workgroup asked whether there is any way to account for non-compliance reporting in the Atlantic HMS reporting program. Dr. Hutt indicated that commercial rod-and-reel and harpoon reporting can be compared to dealer reports to estimate non-compliance of anglers targeting Atlantic HMS species.

## For-hire Reporting (Item IVg) -

Mr. Ken Brennan (NMFS) reviewed the reporting requirements for headboats that participate in the Southeast Region Headboat Survey (SRHS), including the types of data collected and the transition to electronic reporting for vessels that participate in the SRHS. For the SRHS, the transition to electronic reporting has improved the reliability, accuracy, compliance, and timeliness of data. Mr. Brennan described the Headboat Collaborative project as an example of an alternative management strategy. He also provided an overview of the upcoming implementation of the Southeast For-hire Integrated Electronic Reporting (SEFHIER) program for all federally permitted for-hire vessels in the southeast region. The SEFHIER program will use a database structure similar to the SRHS and will be implemented in two phases. Phase 1 implements the requirement for electronic reporting and will begin on January 5, 2021 for Gulf of Mexico vessels, and January 4, 2021 for South Atlantic vessels. In the Gulf of Mexico, phase 2 implements the vessel monitoring system (VMS) requirements, which are still undergoing testing.

## Creel Cards

Mr. John Carmichael (SAFMC Staff) commented on creel cards, which are typically used by an agency to learn more about one or two specific species. Creel cards are traditionally paper-based but now are collected electronically and submitted to the agency after a fishing trip. As an example, in the State of Washington, a fishing license is issued with a "catch collection card" for recording salmon harvest. Washington also uses a similar tool for tracking Dungeness crab harvest, and for tracking the catch limit for sturgeon. Many states use similar methods for a variety of non-aquatic species also, including waterfowl, woodland game, and others. A key component of creel cards is that they are almost always mandatory, and not completing a creel card as directed counts as a resource violation. The supplementary data collected by creel cards can address gaps in knowledge, improve reporting frequency and data resolution, increase precision in effort estimates, and better account for rare-event species, amongst other things.

#### NC Flounder 'Panels'

Mr. Steve Poland (SAFMC) from the North Carolina Division of Marine Fisheries provided an overview of a new state initiative for reporting flounder landings, called Catch U Later. Three morphologically similar species of flounder (southern, summer, and gulf) are found in North Carolina and it is difficult for anglers to distinguish between these species. A rebuilding plan is being developed for southern flounder, while the other two flounder stocks are relatively healthy; so, increasing anglers' ability to differentiate species is advantageous for management. The purpose of the new program is to collect length information on discarded catch, ascertain the public's knowledge about flounder species identification, provide a resource for public outreach for species identification, and conduct panel surveys to validate directed flounder fishing effort. Catch U Later would be the state's first exploration of electronic reporting for recreational fishing data.

#### Voluntary Angler Reporting Applications

#### MyFishCount (Item IVh)

Dr. Chip Collier (SAFMC Staff) gave a presentation on the MyFishCount (MFC) app noting that the goal of this program is not to estimate total catch but to provide supplemental information to managers to improve catch information on deep-water species. Through a smartphone app or website, anglers can voluntarily log personal fishing trips, hopefully leading to an overall better angler experience while also providing managers with valuable information that leads to better and more informed management actions. Initiated in 2017 as a pilot program for a red snapper mini-season, MFC eventually expanded to include reporting on a variety of species year-round. Dr. Collier mentioned that angler outreach and education is critical to continued app development and increased angler participation. Following review of the pilot program, MFC was expanded to fully cover the South Atlantic states (residents in inland and coastal counties). A goal of MFC is to increase the chance of all app users making trip-logging a habit. The app also collects information on length distributions for kept and released fish, treatment of released fish, departure and fishing location, and reasons for cancelling trips. SAFMC strives to make sure the data collected are representative of the entire fishery and not just one area. These data have been provided for the SEDAR 73 assessment of South Atlantic red snapper. Other information has already been used for management: a large number of trips in 2017 were cancelled due to inclement weather, indicating trips that were initiated but ended prior to harvesting any fish, leading management to reopen the season briefly for additional access to the fishery. Dedicated outreach efforts have led to reporting benefits for both managers and anglers. The app has allowed managers to collect information, such as treatment of released fish, that isn't normally captured in electronic reporting apps. SAFMC will begin to transition responsibility of the app to the Angler Action Foundation while continuing to collect data and provide quality assurance measures throughout the transition process.

#### Something's Fishy (Item IVi)

Ms. Emily Muehlstein (GMFMC Staff) provided a summary of the Something's Fishy tool and explained the benefits of crowdsourcing qualitative stakeholder observations to enhance scientific understanding of fish stocks. The Something's Fishy tool gathers information on angler observations rather than quantifying angler catch. Asking for angler observations on certain fish species gives scientists and managers insight into angler behavior, trends or changes in stock abundance, and on-the-water anecdotal evidence through stakeholder testimonials. One

goal of this tool is to collect information from the broadest possible range of stakeholders. Another goal is to encourage incorporation of local-level knowledge into federal fishery management, not just as public comment submitted at Council meetings but as qualitative data used in the scientific process, such as stock assessments. Collecting data and involving stakeholders directly in the science side of the process usually requires a great deal of time and resources on the part of the manager and stakeholder through meetings, citizen science projects, and time spent providing feedback. The Something's Fishy tool provides a simpler method to gather individual perspectives from many stakeholders. There is often a lag in real-time data and/or data gaps that are evident in stock assessments. Current knowledge from stakeholders can be used to ground-truth trends observed in data collected by scientists, explain anomalies observed by modelers, and help inform projections.

Ms. Muchlstein explained the process of soliciting public comment through the online tool and producing a report that is sent to stock assessment panels to inform analyses, followed by sharing the collected information with scientific and statistical committees, relevant advisory panels, the Council, and the respondents themselves. Stakeholders are asked to provide their association with the fishery, a general observation on one specific species, and the location from which the observations is made. Comments are then categorized into overall positive, negative, or neutral sentiment and analyzed in two ways: manually, by two individuals who classify sentiment separately, and automated, using the R statistical package 'tidytext' and a Bing lexicon library to classify sentiment. An example of results from deploying the tool prior to an assessment was given for cobia. Comments were broken down by sector, then location, with a majority of responses coming from the Florida Panhandle. Manual analysis was able to classify more responses than the automated analysis; however, as the tool is launched for more species and the number of responses grow, automated analysis will be useful for increasing efficiency of sentiment analysis. Thus far, the tool has proven useful; it will be used next for red snapper and gag grouper while Council staff work to formally document the process in a technical guidance document and seek general approval through the Paperwork Reduction Act to allow for more targeted questions to be asked. Council staff will continue to promote the tool across the region, and with additional state agency cooperation, hope to continue to increase the number of respondents.

#### Fish Tags

Mr. Poland indicated that in the interest of time, fish tags will not be discussed. Mr. Poland noted that fish tags are not a new idea and most participants have had the opportunity to discuss fish tags in their respective organizations. Participants were referred to the presentation included in the briefing material for additional information.

#### Workgroup Discussion

Mr. Poland and Mr. Rindone encouraged the Workgroup to consider which approaches discussed thus far had merit, and which could perhaps be shelved. Mr. Rindone also offered some perspective on the probability of learning something from the application of a new approach based on the stock condition and nature of fishing effort present on the species. A stock which is currently being fished near its annual catch limit (ACL), or for which the fishing season is regularly truncated due to fishing effort, may be more at risk of an overage from implementing a novel method (e.g., South Atlantic red snapper). However, the likelihood of learning more about

the performance of a novel method may be less for a species which is not being fished as heavily, and for which the season is open year-round (e.g., Gulf vermilion snapper). Mr. Bell noted that the cost of implementing programs was of interest to him, as financial and human resource allocation is a continuing balancing act for state and federal agencies. Ms. Guyas added that the approach taken to sample effort for the Atlantic red snapper mini-season would not be appropriate for recreational red snapper fishing in the Gulf of Mexico. Ms. Guyas stated that data collection programs needed to be adaptive to changes in conditions by region and species. Mr. Brewer thought that attempting a different approach with Atlantic red snapper may have merit, the management of which has been a point of consternation for many South Atlantic anglers.

#### Review of the Gulf of Mexico Headboat Collaborative Program (Item V)

Dr. Jessica Stephen reviewed the program design and achievements of the Headboat Collaborative (HBC), a recreational for-hire catch share program. Executed through an exempted fishing permit (EFP), the goals of the HBC were to evaluate the effectiveness of electronic reporting, and the use of numbers of fish instead of weight. The HBC ran for two years (2014-2015) and included red snapper and gag. Dr. Stephen reviewed the participation requirements, system design, and reporting requirements, and discussed how NMFS determined the proportion of the quota assigned to the program, adding that the HBC determined how the quota would be allocated among participating operators. For the conversion from the quota in pounds to numbers of fish, she noted that pre-season ratios were used to convert pounds to fish, and then ratios were determined in-season and updated every 15-30 days in order to monitor landings toward the quota. She then provided some results from the program, including the total number of trips taken and the average number of red snapper and gag landed per trip. Overall, much more of the red snapper quota was landed (99% in 2014; 90% in 2015), than gag (51% in 2014; 38% in 2015). In terms of compliance, Dr. Stephen described some of the reporting errors, which mostly pertained to species selection errors from a pull-down menu and transposed numbers. Reporting on the conclusions and recommendations, Dr. Stephen noted that the program achieved its goal of resource conservation by constraining landings below the quota, and that the program increased access for anglers by providing more trips. She noted that the electronic reporting functioned well, but changes would be needed to scale the program up to the full size of the fleet. In terms of monitoring landings in numbers of fish, she noted that an increased sample size should be considered, along with a conversion metric to allow for quota to be transferred across areas of the Gulf that have different average weights of fish. She concluded by saying the HBC showed that a recreational catch share program allows operators to adapt their offerings, pricings, and marketing approach to reflect local context and customers, in addition to offering year-round harvest opportunities.

The Workgroup noted that one aspect of this program that differs from other programs presented during the meeting is that participants contributed to the program expenses. HBC members were required to purchase a VMS for their vessels and also required to purchase harvest tags. Thus, the program was unique in that there were additional costs and buy-in from the participants.

Ms. Boggs (GMFMC), who was a participant in the HBC noted that it appears the harvest tag component of the program was implemented successfully, and thought that the program serves as

a good example of how an EFP can be used to test alternative management programs at the sector level or for an entire fishery. Mr. Brewer stated that this EFP, as well as the EFP that was attempted to be implemented for harvesting swordfish off Florida, almost caused a situation in the reauthorization process for the MSA, where EFPs would be done away with entirely. Mr. Brewer thought that catch shares on the recreational side are the poster child for things that do not warrant further exploration. There was a push by the South Atlantic Council to use catch shares on the recreational sector, and the South Atlantic Council ultimately decided against using that approach. Mr. Brewer thought that this was an example of a detrimental approach that the Councils would spend years on.

The Workgroup noted that Gulf recreational red snapper is managed with separate private and for-hire sectors and was uncertain if the objective is to resolve the private sector's issues, or both the for-hire and private sectors' issues simultaneously.

Dr. Crabtree (NMFS) noted the situation in the Gulf is very different from the South Atlantic with respect to recreational red snapper. In the Gulf, the ACL is much larger because of increased productivity versus the South Atlantic. Also, all Gulf states now have 9-mile jurisdictions for red snapper management. Sector-separation arose in the Gulf because states were opening red snapper state-water seasons while the federal season was closed, and increasing amounts of the quota was being harvested in state waters, causing the federal season to get shorter. Sector separation preserved the historical participation of the for-hire sector in the fishery, which was losing access under the shorter federal seasons. State management of red snapper in the Gulf was a solution to the jurisdictional issues, where state water seasons were much longer than federal water seasons, and there was a need to make state and federal water regulations consistent, since the 9-mile boundary was difficult to enforce. That problem does not exist in the South Atlantic, where all South Atlantic states' waters extend to 3-miles.

Some Workgroup members stated they don't think that sector separation creates the intended benefits that outweigh the potential negative consequences, and so sector separation and catch shares should not be considered in the South Atlantic. The Workgroup needs to look at the language in the MFA for alternatives to management approaches currently used, which are quantity-based metrics for determining overfishing, and let the language in the MFA guide the Workgroup on what it is supposed to be accomplishing.

#### Interim Analyses in the Southeastern U.S. (Item VI)

Dr. Skyler Sagarese from the NMFS Southeast Fisheries Science Center (SEFSC) reviewed the interim analysis (IA) process, which quantitatively adjusts catch advice between stock assessments. The IA process relies on a representative index of abundance, preferably a fishery-independent index; however, a catch-per-unit-effort (CPUE) index can also be used. A management strategy evaluation (MSE) is used for index selection and determination of a reference period. The overfishing limit (OFL) and acceptable biological catch (ABC) are set initially from the projections from an operational stock assessment. The IA process then allows for glimpses at how a stock is doing in the intermediate years between assessments, and can be used to adjust catch limits (e.g., ABC) in response to signals from the representative index.

A case study of Gulf red grouper was examined as an example of the IA process in action. SEDAR 42 resulted in a large increase in the ABC for Gulf red grouper in 2015, to 13.92 million pounds gutted weight (mp gw). After years of commercial and recreational landings coming in well below the stock ABC, an IA in 2018 revised catch downward to 4.6 mp gw. Completed in 2019, SEDAR 61 recommended an ABC of 4.9 mp gw, and considered a severe red tide event in 2018 in its projections. Another IA in 2019 validated the Gulf Council's catch limit decisions following the 2018 red grouper IA, showing that the 2018 red tide was severe and that the action taken was appropriate. The Gulf red grouper IA used the NMFS bottom longline index as its representative index of abundance, because that index captures red grouper in the eastern Gulf (primary area of red grouper occurrence), and has a consistent sampling design over time. A harvest control rule then applies a scalar, which adjusts the forecasting to more closely follow the index or the landings, depending on the scalar value selected (between 1 and 9). A low scalar value tracks the index more closely, while a high scalar value tracks the ABC more closely.

The Workgroup asked why the SEDAR 42 Gulf red grouper assessment recommended such a large increase in ABC. Dr. Sagarese indicated that the large estimate was influenced by a number of decision points during the development of the data for SEDAR 42. Specifically, that the recreational fleets were considered as separate inputs when they should have been combined, and that accounting for commercial catch data prior to 1986 using an equilibrium approach greatly overestimated the biomass at the beginning of the time series such that a 5-year average would have been a more appropriate estimation method of catch in those earlier years. The Workgroup thought the IA process showed great promise, but was worried about expecting too much from it. Dr. Sagarese replied that the SEFSC thinks the IA process has great potential, with the end goal of automating as much of the process as possible in the future to increase throughput of advice to the Councils. For certain situations, interim analyses can be completed rather quickly, but SEFSC staff also stressed the importance of transparency and documentation during IA process. Mr. Poland also noted that streamlined management procedures would likely help to implement policy associated with the results provided by interim analyses.

Dr. Carrie Simmons (GMFMC Staff) discussed the integration of IAs into the Council process. Dr. Simmons used red grouper and gray triggerfish timelines as examples to showcase the time it takes from when the IA was requested, up to the publication of the final rule. Based on recent experiences, a fast-tracked Framework Action can still take up to one year before the associated regulations are implemented. Dr. Simmons encouraged the Workgroup to think about potential approaches to automate and help speed the process. Potential approaches could include modifying the framework procedure to change ABCs and ACLs after revisions and recommendations from the SSC; automate the ABC Control Rule; and/or streamline the framework action approach that is currently being used. IAs haven been requested by the Gulf Council for gray triggerfish and red snapper, which also has a standing request for an IA for red grouper every other year.

Considerations should be given to the timing of the request of an IA. One possibility would be to submit the request at the beginning of the year (i.e., January/February) and have a final rule published by the end of the year so that it could go in effect the following year. This would not be a one-size fits all approach, as there are species which are managed by fishing years and not calendar years, like greater amberjack and king mackerel. Mr. Poland suggested it might be a good idea to present the IA process to the South Atlantic Council and consider implementing similar strategies.

## Review of Carryover and Phase-in Strategies (Item VIII)

Mr. Ryan Rindone (GMFMC Staff) gave a presentation on carryover and phase-in provisions. Staff noted that the National Standard 1 Workgroup, which includes NOAA Office of Science and Technology, Atlantic HMS, SEFSC, SERO, and Council staff, developed a technical memorandum to guide Councils on carryover and phase-in. A carryover is defined as moving a portion of foregone yields from the previous fishing year to the next. Carryover can be limited by several factors, including buffer rules, species exclusions, and environmental considerations. In contrast, a phase-in is defined as a mechanism allowing incremental changes in catch limits within a period not to exceed three years. Staff underscored the fact that carryover and phase-in must continue to prevent overfishing. Staff then discussed best practices for carryover and phase-in. Staff indicated that carryover must go hand in hand with payback provisions to prevent overfishing, and that phase-in could be used to soften the socioeconomic effects of large changes like sizeable quota reductions. Staff also noted that the Gulf Council explored the carryover provision for species that are not overfished in a now-tabled generic amendment.

The Workgroup inquired as to whether a stock undergoing a rebuilding plan would be considered for a carryover provision or increase in ABC based on the results of an IA. Mr. Rindone clarified that IAs and carryover provisions were two separate things. Carryover adjustments would look at historical landings while IAs explore fishery-independent indices of relative abundance that could be used to adjust catch limits after SSC review. Mr. Rindone also stated that if a carryover provision is implemented for a stock, that paybacks are also required should an overage occur, which could be problematic for overexploited stocks in a rebuilding plan. Dr. Roy Crabtree (NMFS) stated that an IA and potential adjustment to an ABC could be considered for any stock regardless of status.

## Evaluation of Zone Management in the GMFMC and SAFMC (Item VII)

Mr. Rindone discussed the rationale for integrating spatial boundaries into fisheries management. This approach can be used for resident and migratory species. Spatial management is not constrained to biological aspects, such as seasonal migration patterns, but it can also be based on social and economic implications to those who pursue the fishery. It also allows for changes in management practices for a delimited region without negatively impacting other areas. Spatial management is limited by the availability of robust data and data requirements can be further increased with each layer of stratification. Considerations should be given to stakeholders that utilize multiple areas with different regulations.

An example of a fishery that incorporates spatial management is king mackerel. Fishing zones and fishing seasons capture the seasonal migration pattern of the stock, as well as the commercial use of the fishery. Red snapper is another spatially-managed species, where the zones are delimited by each Gulf State's jurisdiction.

Ms. Guyas mentioned that one of the challenges with spatial management is the limitations by each of the Gulf States' data collection protocols. Members of the South Atlantic Council also discussed the limitations that boundaries such as the East Coast Zone boundary for Atlantic migratory group cobia impose, which has a boundary that is not commensurate with a state line.

The Workgroup was encouraged to think about other species that would benefit from spatial management.

The Workgroup noted that one of the challenges with zone management in recreational fisheries is that regions would be limited by MRIP data collection, and it may not be possible to track catch and effort within regions or zones. In Florida, for instance, with the SRFS, there are different strata, so the different areas used for data collection with SRFS could potentially be used to assist with zone management.

## Conditional Accountability Measures (Item IX)

Mr. Rindone noted that accountability measures (AM) are triggered upon reaching or exceeding a threshold, such as a quota overage. AMs are implemented to maintain the Councils' responsibility to manage stocks sustainably. In the South Atlantic, examples of AMs include inseason closures, payback provisions typically tied to stock status, and trip limit step-downs based on the percentage of the ACL landed. In the Gulf of Mexico, examples of AMs include private recreational payback provisions and commercial trip limit reductions. Though AMs are usually established to mitigate adverse effects, they could also be implemented to increase opportunities. For example, in response to an underharvest, AMs could be used to increase trip or bag limits, lengthen fishing seasons, or temporarily shift allocations between sectors. The Gulf Council explored an allocation sharing strategy for king mackerel in the now-tabled CMP Amendment 29.

The Workgroup discussed what optimum yield (OY) is and how it can vary by species. For some species, the OY may involve leaving some portion of the population unharvested to increase the probability of an angler interacting with the species, regardless of the angler's intent to retain any catch. The Workgroup acknowledged the need to not just consider biological effects as they relate to OY, but also social and economic effects.

## **Public Comment**

Captain Gary Jarvis supported the collection of better data and more accountability for the resource by the stakeholders, in which he thought the Gulf States had made great strides.

# Workgroup Charge

"To explore alternative management approaches to suit regional/fishery needs, including data collection improvements, to improve recreational fishing opportunities."

<u>Action</u>: To provide a report to the Councils with a prioritized list of alternative management approaches, in consideration of the Modern Fish Act of 2018.

The Workgroup entertained consideration of stocks for which fish tags might be a viable option, or stocks for which zone/area management might be most applicable. A need to identify the problems that need to be resolved was emphasized as a first step. Workgroup members agreed that recommendations should be reasonable and possible to implement. Staff were requested to

tabulate recreational landings histories for managed stocks to consider where opportunities for alternative management strategies may exist.

Extraction rate, and consideration of managing using another metric than catch limits like by fishing mortality, was discussed. Workgroup members requested that passages about ACLs from the Magnuson-Stevens Act be provided to the Workgroup at its next meeting, and expressed interest in further discussing the limitations within the concept of a "catch limit". Some workgroup members argued for broader methods for defining catch limits, suggesting that the metric for monitoring catch could be something other than pounds or numbers of fish.

The webinar was adjourned at 4:30 PM eastern time.

## Membership:

Steve Poland (SAFMC) – Chair Kevin Anson (GMFMC) Mel Bell (SAFMC) Susan Boggs (GMFMC) Chester Brewer (SAFMC) Thomas Frazer (GMFMC) Martha Guyas (GMFMC) Jessica McCawley (SAFMC) Chris Schieble (GMFMC) Troy Williamson (GMFMC) Spud Woodward (SAFMC)

Staff: John Carmichael (SAFMC) / Ryan Rindone (GMFMC)