# SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL 

## SNAPPER GROUPER COMMITTEE

Webinar

June 15-16, 2021
Transcript

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Dr. Jack McGovern
Dr. Genny Nesslage
Dr. Clay Porch

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Other Attendees and Participants list attached.

The Snapper Grouper Committee of the South Atlantic Fishery Management Council convened via webinar on Tuesday, June 15, 2021, and was called to order by Chairman Jessica McCawley.

MS. MCCAWLEY: We are in the Snapper Grouper Committee. Our first order of business this morning is Approval of the Agenda. Are there any changes or additions to the Snapper Grouper Committee agenda? I don't see any hands. Are there any objections to approval of the agenda? Seeing none, the agenda is approved.

The next order of business is Approval of the March 2021 Minutes. Any changes or corrections to those minutes? Any objection to approval of the minutes? All right. Seeing none, now we will go over to Status of Amendments Under Formal Review, and I'm not sure who's going to go over that with us, if it's Rick or not.

MR. DEVICTOR: Good morning, Jessica. Yes, I can quickly go over it. There is only one amendment to give you the status of, and that's Regulatory Amendment 34, and that created thirtyfour special management zones around artificial reef sites in the EEZ off of North Carolina and South Carolina, and that was thirty off of North Carolina and four off of South Carolina, and those sites had gear restrictions in them. The final rule published on April 2, and regulations were effective on May 3, and that's it.

MS. MCCAWLEY: Thank you, Rick. Any questions for Rick? I don’t see any hands. Moving on through the agenda, next up is gag grouper, and, first up, I believe we're going to get an assessment presentation, and I'm not sure who is going to give us that.

DR. SCHMIDTKE: I believe Scott is giving us that, Jessica.
MS. MCCAWLEY: Thanks, Mike.
DR. SCHMIDTKE: I will pull that up. Scott, I am just going to go through the PDF, and I'm assuming that there's no animations or anything, but, whenever you're ready, take it away.

DR. CROSSON: Animations on a PDF are far beyond my capabilities, and so thank you. Good morning. This is Scott Crosson, and I am currently the Acting Branch Chief for Sustainable Fisheries on the Atlantic side, among many other roles, and some of you may know me already, and I'm here to give the presentation for the gag SEDAR.

You can see here the history of the SEDAR for gag, and this is an operational assessment, and there have been several assessments before then, and you can see that the fishery has been hovering close to an overfished status for a number of years, and it's been overfished for quite a while now, and I think we're at the point now, as you'll see, that the recruitment has tanked, and now we're in a more severe situation than we were earlier.

I was actually part of this SEDAR as an SSC representative, and so I've been to all of the different assessment webinars, and a lot of them ran relatively smoothly and were done early, because a lot of the results were pretty consistent over time, and you can see the history of those. If you're more interested in that, you can go to the report, and the SSC reviewed this at its April/May meeting.

You can see the history of landings and discards, and it's primarily composed of general recreational and commercial handline, and you can see the discards on the right column, and you can see the overwhelming number of those, in recent years, have been general recreational.

This is the indices of abundance, and so this has been -- You can see some of the trends in here, and one of the things that might be of note here is that the commercial handline looks to be relatively consistent over time, and that's the only one that was, and that sort of hyperstability that commercial fishermen could keep going to keep catch levels consistent over time, even if the population is declining, is something that we see in other fisheries, but, even there, it still shows some of the recent patterns that we saw in the video index, and so all of these were tested with sensitivity analyses, and none of them really affected the outcomes.

Again, this is an operational assessment, and there were seven years of data that were added in, and the MRIP numbers have been updated to the current standard, and everything was computed using current records. The life history parameters were also updated, and you can see those in the SEDAR report, if you wanted to look at those, and there were length comps that were added for the headboat discards, which were not included the last time around.

This is always my favorite part of the presentation, my favorite part of the SEDAR report, and you can see, over time, that there's been pretty low recruitment, especially over the past ten years, and so the fish that are in there are generally young fish, and, again, this is something that we'll see in a lot of the different models that were run.

The uncertainty analysis, it's rare that I think that you see these confidence intervals that low, and that's -- Again, you're going to see that these are 95 percent confidence intervals, and so almost every run was showing the exact same thing, and so this decline is unremarkable, or unmistakable. This is the recruits coming into the fishery from the base run, and, again, the decline is there, especially since 2010. This particular slide, you can see that it looks a little confusing, but, on the left side, a lot of those recent years are below the curve, and so you can see that the fishery -- That the fishery finally caught up and drove the stock down to its overfished status.

You can see here that the fishing levels, the F, has been keeping up, and it has not declined any, and you can see the results of that. The spawning stock biomass is considerably below the threshold that it should be, as well as MSST.

Here is the results from the base run, and you can see F over FMSY, and there's a very high level of overfishing, and, on the bottom right, you can see the fishing mortality, and, as I noted earlier, commercial handline is the largest portion of that, followed by the general recreational. The uncertainty analysis, every run showed that this fishery is both overfished and undergoing overfishing, and it's rare that you see everything popping up in that bottom-right box, and so there was no mistake about it, and, again, this is probably why a lot of the assessment webinars ended relatively early, because everything was just so consistent.

The summary over time here, you can see that gag is definitely overfished, and it's still undergoing overfishing, and it's been going on since the 1980s, and it’s finally driven the stock down to a very low number. The past ten years, particularly, have not been good, and there's been low recruitment, and the general recreational fishing mortality is still very high, and that's, again, mostly driven by the commercial handline and the general recreational fleets, and these results are
extremely robust. You can see, again, the 95 percent confidence intervals, and the grouping is very tight. Everything is in the overfished and overfishing status for all of the different runs.

This is getting into what Genny is going to discuss for the SSC, but we are in discussions to run a number of different projections and what it would take to build back the stock, and so, if you got the F back down to FMSY, you might get back around 2040, but there's a lot of different variables that need to be considered, and so, at this point, I think that I'm going to let it slide over to Genny, and, of course, I will answer any questions, and I do have the stock assessment scientist, Kevin, available, I believe, but, if I can answer any questions, please ask.

MS. MCCAWLEY: Thank you, Scott. Mike, do we want to do questions for Scott now and then go to Genny?

DR. SCHMIDTKE: Yes, I think that sounds good.
MS. MCCAWLEY: All right. Any questions about this presentation? Andy.
MR. STRELCHECK: Good morning, Scott. Thanks for the presentation. I might have you flip back a couple of slides, and so I think, on one of your initial slides, you showed the prior assessment, and it indicated that were above MSST, but kind of approaching an overfished state, and is that correct?

DR. CROSSON: Yes, and Kevin is here online, and he can also answer any questions.
MR. STRELCHECK: Okay. Then, if you go to the slide that's on the screen, and look at kind of the same time period for the assessment, it indicates that, if we knew then what we know now, we would actually been below MSST, and so I'm curious to understand what might be driving some pretty significant differences between the last assessment and this assessment. Obviously, you pointed to low recruitment, which is influencing the fishery, and we have the change in discards, but can you speak to why maybe the major difference in the results for the 2012 timeframe, which was the end of the last assessment?

DR. CROSSON: I think I'm going to let Kevin answer that question.
DR. CRAIG: I think the question had to do with differences between the last assessment and this assessment, and I think the last assessment showed a very similar pattern, and it was very close to overfishing, which we use the geometric mean of the last three years as an indicator of the overfishing status, and so it was essentially right on the line. I think what's happened in the last ten years is there has been a period of fairly low recruitment and declining abundance, which is indicated by both the fishery-dependent index, the headboat index, as well as the fisheryindependent index, and so that's driven it below that MSST level since the last assessment, but, if you look at the time trajectory of the spawning biomass, it's fairly similar, and I think Scott may have a slide of that, and I don't know if he's got it in the extra slides or not, at the very end.

This is pulled directly from the last update, and so you can see that it's been sort of hovering around the MSST threshold for a number of years, and it just happened, at the end of that assessment, it was just barely above the MSST line, and so it was considered not overfishing, based on those results, but the pattern of decline in biomass is sort of hovering around the MSST threshold for a
number of years, which is pretty consistent with what we saw with the current assessment. I think it's just the low recruitment and the continued landings are what appear to be what drove it quite a bit below that threshold in the last ten years or so.

MR. STRELCHECK: Jessica, can I ask a follow-up?
MS. MCCAWLEY: Of course. Go ahead, Andy.
MR. STRELCHECK: Thanks, Jessica. This is super helpful, and, obviously, it kind of shows the terminal year just above the MSST, but, when you get, obviously, new recruitment information and the trends that we're seeing, we would expect that to kind of be pulled down, with new information being added to the assessment. My follow-up is Scott showed a very tight confidence interval around the assessment, which is unusual, as he noted, and I assume that tight confidence interval really is because all of the trends and indices of abundance and how the model is being fit are much in alignment with one another, and can you speak also to kind of the certainty of the assessment and how it's being fit?

DR. CRAIG: Well, I think it's pretty clear that it's a depressed stock, and I do think the fact that we had very strong consistency between the two indices, the headboat index and the fisheryindependent video index, are what is kind of driving that. They are both indicating fairly large declines, on the order of two to threefold, in the last ten to twelve years or so.

Scott had mentioned the commercial handline index, which looks like may show a more stable pattern over the long term, perhaps because of some of these hyperstability issues that he alluded to, but, if you look at the last ten or twelve years of that index as well, it's very similar to -- There is a decline since 2010 in the commercial handline index that is of a similar magnitude to what we saw in the headboat and in the fishery survey, and so, when you have three indices that are all essentially showing fairly large declines in the last ten to twelve years, that sort of --

In my mind, it engenders some sort of faith in the assessment, and, when it's that depressed, I guess there is some uncertainty in terms of the magnitude, but there's not much -- Because we always -- The last two or three years of the assessments tend to be the more uncertain years, and so I think the magnitude could be in question, but the fact that it’s depressed, and depressed by quite a bit, doesn't really seem to be -- It's seems to be driven by the consistency of the indices and the continued landings. Even though the landings have declined, they haven't declined enough, given the depressed state of the stock and the lack of recruitment coming in.

MS. MCCAWLEY: Andy, did you have anything else?
MR. STRELCHECK: No. He answered my question. Thank you.
MS. MCCAWLEY: Okay. Thank you. Chris, did you have a question?
MR. CONKLIN: I was sitting in on this assessment review for the SEDAR and all, and I was a little -- I questioned why we didn't use the commercial handline on a lot of this, and headboats don't generally catch gag grouper, and they don't really swim in the chevron traps, and you can't really see them with a video camera, because they live inside of caves and rocks.

Then I also explained to the panel why the commercial handline was tapering off, and that's because our commercial fishery is in such a depressed state, with the low limits, that there's no one else coming through the ranks to catch a fish that the old-timers used to, and I see it firsthand, and I have absorbed several businesses, and I have trouble finding captains to run these boats for me. The guys that pioneered this fishery, they are now in nursing homes or dead, and there's just no one to get the fish anymore, and that's not saying that they're not there, but I'm not going to test why it was, but I just wanted to point out that I did explain that on the record, and that's my mentality. Thank you.

MS. MCCAWLEY: Thank you, Chris. Any more questions about this assessment presentation before we hear from Genny? All right. I don't see any more hands. Genny, are you ready?

DR. NESSLAGE: Yes, I am. Thank you, Jessica, and good morning, everyone. The SSC, at our April/May meeting, had the opportunity to review the gag grouper assessment, and I am happy to report that the SSC felt that this assessment appropriately addressed all the TORs, is the best scientific information available, and can be used to determine stock status and support fishing level recommendations. We felt that the uncertainty in the assessment was adequately characterized and is consistent with our expectations, given the available data.

We were asked to comment on what factors affect the reliability of stock status and the estimates that would support fishing level recommendations, and the first thing that we wanted to point out was that this assessment was very robust to a number of sensitivities that Kevin ran, in particular natural mortality, which is something that we often see assessments have a lot of uncertainty around, but several of the other assumptions that were tested as well.

There were some slightly counterintuitive responses, when steepness was re-estimated and certain of the natural mortality sensitivity runs, but, in general, this model is pretty rock solid, as Andy was kind of indicating with his question that a lot of the data sources are all saying the same thing, and so it's not too surprising that this assessment is quite robust to the various sensitivities that were explored.

As has been mentioned several times already, recruitment for this stock, and particularly in the last ten years, was estimated to be quite low, and the SSC just wanted to point out, with regard to uncertainty, that, when Kevin ran the retrospective analysis, it appears that it might actually have been overestimated in previous years, which you can kind of see in this lower-left-hand graph. This is the retrospective analysis where he peeled off one year at a time of the data and re-ran the assessment, and you can see the pink and blue dots are a bit higher estimates of recruitment than the most recent years, and so there may have been a little bit of that going on, which increases the uncertainty in our understanding of what the recruitment is in the most recent years, possibly.

The other thing we wanted to point out that was a bit striking to us was this -- If you look at the bottom-right pink graph there, this is the graph of dead discards estimated over time, and so there was a pretty sharp drop in the private recreational discards at the end of the time series. We just wanted to note that. Whether it's an accurate phenomenon, or whether it's a problem with MRIP estimation, or whether it's simply that the population is so low that people aren't encountering them, or there's been a change in the fishery, but this is something that you'll see in our research recommendations that we thought added some uncertainty, given that there wasn't a great explanation, or, obvious I should say, explanation, and it's something to look into in the future. $\$

Just, in general, we thought we should mention that it's just really tough to model to protogynous fish. Kevin did a great job with the information he had, but there's a lot of uncertainty in the assumptions that you make and the data that go into the life history assumptions in an assessment like this, and so it's just something to keep in mind.

We were asked if there had been a change in stock status. Yes, unfortunately, the stock condition appears to have worsened. We've had continued declines in abundance, indicated by multiple indices, as well as the estimates coming out of the assessment, and you can see that on the left, the upper-left-hand, graph. On the right, we've got the trend in biomass over time is declining, and then the bottom graph shows the recent recruitment estimates are well below our MSY.

That leads us to ask should fishing level recommendations and management be based on that recent low recruitment, and the SSC felt that, yes, that should be taken into consideration, given there's been consistent low recruitment estimated in the last ten consecutive years, and this recruitment is the lowest in the time series, and there's really been no indication of any high-recruitment pulses that might have occurred in this most recent decade, and so we did recommend that both the average and the low recruitment be considered in the rebuilding projections.

With regard to fishing level recommendations, we recommended that OFL be based on F equals FMSY, and we applied the ABC Control Rule. With regard to the tier level adjustments to the FMSY, or $\mathrm{P}^{*} 50$ percent, basically, we suggested no adjustment for Tier 1, because steepness was estimated, and MSY-based reference points were calculated. For Tier 2, we recommended a slight adjustment, and the uncertainty was well characterized, but, given our decision tree, we do dock folks a little bit if there's no environmental conditions explicitly included in those projections, and that's usually the highest we've given everyone, of the assessments in recent memory that I have.

With regard to Tier 3, there was a larger adjustment applied, because the stock is both overfished and overfishing, and that's an automatic adjustment, and then Tier 4 -- A larger adjustment there of 10 percent, because the stock has low productivity and high vulnerability and susceptibility, and so that leads to a total adjustment of the OFL of 20 percent, which would recommend a $\mathrm{P}^{*}$ of 30 percent, but, of course, we're rebuilding here, and so you would add that to 50 percent, to get a recommended $P$ rebuild of 70 percent.

You can see the fishing level recommendations table on page 29 of our report, and you will see that we've had the OFL recommendations filled out with regard to landed pounds in numbers, and there's blanks for the ABC. The catch level recommendations associated with the probability of rebuilding will be provided, and we can provide those once a rebuilding schedule is selected by the council, and, as I mentioned before, we recommended that both average recruitment and lowrecruitment scenarios be run for the rebuilding projections, to give you an idea of how that might impact rebuilding.

This is going to be my mantra for the next two days, but, for those of you who may have listened in on our long webinar, you will know that we had many extensive and different discussions about how recruitment should be incorporated into projections used to set fishing level recommendations, and so we've had -- It's run the gamut of low recent recruitment and high recent recruitment and high uncertainty in recent recruitment, and we've seen the whole gamut in the last
few assessments that we've reviewed, and we want to make sure that we are providing you with consistent and logical and reasonable advice.

We recognize that we really could use a little bit of extra time outside of our meetings to kind of think through what the best practices would be, and so we would very much like to request, from the council, that the SSC be allowed to form a working group to develop these best practices and lay them out and think about it very carefully, about how we should be incorporating recruitment trends in assumptions used to run our projections for ABC setting.

We were also asked what indicators or metrics should be used to monitor this stock, in addition to the usual suspects of monitoring updated landings and discards and indices of abundance, and we also thought that it was important to monitor the length and age composition for any evidence that might pop up of a good recruitment pulse coming through for this stock, and then, of course, discard mortality, having been historically quite high, at least we thought that estimating and monitoring discards, and discard mortality, as well as the use of descending devices, should be monitored.

We were also asked to review the research recommendations that were provided in the assessment report and highlight any of those that might help to most reduce risk and uncertainty the next time an assessment is run, and we highlighted, amongst the recommendations, which were all good in the report, that increased age sampling would be very helpful. Also, non-traditional recruitment monitoring, and, in particular, those areas that are coastal or estuarine, and so bridge nets and channel net sampling, to try and get a handle on trends in recruitment.

Also, we recommended that more length info be grabbed from that SERFS video index and then any information that can help us better understand and characterize the protogynous life history of this species, and so things like age at sexual transition, maturity, characterizing batch fecundity, and any evidence there might be for sperm limitation would be very helpful.

Then we were also asked if there are any additional research recommendations that weren't in the report that we would like to highlight or recommend, and we suggested incorporating time-varying maturity, if necessary, and if the data support it, and we also suggested better characterization of discard mortality and the use of descending devices, as well as the compliance rates, with a percentage of folks that are actually using the descending devices, would be very useful.

The third bullet here, explore the drop in MRIP discard estimates, that's what I mentioned earlier, whether this is a real phenomenon or an estimation problem, and it would be really good to get a handle on that. As I mentioned in the last slide, it would be great if we could examine more closely some of the non-traditional coastal and estuarine data sources that could be used as indicators of recruitment, and the SSC recommended a number of different things, like coastal trawl surveys, the channel nets, both fishery-dependent and independent bridge nets, habitat traps in the estuaries, shellfish culture trays, and there were a number of different things, and you can check out our report for some of the details on that.

Then we also suggested considering development of a recruitment index using the chevron trap catches for the younger ages, one to three, and that might be another potential index that could be used to track any changes that we hope will occur of increases in recruitment, and then just to get an idea of what's going on in the broader ecosystem, if there's any opportunities to get gut content
analysis, and that would likely have to be genetic, given the depths these animals are harvested at, as well as who is eating them, the gut content analysis for their predators.

Then the last recommendation we had was it would be great if we could get more information on egg viability with age, and that gives us an idea of how important the older spawners are to the productivity of the stock, and so we recommended that the next assessment be conducted, and it could be an operational assessment, within the next five years, and I think that's my last slide. Yes. So I would be happy to answer any questions. Thank you.

MS. MCCAWLEY: Thank you, Genny. That was a great presentation, and I don't want to lose the point that you brought up about the working group to develop best practices for making recruitment assumptions, and do you have a timeline for when you would like to see that completed?

DR. NESSLAGE: Well, I guess, ideally, the sooner the better, in my opinion, and this is an issue that keeps popping up again and again. With each new assessment, we seem to get some new challenge to our decision about how to incorporate recruitment and projections, and I would love to get ahead of it before the next assessment hits our desk, but I am also realistic and know that we all have a lot on our plates, and council staff have a lot on their plates, but I think this is a huge issue, and it would be really important that we really give this some good, hard thought and make sure we're really thinking through the best way to do this consistently for different scenarios that seem to be popping up. I don't know that I answered your question, but ASAP would be great.

MS. MCCAWLEY: I appreciate that, and I agree. I think it's really important, and I know you guys have a lot on your plate, and I wasn't sure if you were thinking, hey, we would like to get this done in six months or a year, and so it sounds like, if it could be done, if folks could find the time, that maybe six months is better than a year.

DR. NESSLAGE: I would prefer that, but I know everyone has got challenges with commitments, and I think our next assessment is scamp, and is that correct? Is that the only assessment that we'll be seeing in the fall?

MS. MCCAWLEY: Chip.
DR. COLLIER: Thank you. Yes, that is the assessment that we're going to be seeing in the fall, and, because that is a research track assessment, that's not going to be providing quantitative information, and so you won't be getting a projection for that next one. The next assessment that will have a projection will be coming in April, unless we have a special meeting, like we did with snowy grouper last year. I'm not envisioning one right now, but that would be the only case.

MS. MCCAWLEY: I appreciate that, Chip, and so, Genny, I would like to keep this on the list, and keep it towards the forefront, and see if we can get it on one of the upcoming agendas.

DR. NESSLAGE: Absolutely. If we could have something in place before our next assessment that's used for fishing level recommendations, that would be ideal. Thank you.

MS. MCCAWLEY: Thank you, Genny. I see a couple more hands. Art and then Mel.

MR. SAPP: Good morning, everybody. Thanks to both of you all for two great presentations there. Chris, I think, made some good points earlier, and I wanted to add to it a little bit, especially on the recreational side. One of the main reasons I think you're seeing a drop in recreational catches, and especially on the for-hire side, where I have a lot of experience with it, is the shark depredation issues we're having.

You can't release something that gets eaten before you catch it, and you're certainly not going to bring something to the dock that's been eaten before you caught it. In my charters here, in the last ten years, we don't grouper fish anymore, because our anglers generally aren't the best, and they aren't capable of moving the fish through the water quickly enough before it gets eaten, and so, when the cobias move in on the wrecks, we'll still fish for them, and, if we get bit, we get tight, and we back off on the drag a little bit. If the fish rocks up, all right, great. We had a grouper bite, and we part them off, and hopefully the fish survives, whereas the cobia will generally swim up or swim away from the structure, and we can catch them.

I think, much like Chris was saying, the handline guys -- You can horse them a lot better handlining, and the commercial guys are far better at it, and so their numbers would not drop, other than the fact that, like he said, he's losing fishermen, and so fewer people targeting the fish that have the ability to catch them.

From my understanding, from a lot of the divers, they're still seeing quite a few, but they too have the issues with sharks trying to take them off their spears, and so I think there might -- With these added issues with the sharks, we might need to find better ways to count these fish, or get our numbers on them, but that's my thought. Thank you.

MS. MCCAWLEY: Thank you, Art. Mel.
MR. BELL: I had actually taken my hand down, but I was just following the same train of thought you were with Genny and the request to maybe form a working group, sooner than later, and deal with the recruitment issues, and so I certainly support that, and, obviously, it's something that she and council staff could kind of coordinate, based on schedule, because they do have a challenging schedule.

MS. MCCAWLEY: Yes, I think that sounds great, Mel. Kyle.
DR. CHRISTIANSEN: Morning, Genny. Thank you for the presentation this morning. That was great. Just a quick question on the recruitment, and it seems like you've had ten years of consistently declining recruitment without even any pulses of decent years, and do you guys have any reasoning for that, or did you all go into that, or is it just that's part of the presentation?

DR. NESSLAGE: I don't think we have a good idea of what's causing that. There is -- I think, if you go -- Let me see what the right slide might be. If you go to -- Sorry. Just one moment. I'm just trying to see if there's anything that I can show to elucidate. Do we have the F trends?

DR. CHRISTIANSEN: It seems like, and this is just basic, but, if you're looking at trying to rebuild the stock, if the recruitment is continuing to go down, then you're never going to get to the rebuilding point. I mean, is that correct?

DR. NESSLAGE: Yes, that's definitely a concern, and we did discuss that, that even -- Really, you have to have much lower fishing mortality in order -- With this new low recruitment, if you're going to try to rebuild the stock, which, really, ideally, we would have a better idea of what's causing that, but, in the absence of that -- I'm sorry that I don't have a great answer for you. We're not really sure what's causing this low recruitment, and it's a very marked trend, if you look at the trend in R versus RMSY.

There has been this -- Again, I'm trying to find the right slide. It seems like recruitment was bouncing around RMSY until you get to about 2009, or 2010, and then there was this steep decline, and it's just been in this lower regime, if you will, for the last ten years or so, and I don't know why. I really wish I could tell you, but you're right that this would affect rebuilding, absolutely. If we don’t see another good rebuilding pulse, that will definitely hinder rebuilding.

DR. CHRISTIANSEN: Thank you.
MS. MCCAWLEY: Andy.
MR. STRELCHECK: Thanks, Genny, for the presentation. On I believe it was Slide 4, you showed the trends in discards and alluded to the fact that it was kind of very unusual that discards have fallen considerably in the recreational fishery. It's hard to tell, from that graphic -- Is that a consistent trend across-the-board for headboat and private and charter, based on the information you had available, as well as are we seeing any changes in discards in the commercial fishery, where they are declining similar to recreational?

DR. NESSLAGE: It would be helpful if we could pull up -- I think Kevin should probably address this question, because he's more familiar with the data than I am, but, if you look at -- Kevin has a slide of the landings by fleet, I believe, or sorry. It was Scott who provided the presentation, but the -- You asked about the other components of the recreational, and those general recreational discards have gone down, as have the total landings. It looks like handline has been declining a bit, or is stable, and the commercial discards, it looks like, have gone down, and headboat has gone down, if I'm interpreting Kevin's graphs correctly. I don't know if that gives you the answer you were looking for. Did I answer your question, Andy?

MR. STRELCHECK: You did. I was just looking for more just information on consistency, which I would expect that, if we're seeing reductions in discards for kind of the general recreational private fishery, we would see it across-the-board for all the sectors.

## DR. NESSLAGE: Right.

MR. STRELCHECK: I guess my comment then would be, I mean, it's a very unusual pattern. Oftentimes, when we get into situations where a fishery is overfished, the fish are getting smaller, and they're maybe less abundant, but that means that typically the discards are going up, due to regulatory restrictions or availability of fish. In this instance, the stock might be at such a state where you're not even able to go out and catch the fish and even discard them, and so there's a precipitous drop, obviously, in discards that's being seen across-the-board.

DR. NESSLAGE: Right, and I think the SSC was concerned that, if this wasn't a change in fishing behavior, as we were just discussing a little bit ago, which it may have been, that, of course, this -

- If you see a sharp drop in discards, even though the overall effort appears to be the same, then that could be a result of recruitment levels having been low for a really long period of time, and so you're getting fewer undersized fish being released, and that was something we were worried about.

If it's a change in the behavior of anglers, due to shark predation or something else that's going on, that's less of a concern, but, yes, it doesn't -- The other components are so small, of the recreational fleet, in comparison to the general recreational fleet, and I'm not seeing a huge trend, a similar trend, right, but it's really hard to tell with the discards, because the dead discards are such a small component for the headboat fleet there.

## MS. MCCAWLEY: Clay.

DR. PORCH: Thank you. To me, it seems that the decline in discards is pretty much consistent with the decline in recruitment, because they are regulatory discards, presumably mostly because of the minimum size limit, and so, if there's fewer small fish out there, you're going to discard fewer fish. I don't know, and maybe Kevin can comment on that.

DR. CRAIG: I do think that's the case. They've been under a size limit for a long time, and I think it's been a twenty-four-inch size limit since 1999, and so I think, if the recruitment is low, which it appears to be, then you would expect fewer regulatory discards under a size-limit-driven discard, if the discards are driven by size limits.

MS. MCCAWLEY: All right. Any more questions for Genny or Scott or Kevin? Chris.
MR. CONKLIN: This one is for Kevin. I think you guys did do a run with the commercial handline, or do a bunch of runs with the commercial handline, and did you do one with like just the commercial handline and take another one, of the like the headboat, out, or the general recreational?

DR. CRAIG: I am looking at the report right now, to see. We did do a lot of permutations on the indices in the sensitivity analysis. None of those had a different qualitative outcome than the base run. We did do -- We didn't do just the commercial handline index alone. We did do it along with the other indices and various sort of alternative weighting schemes for the indices, or alternative assumptions about catchability.

I think the closest -- It would be Sensitivities 6, 7, 8, 9, and 10. I guess, to answer your question, we did include the handline index, but it was always in combination with at least one of the other indices, and it was -- It’s hard to justify excluding a fishery-independent index and just relying on a fishery-dependent commercial handline index, and so I think that's why that one wasn't done alone, and it was always done in combination with either the headboat or with the video index.

I guess you would have to postulate that there's a problem with both the headboat index and the video index, which are showing the same kind of decline in abundance, and that doesn't exist for the commercial handline index, and so I think, based on some of the discussions with the panel, it didn't seem like that was very plausible, particularly excluding the video index, which is fisheryindependent, and so it wouldn't be subject to some of the same issues that the handline might be subject to with sort of hyperstability or maintaining relatively high catch rates, despite declines in
abundance or what the headboat index might be subject to, not catching a lot of gag, and those wouldn't be the case for the fishery-independent index.

MS. MCCAWLEY: All right. Any more questions? All right. I don't see any more hands. Thank you, Scott and Kevin and Genny. Mike, I'm going to pass it over to you, and I think you're going to go over the fishery overview.

DR. SCHMIDTKE: Yes, I'm going to go through that. The fishery overview is linked in all of your agendas, and the agenda overview, and I'm going to be kind of skipping around quite a bit, just because we just heard the assessment information, and so I'm not going to delve too much into that, and I'll try not to be too redundant. I will also be focusing a bit more on the landingstype information, but, if you kind of poke around within these overview sites, you would see that there is a lot of information here, looking at history of management, the fishery performance report, and then quite a bit of life history, size, maturity, that type of information, in addition to the landings stuff that I'm going to go over.

Just kind of reviewing with you what these tabs are, and we're going to see quite a few of these fishery overviews throughout today and into tomorrow, in looking at some of these assessment responses, but, under the history of management, the only thing that I want to highlight here, and it's pretty comprehensive and long, but the only thing I want to highlight here is that the current ACLs were specified through Regulatory Amendment 22, and that set a current ACL of 773,000 pounds gutted weight, which is allocated 51 percent to the commercial sector and 49 percent to the recreational sector.

The most recent fishery performance report is available as well, and that was completed by the Snapper Grouper Advisory Panel in September of 2020, and I encourage you to look at that as we go through this process of responding to the assessment. There is information there on some of the AP's observations on abundance and catch levels, where they are spatially and by depth, how that has changed in the gag fishery, as well as information on price and demand for the commercial fishery, recreational for-hire, and private recreational, and then some comments on potential management measures that could be considered to improve the fishery going forward.

Now I'm going to move over to the graphic information, and, like I said, we just went through the assessment, and so we have that information kind of summarized here. We have the fishing mortality portrayed there and the spawning stock biomass that show that overfishing and overfished status. We also have the recruitment further down, and all that information has been discussed, and it's reflected here.

This projections tab is something that is newly added to the fishery overview, and that deals with some of these recently-assessed species and the projections coming out of those assessments for different landings levels, and so I'm going to spend a little bit more time on this, and we'll see these for other species, as we continue to work through the agenda.

The time period that's being projected out has this light-blue background, and so all this -- In the gray background, these are all of the landings time series and the discards time series coming forward, and then, after you get into the light blue, these are projected landings and dead discards. This brick red type of color, those are the dead discards, and the navy blue are -- That shows the landings, and then, when we're in this projection timeframe, what we have here is a solid curve,
and that's showing the probability that the stock is rebuilt, and just one thing for this line, and that corresponds to the right axis, and it doesn't correspond to this left axis. The left axis shows the poundages of the discards and the landings.

This first projection would project fishing at FMSY, and what we would see here is that the landings would be projected to decline in the kind of immediate management scenario and then increase following that. That increase would level off at about 1.3 million pounds, and that is approximately the level of harvest that was seen during the late 2000s.

The SSC recommended a P rebuild of 70 percent, and what we see here is, from fishing at the FMSY level, that's not something that would be attained by 2040, and these projections go out until that time period, and so, scrolling down, we see kind of another scenario of fishing at 75 percent FMSY, and there is a similar type of makeup. When we get into the management regime of fishing at 75 percent FMSY, there is that initial drop in the landings and the dead discards, and then a subsequent increase, but at a lower level, and the probability of the stock being rebuilt increases, and this is by about -- I believe this is the ten-year timeframe, when we get out here, but it's between 50 and 75 , and it's about halfway there, and so probably about 62 or 63 percent of that $P$ rebuild, and so it wouldn't be hitting that 70 percent.

In addition to this information, a run was done at F equals zero, and this resulted in the stock being rebuilt in six years, and so somewhere between -- Somewhere above that six-year timeframe, if there's some sort of landings component within the fishery.

Now I'm going to move to the landings data, just taking a brief look at the landings history relative to the sector ACLs, and the commercial landings have declined and most recently been about 75 percent of the commercial ACL. Recreational landings have been low relative to their ACL, typically not harvesting more than 50 percent of it.

A note for all of the reviews that we'll be doing is that the landings, compared to ACL data, used that information as tracked, and so, for the recreational landings and ACL, in this first figure, these are in the telephone survey units, whereas the later figures, recreational landings, are in FES units, the Fishing Effort Survey units.

The second graph shows landings in pounds, and the gag ACL is, as I said before, allocated 51 percent to the commercial and 49 to the recreational sectors. However, with the FES data, you will see that the recreational landings are estimated to be greater than the commercial, and that's just -- The reason why is because of the changeover in the data, and so the landings don't necessarily correspond to the current allocation scheme.

Seasonally, gag landings have occurred throughout the year, during different timeframes, but they have been impacted by some management actions that have kind of formed some of these trends over time, and so, from Amendment 9, commercial landings in March and April have been prohibited, since 2000, and so you will notice, in Wave 2, we don't see any commercial landings there, and then the other kind of big action was Amendment 16, which established the shallowwater grouper spawning closure, and that went into effect in late 2009, first impacting really the 2010 fishing year, and so, from 2010 on, you see little to no landings occurring from January through April. Spatially, within the South Atlantic, landings fluctuate annually, but, overall, they are pretty close to 50/50 between the Carolinas and the combined Florida/Georgia landings.

For the commercial fishery, gag landings have generally been decreasing since about 2007, and we see this pretty sharp decline there in the landings, which is shown in gray. Releases had a big drop in 2006, and, since then, they have remained pretty low, between 1,000 and 2,000 fish per year, in most years, and we pretty much covered seasonal trends in the overall portion of this, and so, spatially, commercial landings primarily occur in the Carolinas, with about a fourth to a third occurring in the Florida/Georgia region.

I won't focus too much on the length information, just highlighting that gag do have a twenty-four-inch minimum size limit in place for both sectors, and the commercial trip limit is 1,000 pounds gutted weight, with a step-down to 500 pounds after 75 percent of the ACL is met, and, finally, we'll look at the recreational data, and, here, we see the landings and releases history. The landings are shown in blue, and releases are in the yellow-dashed line. Both of these have declined in this fishery, and we see this big drop in the releases that happened from -- I believe that's 2008. After 2008, there's kind of this big drop, and then even further declines into the present. 2019 is kind of a low year for overall catch for this time series.

Finally, looking at the spatial information, recreational landings are close to the reverse of the commercial, with about two-thirds to three-quarters of these coming from the Florida/Georgia region and the rest coming from the Carolinas. That's what I have for the fishery overview. If you would like me to go back to anything, or if there was something that wasn't covered that you would like to see, please let me know, but I will hand it back to you, Jessica, for questions.

MS. MCCAWLEY: Thank you, Mike. That was excellent. I learned a lot. Do folks have any questions for Mike? No hands. All right. Then, Mike, the next steps here is we are trying to figure out kind of what new ABC is going to be and figure out when that would come back and figuring out what the management response is here, and is that what we need to talk about now? Sorry. Mel has his hand up.

MR. BELL: That's all right, and I was just too slow on the button, and I was going to ask him to back up a slide, but it's okay. I just had a question about recreational landings, but I can deal with it later.

MS. MCCAWLEY: Are you sure, because I think we could go back there.
MR. BELL: Just real quick, I guess, if he -- All right. We've got South Carolina and North Carolina, and my question about recreational landings, in general, is, from talking to a number of people, and looking at Facebook posts and things, I know gag are a popular targeted species for spear fishermen, recreationally, but I've always been a little concerned about the degree to which MRIP can accurately capture spearfish landings, and, again, because maybe a number of the folks aren't folks that would go to landings, and some are, but some may go to private docks and that kind of thing, but it's a popularly-targeted species for spear fishermen.

I have heard a number of spear fishermen complaining about lack of gag on sites that they have traditionally visited, and even out into fairly deep water for diving, but that's always just been something that's worried me a little bit, and not just gag, but about some species like hogfish and other things that MRIP perhaps doesn't, just by design, capture spearfish landings as easily as it
does hook-and-line landings, but, obviously, we have landings captured there, and so thanks, and that was just a thought.

MS. MCCAWLEY: Thanks, Mel. Mike, did you have any response to that?
DR. SCHMIDTKE: I guess I can't speak on how well MRIP captures the spearfishing landings, and I would have to do some asking around and digging for that, and I do know that some of the things expressed by Mel just now -- Some of that information is contained in the fishery performance report, and it was voiced by the AP, and some of the folks, some of the diving folks, were talking about changes that they've seen in gag abundance by area. Some of the familiar areas didn't have many, and they would have to try new areas, different depths for different sizes of fish and things like that, and so some of that has been conveyed through that report.

MS. MCCAWLEY: Thanks, Mike. Chip.
DR. COLLIER: Thank you. We incorporated all landings in there for this species, and the landings from the dive fishery, on the recreational side, definitely wasn't covered as well in the North Carolina and South Carolina regions. It is getting better, and Florida has been doing it a little bit more consistently, sampling the dive fishery, and I think Myra had presented some of this information to you guys a few years ago, when there was some discussion about the impact of the dive fishery on certain species, and gag was one of them that was brought to you guys, and so sampling is improving for the dive fishery, and it's still somewhat limited, as Mel said. They could be a very different fishery that is not overall sampled well by MRIP.

MS. MCCAWLEY: Thanks, Chip. Steve.
MR. POLAND: Thank you, Madam Chair, and this is not necessarily a question, but just more observation from me, and so I was sitting here going through the fishery overview, which I think this is great, and I'm glad that we have these for the other two species that we'll be discussing during this committee later on, and I think this is just fantastic.

Looking at the recreational data, and so the page that you're currently on right now, Mike, if you'll scroll up to the first graph, it just struck me that we're seeing releases really take a sharp decline, and kind of, right here, even starting in the late 2000s, and we're seeing landings that they take a decline, but then they kind of level out at a more or less new lower equilibrium, and we're seeing that just across-the-board, even when you look at the commercial landings. Really, for the last decade, everything has kind of settled out at a new just lower landings level.

I guess, interpreting this graph with some of the information that we heard from the assessment report showing low recruitment, especially in the last five or six years, I am just -- I'm having a hard time kind of reconciling this with what we saw in the assessment report, because, if we look at this figure on its own, to me, it would kind of suggest that, yes, there is a recruitment failure, and it looks like we're just fishing on larger fish, and that's why we're discarding less, because we're just catching less regulatory discards, and, eventually, that will catch up, and we might would see a decline, a further decline, in landings, but then we go to the assessment report, and it was the figure that I think Scott drew our attention to, and it was one of his favorites, and you look at numbers-at-age, and biomass-at-age, and it looks like there -- Those age-ones and age-twos are pretty much the bulk of the stock.

There seems to be a little decline in age-ones and age-twos in the last decade, for the last couple of years, especially age-ones, and then it looks like it has rallied, and so those are new recruits coming in, and so, if we look at recreational landings, and the fact that releases are going down, it would tend to make you think that they're just encountering larger fish and there's less regulatory discards, but then we look at the numbers-at-age of the stock, and it seems like the stock is just kind of ticking along at a few younger age classes, and ages that wouldn't necessarily have recruited to the fishery yet. Like I said, I don't have a question, and it's just these were two things that stuck out to me in these presentations. That's all I've got.

MS. MCCAWLEY: Thank you for that. Any more questions before we get into committee actions? I don't see any more hands. Thank you for going back to this, Mike. Then, to switch over to the actions, I guess what we need here is to take an action to start an amendment to change the ABC, establish a rebuilding plan, and then I think we need to discuss the timeline for rebuilding and what else the committee would like to see in that document. Is that right, Mike?

DR. SCHMIDTKE: Yes, that's correct.
MS. MCCAWLEY: All right. Mike, when are you guys thinking that this document would come back?

DR. SCHMIDTKE: The thought on timeline right now is that we would have an options paper ready for the December meeting, and that would kind of be the kicking off of what we need to see here, but, in order to make that options paper, we need some information on what rebuilding timelines the council would be interested in, and then we can develop some of the scenarios there and the options within that paper.

MS. MCCAWLEY: All right. Thank you, Mike. Mel.
MR. BELL: Mike’s last comment hit on exactly what I was going to ask about, because Genny said that we would need to select a rebuild schedule to advise them, so they can advise us, and so my question is how do we -- I guess that's what we would need to talk about right now, and how would we -- What are our options there? Are we legally bound to a certain schedule and that sort of thing? I think that's perhaps a step that we need to work through.

MS. MCCAWLEY: I agree, Mel, about the rebuild and how many years to rebuild. Based on what we saw, it seems like maybe it's being suggested of a ten-year rebuild, but I guess I'm wondering if there's any flexibility with the ten-year number. Can we have a longer rebuilding plan, or is that not allowed?

MR. BELL: Yes, that would be my question.
MS. MCCAWLEY: Andy.
MR. STRELCHECK: Certainly Monica can weigh-in here as well. In Scott’s presentation, I guess Slide 15, it shows two scenarios for rebuilding, depending on recruitment, and one is a Tmin of nine years and another is a Tmin of eleven years, when you set F equal to zero. Under the National

Standard Guidelines, if Tmin is less than ten years, then you're bound by a ten-year rebuilding plan.

From what I heard Genny say earlier, their most likely assumption, going forward, is that low recruitment is going to continue, which seems to then give us the ability to set the rebuilding plan greater than ten years, with Tmin being eleven years, at kind of the shortest rebuilding timeframe, and Tmax being double that, at twenty-two years.

MS. MCCAWLEY: Thank you, Andy. That was helpful. I see Monica has her hand up.
MS. SMIT-BRUNELLO: I would just be repeating what Andy said, except he gave you even more information than I would, because I was just going to quote from the guidelines and the act, that, if you can rebuild in ten years or less, then your maximum time period to rebuild is ten years.

MS. MCCAWLEY: Thank you. Based on what Andy said, because we have this low recruitment, I'm assuming that we can go out to twenty years, and possibly even twenty-two, and so it seems like, based on the slide we have on the screen, that twenty years is possible, and it's unclear to me if twenty-two years is a possibility. Chip.

DR. COLLIER: In looking at the information that was provided by Kevin post the SSC meeting, he did do projections at a F equals zero and a low-recruitment scenario. With management going in place in 2023, the stock can rebuild with a 50 percent probability by 2030, and that's in the SSC report, and it's PDF page 51, and so that's shorter than the ten-year timeframe, and then, obviously, if you have average recruitment, which would have been higher, it rebuilds a bit faster, and so I'm not certain on the statement where it would rebuild in a little bit longer time than that. Andy, could you clarify that?

MR. STRELCHECK: Can you go to the next slide? Can someone explain this slide then? This is what I was looking at, under a low-recruitment scenario, and does this not include information about kind of extending forward to 2023 before the rebuilding plan starts?

DR. COLLIER: It looks like this is assuming that the time period starts in 2020, but management would start in 2023. I think that might be the difference.

MR. STRELCHECK: Okay. Well, could Genny or Kevin or others clarify, in terms of the rebuilding timeframe, based on what the SSC discussed?

DR. CRAIG: You're looking at two projection scenarios that are identical, except the left panel has average recruitment and the right panel has low recruitment, and so the projections start in 2020, and the terminal year of the assessment was 2019. They assume average landings for 2020, 2021, and 2022, and then the management begins, which in this case is F equals zero, in 2023. Under average recruitment, the projections are suggesting a nine-year timeframe for SSB to exceed SSB MSY. Then, under the low-recruitment scenario, it's suggesting an eleven-year timeframe for that to occur, and does that help?

MR. STRELCHECK: Well, I think it's confusing matters, because the 2020 through 2022, or 2023, timeframe don't assume F equals zero, and so, under our rebuilding guidance, we need to know how long does it take to rebuild at F equals zero.

DR. CRAIG: These projections were run with F equals zero starting in 2023, and I think that's what was requested. Then, for the interim years, which obviously 2020 has already passed, and 2021 is underway, and we assumed an average landings for those years. These can be rerun with $F$ equals zero starting in some earlier timeframe, or some earlier year.

MR. STRELCHECK: I don't think that's necessary, but I just wanted to better understand the graphic, and so, essentially, the bottom line is we can rebuild in less than ten years at F equals zero, assuming a start time of 2023.

DR. CRAIG: Assuming a start time of 2023 and average recruitment.
MR. STRELCHECK: John, can you weigh-in here?
MR. CARMICHAEL: I mean, I think I agree with Andy. I don't think there's a need to change the projections. It would seem like this figure is using a different convention for how you calculate the rebuilding time. We have always calculated it, in the past, in my memory, from the time management started, and so you factor ten years from the time management goes into place and then however long it takes at the F.

This one would seem to be as starting from the terminal year, which is a couple of years before management actually takes place, and that's a pretty -- At least that seems to me to be a different way of calculating rebuilding periods, and I guess it's a legal determination, as to when you consider T1 to start. Did T1 start in 2020, or does T1 start in 2023, when we do management?

MS. MCCAWLEY: Clay.
DR. PORCH: Another fly in the ointment, so to speak, when you're talking about whether it's possible to rebuild within ten years, is that it really isn't possible to achieve F equals zero unless you are willing to shut down all offshore reef fishing. I think the other argument, and maybe Monica wants to weigh-in, is that you really can't achieve that no fishing mortality on gag grouper, because, even if you prohibited all take, there's still going to be substantial discard mortality.

## MS. MCCAWLEY: Good points. Monica.

MS. SMIT-BRUNELLO: Well, yes, I agree with Clay. This is kind of a confusing scenario that you're presented with. Year-one usually starts -- In the past, we have calculated year-one in terms of your first year of your rebuilding schedule, when the measures were put in place that implemented the rebuilding plan.

I mean, I don't know if you want your IPT to come back with various measures for you, which would then delay the SSC's giving you back information on the ABC and all that, but this is confusing, and, when you look at the second slide on low recruitment, I mean, that's what you've been hearing all along, right, is that there's low recruitment, and that's what the stock assessment said, and it's been low recruitment for some years, and so this is a little confusing. I think you maybe have a couple of options in front of you, depending on the record we can build.

MS. MCCAWLEY: Okay. This is a little confusing, and so I guess I'm looking to council staff to help here about what the next step is, and so Monica made a suggestion to go to the IPT. If we go to the IPT, it sounds like that's going to delay the SSC giving us something, but, yet, it seems like the start year on this graph doesn't match what we've historically done for other fisheries, and I'm trying to figure out what to direct staff to do as a next step here, since we have a lot of questions. John.

MR. CARMICHAEL: I guess I don't know that the IPT can solve this. It seems, to me, that it's a question for the agency, and perhaps Monica and company, as to when is T1? Does T1 start once you've been told it's overfished, and the two years you have to rebuild the -- To develop your plan under the statute counts as part of your rebuilding period, even if you haven't taken the action that's necessary?

If we take action, my understanding is we've got to take action that, at the very least, ends overfishing, and we could take an interim action, but that's only in place for a year, and so we have to have something permanent, or things would revert, and so it seems like there's a lot of cans of worms in there, and we have been in this situation before, and we've evaluated F equals zero for many, many stocks, and the council has long been frustrated with the realities of a multispecies fishery and known that $F$ equals zero is very hypothetical, but my understanding of the act and all the guidelines has been that that's irrelevant, and you're supposed to do F equals zero, and you're not supposed to say, well, we can't get $F$ equals zero, because this is a multispecies stock and that would be impractical and too difficult, and I've never seen anything in the Magnuson or guidance that allows us to do that, as much as I would dearly love to see some guidelines that would accept the realities of a multispecies fishery and that F equals zero is completely impractical.

We, as the South Atlantic Council, have written comments on this issue, year after year, opportunity after opportunity, on Magnuson Act revisions, and we have noted this issue, and we have noted the issue that comes up with this arbitrary and hypothetical $F$ equals zero, and we have pleaded that we just apply the time plus a generation for rebuilding and go from there, so that it would be fair, but, so far, I have not seen guidance that lets us do that, but, if someone has, and we can go there, it would be outstanding, but I think, as far as punting this to the IPT, I think that's a bit of a challenge for them, and we need to settle the question of when T1 is first.

MS. MCCAWLEY: Great point, John. I'm going to go to Monica and then Clay.
MS. SMIT-BRUNELLO: Maybe it would be even better to go to Clay first, but I will just chime in. John, the Fisheries Service is under the same guidance, and perhaps gets frustrated as well, that the council is, right, and so this is what Congress put in place, and the Service has the guidelines. You don't, I believe, yet have a letter from the Fisheries Service telling you that it's overfishing and overfished, which -- So your two-year clock hasn't started, and that doesn't really help you determine when the first year is for your rebuilding, but I recall we've had other amendments where the council -- For example, it went into place in 2008, and you had determined that your rebuilding period started in 2006, maybe when you ended overfishing, or that was the theory anyway.

At any rate, I think there is some flexibility, but I would say the council also has some flexibility in determining when that first year starts, and it depends on when the management measures go into effect, unless you think there are already measures in effect that would not -- That would
prevent overfishing, and apparently that's not accurate, right, because we have measures in place, but overfishing -- We're undergoing overfishing, and so I would say there is some flexibility on both ends, and maybe frustration as well.

MS. MCCAWLEY: Thanks, Monica. Clay.
DR. PORCH: I would just add that you also have the responsibility to reduce bycatch to the extent practical, and I think it could be argued that it's not practical to discontinuing all reef fish fishing, whether it's targeted at gag or not, and so I think there is an argument to be made there, I mean to John's point. Certainly, when the NS 1 Guidelines were put together, they weren't thinking as much about fisheries with the high level of discards that we typically see down here, where many fisheries are actually discard driven, but I do think there is some wiggle room there, in that clause of reducing bycatch to the extent practical, and, in any case, I think an argument could be made regarding when to stop it.

MS. MCCAWLEY: Okay. Mel.
MR. BELL: Thanks. Monica may have covered this, but I was -- I guess I'm just still struggling, because I thought the when you had to start, when the clock started, was prescriptive based on a process where the Service declares the overfishing status, and then, boom, that's when the clock started, and I thought that was kind of automatic within the context of Magnuson, and I didn't really think there was a lot of flexibility to kind of move that around, but I guess maybe I'm wrong.

MS. MCCAWLEY: Andy.
MR. STRELCHECK: Mel, just in response to that, I mean, you are correct, in terms of the guidance that you're supposed to address overfishing immediately, and then, obviously, if it's overfished, implement a rebuilding plan. What we're talking about here though is in the question of when do we calculate fishing mortality equivalent to zero for all landings and discards, to then estimate how long the rebuilding timeframe would be, and that's where the confusion has arisen today, is kind of how the Center has calculated relative to how we maybe historically have implemented it, and where do we have the flexibility, obviously, to start the clock on a rebuilding plan.

MS. MCCAWLEY: Thanks for that, Andy. Monica and then Chip.
MS. SMIT-BRUNELLO: Andy covered what I was going to say about the statutory time periods, when you're notified and that clock. He's right that we're talking about kind of two different clocks here, one when you're notified, and that starts the two-year period, but the other is when to start the rebuilding.

MS. MCCAWLEY: Thank you both for that clarification. Chip.
DR. COLLIER: Actually, based on what Andy just said, when F equals zero is the rebuilding timeframe, and F equals zero is not in 2020 through 2022, and those were average level of landings, and it was -- If you look in the SSC report, I believe it was 2023 is when landings go down to zero, and so maybe that helps with the clarification.

MS. MCCAWLEY: Okay. I'm still struggling a little bit with what decision can be made today and how we direct staff for what comes back in this paper in December and how many years we have to rebuild the stock, and I'm not certain that we're going to figure that out right here at the committee level. I guess I would look to John or Myra to maybe -- Well, first, I think, after we kind of end this discussion, we should probably take a break, but should we hit a pause on this discussion and pick it back up either later in the committee or later in the week at Full Council, when we think we'll have more clarity, or is there the inability to get clarity during this week, and we just need to give staff direction to start this document and then bring something back to us? I see that Mel put his hand up.

MR. BELL: Thanks, Jessica. I think we're kind of stuck right now, and I don't see us coming up with the magic answer here. Obviously, some folks are going to have to sit down and talk about this a little bit and then give us some clearer guidance on what our options are for proceeding, perhaps, and so maybe that could be something that the staff and Service staff talking about a little bit.

I mean, we talked about the IPT, and the IPT -- That's on down the road, but we need to get the ball rolling, and so maybe, in the context of the meeting, if there's some communication between appropriate staff about, okay, here's the options, and then we can maybe come back at Full Council, or even later within Snapper Grouper, and I don't know how fast that's going to take, but I kind of feel like we're spinning our wheels a little bit right this second on it, just because it's not -- We're not the folks to kind of make that call at this point.

MS. MCCAWLEY: I agree. I'm going to go to Andy and then John.
MR. STRELCHECK: I'm going to let John speak first, and then I will follow-up.
MS. MCCAWLEY: Okay. John.
MR. CARMICHAEL: Thanks, Andy. Well, I think that -- Well, Monica said that we haven't got the letter, and the clock has not started, but that clock rings loud and fast, and, really, technically, the agency wants the council to get it done in fifteen months. I think there may be some question, but it seems the question is based on an interpretation that's very different than what we've ever done.

I think the council could give guidance to at least look at an option for rebuilding within ten years, and that allows some things to get going while this discussion comes out as to whether or not there's an even longer option that's in place, and that would at least hedge our bets and put us making progress for what is essentially the worst-case scenario. If it turns out that you get a longer period, then that totally changes things, and you can have less restrictive management, which is always easier options to add into the system than more restrictive management.

MS. MCCAWLEY: I like that, John. Andy.
MR. STRELCHECK: I think that's a good suggestion, John. I think let's try to come back to this, and we'll see what we can do, from the Fisheries Service end, to provide a little more clarity before the end of the meeting, if we can. My comment was going to be, for IPT guidance, we know we have rebuilding scenarios that need to consider Tmin and Tmax, and probably something in
between, and the real question here is whether or not we're bound by ten years or not, and so I think the IPT certainly could at least start looking at a ten-year timeframe, knowing that that's in play, and then certainly look at other options that we can provide more clarity with regard to the start time for the rebuilding plan.

MS. MCCAWLEY: Thanks, Andy. It sounds like we have a small amount of clarity, in that we would be using ten years as kind of the worst-case scenario, but, ultimately, if we can consider longer years, we would like to do that. It sounds like we want to bring an options paper, or a management response paper back, at the December meeting, but I think maybe we need to kind of hit the pause button on this discussion in committee right now and see if we can get additional clarity this week and then come back to this discussion, and so I'm going to leave that right there, and maybe let's go ahead and take a -- I was going to say a break, but let's go to John before we take a break.

MR. CARMICHAEL: Just one more quick thing. I think, also, to prepare for this, we could ask the Science Center to do an F equals zero landings only, and perhaps put that forward, and maybe there is still some room for clarification in what's truly meant by F equals zero in a multispecies fishery, at least put something in paper in an amendment, potentially, that would require the agency to really come to grips with that question.

MS. MCCAWLEY: I think that's a great idea. I'm not sure if we need to be capturing these things, and I'm not sure if Mike is capturing it right now or what.

DR. SCHMIDTKE: I can get it up on the screen, just to have it there.
MS. MCCAWLEY: That sounds great.
DR. SCHMIDTKE: John, you were saying requesting a projection at essentially F discard?
MR. CARMICHAEL: Yes, and so, rather than an F equals zero, but you would still have the bycatch that was occurring, and so it’s the landed F equals zero, and perhaps we can develop an argument around a multispecies fishery for that interpretation of $F$ equals zero, which I think is consistent with Clay's take on things.

MS. MCCAWLEY: All right. We have some information there on the screen. We verbally said it sounds like it would come back in December. Anything else we need to discuss before we take a break here? All right. Let's go ahead and take a ten-minute break. Remember to put your hand up when you come back.
(Whereupon, a recess was taken.)
MS. MCCAWLEY: It looks like we have a fair number of folks back. Just to reiterate that we had been discussing gag grouper, and we hit some snags on that, and we need some clarification. We have some notes there on the board about that, and it sounds like we're going to try to come back to that later this week, if we can. Otherwise, I guess that will get clarified at a later date. Now I think we're good to move over to red porgy.

DR. SCHMIDTKE: Jessica, sorry to interrupt, but just, before we move on from gag grouper, if you all are planning to initiate an amendment and have an options paper ready for December, it would probably be helpful to have that in the form of a motion.

MS. MCCAWLEY: That sounds great. Would someone like to make that motion? Mel.

## MR. BELL: I will make that motion, Madam Chair.

MS. MCCAWLEY: All right. Chester, would you like to second that motion? Steve, are you seconding?

MR. POLAND: Yes, I was going to second.
MS. MCCAWLEY: Okay. Chester, did you have your hand up on gag, or was it up that you had returned to the table?

MR. BREWER: It was up that I had returned to the table.
MS. MCCAWLEY: Thank you, Chester. All right. We have a motion on the board, and it's been seconded, and this is to initiate a plan amendment to rebuild and end overfishing of gag grouper. Mike, do we need to add that we are seeking to have this come back in December?

DR. SCHMIDTKE: I think we have that guidance on the record, and I can note it here, but I don't think it needs to go into the motion language.

MS. MCCAWLEY: Okay. Wonderful. Thank you. All right. Any more discussion on this motion? Any objection to this motion? That motion is approved. Mike, anything else we need on gag?

DR. SCHMIDTKE: I think we're set there, and we can move to red porgy.
MS. MCCAWLEY: All right. As we move into red porgy, first up, are we going to do the AP recommendations from Jimmy Hull?

DR. SCHMIDTKE: Yes, we can do that, and I will get that queued up. Jimmy, if you're ready, you can go ahead and take it away.

MR. HULL: Thank you, Mike. Good morning, Madam Chair and council meetings. Your AP conducted an April meeting by webinar, and we had twelve agenda items, with six different species to discuss and provide recommendations to the council on, including an FPR on mutton snapper.

As for red porgy, the AP had the following comments and recommendations. Number one, close the commercial and recreational fisheries for red porgy during the snapper grouper shallow-water closure, January through April, and, for the commercial fishery, open back in May with a low trip limit, to keep the season open as long as possible. Number two, keep the fishery open as long as possible for all sectors, to continue data collection, and a longer rebuilding period is preferred. For the charter/headboat industry, it's probably better to keep a per-person limit, rather than a pervessel limit, for tracking and other purposes. Number four, to consider opening the recreational
season during the summer months of June through August, to give the recreational sector the opportunity to have red porgy as a species that could be retained during the peak months for recreational fishing. That's what we have on recommendations from the AP for the red porgy rebuilding plan.

MS. MCCAWLEY: Thank you, Jimmy. Let me see if there's any questions for you. I don't see any hands. Thank you for joining us, Jimmy. We might have more questions as we go through this discussion. All right. Next up, are we going to go to Myra with the decision document?

MS. BROUWER: Yes, I'm ready. Let me just grab the screen here. You should all be seeing Attachment 2, which is the decision document for red porgy. Good morning, everybody. Here we are talking red porgy again, and so Attachment 2, as I said, is the decision document, and it's going to look very similar to what you saw in March. There are several actions that have not changed, and so what we're going to be doing, overall, is just walking through and spending a little bit more time on actions that you have not had a lot of time to discuss, and then, ultimately, we're going to be talking about approving this for public hearings.

The first bit of the decision document is the background, and so I'm going to skip over most of it, because you've seen it before, but it's there for your reference, and, also, I would just remind you that this amendment addresses the new catch level recommendations from the last stock assessment, which was SEDAR 60, and that was finished last year, and it would establish a rebuilding plan for red porgy. There is a statutory deadline of June 2022 to have that submitted.

The background section also contains the guidance that you provided to the IPT at the March 2021 meeting, and so I'm going to quickly go over those bullets. You had asked us to add an alternative for an ACL of zero, and so that would match up with the rebuilding projection at F equals zero, and so we've done that. Incorporate reference to an annual optimum yield, Action 2 and its alternatives, and so you'll see that highlighted when we get to it.

You removed the action for the recreational ACT, and recall that the guidance there was to include it in Amendment 49, which is the one addressing greater amberjack, and the intent is to make it applicable to the entire FMP. Also, you asked us to modify alternatives for the recreational vessel limit and explore options for different vessel limits for headboats for analysis and discussion at this meeting. You removed the action to consider modification to commercial accountability measures, and it was not necessary to make changes there. Then we talked about alternatives to modify the accountability measures, and so we'll get into -- That's one of the actions that we will get into a little bit more a later on.

The amendment now contains the six actions that you see on your screen, and Action 5 is subdivided into two actions, and noting, again, that we had to tweak the order a little bit, based on your guidance.

Here is the timing of this amendment. Again, as a reminder, we are reviewing modifications, and we're going to look to selecting preferreds, as appropriate, and then approve for public hearings, and, again, the intent is to have everything wrapped up hopefully by December of this year or March of next year, to meet that deadline.

Here, I will go over the purpose and need. We do have some changes to the purpose of this amendment, and so that would be to establish a rebuilding plan and set an ABC, an acceptable biological catch, sector allocations, and ACLs for South Atlantic red porgy, based on the results of the stock assessment. The need hasn't changed, and so I'm going to pause here for a little bit and let you read over it, and we would be looking for any modifications and approving of the purpose and need for this amendment.

MS. MCCAWLEY: Thank you, Myra. Once folks read this and are ready for a motion, let me know. We're looking for a motion to approve the purpose and need, as modified. Mel.

MR. BELL: Madam Chair, I would move that we approve the purpose and need, as modified.
MS. MCCAWLEY: Kerry, is that a second?
MS. MARHEFKA: Yes.

MS. MCCAWLEY: All right. Thank you. Any discussion? Any objection? Mel.
MR. BELL: That wasn't an objection, but I was just going to ask if we needed to clarify why that was changed, if that was necessary, for the record.

MS. MCCAWLEY: Great question. Myra, do you think we need to clarify why we're not revising the rebuilding schedule and just establishing a rebuilding plan?

MS. BROUWER: Yes. Sorry. I should have gone over that, and so the reason -- We're just basically clarifying that there was a rebuilding plan that was in place for red porgy that ended in December of 2017, and so there isn't currently a rebuilding plan, and so the wording was not clear enough, previously, and so you'll see, as I said, those changes in the language of the action and the alternatives, to clarify that this amendment would establish a new rebuilding plan. Then we removed, from the purpose, revising the recreational annual catch target, because we removed that action, back in March.

MS. MCCAWLEY: All right. Thank you for that clarification. Based on that, are there any objections to the motion? I don't see any hands. The motion carries.

MS. BROUWER: Thank you for that. Moving on to the ABC and the OFL, again, this is provided here for your reference, and so I'm not going to spend time here. These are the recommendations from your SSC. You can see, on the table, highlighted in blue, are the landed catch, in pounds whole weight, for the OFL and the ABC recommendations for 2022 through 2026.

This is where we start getting into the actions, and so I'll just go right ahead, unless I see any hands up, and so you'll notice, at the top of each action, in this decision document and others that you're going to be discussing this week, we have added a little section at the top to clarify the purpose of each of the actions. This is to make sure that we, as staff, are capturing your rationale as we put together these amendments for you, and also for this to be available to the public and to make sure that we can modify your rationale as we move along and have that draft council conclusions, or council rationale, when an amendment wraps up. I'm not going to spend a whole lot of time going
over them, but just suffice it to note that that is there, and, if you see anything that needs clarification or changing, please let us know.

Here are the alternatives for Action 1, to establish the rebuilding plan, and you'll see we've made a couple of edits to Alternative 1, and, as I said, clarify the language regarding a rebuilding plan, as opposed to a rebuilding timeframe. Alternative 1, as I said, the eighteen-year rebuilding plan that was previously in place expired at the end of 2017, and red porgy did not rebuild by the end of that rebuilding plan.

Alternative 2 is your Tmin alternative, and so that is the shortest possible time period to rebuild at F equals zero, and that would be eleven years, with the rebuilding period ending in 2032. Alternative 3 is Tmin plus one generation, and so that would rebuild by 2040. Then Alternative 4 is your Tmin times two, and that would be twenty-two years, with the rebuilding period ending in 2044, and, finally, Alternative 5 is your Tmax alternative, and so that rebuilds by 2047. All of these would have a year-one of 2022.

Just some things to point out as you consider a potential preferred for this action. As I said, under Alternative 2, the red porgy ACL would be zero. It assumes that fishing mortality would be zero and discards are eliminated, and so you can expect that, under that scenario, rebuilding will take longer than eleven years.

Alternative 3, just to clarify, the generation time for red porgy is approximately seven years, and then we've added this box here, which I found useful, just to sort of remind you what is in the NS 1 Guidelines as far as rebuilding, what Tmin means, what Tmax means, and just all that juicy definition there, for everybody to make sure we're clear, and then we have a very quick summary of all the biological, economic, and social effects for each of the actions, and so I will try to quickly go through those, for the record.

In terms of biological effects, Alternative 1, as I said, is not a viable alternative, because red porgy are overfished, and there needs to be a rebuilding plan in place. Alternatives 2 through 5 are based on the best scientific information available. The sooner the stock rebuilds, the greater the biological effects, and so Alternative 2 would be the most beneficial, in terms of biological effects.

Economic effects, there would be no direct effects from putting a rebuilding plan in place. Indirect effects would be highest under the shortest timeframe for rebuilding, and, in terms of social effects, the shortest rebuilding timeframe has more long-term benefits, but then you would have the shortterm negative effects on communities, and those would be highest under Alternative 1, which is not an option, and Alternative 5. Here, again, you've seen this action a couple of times, and it has not changed, and so we're looking to get a preferred alternative, and so I'm going to scroll back up to the alternatives, so you have them in front of you, and I would be happy to answer any questions.

MS. MCCAWLEY: Thank you, Myra. So, the yellow parts, do we need to have a motion to accept these edits, because I thought that that was a change.

MS. BROUWER: These are changes. We're trying to not get too bogged down in language until towards the end of an amendment, and so these are changes that you're going to continue to see. There will be a chance for you to finalize the language of actions and alternatives at the meeting
where you approve all actions, and so that would probably be either September or December, and so these are changes, and they're there for you to just be aware of them.

MS. MCCAWLEY: Okay. Thank you. That helps, and so then we don't need a motion to do that, and we just need a motion to select a preferred here.

MS. BROUWER: Correct.
MS. MCCAWLEY: Okay. Thank you. Mel.
MR. BELL: I was jumping ahead, and I was willing to accept edits, but let's talk about the preferred first, obviously. I don't have a recommendation, off the top of my head, at this second.

MS. MCCAWLEY: I guess that I will throw out there that it seems like either Alternative 3, which is the eighteen years, or Alternative 4 , which is the twenty-two years, are our best alternatives, because 2 is not really viable, and 5 seems like it's beyond Tmax, and so I don't know that 5 is viable either, and so it guess it seems like we are kind of honing-in on either Alternative 3 or 4, and my gut would be to take the longer time period, which is the Tmin times two, and so let me just throw that out there, to kind of start a discussion here.

MS. BROUWER: Jessica, if I may, Alternative 5 is a viable alternative. It does have a 50 percent probability of success by the -- When you reach those twenty-six years, and so by 2047, and so that is a viable alternative.

MS. MCCAWLEY: Thanks, Myra. It just was confusing to me, because it said that it exceeded the current recommendation for ABC.

MS. BROUWER: Right, and so, when you look at the projected catch levels under this rebuilding scenario, they are higher than what your SSC has recommended as an ABC, which simply means that you're going to be in a position to rebuild. If you keep the ABC and OFL recommendations from your SSC, then you'll rebuild faster.

MS. MCCAWLEY: Okay. Thank you. John.
MR. CARMICHAEL: I have a question, I guess for maybe Andy or Monica, and then a potential comment, and so the question is was the stock ever declared rebuilt, thereby ending the prior rebuilding plan?

MS. MCCAWLEY: Monica.
MS. SMIT-BRUNELLO: I believe that answer is no, and it says right in your Alternative 1 that red porgy did not rebuild by the end of the last rebuilding plan which was 2017.

MR. CARMICHAEL: Don't rebuilding plans end when the stock is rebuilt and not just when their target rebuilding time comes and goes?

MS. SMIT-BRUNELLO: So that's a great question. It seems like, if you've reached the end of your rebuilding plan, and it hasn't rebuilt, I don't think your plan -- I don't think your plan
continues, necessarily, but the guidelines talk about, if you haven't rebuilt by the end of your plan, then you really kind of go into what is, I guess, proposed as Alternative 5, in that you maintain the current 75 percent of the MFMT, but obviously, the council needs to look at implementing another rebuilding plan, because the one that was in existence, one, ended, and, two, wasn't successful.

MR. CARMICHAEL: Right, and I guess maybe that's the question. I would have considered that the one that was in existence didn't really end, because the stock wasn't rebuilt, and they don't end until the stock is rebuilt, and so, to my thought, we are under the Alternative 5 situation, where we continue under the rebuilding plan, at either 75 percent of that, or potentially the F rebuild of that, or something that ends overfishing, and the council then could, of course, have a choice to develop an entirely new rebuilding plan under another set of circumstances and establish a new T rebuild, but I didn't feel that they were obligated, because, in one sense, this plan never really ended.

MS. SMIT-BRUNELLO: I will jump back in. I guess that's kind of a gray area, John, and it depends on your interpretation. I understand what you're saying, and it certainly isn't like, well, it didn't rebuild, and so now there's no rebuilding plan, and it's a wide open back to whatever, because you still have your management measures in place, and I think that the best advice, going forward, would be though to establish an additional rebuilding plan that got you to where you could actually rebuild the fishery.

When I was looking back at the minutes from before, I see that Shepherd, who has been advising you before on this, and, by the way, he's on a detail to the Southwest Section for several months, and so I'm jumping in here, but the council -- He advised that the council should be looking at catch levels that would be even less, I guess, so that you would be able to rebuild within a short time. I think there was even a previous rebuilding schedule for red porgy, and so it’s kind of a difficult fishery to deal with, apparently, in terms of rebuilding, but I would say the best thing, going forward, as you represent this to the public, is that you're trying to now come up with a new time period, and how's that? A new time period in which you could rebuild, so that it would no longer be overfished.

MR. CARMICHAEL: I think that would probably be good, and I guess I do think, looking ahead, if the idea goes forward in this that that prior rebuilding just ended at 2017, because you got to the end of the period, it could be pretty misleading, and that could come back to haunt us in some other circumstances where we are between the end of that rebuilding plan and having an assessment which actually would allow the agency to determine if indeed you had truly rebuilt.

MS. SMIT-BRUNELLO: So maybe -- I will stop, because I see Andy has his hand up, but we can work on the language then of the no action, and explain that further, and it sounds to me like that's a very good idea.

## MS. MCCAWLEY: All right. Andy.

MR. STRELCHECK: I will agree that the guidance for rebuilding plans, especially once you've reached the end of a rebuilding timeframe, can be a little confusing. Based on kind of a quick read of the National Standard Guidelines, it seems to be fairly clear that, in this instance, we need to implement a new or revised rebuilding plan, because we aren't making adequate progress, and so, although the guidelines are explicit with regard to kind of continuing the previous rebuilding plan at 75 percent of MFMT, there are parts of the guidelines which are fairly clear in terms of selecting

F rebuild or 75 percent of MFMT, whichever is less, or whichever is lower, and so, in this instance, I think it would be appropriate to consider rebuilding timeframes that are lower that increase our probability of rebuilding a stock that has taken now close to twenty years and has not rebuilt yet.

MS. MCCAWLEY: Thank you, Andy. Okay. Just to reiterate what Myra clarified that I was misstating, Alternatives 3, 4, and 5 are viable alternatives, and so I think we still have a goal here, even though the wording is going to change a little bit for the no action portion here, and I think that our goal would still be to try to select a preferred. I am wondering if we want to select Alternative 5 as the preferred, but you've also heard some discussion, and so that has a 50 percent probability of success, but you've heard some discussion about how there has been a previous rebuilding plan that was not successful within the timeframe. I am looking for some discussion from the committee. Anna.

MS. BECKWITH: Jessica, I would agree with you that Alternative 5 makes the most sense. It seems like there's something going on in this fishery that we're not really being particularly successful with. If there is an option to continue at the F 75 percent, it makes -- That makes sense to me. I think, under some pretty extreme circumstances, we would have to go to rebuild this any faster, and so I would support Alternative 5.

MS. MCCAWLEY: All right. Would you like to make that in the form of a motion?

## MS. BECKWITH: Happy to. I move that we make Alternative 5 our preferred.

MS. MCCAWLEY: Thank you, Anna. Mel.
MR. BELL: I will second that, to move us along here.
MS. MCCAWLEY: All right. Myra is getting it on the screen here. Andy, under discussion.
MR. STRELCHECK: Thanks, Jessica. I'm going to speak against the motion. Certainly, from the standpoint of the longest rebuilding timeframe, it presents the kind of least socioeconomic impacts, and so I certainly am cognizant of that, but we do have now a track record of eighteenplus years of not rebuilding this stock, and we're looking to extend that by another twenty-six years. I think it would be prudent for the council to consider a shorter rebuilding timeframe with a higher likelihood of rebuilding than a maximum twenty-six-year timeframe.

MS. MCCAWLEY: Thank you, Andy. Then, if you had to pick one of the other alternatives, which alternative would you be suggesting?

MR. STRELCHECK: I agree with you that Alternative 2 isn't reasonable, and I would want to look kind of more explicitly at Alternatives 3 and 4 and some of the assumptions and information about discard reductions, but certainly it's either Alternative 3 or 4 , for me, in terms of a preferred.

MS. MCCAWLEY: All right. More discussion from the committee, or if you would like to make a substitute motion, Andy.

MR. STRELCHECK: Sure. I'll make a substitute motion to select Alternative 4 as the preferred.

MS. MCCAWLEY: All right. You've heard the rationale from Andy, and he is making a substitute motion to select Alternative 4 as the preferred, and that is a twenty-two-year rebuild, it looks like, with a period ending in 2044. Is there a second for this substitute? I just want to make sure. All right. I don't see any hands going up, and I don't hear anything. The motion dies for lack of a second.

All right, and so we are back to the main motion, which is selecting Alternative 5 as the preferred under Action 5. You've had some, or heard some, discussion in favor of that, and then you heard some discussion suggesting a shorter timeframe. Any more discussion on selecting Alternative 5 as the preferred? Mel.

MR. BELL: I will just say that, I mean, I understand Andy's concern, and what he's basically saying is Alternative 5 is, effectively, what we've been doing during the period that it wasn't working, and we can argue that perhaps you need to be a little bit more conservative, which would take you to 3 or 4, but I don't, at this point, have enough of a sense of what those differences would be and how this would play out in the fishery, and we can move with selecting 5 at this point, but we have the option of changing it later, if we feel that perhaps 3 or 4 is a better approach, I believe. Is that correct?

MS. MCCAWLEY: Yes. All right. Any more discussion on this motion? All right. Any objections to this motion? I'm going to wait for hands. I see two objections, in the form of Andy and Tony. Any more objections?

MR. DILERNIA: Madam Chairwoman, I raised my hand to say that I would be abstaining on this motion and not objecting to it, but, rather, I would be abstaining on the motion.

MS. MCCAWLEY: Thank you, Tony. Thanks for the clarification. So we have one objection and one abstention, and the motion passes.

MS. BROUWER: Okay. Let me just scroll down, and I will try to go slow, and the next action is to revise the total annual catch limit and annual optimum yield. Again, the purpose of the action is in front of you, and the SSC has recommended a new ABC, based on the stock assessment, and so these levels have to be adjusted based on the SSC's recommended ABC. Alternative 1 has the current total ACL and annual OY, which is equal to the ABC, and that's 328,000 pounds whole weight or 315,384 pounds gutted weight.

Preferred Alternative 2 is the one that you selected, and I believe it was back in December, and this would revise the total ACL to make it equal to the revised new ABC, based on the SSC's recommendations, and you see what those catch levels would be for the next few years, with the intent of maintaining the 2026 catch level moving forward, and so, for 2022, your total ACL would be 75,000 pounds whole weight. We requested that you select a preferred alternative for the total ACL, so that we could conduct analyses for further actions, and so I'm just reminding you why there is a preferred for this action already, and, of course, you always have the option of changing that.

Alternative 3 would include a buffer between the total ACL and the ABC of 10 percent, and so you can see what those catch levels would be under that alternative, and Alternative 4 makes that
buffer a little bit wider, and so it's 20 percent between the total ACL and the ABC. This is where we added a new alternative, at your direction, to reflect the potential that you have to have selected Alternative 2 in the previous action, which would have put your ACL at zero.

We have some discussion there and points of clarification, but I will go straight into a summary of the effects. Alternative 1 is not a viable alternative at this point, because it is not based on the best scientific information available. Alternative 5 would have long-term biological benefits, in terms of ending overfishing and allowing the age structure of the stock to improve. However, it would result, of course, in the highest level of discards, and then, therefore, have a negative biological impact on the stock.

In terms of economic effects, overall, and based on cumulative estimates, Alternative 5 would result in the greatest net reduction in consumer surplus and producer surplus. For the commercial sector, all alternatives would result in decreases in economic benefits, from that reduction in landings. The average annual gross revenue for vessels that harvested red porgy during 2015 through 2019 was about $\$ 68,000$ per vessel, and so, under these alternatives, the percent gross revenue per vessel would decrease by up to 2.2 percent under Alternative 5. For the recreational sector, in the first year of implementation, consumer surplus would decrease by up to $\$ 1.7$ million under Alternative 5, and there would be short-term benefits under the status quo.

For social effects, the higher ACL has the most benefits to communities. Alternative 5 would be controversial and result, potentially, in negative social effects. For this one, we want you to think about the range of alternatives and approve or disapprove this addition of Alternative 5, ahead of public hearings, and, also, think about if you want to clarify the units, to specify catch levels, and this is a request that we received from the technical writers, the regs writers. Right now, I think it's expressed in both whole and gutted weight, and so this would be for this and subsequent actions, just to get some clarification, and then confirm your preferred, or modify it, if you so desire, and so I will pause here for questions.

MS. MCCAWLEY: Thank you, Myra. I guess one of the questions I have is I see that Alternative 5 was added, which is basically an ACL of zero, and is that -- Do we have to have that? Are we required to keep that type of alternative in there?

MS. BROUWER: I don't believe you are, and I'm sorry, and my audio cut off there for a second, but are you asking if you have to have Alternative 5 included?

MS. MCCAWLEY: Yes, I am. Sorry about that. Are we required to have that? Is that why it was added in here?

MS. BROUWER: No, I don't think you are required to consider it, if it's not something that you think is in the realm of reality. Simply it was put in there because there seemed to be a disconnect with the Tmin alternative. If you had selected that alternative as preferred, then you would have to have a corresponding ACL of zero, and so I feel like -- My recollection is that some council members just wanted to have that included, for that reason, but I don't believe you're required to have it if it's not a reasonable alternative.

MS. MCCAWLEY: Thank you, Myra. I guess I would put out there, for the committee, that I don't imagine that we would select Alternative 5, and I don't know that it's reasonable with an

ACL of zero, and so it might be one that we can remove, and I will put that out there. There was also a question about are we still okay with our preferred, which is Alternative 2, and then the other question was do we want to continue specifying in both whole and gutted weight. What's the pleasure of the committee? Mel.

MR. BELL: Related to the first question about Alternative 5, if it's really not viable or something that's reasonable to have in there, I don't have a problem with not putting it in there. Again, if it's not required, I wasn't really sure why we put that in either, and so I would be okay with not having it in there, and then, related to Alternative 2 as the preferred, I'm okay with leaving it like that, and that seems to be -- It provides, I don't know, but maybe the best positioning for the fishery, but, if you want to take 5 out, I'm fine with taking 5 out.

MS. MCCAWLEY: I think 5 is just not in the range of possibilities, in my mind, that we would have ACL equal to zero, and I appreciate your comment on the preferred. I agree, and I think that that is probably the best place to be. Let's go to Steve.

MR. POLAND: I don't see any scenario where we would consider Alternative 5, and so I'm fine taking it out of the document, and I'm fine with our current preferred, and I really do not have an opinion on gutted versus whole. I don't know if some of the other council members, some of our commercial representatives, might could speak to that.

MS. MCCAWLEY: Thank you, Steve. Chris.
MR. CONKLIN: I would stick with gutted weight, instead of whole weight. That's how every one that comes in that I have ever seen is gutted. That's how we buy them, and so I think that's how it should be.

MS. MCCAWLEY: Thank you, Chris. Kerry.
MS. MARHEFKA: I agree with Chris.
MS. MCCAWLEY: All right, and so the discussion that we've had so far, Myra, is to, it sounds like, remove Alternative 5. Do we need that in the form of a motion, or is direction okay?

MS. BROUWER: I think perhaps, with removing the alternative, I would prefer it in the form of a motion, and I'm going to capture what Chris and Kerry said regarding the gutted weight as direction to staff.

MS. MCCAWLEY: Okay. 10-4. Mel, would you like to make a motion?
MR. BELL: Yes, ma'am. I would move that we remove Alternative 5 in Action 2.
MS. MCCAWLEY: All right. Steve, is that a second?
MR. POLAND: Yes, ma'am. I would like to second.
MS. MCCAWLEY: All right. Thank you, Mel. Thank you, Steve. It's under discussion of removing Alternative 5 and putting it in the Considered but Rejected appendix. Any more
discussion on that? Any objection? That motion carries. Myra, I see you captured the direction there, and I don't think there's any desire to change the preferred, and I'm going to turn it back to you for the next action.

MS. BROUWER: Thank you, Jessica. Let me get myself down here. Action 3, revising the red porgy sector allocations and sector ACLs, to remind you, you have an allocations trigger policy that says the council is going to review sector allocations when an assessment is completed. Also, as we all know, recreational landings estimates have been revised to adopt the new Fishing Effort Survey methodology, and so this action allows the council to consider how to allocate the total ACL between the sectors.

Again, to reiterate, the revised ACLs in the alternatives here reflect your preferred in the previous action, and so, here, we have to do a little bit -- We changed things around a little bit to realize that the no action that you saw in March was not fully complete, and it did not have the correct current ACL, and that's why you see Alternative 1 there highlighted, because we have to go and put it back in there, and, also, the commercial ACL is currently split into two seasons, with 30 percent allocated to January through April and the rest to May through December, and that was with implementation of Regulatory Amendment 27 back in February of last year.

You can see, under Alternative 1, what is currently in place. Alternative 2 applies the current allocation percentages, which is $50 / 50$, to the revised total ACL, and so you can see what the commercial ACL would look like for both of the seasons and the recreational ACL in pounds whole weight, and then Alternative 3 applies the current allocation formula, and so the one that uses the average landings from the historic period and the average landings from the current, and those years are on your screen, and it applies that formula to the revised total ACL. When you do that, it results in a commercial allocation of 51.43 percent to the commercial and 48.57 percent allocation to the recreational sector. Again, what that would look like, going forward, is included there in the table.

Then Alternative 4 is one that's been in here for your consideration, to give you kind of a wide range to consider, and this would remove the sector allocations and manage red porgy under a total ACL. What I would say here is, if we do retain Alternative 4, you may need to bring the action to revise commercial accountability measures back in, because then that commercial AM is not going to be appropriate anymore.

In terms of effects analysis, real quick, Alternative 3, which is the one that allocates a little bit more to the commercial sector, may have negative biological effects, although I don't know how you would measure that, but there is a little bit more -- A higher discard mortality in the commercial sector, because of where that fishery is prosecuted, if the fish are caught in deeper waters, and so, if you allocate more to the commercial sector, it could potentially have a negative effect.

Here is also a table of commercial and recreational landings, just so you have it in front of you, if you're wondering how much of each of the ACLs has been caught in recent years, and this has been calibrated to the current FES currency, and so you can see the percentages there, and neither of the sectors -- Well, in 2016, after you do the FES revision, there was an overage there of the recreational ACL, and the same thing in 2018, and that something we talked about back in March as well.

In terms of economic effects, Alternative 3, as I said, would shift only about a thousand pounds to the commercial sector from the recreational sector, and, in the first year of implementation, that would translate to an estimated change in benefits of about $\$ 6,000$, and the effects of removing sector allocations, as proposed under Alternative 4, would be highly dependent on what management you put in place to restrict the harvest.

Social effects, the shift in allocation percentage from recreational to commercial under Alternative 3 could cause some negative perception among fishermen, and Alternative 4 may have few social effects unless the ACL is met in-season, and an in-season closure, of course, would create conflict between the sectors.

For this action, again, just review the range of alternatives and make sure you're happy with that and think about whether you want to keep or remove Alternative 4. As I said, we may need to modify commercial accountability measures and bring back that action into the amendment and then select a preferred alternative.

MS. MCCAWLEY: Thank you, Myra. Let me see if I can get the discussion going here, and so we definitely need to select a preferred. We have had some discussion in the past, and I can't remember if it's on red porgy or just in general, about removing sector allocations and managing under the total ACL, and that could be an even bigger problem here in this rebuilding plan, and so we might want to consider removing Alternative 4, because we also, as you heard, would have to modify accountability measures as well. Kerry.

MS. MARHEFKA: I don't recall the discussion around Alternative 4 the first time we looked at this, and so I would love to hear if there's any rationale for keeping it, because I'm inclined to dump that.

MS. MCCAWLEY: I think that -- My recollection is that Anna -- Not that you wanted to keep it, but you were one of the ones speaking out against doing this, but I can't remember if that was red porgy or a different snapper grouper amendment where we had that discussion.

MS. BECKWITH: It was yellowtail.
MS. MCCAWLEY: Okay. Thank you. One thing to point out, and I'm not necessarily advocating for keeping it, but, since neither sector has met their ACL in recent years, it might not be a big deal to keep Alternative 4, and it would require that change to the accountability measure though. I know that the Gulf Council does not have every single ACL split between rec and commercial like we do, and so they have made some decisions where they will take that overall ACL and split it between rec and commercial, and sometimes even splitting it on the rec side, but not necessarily for all species, and so just an interpretation of when these ACLs went in place in the first place. Andy.

MR. STRELCHECK: Thanks, Jessica. In response to your comment, you're correct that, recently, the ACLs haven't been met by both sectors, although it's variable. I do note that we're looking at a 75 percent reduction in harvest, and so the likelihood of exceeding the ACL goes way up. I would certainly support removal of Alternative 4, and I don't think it would work, given the small ACL.

MS. MCCAWLEY: Okay. Sounds good. Would you like to make that in the form of a motion, Andy?

MR. STRELCHECK: I would like to hear more discussion from others first.
MS. MCCAWLEY: Okay. Sounds good. Mel.
MR. BELL: I was thinking along the terms of what Andy came up with. My concern would be you have a smaller ACL, and then, in combining the two, you're also now subject to MRIP data, and sometimes that can be interesting, from what we've seen in the one table there, and so I would be all for removing 4, myself, and I think our discussion of this in the past -- Anna mentioned yellowtail, and we've looked at the Gulf and how they've managed some fisheries, and so the question has come up before with other species, and so, I mean, it's logical that we were kind of thinking about that, but, in this case, I think I would be comfortable removing Alternative 4.

MS. MCCAWLEY: All right. Is that a motion, Mel?
MR. BELL: If that's enough discussion.
MS. MCCAWLEY: Well, we have other hands up, but I didn't know if you wanted to go ahead and throw out a motion though.

## MR. BELL: Okay. I will make it a motion, and then we can discuss it that way.

MS. MCCAWLEY: All right. While Myra is getting that typed up, I'm going to go to Tim.
MR. GRINER: Thank you. I will go ahead and second that motion as well, and I see combining as very problematic, especially when it comes to this small quota and trying to figure out an accountability measure, with MRIP data lagging so far behind, and we're already going to blow through -- We're going to blow through this little 75,000 pounds in pretty quick, short order, and so I don't think Alternative 4 would work in any way, shape, or form. Thank you.

MS. MCCAWLEY: Thank you, Tim. Steve.
MR. POLAND: I'm in support of removing this alternative. The concept, I'm not opposed to considering, for this fishery, and, really, any of our other fisheries, but I just feel like, with all the changes, with the reduced ACL and everything, that this is just probably not the right time to consider this for red porgy.

MS. MCCAWLEY: All right. These are great points, and so we have a motion, and we have a second. The motion is to move Alternative 4 to the Considered but Rejected appendix. I think we've had good discussion. Is there any objection? Seeing none, that motion carries. Would we like to select a preferred alternative here? Now we have three alternatives, and Alternative 1 is no action. Thoughts on selecting Alternative 2 or 3? Mel.

MR. BELL: To move things along, I would just move that we accept Alternative 3 as our preferred for this action.

MS. MCCAWLEY: All right. Spud.
MR. WOODWARD: I will second that, Madam Chair.
MS. MCCAWLEY: All right. Thank you, Spud. It's under discussion. Chester.
MR. BREWER: I was going to second, and so I will put my hand down.
MS. MCCAWLEY: All right. Thank you. Once again, the motion is to select Alternative 3 as the preferred under Action 3. There is a little bit of difference between this one and the 50/50 alternative. Chester.

MR. BREWER: I am sorry, and I fat-fingered that thing. I was trying to put my hand down, and I think I put it back up.

MS. MCCAWLEY: All right. No problem. Any more discussion on this alternative? Any objection to this alternative? I don't see any hands. This motion carries.

MR. BROUWER: Thank you. Moving on to Action 4, this action would modify the commercial trip limit, and, as you can see, we are suggesting changing the title of the action to reflect that, since trip limits is the only measure you are considering, and so we made that change for you to consider, and this has not changed since you saw it back in March, and so you have Alternative 1, which has the current trip limit, which is sixty fish from January through April and 120 fish from May through December. Just to remind you, this was put in place fairly recently, and the sixtyfish trip limit in Season 1 was put in place, or was implemented, in February of last year.

Moving on, or let me go through the alternatives. Alternative 2 is going to reduce the trip limit just in Season 1, and so you have a range there from fifteen fish per trip to forty-five fish trip per trip from January through April, and Alternative 3 focuses on Season 2 and would reduce that trip limit from -- Again, the range is from fifteen fish to sixty fish per trip.

Moving down to the discussion, I have a highlighted note at the very top, and commercial landings were updated quite recently, and the analysts have not had a chance to update the analyses, and so what I'm going to show you here is based on the time series of landings that were pulled for this analysis a few months ago. I don't think the changes are substantial, but certainly the folks who have done the analysis in the region can chime in if that's the case.

The commercial landings for red porgy in the South Atlantic from 2015 through 2019 averaged about 71 percent of the commercial ACL, and the majority of trips were estimated to have harvested less than thirty fish during a trip, and so you have a table here showing the percent reductions in landings from these proposed trip limit alternatives, and I believe this has not changed since you saw it in March, and so you've got Season 1 at the top and Season 2 on the bottom, and that percent change in landings per trip on the far-right column of the table.

Here, you have a predicted monthly distribution of landings, based on the current trip limits, and you can see the different colors there denote that, for a number of years, there were no landings from January through April, and so those had to be filled in, and so here's where I'm going to
attempt to go to the online application, but I wanted to show you this table here first. We're going to bring up the online application, which is linked in the decision document, but you can see the predicted season length under the various trip limits and the predicted closure date with the 95 percent confidence intervals on the far right. Let me see if I can pull up Shiny over.

MS. MCCAWLEY: Myra, Chris has his hand up. Chris, do you have a question, while Myra is explaining this?

MR. CONKLIN: I was just wondering what the AP recommendation was on this, and that's all.
MS. MCCAWLEY: That's a great question, and I'm hoping we're going to come back to that. I would like to look at that slide that Jimmy put up earlier again, and so let’s have Myra go through this decision tool, and then I want to come back to that, too.

MS. BROUWER: Okay. Thank you for that, and so, here, I've been able to pull up the application that's online that summarizes all the analyses, and so you can see, at the top, what the total ACL for the commercial sector would be, and so that's 37,500 pounds, and this is under the current trip limits, and so the graph on the right shows you the predicted landings and the seasonal limits there, in the dashed red lines, and you can see when the landings are predicted to reach those levels, and so I'm going to just show you the range over here, and so, if we go to the very lowest trip limit, in Season 1, that's what that would look like.

There's Season 2, and so, even under the lowest trip limit, you are looking at a closure date, and you can see what the predicted closure dates are here in the red font at the top of the graph, and so, under the very lowest trip limit, we're looking at a closure date possibly at the end of March for Season 1 and the end of September for Season 2. I will pause there and see if there's any questions.

MS. MCCAWLEY: All right. Are there questions? I don't see any hands. Wait. Kerry has her hand up.

MS. MARHEFKA: Well, just a comment that gets back to what Chris was asking, and it's my recollection that the AP did suggest that we have this season from May through the end of the year, and so that's just something for us to keep in mind as we look at these split seasons and this data.

MS. MCCAWLEY: Kerry, just so I understand, that would be adding back in the January through April closed season that was in place before, and you're saying that same thing, right?

MS. MARHEFKA: That was my understanding of what Jimmy said, and I know we're getting back to it, but the AP had suggested that we follow along the red porgy closure with a shallowwater grouper closure.

MS. MCCAWLEY: Yes, that's my recollection as well. Mel, did you have a question?
MR. BELL: Well, kind of a statement, and Kerry touched on this. One was the AP recommendation, but I think, in this particular case, I'm real sensitive to the commercial folks looking at this and advising us on what works, because now we're talking about, okay, we're going to take medicine, and it's sort of how do you take that medicine in a way that allows them to work
with the markets and all that sort of stuff, and so I'm real -- At this point, I think they're the ones that I would kind of a really like to hear from, in terms of how this plays out.

MS. MCCAWLEY: That sounds good. Tim.

MR. GRINER: Thank you. The rationale for having that first season was to limit these discards and be able to harvest a small amount of these fish, in lieu of discarding them. A reduction in the ACL does not change that. We are still going to encounter them, and, even if it's a lesser amount that we should keep, we still don't want to encounter the discards, and so, regardless of what the ACL is, the premise of being able to limit discards during that first part, when all we're doing is vermilion snapper fishing, and trigger fishing, when you're going to encounter them, and you're not going to get away from them, to me, it just seems like you're stepping backwards, and so I would not be in favor of doing away with what we've just implemented. We only have a year of it under our belt anyway. Even if it has to be just a small number of fish, I think that's better for the stock than not keeping any of them. Thank you.

MS. MCCAWLEY: All right. I'm going to go to Monica and then Chris.
MS. SMIT-BRUNELLO: Well, I was going to raise, as a question really, something that Tim just brought up, and that's what I was going to ask Myra. Wasn't part of the reason for the split season that the council wanted, in Regulatory Amendment 27, because of the co-occurring other species and then the discards, but Tim just addressed it.

MS. MCCAWLEY: Thank you, Monica. Chris.
MR. CONKLIN: My audio has been going in and out for some reason, and so I really didn't hear anything that Monica said, but it seems like -- I mean, I'm not sure what work it would entail or whatever, and I don't know if it can be done in this one, but it seems like these little fish all need to be aligned on the same season, the triggerfish, the red porgy, and the vermilion snapper, and it makes me wonder if we should have a January through July season and then a July through December season, because that's primarily when you encounter these red porgies, when you're fishing with little hooks for little fish, because you usually get some inexperienced crew that end up dropping all the way to the bottom and catching these animals, and so is that a possibility, to change the fishing season to July, July through -- To align them with the vermilion and triggerfish?

MS. MCCAWLEY: I think so. I think that can certainly be part of the discussion, and we can talk through that. I saw that Jimmy put his hand up, and I would love to hear what Jimmy has to say.

MR. HULL: Thank you, Madam Chair. Tim and Chris have pretty much captured it in the discussion now, but, overall, the AP, the commercial members, realize that this is going to be a bycatch fishery and that we want to try to reduce dead discards, and so, no matter how small the trip limit is, we need to keep it open whenever we potentially could interact as bycatch, which is going to be in all the fisheries, vermilions and triggers in particular, with a smaller hook, and so exactly as they commented on is how the AP feels.

MS. MCCAWLEY: Thank you, Jimmy. All right. Myra, back to you.

MS. BROUWER: Thank you, Jessica, and so I guess what I've heard is that you're potentially interested in seeing an additional alternative that would line up the commercial seasons with gray triggerfish and vermilion snapper, and so we have to probably include actually an action to do that, since, currently, we're only looking at trip limits, and so we would -- If you would like to include an action to look at changing the way the commercial season is structured, we can certainly do that.

MS. MCCAWLEY: I think that sounds like what we're talking about, but let me go to Kerry.
MS. MARHEFKA: Thanks, Jessica. Just to make sure I wasn't losing my mind, I just went back to the AP's recommendations for red porgy, and so I just want to be clear, because I feel like I'm hearing two different things. The first recommendation under red porgy was to close the commercial and recreational fisheries for red porgy during the snapper grouper shallow-water closure, January through April, for the commercial fishery and open in May with a low trip limit, to keep the season open as long as possible.

I was saying that, the first time, in support of what I thought the AP wanted. Chris and Tim, and now Jimmy's, recommendation makes sense to me. What I'm trying to figure out is really what the AP might want is sort of a small, if you will -- I mean, everything is incidental at this point with red porgy, but a smaller incidental trip limit in the winter months, and then it increases in the summer months, when the shallow-water closure ends, and I guess that I would just love some more clarification, because what I'm reading in black-and-white is different than what we were just discussing.

MS. MCCAWLEY: Thank you for that clarification, Kerry, because that's how I read that recommendation, and I have the AP report in front of me that says close commercial and recreational during January through April, the same as the snapper grouper shallow-water closure, but it's sounding more like maybe going into this Action 4 and having these reduced trip limits, and then also adding an action that would do what other folks have been saying, which would also change up -- An action to possibly change up the season, and so it seems like it's kind of both. Let's go to Chris. He has his hand up.

MR. CONKLIN: Going back to my comment about changing the season, there's not enough fish to -- It wouldn't matter anyway. Maybe one day, whenever this fishery gets rebuilt, after its hundred-year rebuilding plan, we can circle back and do that. I think it would just a waste of time and resources right now, and, with all this in mind, and talking about even -- Despite what the AP has recommended with upping it in the second season, it's still not going to matter, and it's not going to stay open, and so, with that in mind, I would be inclined to just keep it at the lowest, at fifteen fish, for both seasons.

I can make it as a motion, or, if you all want to keep talking, that's fine, but, in order to move things along, and, from what I'm seeing, the lowest is still going to close both times, but we'll be able to reduce the dead discards while we're fishing in that first part of the year, and also in the second season.

MS. MCCAWLEY: We can certainly take that as a motion to select, under Action 4, Alternative 2a and 3a, which is fifteen for each season, and Myra had that going in the decision tool while you
were talking, so folks could see it, and so, before we go to Kerry, let's let Myra get that on the board. All right. Kerry.

MS. MARHEFKA: I will second Chris's motion.

MS. MCCAWLEY: All right. Great. Just to be clear, what we're doing in here is we're under Action 4, and we're on the commercial trip limit, and, based on this discussion that we've had, this is selecting the smallest amount we have here in these sub-alternatives for each of the seasons, and so it's under discussion. Mel.

MR. CONKLIN: I think we need a second.
MS. MCCAWLEY: We got a second from Kerry.
MR. BELL: I just -- Having heard from the commercial side, and that's what I was looking for, and I think what we basically have is a very limited kind of almost bycatch fishery the whole time, and the idea was to try to keep it available as long as possible, and, in the little tool that we looked at there, that's what 2a and 3a do for you, and so it makes sense to me, and it makes sense for them.

MS. MCCAWLEY: Thank you, Mel. Myra.
MS. BROUWER: Thank you, Jessica. While this motion is on the table, if you don't mind, I would like to quickly go over a summary of effects. I meant to mention that I neglected to include that in the decision document, and that's why I had it highlighted in blue, so that I would not forget to mention it, but I did it again, and so, before you vote, if you will indulge me, I will just quickly go over those effects, just for completeness, if that's okay.

MS. MCCAWLEY: Sounds great.
MS. BROUWER: Okay. In terms of biological effects, as we’ve already discussed, the commercial seasons were implemented in 2020 to reduce discarding early in the year, and there has not been enough time to evaluate the change in the regulations up until now, and so, obviously, the fifteen fish per trip alternatives, 2a and 3a, would give you the longest seasons and allow more retention, and so that would have the most positive biological effects.

The thirty-fish per trip alternatives, 2c and 3c, would match what fishermen have been catching, on average, and also would reduce discards over the long term, and so I wanted to make sure that I mentioned that for your consideration. In terms of economic effects, since the revised commercial sector ACL is expected to be fully harvested, regardless of the alternative or subalternative that you choose, the total economic effects are likely similar among all the alternatives, but higher trip limits are going to help increase the NOR on trips where red porgy are landed, but would also likely result in commercial AMs being triggered sooner. Lower trip limits would allow for some level of commercial harvest over a longer period, but contribute less to NOR on trips landing red porgy.

Finally, in terms of social effects, since the majority of trips landing red porgy have at least -- Have harvested less than thirty fish, the thirty-fish sub-alternatives, 2c and 3c, may reduce the negative social effects associated with the lower trip limit. Thank you.

MS. MCCAWLEY: Thank you, Myra. Any more discussion on this motion? Is there any objection to this motion? I don't see any hands. That motion carries. Before we go into the next action, do we need to have a discussion about season? It seems like we were kind of shying away from that. Kerry.

MS. MARHEFKA: Well, I don't want to be insensitive to sort of what the AP requested, but, on the other hand, it just seems like there's no point in looking at changing the seasons, and it's only been in place for a while, and it's another administrative burden, and I think the AP's intent and our intent, at the end of the day, is the same, and we're accomplishing that with the Action 4, as we have it, and so that would be my rationale for not delving into changing the season.

MS. MCCAWLEY: Okay. Sounds good. Chris and then Andy.
DR. SCHMIDTKE: Chris, you may be on mute.
MS. MCCAWLEY: Okay. I’m going to go to Andy.
MR. STRELCHECK: Thanks, Jessica. I think Kerry said it well and made most of my points. Certainly, with Reg Amendment 27, this is recently changed, and I like the idea of maintaining, even at a very low level of harvest, some ability to retain bycatch and discards that might die while fishing for other species, and so I would not support adding a closure option, but I do appreciate the recommendation of the AP.

MS. MCCAWLEY: Thank you, Andy. Chris, anything to add here?
MR. CONKLIN: Earlier, I was having some more audio problems. If you need to build a record, my rationale is there's just not enough fish to go around, and this is probably the best alternative for us to reduce discards during both seasons and maximize whatever we can out of whatever crumbs we're getting here.

MS. MCCAWLEY: Got it. Thank you, Chris. I don't see any more hands, and so I'm going to turn it back to you, Myra.

MS. BROUWER: Thank you, Jessica. The next action would modify recreational management measures, and this is the action that we have split into two sub-actions. Sub-Action 5a addresses the bag and vessel limits, and Sub-Action 5b addresses the recreational season. You can select more than one alternative here, and no action is the recreational limit in the South Atlantic is three per person per day, or three per person per trip, whichever is more restrictive, and there are no vessel limits in place for red porgy.

Alternative 2 would reduce the recreational bag limit, 2a, to one fish per person per day, and 2 b is two fish per person per day, or per trip, whichever is more restrictive. Alternative 3 addresses a vessel limit for private recreational and charter vessels, and the alternatives there are from six fish per vessel per day, or trip, to eighteen fish per vessel per day, or trip, and this is based on guidance
that you provided the IPT in March. Additionally, Alternative 4 has been included for analysis, and that looks at establishing vessel limits for headboats, and the range there is from twenty fish per vessel to sixty fish per vessel.

What I wanted to point out here is that there is -- There are some issues with the way that charter vessels and headboats are defined that have made it a little bit difficult to analyze, and so there can be several permutations of what constitutes a charter vessel versus a headboat, and that's because they are both under the same permit, and so there's no way to differentiate by permit when you go to gather the information, the landings, the data, for the analysis.

On your screen is the definition of a headboat, and that is a vessel that participates in the headboat survey that meets those criteria, licensed to carry fifteen or more passengers, fishes in federal or state waters adjoining federal waters, or state waters adjoining federal waters, and charges primarily per angler. The charter vessel is also the same federally-permitted for-hire fishing vessel that goes not participate in the headboat survey. However, we do have some charter vessels that sometimes do participate in that survey, and that's where the complication comes in, and so I wanted to make sure you were aware of that.

The definitions were applied to the data, in order to conduct the analyses as best we could, and, again, I will just go through some of the background information, and some of this you've already seen. This figure is showing you the percent of trips harvesting red porgy for private, charter, and headboat modes, and this is with data from 2015 through 2019.

Following that, we have the potential impact of bag limits by mode, the largest reductions being in the private mode and the smallest reductions observed in the charter and headboat modes, and, here, you have another distribution of harvest per trip, kind of extending out the range there, on the bottom axis, to show you more of the headboat, kind of a better resolution, I guess, from the previous figure.

Here, these tables are going to be combining the bag limit and the vessel limits. This top table is looking at private and charter landings for each potential vessel limit and bag limit combination, and then you can see it's color-coded. Green is less of a reduction, and then the red is more of a reduction, and then, at the bottom, you have the modes combined, and the following table shows what that would look like for the headboat mode.

Then, here, I'm going to go back to Shiny and show you the information for the recreational sector. Here, you have the option -- Well, let's not go there first. The bag limits are at the very top, and the vessel limits, so you can modify with whatever combination you would like to see, and the graph changes to show you the predicted catch relative to the recreational ACL, which would be 37,500 pounds. Let me go back to the effects analysis, to make sure that I cover that and I don't forget.

Basically, given the distribution of the recreational catch and the reduction that we're looking at for the ACL, the bag limit reduction really has negligible biological benefits to the stock, and then, of course, if the proposed discards were to increase discarding, then that would be a negative effect. In terms of economic effects, since the revised recreational ACL is expected to be fully harvested regardless of whatever we do to the bag limits or vessel limits, the total net economic effects are, again, likely to be similar among the alternatives.

Anglers tend to land two or fewer red porgy on their trip, and so retaining the current bag limit or setting vessel limits that allow more than that average of two fish per person, which would correspond, I think, to Sub-Alternatives 3c and 4c, would have minimal economic effects on a per trip basis, and reducing the bag limit to one fish per person or implementing vessel limits that would restrict harvest near that one fish per day would have noticeably larger negative economic effects on a trip level.

As far as social impacts, the most restrictive limits, and so all the 2a sub-alternatives, could eliminate fishing opportunities for for-hire and private recreational and less restrictive recreational limits, and so all the 2 b and 2 c , including Alternative 1 , would improve benefits to the recreational sector and businesses associated, but it would also potentially substantially shorten the fishing season.

I think I'm going to pause here. Again, here, we need to consider the AP's feedback and review the range of alternatives and modify and then select a preferred, and it's up to you if you would like me to go over Sub-Action 5b, since they can be combined, or if you want to talk about vessel and bag limits first and then get into the season discussion.

MS. MCCAWLEY: All right. Thank you, Myra. What is the pleasure of the committee? Maybe we should start with bag and vessel limits first, and so, in the document, it is split out right now to establish a special vessel limit for headboats for red porgy, which Myra talked about how there would be some additional challenges for doing that, because you would have to define headboats, et cetera. Any thoughts here on this Sub-Action 5a? Chris.

MR. CONKLIN: I would -- Just thinking about the way charter and headboats fish throughout the majority of our region, I would probably close it January and February and March and April, and open it starting it Wave 3, and, as far as the limit goes, I mean, I'm not a recreational representative, while I do recreational fish all the time, and I do have a charter boat, but I do want to point out some of these options are even higher than the commercial trip limits, which may be a problem, and I want to hear from some of the recreational guys on what would make them work, but I mean, as far as the charter and for-hire go, I mean, it seems like a one fish per person would be doable on a six-pack boat, and, for a headboat, I certainly couldn't tell you, and so I just wanted to put that out there.

MS. MCCAWLEY: Thank you, Chris, and Myra has that going in the decision tool. Chester.
MR. BREWER: Thank you, Jessica. Speaking to the issue about vessel limits on headboats, I don't see that as something that's going to be all that beneficial. I've always been a big proponent that you -- No matter what platform a recreational fisherman is fishing on, they are still a recreational fisherman, and all recreational fishermen should be treated the same, and so it just seems like, to me, that you do a one fish per person per trip across-the-board, and that would be the way to go with it, no matter what the platform is. Thank you.

MS. MCCAWLEY: Thank you, Chester. Anna.
MS. BECKWITH: I mean, I agree with part of what Chester said. I, obviously, don't agree that we should always treat everyone the same, and I think the different platforms do have different
needs, and the Mid-Atlantic Council does a much better job of acknowledging the differences between recs and some of their charter and headboats, but I also worry about the vessel limits for headboats, because I think that gets a little bit difficult for them to manage if there isn't some easily divisible number of fish per person on the headboats.

I think I would be more inclined to have a per person on this one, one or two, depending on what you guys prefer, and I probably would keep it the same across-the-board, in this particular instance, as I'm not sure that the vessel limit would not complicate the headboat's management of their take. Thanks.

MS. MCCAWLEY: Thanks. What I've heard from a couple of folks so far is forget this whole concept, at least for red porgy, of establishing a separate headboat limit. It's difficult to figure out how to divide that among the customers and, instead, go with some per-person trip limit. Tony.

MR. DILERNIA: Thank you, Madam Chairwoman. Just to perhaps expand on a little bit of what Ms. Beckwith just mentioned, what we do in the Mid is we may have, in some cases, a private recreational bag limit, possession limit, and a for-hire recreational bag limit. Say in the case -- I will give an example of bluefish.

Currently, it is now three bluefish per person for a private recreational vessel and five fish per person on a for-hire vessel, be it a six-pack or multi-passenger, what you would call a headboat, and the way we enforce or compute the -- To facilitate enforcement on the for-hire vessels, we allow co-mingling, and so what it actually comes down to is, if it's five per person, and you have ten people onboard, provided the vessel doesn't exceed thirty fish, you're within the regulations, and so it is a per-person possession limit, but we do allow co-mingling of all the fish going into one container, and that's how law enforcement enforces that regulation. Thank you.

MS. MCCAWLEY: All right. I'm trying to kind of narrow down the various discussions that we've had here by looking at the Sub-Action 5a, and it seems like maybe we're moving towards not using Alternative 3 or 4, and maybe we can remove those to -- Send those to the Considered but Rejected, and then maybe we are choosing, under Alternative 2, one of these two subalternatives, either a one fish or a two-fish, and then we'll come back to this season, and Myra was using the decision tool to show us how that was working, and so are there thoughts here?

We've had some discussion already, and I'm trying to take the discussion and translate this into what we want to do under this action. Also, our Chair has decided that he would like to go until 12:30 and then have an hour for lunch, and so, with that in mind, we should be able to get through red porgy before break for lunch. Mel.

MR. BELL: Thanks for that. Alternative 3 and 4, based on the discussion we had, I would be fine with sending those to the Considered but Rejected and then picking something within 2, just to throw that out there.

MS. MCCAWLEY: All right. Is that a motion?

## MR. BELL: Well, I'll make it a motion, yes.

MS. MCCAWLEY: Okay. Spud, is that a second?

MR. WOODWARD: Yes, ma'am.
MS. MCCAWLEY: All right. Also, under discussion, would you like to add anything to the discussion, Spud?

MR. WOODWARD: No, I think it's all been said, and it's pretty logical. I was thinking all along that it was going to be probably not very feasible to make a vessel limit work on a headboat. I mean, we're talking about small quantities of fish and who gets to keep one and who doesn't and that sort of thing, and so I think, in this matter, as simple as we can make it is going to be the best.

MS. MCCAWLEY: All right. Thank you, Spud. Steve.
MR. POLAND: I was raising my hand to second, but I agree with everything Spud and Mel just said.

MS. MCCAWLEY: All right. Thank you. Any more discussion on this motion, which is to move Alternatives 3 and 4 to the Considered but Rejected Appendix? Any objection to this motion? All right. That motion carries.

We are still on this particular sub-action, and I believe we need to pick a preferred. Right now, that leaves choosing either Preferred 2a or 2 b . So far, we've heard a little bit of discussion for both, and I would support the one fish per person. That's my suggestion, since we removed these other alternatives, but I see hands going up. Let's go to Spud and then Mel.

MR. WOODWARD: Yes, ma'am. I was going to make the motion that we choose Alternative 2a as our preferred.

MS. MCCAWLEY: Thank you, Spud. Do we have a second?
MR. BELL: Yes, and that's where I was going.
MS. MCCAWLEY: All right. Second by Mel. It's under discussion. Steve.
MR. POLAND: Third.
MS. MCCAWLEY: All right. Any more discussion on selecting 2a as the preferred? We've already had some discussion on this already from a number of folks. Mel.

MR. BELL: Just basically we don't have a lot to work with, and I know, in the recreational world, opportunity is important to everybody, and so it's spreading the peanut butter as thin as we can, I guess.

MS. MCCAWLEY: All right. Thank you, Mel. Any objection to this motion, which is to select Sub-Alternative 2a as the preferred? I don't see any hands, and that motion carries. All right, and so I'm going to pass it back to Myra. As she's going back to that action, Chris had already thrown something on the table here that we were looking at in the decision tool, and I'm
trying to look, and, Myra, can you remind me what it was relative to these alternatives, or can you show us the decision tool again?

MS. BROUWER: Sure, and so here's your options. If we put the bag limit at one per person, and I think Chris had mentioned perhaps closing Waves 1 and 2 and opening things up in May, and this is what that would look like, and then you have the option for various waves, and you could keep it open just in the middle and close the rest of the year, and that's what that would look like, and so you have your predicted closure date up at the top, and then, of course, you can see those confidence intervals are pretty wide, and so I'll display the alternatives here, so you can see what those are.

MS. MCCAWLEY: Okay, and so then I want to remind you what the AP said, and they were suggesting to avoid a closure during the peak summer months, June through August, and so I'm trying to figure out how to mesh what we just saw on the decision tool with what's here in the alternatives, and so --

MS. BROUWER: I think the way I've got it set up right now, with the season opening -- The Waves 3 and 4 is what you were just talking about.

MS. MCCAWLEY: Yes, and I agree that it would have it open those four months, but do we have an actual alternative that does that, or you would just select Alternatives 3 and 4 as the preferred, and is that how you would do it?

MS. BROUWER: Correct.
MS. MCCAWLEY: Okay. All right. Sorry for my confusion there and trying to figure out which alternatives here matched up with what we were doing in the decision tool and with what we were doing -- What Chris was saying and what the AP was suggesting, and so thoughts from other committee members here? I know people are getting hungry, but I think my suggestion would be to select Alternatives 3 and 4 as the preferred under this sub-action, and so it would be open during these summer months. Thoughts from committee members? Mel.

MR. BELL: I think your approach would be logical, given trying to provide maximum opportunities for folks across the board.

MS. MCCAWLEY: All right. Is that a motion?

## MR. BELL: Yes, and so I would move to select Alternative 3 and 4 under 5a.

MS. MCCAWLEY: All right. Thank you. Andy.
MR. STRELCHECK: Thanks, Jessica. My concern with what Mel's motion just indicated is that that's a high likelihood that the catch limit will be exceeded, and I realize there's uncertainty around the projection estimates here, but it's indicating that the likelihood of exceeding the ACL would happen just in a two-month wave, and you would be proposing a four-month season here. Given the error bounds, obviously, it could be a longer season and not be exceeded, but it certainly could also be a shorter timeframe and be exceeded sooner, and so I'm concerned that we're setting
ourselves up to be triggering accountability measures in this fishery by setting a four-month season.

MS. MCCAWLEY: Thank you, Andy, and that is a good point, and so then, based on what you said, we would have to select either Alternative 3 or 4, and I'm going to go to Chester.

MR. BREWER: Thank you, Jessica. Maybe I'm off by 180 degrees, but I thought the AP was talking about closing during the summer months, and am I off by 180 degrees? I thought that's what they said, but maybe it was the exact opposite.

MS. MCCAWLEY: It was the opposite. Consider open recreational season during summer, June through August, to give the recreational sector the opportunity to have red porgy as a species that could be retained during the peak months for recreational fishing.

MR. BREWER: Thank you very much. I stand corrected.
MS. MCCAWLEY: I'm happy to help. Andy made a good point here that maybe -- We haven't had a second yet on this motion that's on the table, but Andy made a good point that we might only be able to get through one of these waves, and so maybe we need to select one versus the other, but let me go to Spud and then Mel.

MR. WOODWARD: Thank you, Jessica. I was going to second Mel's motion, and I certainly understand that concern, but I also think that we need to recognize that we're going to have precision and accuracy issues with MRIP on this species, and we've always had it, to some degree, and it's going to be amplified, I believe, now, with some of these smaller bag limits.

We've already got a history of trying to rebuild this fishery and control fishing mortality, and it has not responded very positively, and I've got concerns that it's going to continue to not respond very positively. I mean, we have a situation where the species is more controlled by environmental factors and predator-prey relationships than fishing mortality, and so, to me, I think it's a reasonable balance between risk and reward, to open it open for a couple of waves during the summer.

MS. MCCAWLEY: Okay. Sounds good, Spud. Mel.
MR. BELL: Well, originally, I was going to point out that I didn't have a second, but, yes, I think -- Again, all I was looking at -- I kind of do understand what Andy is saying, but my thought was just to try to provide, at a very low bag limit, to try to stretch this out and provide opportunity, which we constantly hear from the recreational sector that it's extremely important to them, over a little longer period of time, and, if they hit the ACL, they hit the ACL, and I realize that triggering accountability measures isn’t a happy thing, but I was just trying to -- My approach was to just to try to provide maximum opportunity at a very low bag, but, yes, we may very well hit the ACL.

MS. MCCAWLEY: Yes, I agree, but I also agree with you all's rationale that trying to provide the maximum opportunity, and I also agree with Spud that I think other factors are at play here, and not necessarily just fishing mortality. Any more discussion on this motion? Andy.

MR. STRELCHECK: Maybe my recommendation is to hold off on this motion until we look at the accountability measures. There's a couple of things you need to consider. Obviously, we have overfishing occurring in this fishery, and so we need to ensure that we're ending overfishing based on the management actions that we're taking. The second is that we do have the ability, or it's been authorized with the Regional Administrator, to reopen fisheries if in fact the catch limit has not been met, and so there's other options where we potentially could provide flexibility, if a shorter fishing season is specified, and, if we get data during the year, to reopen later in the year, after that season opens.

MS. MCCAWLEY: Yes, that's a good point, and I'm fine keeping this motion on the table and going to the accountability measure action. I guess my concern with trying to open later in the year -- You know, that's not at a time period when I think all states in the council's region would be out trying to fish, but that might also be your point, is that you would likely have less fishers later in the year, and you could have bad weather, and likely less people on the water trying to take that remaining available quota. Mel.

MR. STRELCHECK: Can I respond, Jessica?
MS. MCCAWLEY: Of course.
MR. STRELCHECK: Less so my point about fishing effort and the time of year you're fishing, but more just the fact that there's potential additional fishing opportunities that could be offered if we prematurely close the fishery because we set the season at two months and the catch limit wasn't met in that two-month time period.

MS. MCCAWLEY: All right. 10-4. Mel.
MR. BELL: I was just going to concur with Andy's thought that maybe, given that a clear understanding of Action 6 and the accountability measures might influence our comfort level with the motion on the table at the moment, we could just kind of hold on the motion on and have that discussion about Action 6 and then revisit that motion. I mean, that would be okay with me.

MS. MCCAWLEY: All right. Sounds good. Myra, do you mind going to next action?
MS. BROUWER: Not at all. Let me navigate there for you. Here is Action 6, and this is the last action in this amendment, and it would modify accountability measures, and so just to note that the language under these alternatives has been simplified a good bit, for discussion purposes, and, to me, it's a lot easier to explain to you what's going on and what's currently in place when the language is simplified, and so be aware of that.

Your guidance from March was to develop an alternative that would incorporate multiyear, three or longer, years running averages and explore the use of geometric mean versus the arithmetic mean for triggering AMs, and so that guidance is reflected in Alternative 3. Let me start from the top. Currently, there is an in-season closure if landings reach, or are projected to reach, the recreational ACL, and then, if that happens, harvest of red porgy is closed for the remainder of the fishing year, and there is the flexibility for NMFS to determine that no closure is necessary, based on BSIA.

For post-season, if landings exceed the recreational ACL, you monitor for persistence in increased landings during the following fishing year, and, if landings exceed the ACL and red porgy are overfished, and I should note here that this is the total ACL, then there's a reduction of the fishing season the following year and a payback of the overage, and so that's what is currently in the books.

Alternative 2 is structured similar to what you have in place recreationally for black sea bass, where NMFS announces the recreational fishing season and the start and end dates each year, and the council would select a date for black sea bass, and I think you've selected April 1, and so NMFS issues a Fishery Bulletin and says red porgy is going to be open starting April 1, and it’s going to remain open for however long they project that season to be allowed to last.

Then Alternative 3 is what the IPT put together based on your guidance, and the trigger for the situation when the ACL does not change from year to year, and so when you have constant catch levels, and so, for this, we're looking at 2026 onwards. From that time forward, you would use a single year of landings, beginning with the most recent, and then do this rolling average two years, and then three years, and a progressive running three-year average to trigger the accountability measure, and the accountability measure itself is down below, and that would be a reduction in the length the following season by the amount necessary to prevent the recreational ACL from being exceeded, again allowing NMFS the flexibility to determine whether that's necessary or not.

Then there's a different trigger under Sub-Alternatives 3a and 3b, whether the arithmetic or the geometric mean would be used to determine when landings exceed the recreational ACL, and then the post-season would be the same.

Here, basically, the discussion just explains what I just did, and I'm going to hold off getting into the biological effects, unless you want me to go through that, and the economic effects, and I would note that, here, for this action, the IPT felt that maybe an additional alternative, and I've got some language that you can consider, that would maintain an in-season closure, but then wouldn't have a payback of the overage, and so it would be essentially the same no action, but taking away the payback, and so I'll pause here and see if there are any questions or clarifications that are needed to help you discuss this.

MS. MCCAWLEY: I think I would really like to see that additional alternative, and I know that you and I talked about it, and so I think I would like to see that added.

MS. BROUWER: I have pasted in the language, and, again, it's very wordy, but, basically, you keep everything the same, and you monitor for persistence a year after that recreational overage, and, if the total ACL is exceeded and the species is overfished, then the length of the fishing season is reduced by the amount necessary to prevent an overage from occurring again, and so the only thing that it takes away is, as I said, this payback of the overage, and that's to prevent the seasons from getting shorter and shorter, because the ACL is going to continue to get diminished over time.

MS. MCCAWLEY: Thank you, Myra. Chester.
MR. BREWER: I would like to move that we include this new additional language. I really like it.

MS. MCCAWLEY: Thank you, Chester. Is there a second? Mel.
MR. BELL: I will second that, for purposes of discussion here.
MS. MCCAWLEY: All right. I really like this alternative as well. This is not necessarily selecting it as the preferred, and this is just a motion to add this alternative to Action 6, and we've had a second. It's under discussion. Andy.

MR. STRELCHECK: I'm not going to speak to support or opposition of putting it in the document, but what I do want to talk about is the issue of monitoring for persistence in increased landings. Given we are looking at one or two waves for monitoring landings and having a fishing season, it would be virtually impossible for the Fisheries Service to do this in-season, given the timeframe for when we receive data and when it would be made available for monitoring that persistence, and so I just wanted to acknowledge that, given the short seasons we're looking at for red porgy.

MS. MCCAWLEY: All right. Any more discussion here? All right. Any objection to adding the alternative? Chester.

MR. BREWER: I'm here. I wasn't raising my hand to object. I was thinking about Andy had to say, and I think he's right, and maybe we tweak this language a little bit, such that, when you're looking to see if there is a persistence in increased landings, you're not trying to do it real time during this one wave, but rather when the wave is over, and I will leave it at that, but I think that what Andy is saying makes great sense. During a three-month season, you're not going to be able to monitor this fish real time. It's just not going to happen.

MS. MCCAWLEY: Okay. I'm not quite sure what to do here. Andy.
MR. STRELCHECK: To Chester's comment, that was the point that I was trying to make, and so, for example, if we did a May, June, July, August season, the landings data that comes in from MRIP would be available for that May/June wave about the middle of August, and so it's going to be available, if we're lucky, about fifteen days before the end of the season, and so any sort of closure or adjustment that we would make in-season would not be able to take place, because of just the timing of when we receive landings data and how it's monitored. We do have headboat landings and a few other sources of data, but it's very limited. The main bulk of, obviously, landings come from MRIP.

MS. MCCAWLEY: Anna.
MS. BECKWITH: This conversation shows why we keep sort of getting away from in-season closures for the recreational. To me, the one that makes the most sense is what we do with black sea bass in this case, where you're basically achieving the same thing, and you're setting the season based on the previous year's effort, and, if it so happens that you close the season and those have not been caught towards the end of the calendar year, the fishing year, the Service certainly has the ability to reopen if they deem that the quota has not been met. To me, that seems like the simplest solution, for this species anyway.

MS. MCCAWLEY: Thank you. Myra.

MS. BROUWER: Thank you, Jessica. Two things. Let me try to verbalize what I'm thinking here. What Anna was just explaining is captured in Alternative 2, I believe it is, but that would be an option that you could choose. The other thing is, if you establish a season, under Sub-Action 5 b , you could simply select the start of that wave as the start of the season and let the region figure out how long the season could remain open, and so all those possibilities are already included for you to choose, and then the other thing I would just point out is that this language that we’ve just been discussing here is a post-season AM, and so, if you wanted to adopt this and get rid of the inseason, that would need to be added to this language up on your screen. Thank you.

MS. MCCAWLEY: All right. I don't see any quick resolution to this. I feel like we're going to keep discussing this for some time, and my suggestion would be that we go ahead and take a break and come back at $1: 30$. We'll try to unravel what we've done here by adding this motion, and make sure that we want to add this, or tweak it, and then we need to select a preferred, and then we need to go back to the season, as Myra mentioned, but let me go to Mel first.

MR. BELL: I like that approach, Jessica. I think we're getting a little stressed here, and so let's take a lunch break and think about this a little bit, and we'll come back and clean up the points that you just mentioned.

## (Whereupon, a recess was taken.)

MS. MCCAWLEY: We were having a discussion, when we left off, in red porgy about accountability measures. To continue that discussion -- We were talking about accountability measures, which is the final action in this document, but we still have to back up an action, and so we are on Action 6. We were having a discussion about this added alternative. Thoughts on this added alternative? There were people that wanted to wordsmith it and folks asking questions, et cetera. What is the pleasure of the committee here?

MR. BELL: I have my hand up.
MS. MCCAWLEY: Go ahead.
MR. BELL: Thank you. I can't remember -- So we didn't actually put this Alternative 4 that we were discussing -- We didn’t actually put it in yet, I don’t think.

MS. MCCAWLEY: No, and there was a motion, and I was calling for a vote, and then we continued discussion, and people were suggesting possibly even modifying it more, and so we never took the vote yet, basically.

MR. BELL: Okay. Well, that had some appeal to me, but I guess we haven't fully discussed it yet, and we should probably finish that off, but I was kind of interested in that concept and maybe going down that road, but, if it's not fully fleshed out, then maybe that's what we should focus on right now, and I'm not -- There it is, and so that would be -- I would like to do that and see if we can get somewhere with this.

MS. MCCAWLEY: Okay. Myra.

MS. BROUWER: Thank you, Jessica. I guess what I would like to do is -- Maybe it would be useful to reiterate what this would do, relative to what's currently in place, and so, right now, the current accountability measure has an in-season closure to prevent the ACL from being exceeded. When the ACL is exceeded, there is a monitoring for persistence, and then, the following year, if the total ACL is exceeded, and red porgy is overfished, that's when the post-season accountability measure to correct for an overage kicks in, and then there's a reduction in the length of the season and a payback of the amount of the overage.

The proposed language in front of your screen focuses on the post-season AM, and so there's no mention in here of what would happen in-season, but, if you are considering a very short recreational season, as Andy pointed out earlier, because of the lag time in the availability of the data for the Regional Office to announce a closure and do everything that needs to be done in order to implement that, there would not be enough time. What you have in front of you focuses on removing the payback portion of the post-season AM only, and does that make sense?

MS. MCCAWLEY: I think so, and then the little blurb you have underneath it is helpful, that monitoring for persistence is not intended to be done in the middle of the season.

MS. BROUWER: That's correct.
MS. MCCAWLEY: Okay. All right. Then I guess let's focus on the motion about adding this alternative to Action 6 for analysis. I believe this would become Alternative 4, and so let's continue discussion on this. Is the wording okay? Are there more comments on this before we vote? Chester.

MR. BREWER: Thank you, Jessica. I think that, with the clarification, this gets us where we, I think, need to be, and I thank Myra for that, because, as we said, it doesn't make sense to try to do any kind of, quite frankly, in-season management of these fish, if you're only going to be open for a very short period of time, one wave. By the time you've got the information, the wave is already over, and so, to me, this captures it, and it works.

MS. MCCAWLEY: Okay. Thank you, Chester. Mel.
MR. BELL: If I'm fully understanding what I'm reading, and I agree with Chester. Whether it's a two-month or a four-month season, it's a tiny little season, and utilizing MRIP to try to deal with that in an in-season fashion is just not realistic, given that it's the only tool we have, but it's not a particularly good tool dealing with short little seasons like that, and so I think, if that's the wording of what this would look like, I would recommend adding it.

MS. MCCAWLEY: Thank you, Mel. Spud and then Steve.
MR. WOODWARD: Thank you, Jessica. I can support adding this. I think, anytime you have abbreviated seasons of two months or four months in the recreational sector, you're going to have a lot of challenges to implement any kind of accountability measures, in-season and post-season, and so, if you read this, it says, during the following fishing year, recreational landings will be monitored for persistence in increased landings.

Well, if you have the single-wave season, you won't be doing any within-wave determination of any landings, and, if you have a two-wave season, which is what we've been talking about doing, you're still going to be challenged to have anything really before the end of the season, and so, in a practical application of this, I think it's going to be really challenging to look at it on a year-byyear basis. The reality, I think, is what this means, in application, is that you're looking for a trend in landings over multiple years that leads you to believe that your restraints on harvest either are or are not controlling that harvest to the desired level.

MS. MCCAWLEY: Yes, and that was nicely stated, Spud. Steve and then Andy.
MR. POLAND: Thank you, Madam Chair. I think Spud's comment kind of addressed the comment that I was going to raise, and I was going to ask if Andy or someone else from the Science Center could just speak a little bit to what exactly would be monitored for persistence, and I think I've asked this before, and it might benefit the committee to hear it again. My recollection is look at catch rates and then, if there were any anomalous intercepts from MRIP, look at PSEs and that kind of stuff, but if someone could just briefly speak to what exactly the process would be for monitoring for persistence.

MS. MCCAWLEY: Well, it just so happens that Andy is next up.
MR. STRELCHECK: Thanks, Steve, for the question, and I guess I'm struggling to really understand what the monitoring for persistence would actually accomplish, since it wouldn't be done in-season. We have this language in a lot of accountability measures, and the intent, obviously, is, if we had an overage the prior year that may have appeared anomalous, or unusual, we would monitor the following season and determine if there's still a need to implement accountability measures or not.

The difference here is we would, obviously, have a very short fishing season for red porgy, and, if we're not going to monitor it in-season, essentially, we're just, at that point, tracking landings from year to year and then making determinations on whether we need to adjust the recreational season, and so one of my questions was going to be -- Let's just take, for example, the first year we have whatever the season is, and we go over the catch limit, and it's not clear to me if this language, as proposed, would authorize NMFS to then reduce the season in the following year to prevent a potential future overage, given that we're not monitoring the persistence of any increase in landings, or can't, for that matter, in the following season.

To me, the AM has to speak, I think, to our ability in order to eliminate or reduce the likelihood of an overage, and, with short fishing seasons like this, it’s just really challenging, given the variability in catches and the timeliness of the data.

## MS. MCCAWLEY: Okay. Monica.

MS. SMIT-BRUNELLO: Thank you. I was going to kind of walk through the proposed alternative and just ask Myra if I understood it correctly, and I think Andy was getting to some of this with his last comment. If recreational landings exceed the recreational annual catch limit, and so that would be year-one, then, during the following fishing year, which would I think be yeartwo, recreational landings will be monitored for a persistence in increased landings. If the total annual catch limit is exceeded, and I guess that's still in year-two, and red porgy are overfished,
the length of the recreational fishing season is reduced by the amount necessary to prevent the ACL from being exceeded the following fishing year, and so is that year-three then? This takes three years to implement an accountability measure?

MS. BROUWER: Monica, that is the way that our accountability measures are set up for the majority of snapper grouper species, and that is my understanding.

MS. MCCAWLEY: Monica, do you have more questions? Spud.
MR. WOODWARD: Thank you, and I want to follow that on with the last parenthetical content of that motion, where it says, "unless NMFS determines that it is not necessary", and so, if in yeartwo, you had a catch estimate that had a very high PSE, or there was some other issue of concern, then does that mean you continue monitoring for persistence in year-three, and so then you look at year-three, which means you actually don't implement anything until possibly year-four, and that's the way that I understand this parenthetical language that's been included in here. I mean, we've had two South Atlantic region catch estimates for red porgy that exceeded 60 percent PSEs, and we may be seeing that again, and so just that's in there, and I'm doing this as much to make sure that I'm thinking through this the right way, like Monica is talking about.

MS. MCCAWLEY: Spud, that's how I was thinking about it, that it would actually take an additional year or so to make a determination, but it could be longer than three years, and that's how I was looking at it. Mel.

MR. BELL: I would read that the same way, and what I guess didn't bother me so much about that is I'm thinking of -- Remember we had cobia at one time on the Atlantic, and we gave them to the commission, and the commission's plan -- Again, different set of rules, and I understand, but the way that's set up is you're -- Again, the recreational component, you're looking at it using MRIP data, with the high PSEs and all, but there's the ability to look at several years, and then react to that.

If you've got PSEs exceeding 60, or whatever they happen to be in this pulse fishery, whether it's two months or four months, it's become a pulse recreational fishery that allows you to sit back and look for a trend and pay a little more attention to the data over time, but, yes indeed, you could find yourself -- As Monica pointed out, and Spud followed up, it could be a couple of years, or more, before you actually act on that, but that is -- Given the nature of the data we're using and, effectively, the pulse fishery we've created, that seems like a reasonable way to live in that world, to me.

MS. MCCAWLEY: Anna and then back to Monica.

MS. BECKWITH: We had a very similar discussion to this under dolphin wahoo, when we were discussing the options for the accountability measures, and this was in fact the same desired outcome for an accountability measure that we had wanted for dolphin, to monitor for persistence in the second year, recognizing that, typically, it's a year of high abundance, and it's very rare that dolphin goes over, and so why put in an accountability measure in the second year unless it's going to stay persistently high, and then implement in the third year, as needed.

We were told that that was not an acceptable accountability measure by the Service, and we had to basically discontinue discussion of that, and so maybe that was a read from Roy, but I doubt it, and I think that there was probably an assessment from the Service, in more than just Roy's opinion, that that was not an acceptable accountability measure, because, if it's an acceptable accountability measure here, then that would have been the ideal accountability measure for dolphin, and we were not permitted to move forward with that as our preferred, and so I just wanted to bring that up, because we do have to have some consistency across the FMPs, because I don't see the red porgy situation being much different than what -- Well, it is different, but, because we don't have a stock assessment for dolphin and all those other things, it was deemed not acceptable, and so I just want to make sure that it's a consistent read on if this is an acceptable accountability measure or not.

MS. MCCAWLEY: Great point, Anna. Thanks for bring that up. Monica.
MS. SMIT-BRUNELLO: Thank you. Previously, when you asked me if I had questions, I was talking to my dog, instead of anybody here, because I forgot to unmute myself, like many of us have, but I can't exactly speak to what was done in dolphin and wahoo, but, for this one, I agree with Anna. I think this has some problems.

The current AMs we have that have the language for the recreational sector about monitoring for persistence in increased landings, it's discussing that next year. It's not a three-year time period. For example, with golden tilefish, if recreational landings exceed the ACL, then, during the following fishing year, the landings are monitored for persistence in increased landings and, if necessary, we reduce the amount of the fishing season, and/or I guess the ACL, to account for any kind of overage, and so I think it happens during that next year, and so I think this -- Maybe the IPT can tweak it somewhat, to make it more acceptable, but I can see that this would have problems keeping an ACL in check, and I understand the problems with monitoring recreational fisheries, and especially for a short season.

MS. MCCAWLEY: Anna, did you put your hand back up?
MS. BECKWITH: Yes, and I was just going to say that that was basically the final read that we had gotten, and what I believe we're sort of moving forward with in dolphin is that we would monitor the following season and adjust the season accordingly to not allow for an overage, and we always have that language that, if the Regional Administrator has flexibility, if he deems yadayada, blah, blah, and so that's how we ended up wording the one that I think is our current preferred, after much discussion.

MS. MCCAWLEY: Okay. Let me see -- Do we actually have -- I didn't know that we had a preferred on this one.

MS. BECKWITH: In dolphin wahoo and not in this one.
MS. MCCAWLEY: Thank you. Spud.
MR. WOODWARD: I don't want to belabor this and beat a dead horse, but we have to make a decision about a season length, and if the decision was made to establish a single-wave, two-month season, then how would you ever monitor for persistence in landings the following year in a single-
wave, two-month season? I mean, Steve sort of brought this up, but what metrics would you use to generate any determination of whether catches are tending consistent or high or low? I mean, I don't know how you would even do that.

MS. MCCAWLEY: Great point. I guess I'm trying to -- We have a motion on the table to add this to Action 6, and we could vote that up or down, and Myra has made some notes there on the screen underneath it. If it gets added, if we do want to add it, we just really need some clarification, or additional information, about this in the next round. What is the pleasure of the committee, since we do have a motion to add this? Remember what Anna said about how something like this was removed from dolphin. Mel.

MR. BELL: Well, I was a little more enthusiastic before Anna brought that up, but what's the harm in adding it and capturing it and having it there to further process and discuss, and I guess maybe we would get the same answer we got related to dolphin, and I don't know, but, like I said, I was -- Myself, I was kind of comfortable with at least considering it. Is there harm in adding it, other than, obviously, work would have to be involved in and a little more time processing through it?

MS. MCCAWLEY: Other than the answer could come back that, hey, we can't really add this, and I guess the other thing -- Let's say we did add it, and I'm not sure that we want to pick a preferred, because this would need to be clarified, and does it get clarified before this goes out to -- I think public hearings is its next stop. Let me throw that out there. Andy.

MR. STRELCHECK: That was going to be my question, and so what's the timing of kind of where we're at? Does it go to public hearings between now and September?

## MS. MCCAWLEY: Let me go to Myra.

MS. BROUWER: Thank you, Jessica. Yes, Andy. The intent would be for the committee to recommend approving this for public hearings, and then they have a choice of directing us to conduct those hearings ahead of the September meeting or during the September meeting.

MR. STRELCHECK: Okay, because I was going to suggest that we get some legal advice before incorporating it, but that doesn't seem like it's going to work, and so we would need a legal determination. Consistent with what Monica was saying, and my read of the National Standard Guidelines, is this would not be adequate for an accountability measure, because it's not implementing an in-season accountability measure or, for that matter, a post-season accountability measure, at least in year-two, and I think, if it is to be added, I think there's still some additional clarification that would be helpful to ensure that everyone has a common understanding of how something like this could be implemented, if it is even determined to be legally sufficient.

MS. MCCAWLEY: Great points. Steve.

MR. POLAND: Thank you, Madam Chair. I had the same question as Andy, as far as the timing of public hearings for this, and I would hate to vote this up and include it in the document and send it out to public hearings and receive comment and then hear that this isn't a viable alternative, but, if we've already received a legal opinion on a similar action in dolphin wahoo, can we dig that up
by the end of this meeting and have a discussion again about this, or do we need another legal opinion specific to this action and this amendment?

MS. MCCAWLEY: Great questions. Also, Myra, correct me if I'm wrong, but the public hearing could occur at the September council meeting, instead of at a separate stand-alone webinar-type meeting, right?

MS. BROUWER: Yes.
MS. MCCAWLEY: Okay. Monica.
MS. SMIT-BRUNELLO: To Steve's question, I said that I can see problems with it already, but I'm happy -- "Happy" is a funny word. I will go back, if you want me to, and look, in the dolphin wahoo situation, to see if I can dig up where we had a similar alternative that ran into the same situation, in terms of the legal advice of was it an adequate accountability measure, and I would imagine that I could bring that back to you at Full Council.

MS. MCCAWLEY: That's what I was going to ask you, if we could just lay this on the table here and then vote on it at Full Council. Andy.

MR. STRELCHECK: I'm always glad when our attorneys are happy to give legal advice. In all seriousness, I guess, the way I'm looking at this, I would recommend against even including this, and it goes back to some comments that I made earlier about the rebuilding plan. We're now starting year-nineteen or year-twenty of working to rebuild red porgy, and we're embarking on another twenty-plus-year rebuilding plan, and this, to me, seems to be a step in the wrong direction, with regard to ensuring that catch limits aren't being exceeded and that we are adequately making progress to rebuild red porgy, because it's providing increased flexibility with regard to the accountability measures, and so I just would discourage moving forward with this alternative, regardless of the legal advice we get.

MS. MCCAWLEY: Thank you, Andy, for reminding us about that. What is the pleasure of the committee here? It sounds like Monica already has some concerns, but she's willing to go review what happened with dolphin and have something for us later in the week, or do we want to jettison this now? What are the final thoughts on what to do with this? Spud.

MR. WOODWARD: Jessica, I would rather leave it on the table and revisit this at Full Council, because I was trying to dredge out of my real foggy memory about all the dolphin wahoo, and I remember one of the issues with accountability measures in dolphin wahoo was we couldn't use any reference to the stock being overfished, and that was kind of an Achilles heel, because we will not, or likely are not, going to have any kind of stock status determination for dolphin wahoo, and so I'm a little foggy, and I think it would be worth at least revisiting that, to make sure we're all exactly clear on this, and what's the harm in taking a few minutes to pull it?

MS. MCCAWLEY: Okay. Thank you. Mel.
MR. BELL: Along the same lines, I would like to leave it in, and I appreciate Andy's comments, and I understand where he's coming from, but, I think at this point, let's leave it in, and we'll come back to it at Full Council, and we'll receive whatever advice we get, counsel we get, prior to that,
and then we can move on from there, but I would like to give it a shot, in terms of moving forward now.

MS. MCCAWLEY: All right. Sounds good, and so we're going to leave this action, and we will come back at Full Council, and we need to back up to Sub-Action 5b, which is the recreational fishing season, and we said that we were going to come back to that after we looked at the accountability measure, because we thought that that would make this action easier. I don't know that it make it any easier.

Let me remind you of where we were. There's a motion there on the board to select Alternatives 3 and 4 under Action 5b as preferred, and so Alternative 3 would establish the recreational fishing season for red porgy as May through June, and Alternative 4 would add July and August, and so you would have a four-month season. You heard some concerns from Andy that maybe that's too long, and you heard some concerns from others that let's leave it like that and see what happens, and so kind of that's where we left off when we shifted over to the accountability measure. Mel.

MR. BELL: I am still -- Even though we had discussion about we're not sure what accountability measure we're going to land on, I am still in favor of moving forward with a four-month season. I mean, think about it. We will have gone, potentially, from a twelve-month season to a fourmonth season, down to one fish, and, whatever the accountability measure is, if it's tripped, it's tripped, but, in terms of providing opportunity, or the chance of opportunity, for the fishery, I am fine with leaving it as we've been considering there, a four-month season.

MS. MCCAWLEY: Thank you, Mel. Any more discussion on this motion, before we vote on it? Spud.

MR. WOODWARD: Thank you, Jessica. I just wanted to restate my support for that, to combine basically Alternative 3 and 4 into a four-month recreational fishing season for red porgy.

MS. MCCAWLEY: Thank you, Spud. Mel, did you put your hand up again?
MR. BELL: No, and I was trying to put it down. Sorry.
MS. MCCAWLEY: All right. Anybody else? Andy.
MR. STRELCHECK: Just a comment, and the reason that I wanted to, obviously, talk about the accountability measures was to understand better how they would be implemented. Obviously, there is variability in the landings data, but, at least the path we're on, the way I see it is that a May through August season will put the onus on the National Marine Fisheries Service to likely institute accountability measures, and, ultimately, institute shorter fishing seasons, assuming that's the path we go down, and so I just wanted to acknowledge that upfront.

Obviously, we're not at the point of finalizing this amendment, but, to me, there's potentially kind of this same outcome, or even a more complicated outcome, that could arise, based on instituting the accountability measures, especially if it results in shortening the fishing seasons due to prior season openings.

MS. MCCAWLEY: Good point, Andy. Myra.

MS. BROUWER: Thank you, Jessica. I just wanted to make a comment, I guess, and remind the committee that you already have four-month seasons for a couple other snapper grouper species, for blueline tilefish and for snowy grouper, and both of those species have a similar -- I think it's identical to the current no action for red porgy, and so I just wanted to put that out there, so that everybody remembers, and I believe there is a presentation at the end of this week where Rick is going to walk you through how that AM has been, or not been, triggered for blueline tilefish, and so maybe there's opportunity to get more clarity in how that works later on this week.

MS. MCCAWLEY: Thank you, Myra. Any more discussion on this? Steve.
MR. POLAND: Thank you, Madam Chair. I mean, as I sit here and think about it, a two-month versus four-month season for red porgy, at least for the recreational sector, I don't see any of the actions that we were considering in this amendment to really change catch, and I think all we're going to do is just change the proportion of landings and discards in this component of the fishery, and so that -- Be as it may, I mean, a two-month or a four-month season, I think we're going to have the same number of fish brought to the boat and sent back over, and so I just -- I mean, I support the motion that's here, and moving it forward for comment, but I think the reality of it is that, as far as a reduction in actual fish coming out of the stock, I don't think it's really going to do a whole lot.

MS. MCCAWLEY: All right. Does anybody else want to speak on this? All right. Let’s go ahead and take a vote. Is there any objection to this motion? I expect there is at least one. All right. We have at least one objection, and so, John Carmichael, I might have used the wrong procedure earlier. Since we're on the webinar, if there's at least one objection, are we calling names and doing the vote that way? I might have screwed this up earlier.

MR. CARMICHAEL: I don't think so. Myra, do you recall? I think, as long as it was clear what the vote was, we were okay. As long as you're clear what the result was.

MS. BROUWER: Yes, and I would -- Yes.
MS. MCCAWLEY: All right. Then it looked like there was one objection. Are there any abstentions? I don't see any abstentions. The motion passes.

MS. BROUWER: Thank you for that. So I guess the last thing then, if you are going to take up Action 6 under Full Council, then would for you to consider approving this for public hearings and giving us some guidance as to what that might look like, if you're comfortable doing that now, or we can certainly leave that to when you wrap up your discussion on this amendment at Full Council.

MS. MCCAWLEY: Let's see if we can have a short discussion on that now. As long as we get the accountability measure fixed up, I am good with this going to public hearing as its next stop, but then I guess we also need to figure out if that's a separate webinar public hearing in July or August or does the public hearing happen in conjunction with the September council meeting? Let me put one more data point out there for you. I believe we had two scoping hearings on this, on two different evenings, and only one person showed up, was my recollection, between the two nights, and so that might factor into how you would like to see this go moving forward. Mel.

MR. BELL: Well, it would be my intention to, obviously, stay on schedule with this, and so we would want to say that, yes, indeed we do want to move forward with scoping, realizing that we have a tweaking to do on the last action, and then, as you pointed out, Jessica, the -- Public hearings, rather. The public hearings could occur in September, or sooner, but do we need to commit to that right now, or can we just say it’s our intention to move this forward to public hearing, with the modification necessary, somewhere in that July to September timeframe? Is that clear enough for now?

MS. MCCAWLEY: I think we need to make that decision this week, and it is one of the questions that staff has asked the committee in the document, and so it's okay if we don't decide to make that decision right now at committee, but I do think that that needs to be made this week.

MR. BELL: Okay, and then we come back to that this week, like you said, and we'll have a better sense, and, if we decide that September is the best option, then fine. If earlier, then we can deal with it then at Full Council.

MS. MCCAWLEY: Okay. That sounds good. It sounds like we're moving towards recommending for public hearing, and then we will talk about the timing of that, all of that, at Full Council, but I see that John put his hand up.

MR. CARMICHAEL: I was just going to support what Mel said and suggest that we can wait and see how the meeting plays out and the workload we're looking at and what we might hear on public comment on this potentially this week and make a decision on Friday as to whether you think we should maybe hold another webinar hearing before the September meeting, as well as doing one in September, or just do one at the meeting.

MS. MCCAWLEY: Okay. That sounds great. I like that idea. Myra, do you think you have everything for now that you need on red porgy?

MS. BROUWER: I think so, Jessica. Just for my own clarification, you're going to defer to Full Council making the decision on whether to approve for public hearings, or are you deciding that right now? I'm sorry.

MS. MCCAWLEY: I think we're doing both the recommend approve for public hearing as well as the timing of those hearings at Full Council.

MS. BROUWER: Okay. Got it. Thank you.
MS. MCCAWLEY: Thank you, Myra.
MS. BROUWER: I think, Jessica, you're wanting to move, I believe, into yellowtail next?
MS. MCCAWLEY: Yes, please, and so Jimmy Hull has someplace to be mid-afternoon, and we wanted to make sure that we could get to the AP report on yellowtail snapper, and so I would like to move yellowtail snapper as the next item and then come back to tilefish. We have, under yellowtail, first up is Chip for the yellowtail fishery overview.

DR. COLLIER: Thank you, Jessica. Similar to what Mike went over, this fishery description for yellowtail has some of the same components in it, and I actually updated it today, based on some issues that I had with it in the previous, and I'll get to those a little bit later.

We do have our history of management, and you can look there for the overall history of management, and it has all the information for actions that affect all species as well as just actions that targeted yellowtail snapper. We also have our fishery performance report, and it doesn't show up well, and this is a version that I have showing on my computer, but, when you click on the fishery performance report, you can see the report from 2018, and it was designed to provide information to the stock assessment, trying to help them if they have any questions in regard to anomalous years or different pieces of information that would be useful when they're going through the assessment and making sure it's representing reality.

Then, if you go to the last tab there, we have some of the same graphics that are being output for each of these, where we start off with the assessment outputs, and we combined the projections in this one as well, and it's going to be slightly different than the last one, but let me remind you where we were for this fishery, or for this species, and it's in a much better place than what you saw for gag.

You can see that the fishing mortality rate here is much less than the fishing mortality rate at maximum sustainable yield, and so it's not overfishing, and the spawning stock biomass is much greater than the target spawning stock biomass, and so the population, once again, is not overfished, and this is another way to look at the population over time, and you're seeing the more recent years here, 2014, 2015, and 2016, in the green, sustainable area, indicating that the population is doing well. There is very few points over here on the left in red, and there's only one point, and just a few points in yellow.

A lot of this is being driven by what they're seeing in some of these indices of abundance, and you can look at the logbook, the commercial logbook, and you can see it's increasing over time, and you're also seeing some increase in MRIP over time, and so now, getting into the projections, the projections were a little bit controversial when they were being discussed in the SSC, and this was done through a joint meeting with the SSCs, and they had to have an additional meeting to really talk about these and dig into the details.

On the left side of the graph, you can look at the -- This is the landings that come from the stock assessment, and so you can see that it was pretty high in the early part of the time series, and this one only goes back to 1990, and so, in 1993 and 1994, there were some high landings, and it decreased in the early 2000s, and then it's been increasing since, and then, here in this dashed period, we're looking at average landings over a time period, and that's what was input into the stock assessment, and then, once we get into this blue period, that is truly the projections coming from the stock assessment, based on some of the estimates that were recommended by the SSCs.

The first one, which is hardly even showing up, is the OFL prediction, or the F at MSY, and then you can see this goldenrod, or golden yellow, whatever your eyes may see, and this is the actual ABC projection recommended by the SSCs, the joint SSCs, and they had a lot of concern with this, because there's not much of a buffer between the OFL and the ABC. They asked for additional projections to be run, and two of the projections that they had requested was 75 percent FMSY and the F current, and you can see where those come forward, and they didn't want to get
into making recommendations for the ACL, but they wanted to provide additional information to the councils, should they want it, when they're setting the ACL, just because there was that very small buffer between the OFL and the ABC.

Going into the combined data, it starts off with the information on allocations, and this was the historical allocations, and it's 52.56 percent to the commercial, and they've been pretty close to, if not exceeding, their ACL in recent years, whereas the recreational, here in blue, has 47.44 percent of the overall ACL, and they are catching about 50 percent of the ACL, and it looks like it's been decreasing from 2014 to 2018.

Here's a landings plot, looking at the trends in landings over time, and I do have 2019 in here. However, this is an incomplete year of landings, and so just ignore that. I did not have the commercial data for 2019 when I was making this plot, and, here, we can see the seasonality of landings, and one thing that stands out -- If you look at over the last five years of data that were provided in here, and so from 2014 to 2018, the month, or wave, of landings with the highest landings has actually been pretty inconsistent, ranging from either Wave $2,3,5$, or 6 , and so it's pretty much all over the place, as far as the overall peak landings, and a lot of that is driven by the variability in the recreational landings. As expected, most of the landings for this species comes in Florida.

I'm not going to go into the commercial data, and that data is available, and you can look at the size of fish caught, and you can also look at the pounds of fish caught in the commercial fishery. All of that information is available for you to look at, and I did want to point out the one piece of information that has changed in this, and it just changed maybe an hour ago. Most of this stayed the same, and it's -- Let me just drop down to the graph that actually did change, and it's this number of fish per angler. There were a lot of points over here to the right, indicating that there could have been some fishermen that were exceeding the bag limits.

What I had done was I accidentally included the released fish in there as well, and so that was an error that I put in there, and I have corrected that since, but you can look at size distribution for yellowtail, and I do want to point out that the sizes of yellowtail included in both the recreational and commercial are fork lengths, and so that has to be converted to a total length, and there's a pretty straight-up conversion that's provided in SEDAR, and I can provide those, as requested.

With that, that's really all I have for yellowtail, unless there are specific questions that you guys have on the species, and, any other suggestions that you would like to look at for this species, we can get this added in, we can get the information added in. There was a request, at the last council meeting, to add in some information on potential changes in distribution of where landings are occurring, and I'm still working on those maps, and so give me some more time, and hopefully the next time, where you're looking at some of these fishery overviews, we'll have those maps in there for you.

MS. MCCAWLEY: Thank you, Chip. Any questions for Chip? I don't see any hands. Let's turn it over to Jimmy to talk about the AP recommendations.

MR. HULL: Thank you, Madam Chair. Being that this is a south Florida and Keys fishery primarily, most of the really strong comments and recommendations were driven from those recreational, commercial, and charter fishermen from that region. There was quite a bit of
comments, which are on the full report, but most of the concerns related about increased effort on the stock, for lots of various reasons that you can read there, and it's pretty much a bail-out fishery for offshore fishermen fishing for dolphin, for instance, if they had a bad trip, and they're coming in to bail-out on yellowtail. There was a lot of concern, and a lot of comments there to read, about the effects of that on the commercial sector and on the charter sector, and so that was the main concern, about the increased targeting of yellowtail due to the difficulties.

As far as recommendations, we recommend that we reduce the recreational bag limit to five fish per person within the snapper grouper limit, which is the same as mangrove snapper, which they thought was important to keep consistency there. However, the charter industry representatives in the lower Keys did really not support, at this time, reducing that for their charter sector, and they thought that, if it was necessary, perhaps you may consider reducing the bag limit for the captain and crew only, but they would prefer not to reduce it for that sector.

Other than, with a stock that's not overfished and overfishing is not occurring, it's just that there seems to be a real effort shift towards it from all sectors, and, also, one of the commercial highliners expressed that, for various reasons, that the landings were down commercially at that time, and he didn't feel that the commercial sector would meet their catch limit this year, in 2021, and so that's what I've got.

MS. MCCAWLEY: Thank you, Jimmy. Any questions for Jimmy? I don't see any hands. Thank you, Jimmy. Thank you, Chip. I'm going to turn it back to Myra to walk us through the discussion paper.

MS. BROUWER: Thank you, Jessica. I have put together a short discussion paper, mainly to bring everybody up to speed on previous discussions you've had on yellowtail snapper, and what's in the background has already been covered, mainly, by Chip's overview, and so I'm not going to spend time going over that, but it's there for your reference, and so, for this meeting, what we're looking for is to review the amendment timing and provide guidance on that and review previous actions that were considered in Amendment 44 and in Regulatory Amendment 32 and the input that you received from the advisory panel and the public at that time and then tell us a little bit about what you would like to see for September.

There's a table that we've included here with a tentative amendment timing, and recall that your direction had been to work closely with the Gulf Council in developing this amendment, and so, if we move forward with putting together a single document that would amend both the Snapper Grouper and the Reef Fish FMPs, this is more or less what that timeline might look like, and so, in August, the Gulf Council could review the Reef Fish AP and the South Atlantic Council feedback and provide direction to their staff. We would regroup and get things back together in front of you in September, at which time you could approve this for scoping.

The Gulf Council would have time in October to talk about it some more, and they don't do separate scoping hearings, and they do their scoping during their council meetings, but, later in the fall, the Snapper Grouper AP and the Reef Fish AP could have input as well, and we could bring you back a document with preliminary analyses sometime in the winter of 2021, with the intent to complete the amendment the following year, and so that's sort of a rough sketch of the timeline. What I would like to do, unless there are any questions, is walk you through some of the actions
that were formerly considered, as I said, in Snapper Grouper Amendment 44. I am not seeing any hands, and so I'm going to proceed.

The South Atlantic Council developed this amendment through the public hearing stage, and so I wanted to refresh your memory as to what was considered then and go over what the public had to say. The council stopped working on this amendment in 2018, pending the completion of the stock assessment and the revisions to the MRIP methodology.

Several actions were included, and I have really condensed and summarized the range of alternatives, just because it is really lengthy for some of them, and, basically, one of the main things was to modify the jurisdictional allocation of the ABC. Right now, the South Atlantic Council has allocated 75 percent of the ABC, and the other 25 percent goes to the Gulf, and that was based on a formula that was adopted by both councils shortly after the reauthorization of Magnuson, and so the 2011/2012 timeframe, and that formula is up on your screen, and it uses 50 percent of the mean landings from 1993 to 2008 and 50 percent of the mean landings from 2006 through 2008. Here, the council was looking at removing the jurisdictional allocation, potentially, and also modify it using a different set of years.

Another action looked at specifying a single ACL for both the South Atlantic and the Gulf of Mexico. Right now, the ACLs, of course, are specified separately for the two councils, and the options that were considered then were maybe do an ACL that would combine each council's ACLs, or maybe use the South Atlantic ACL plus the jurisdictional ABC from the Gulf of Mexico.

There was also an action to allow adaptive management of the ACL and revise or establish allocations, and so, right now, the commercial sector in the South Atlantic is allocated 52.56 percent of the total ACL, and the recreational sector gets 47.44 percent. That allocation was set up using the formula that this council has used for other snapper grouper species, using that 50 percent average landings from 1986 through 2008 plus 50 percent of the mean landings from 2006 through 2008. The Gulf, of course, as we've talked already this week, there are no sector allocations of the total ACL for yellowtail snapper.

Here, the council considered several things, removing the allocations altogether, modifying them based on different years of landings, and there was a lot of discussion about a common pool allocation set aside, and also conditional transfers, based on a percentage of the ACL being landed and various landings thresholds.

The council considered, at the time, revising the accountability measures, and there are separate AMs for the South Atlantic and Gulf, and then, in addition, our council has separate AMs for the sectors, and so the options that were considered there was removing the in-season closures until the total ACL was met, different post-season AMs, reducing the length of the season the year after an overage, paybacks, trip limits to correct for overages, bag limit reductions to correct for overages, and then there was also alternatives that were tied to this common pool allocation that I mentioned a second ago.

Additionally, there was an action to establish a trip limit, and they looked at -- You looked at options for May through July, having a reduced trip limit during the spawning months, and also getting a trip limit in place once a certain percentage of the commercial ACL was met, and, also,
the concept of doing the multi-day commercial trip limits for this species. Right now, there are no trip limits for either the South Atlantic or the Gulf.

Public hearings were conducted for Snapper Grouper Amendment 44, via listening stations, in the winter of 2018, and, also, there were some that were done in-person. We received about 120 comments. In general, there was concern over establishing a single ACL for the South Atlantic and the Gulf, and there was also opposition to this concept of transferring allocation, and that was not very well received, and the public also had some recommendations for commercial trip limits and also for putting a minimum size limit in place, and they had some recommendations that you see there on your screen of fourteen to sixteen inches total length. That's just sort of, in a nutshell, Snapper Grouper Amendment 44, and so I'm going to pause there and see if there's any questions, and then we'll keep moving along.

MS. MCCAWLEY: There is hands up. Anna.
MS. BECKWITH: Is there -- Have the recreational catch numbers been re-estimated using the new FES, because I know, when we were talking about some of those options for combining or whatnot, one of the concerns that I had was we didn't really know how much the recreational were -- How close they were getting to their quota, and so I'm curious if that information is available now.

MS. BROUWER: Thanks for that question, Anna. We don’t have an analysis that compares the revised -- What the catch levels would be with the current landings, but, when we get through this next little bit of the discussion document, I will show you, using the revised landings that incorporate the FES methodology, what the apportionment would look like between the South Atlantic and the Gulf and what the sector allocations would look like, but that's basically all I have for you at this meeting, in addition to what Chip just presented.

DR. COLLIER: Just to build on what Myra said, if you look at that projection graphic, that does show you what the catches relative to historic catches are and what they would be going forward, and so that provides you some information, and, because we don't know what the ACL would be, it's difficult to determine -- We don't know the allocation or the ACL, and so it would be pretty difficult to determine how the recreational fishery was doing relative to their ACL.

MS. BROUWER: Are we good? I will keep moving along. The next kind of historical bit that I have here for you is just reminding you what we did for Regulatory Amendment 32, and so this one was developed to address short-term management of yellowtail snapper by preventing early closure for the commercial sector, and so the council looked through this in 2018, and they considered that an in-season closure would not occur for either sector until the total ACL was met, and they also looked at an in-season closure not occurring if the commercial ACL had been met and the total catch was projected to reach 80 percent of the total ACL, and then another option, similar to that, was 70 percent of the total ACL.

The Snapper Grouper AP provided input, and I believe it was fall, right before the council considered Regulatory Amendment 32 for potential final approval, and they provided their recommendations. They recommended that the council take no action for this amendment, and they cited all these bullets that you have in front of you. They talked about the price diminishing substantially during the summer months, and they talked about preferring to wait until after the
stock assessment. I'm not going to go through all of these bullets right now, but you have all of that information in front of you and all this to kind of back up what the council ended up doing, which was to not submit Regulatory Amendment 32 for final approval, and so that one sort of just went away.

Back to the present, and here's what the current regulations are for yellowtail snapper in the South Atlantic. You have your total ACL, which is equal to the ABC, which is just a little above three million pounds whole weight. The apportionment between the sectors is on the screen, and the summary of the commercial accountability and recreational accountability measures, and the fishing year, currently, is August through July. There is a twelve-inch total length minimum size limit for both sectors, and there is a ten-per-person-per-day limit for yellowtail within the snappers aggregate.

Even closer to the present, the Snapper Grouper AP did talk about this species recently, at their April meeting, and they were provided the same fishery overview that you just received, and the AP did mention that the number of vessels on the water appeared to be interfering with commercial yellowtail snapper fishing, and they talked about there being more targeting of yellowtail snapper recreationally, compared to previous years, and they talked about there being no more issues with discarding of barely-legal yellowtail snapper, like the ones that are right on that twelve-inch minimum size limit, and that was an issue that was occurring back in 2018, but they clarified that was no longer an issue. Some of the other things, Jimmy has already talked about, and I just wanted to have this included in here.

Also, to remind you, these are the current regulations for yellowtail in the Gulf, and their ACL is just a little below a million pounds, and there are no sector ACLs. There's an in-season closure if the ACL is projected to be met. The fishing year is the same, and the minimum size limit is the same, and the bag limit is the same, and there is no commercial trip limit.

Their Reef Fish AP did talk about yellowtail this year, and they approved a motion recommending maintaining the status quo of fishing conditions and fishing levels for yellowtail snapper in the Gulf of Mexico and considering, of course, any changes that would be due to the revisions to the recreational landings estimates as a result of the FES methodology. I'm going to pause there and see if there's any questions.

MS. MCCAWLEY: I don't see any hands up.
MS. BROUWER: Okay. Moving on then to the recommended catch levels, this table basically summarizes the recommendations from the SSCs, the joint SSCs, and these recommendations are for 2021 through 2025, and they are based on SEDAR 64, which includes the FES revisions to the recreational landings. Here is what your ABC would look like, stock-wide, and so we applied the current jurisdictional allocation formula to the revised stream of landings, and, based on that calculation, the apportionment would shift to 81.29 percent to the South Atlantic and 18.61 percent to the Gulf.

That is applying, as I said, the same formula with the revised stream of landings, and so, based on that, for 2021, about 3.7 million pounds would be allocated to the South Atlantic, and about 866,000 pounds would be allocated to the Gulf. Just for reference, currently, the ACL is about
three million pounds in the South Atlantic and 100,000 in the Gulf, and so you just bring it a little bit down for the Gulf, and a tiny little bit down in the South Atlantic as well.

Then, using the same methodology, and so applying the same formula to the revised landings for the sector allocations for the South Atlantic, you get an apportionment of 40.73 percent to the commercial sector and 59.27 percent to the recreational sector, and so here's what those ACLs would look like.

What we need, again, for this meeting is let us know if the tentative timing for this amendment is okay with you, and let us know if a single document that amends both FMPs, as I explained earlier, is okay, and then some general guidance on what you would like to see for September, if you want to retain any of the stuff that you considered in Snapper Grouper Amendment 44, or maybe develop options based on catch level recommendations, with management starting in 2023, perhaps, and that's all I have.

MS. MCCAWLEY: Thank you, Myra. Since this is primarily a Florida fishery, and a south Florida fishery at that, I do have some suggestions, and so a couple of things that are important to us at the FWC. I would say I can't emphasize enough having the same regulations in the Gulf and South Atlantic, and it’s just a lot easier for fishermen that are fishing both permits, or even some of those that are just fishing one of the two permits.

I can tell you, and I think you went over this at the Gulf AP, at the last discussion that they had about yellowtail, that they supported maintaining status quo regulations, and I think that I'm fine with the timeline that was in the amendment, with this joint council document, and I am good with moving forward with these new ABCs and looking at the new allocations that were discussed in this document that Myra provided.

I don't know that we need to look at the reduction in the recreational bag limit, or even a commercial trip limit now, unless it looks like, with these new numbers, that there will be an early closure, and so, in the past, we had talked about how important it is to keep the yellowtail snapper fishery open, including changing the fishing year, so that, if there was a closure, it would happen at the time of the year that the fishermen weren't, I guess you could say, harmed the most, and that has worked out so far, but I would love to get this going, and my recommendation would be that, if it looks like either the recreational or the commercial would close early under the new levels, that we then consider commercial trip limits and that recreational bag limit reduction. I will stop there and see if others want to weigh-in here. Art.

MR. SAPP: I couldn't agree more with everything you said there, and I was just surprised, and intrigued, to hear Jimmy say that at least one of the high-hooks down there in Key West was thinking that it wasn't going to close this year and that they weren't even going to catch their ACL after, year after year, closing a couple of months early there, but I would like to hear more from a few of the other fishermen down there, but that really shouldn't affect what we're talking about right now.

MS. MCCAWLEY: I was surprised to hear that as well. I was on the AP meeting, listening in to that discussion, and it was very interesting, and I was surprised as well. Mel.

MR. BELL: Thanks, Jessica, and I was just going to say that I do appreciate the fact that the focus of this fishery is in south Florida, and really south Florida, and so I'm very interested in you all's approach, and I think, obviously, whatever you guys figure out works best, I am listening.

MS. MCCAWLEY: Thanks, Mel. Any more comments on yellowtail? Myra, what else do you need from us?

MS. BROUWER: That would be it, Jessica. Thank you.
MS. MCCAWLEY: All right. I see that Chester put his hand up.
MR. BREWER: Thank you, Jessica. I was just going to point out that I get phone calls about a lot of fisheries, but, over the past year or so, nobody has said a word to me about yellowtail, and so I don't know that anything drastic needs to be done with this.

MS. MCCAWLEY: That's where it sounded like they were on the Gulf. All right. Anything else on yellowtail? Chip.

DR. COLLIER: Thank you for recognizing me. I was just looking at the commercial landings data for yellowtail, and there is some indication that, over the past few years, they've been catching right around about 1.4 million, and so, looking at Myra's table that she had in there, I believe there might be some potential issues with that time period, and let me check those numbers again real quick.

I am looking at the SERO ACL monitoring, and they've been bouncing around between 1.4, as a low, since the seasonal change occurred, up to a high of almost 1.8 million pounds, and so there might be some implications to the commercial fishery. As far as the recreational fishery, they have tended to be much lower than that recreational ACL.

MS. MCCAWLEY: Then, based on those numbers, we might need to consider a commercial trip limit as part of this action.

MS. BROUWER: Okay. Well, thank you for that. I think we have enough to put together something back to bring to you in September. If there's a desire to look at a range of trip limits, that would be helpful, but, if not, I think the IPT could probably come up with maybe a range, and then we could just keep talking about this in September. Does that sound okay?

MS. MCCAWLEY: That sounds great. I saw Monica put her hand up.
MS. SMIT-BRUNELLO: Just a question, and thank you, based on what Chip just said. Would you want to consider different allocation alternatives? I mean, Chop talked about the commercial sector reaching their ACL, and so I didn't know if that was something you might want to consider.

MS. MCCAWLEY: It was definitely brought up in the past, and I'm fine at looking at alternatives on the South Atlantic side, between commercial and recreational. The Gulf doesn't have it split out, between rec and commercial on their side, and so, yes, I'm fine with looking at alternatives for that, and that's definitely something that the council has discussed in the past. Art.

MR. SAPP: I'm a little concerned about that, because I'm afraid, with these revised MRIP numbers, the recreational sector is going to be awfully close, and I think, if we table it a bit until September, we'll know if the commercial sector does fill their ACL by then, and we'll be able to -- I have always been a bit intrigued by putting some trip limits, to try to make the yellowtail fishery a little more steady, and there's some guys, up a little further north in the state, that would like to try to commercially fish them in August that, obviously, is never an opportunity for them, but, like I said, I would just as soon that we kind of let it ride and see what happens this year, until our next meeting.

MS. MCCAWLEY: Sounds good. Anna.
MS. BECKWITH: I'm good. Thanks.
MS. MCCAWLEY: All right. Any more discussion on yellowtail? All right. I don't see any more hands. If we're done with yellowtail, do we want to take a ten-minute break and then come back and work on tilefish?

MR. BELL: Sounds good to me.
MS. MCCAWLEY: All right.
(Whereupon, a recess was taken.)
MS. MCCAWLEY: We're going to move into tilefish now, and we're reordered the agenda, and first up, under tilefish, will be the assessment presentation.

DR. SCHMIDTKE: We'll have Scott Crosson to give that.
MS. MCCAWLEY: Okay. Great. Thank you. Scott, are you ready?
DR. CROSSON: Yes, I am. Thank you, Madam Chair. I also have Nikolai here, in case I need some assistance on this, but this, hopefully, will be less complicated than the ones that follow, and so we can go ahead and start, and this is for golden tilefish, SEDAR 66. Here, you can see the species, and this is not the first rodeo for golden tilefish. It's been assessed a number of times, most recently going back to 2017, when there was an assessment update, and the fact that there's two different things listed around the same time, I remember this has something to do with the SSC, but staff would have to remind me what was done back then.

Again, the most recent update in 2016 showed that the stock is not overfished, but it was undergoing overfishing, and you can see the results that are there. Here's the history of the SEDAR 66 , and I personally was not on this assessment, but I was on the SSC meeting at the end of April.

There are some report revisions that were included into this, and I believe this came up after the SSC presentation and meeting. Nikolai, the assessment scientist, found that there was a mismatch in the recreational landings and that the numbers had originally been given to him in numbers and not in terms of pounds for recreational landings. Luckily, golden tilefish is very predominantly a commercial fishery, and so this did not really have any effect on the assessment model and the results that came out of it, but the revisions were given to these numbers, to correct them, were
found -- They are found in the revised report that you have in front of you, and also in the presentation.

Here, you can see, again, as I noted, most of the landings that are in this fishery are coming from the commercial longline, and also a significant number of commercial handline, and the remainder of those are from the recreational fishery, and the discards in this fishery are minimal, and so they were not included in the model.

This is just noting here that the two indices of abundance that are included are the commercial longline and the MARMAP survey, but the commercial longline was cut off in the last 2000s, due to some of the regulatory changes, and particularly the fishing derbies that had erupted in recent years, making that data stream unreliable, and so those most recent years do not have the commercial longline data in them.

Again, the new information that is included in here, there is four additional years of data that are updated. The recreational landings are updated to the new MRIP. The commercial longline, as I stated, was truncated in 2006, because of regulatory changes and changes in fishing behavior in response to those regulations, and there were a few things that were excluded.

As I said earlier, during the presentation for gag, these are always the graphs that I look at when I go to a report from SEDAR, and you can see that, generally, the trend is solid, and there's been an increase in the numbers-at-age in recent years, and the biomass is holding steady. These are the results for the abundance, and you can see that there are quite significant confidence intervals on either side of this, and that's something that I will discuss further on in the presentation, and I'm sure that it will also be discussed during the SSC results. Again, this is a similar story with recruitment. The numbers are holding steady in recent years, and there is quite significant confidence intervals on either side of this.

This is the stock-recruit relationship, and I don't have anything particularly to add to this, except that most everything is above the black line, and so that's a positive. This is the log of abundance, and you can see that, especially the purple line, in the most recent years, are above the FMSY equilibrium, and it's just always something we would like to see in the fishery, and so most of the age structure from the different years are showing a positive result.

Here is the log of abundance and the age structure changing over time, and, again, you can see it remains hovering right around MSY, SSB MSY, and so we have a fishery that's not overfished. This is just the results from the different fishing mortality, and, again, as was stated earlier, it's mostly through the commercial longline fishery.

The stock is not overfished. Most of the runs show the stock is not overfished, and most of them show the stock is not undergoing overfishing, and, again, there are large confidence intervals, and I guess this is a point, and I don't want to drag into, or bump into, Genny's discussion of what the SSC said, but, when you're hovering really close to MSY, you would expect to sort of see this even distribution right around especially -- If we go to the next slide, this one, the green intersection right there is the base run, and so, when Nikolai and I were discussing this, you can see the nice, even distribution on either side of that, and that's basically showing that you're hitting very close to the target, and so, because you don't have the ability to see precisely where you are, you would expect an even distribution of the results on either side of this.

I think the comparison that we were making, in our discussion last week, was that, if you were watching a basketball game, and there was somebody going out of bounds, and they were focused right on the foul line, and you couldn't really determine whether they had gone out or not, and you didn't have instant replay, but, if you asked a thousand referees, looking at the tape in real time, what had happened, you would expect a pretty even distribution about whether the person was in bounds or out of bounds.

This is what we basically see with the results of golden tilefish. It's pretty much right on the money about where we should be, and so the next slide is the summary of the results. Golden tilefish is not overfished, and overfishing is no longer occurring. Status benchmarks are right near the reference points, and there is a lot of uncertainty in the stock status, but that's mostly due to some uncertainty in the natural mortality rates and the steepness parameters, and so there's some changes for future assessments that are included down there, and they're also included in the report, but, generally, we don't see any kind of long-term trends in recruitment, and we don't see -- We don't see any negatives, in terms of the overfishing or overfished status. At that point, I will open it up to questions, and, again, I have Nikolai on here, if there are some specific ones that are related to the modeling.

MS. MCCAWLEY: Do we have any questions on this presentation? I'm just waiting to see if we have any hands. I don't see any hands going up. Thank you, Scott. There might be questions here in a minute, and I guess we'll shift over to Genny.

DR. NESSLAGE: Great. Thank you, Jessica. The SSC, at our April/May meeting, had the opportunity to review this assessment, and we found it, as with the gag assessment, to be very thorough and well conducted. We agreed that the assessment appropriately addressed the TORs, is BSIA, and provides an adequate basis for determining stock status and supporting fishing level recommendations and adequately addressed uncertainty in a manner that's consistent with our expectations and the available data.

As usual, we were asked what factors affect the reliability of the stock status estimates and fishing level recommendations, and the SSC wanted to highlight a few aspects of the assessment that you would be aware of, and some of these were mentioned by Scott, and I will just reiterate them briefly. It was apparent, from the sensitivity analyses run, that the stock status is sensitive to uncertainty in natural mortality, and that's pretty common, but it's something to keep in mind, given that we have not a lot of empirical information about natural mortality in golden tilefish.

The terminal year of the assessment is a bit earlier, I guess, than some of the other assessments we're seeing, and so the terminal year is 2018, and we're now at 2021, and so stock status is already higher -- Uncertainty in stock status is already higher than what has been characterized in the assessment, just because there is that gap between the terminal year of the assessment and the current date, and that's a little bit larger than some of the other assessments that you may be seeing at the moment.

The available indices are a bit patchy in their spatial coverage, and they demonstrated a high variability and not a whole lot of trend, especially the fishery-independent index that's used for this assessment, and I'll talk about the fishery-dependent one in a moment. Steepness is an important parameter, as you all know, and it could not be estimated for this assessment, and the
model proved to be pretty sensitive to the specified value, and so that's something to keep in mind as well, because that impacts your estimate, or your characterization, of the reference, when it's in stock status.

Continuing on with other uncertainties, as I just mentioned a moment ago, the index of abundance that is the primary index in this assessment is the commercial longline catch per unit effort index, and it's traditionally been the big one that the assessment relies primarily upon, and, during this operational assessment, it was identified that the management changes that had occurred in the past have kind of led to a change in how effort is characterized in this index, what it actually means, and so what we determined was that it was best to truncate that index in 2006, and that leaves us without a fishery-dependent index from 2007 forward, and primarily just the MARMAP index, which, as I said before, is kind of spatially patchy and has low catch rates, and it's highly variable, and so that leaves us with really not a lot of strong information on the index of abundance side in this assessment from 2007 forward.

Recruitment uncertainty is very high for this assessment, and, if you look at this graph on the right, you can see there's kind of a flat line for estimated recruitment at the beginning and the end of the time series, and that's because we are really -- Given the age of entry into the fishery, we really don't have a lot of information about young fish in this assessment, fish less than I would say maybe ages-one to seven, and, because of that, we're not able to estimate recruitment deviations, and so we basically just assume, in those beginning and end years of the assessment, that we're essentially getting the average recruitment.

As you can see, that leads to kind of a strange pattern here, and we've done this in -- I know it was the last several assessments, and I'm not sure how far back that goes, but that does provide quite a bit of uncertainty. The good news is that that uncertainty has been accounted for. You can see these wide confidence intervals at the end of the time series, and it's accounted for in the Monte Carlo Bootstrap Ensemble procedures that Nikolai ran, and so that uncertainty is accounted for, but, again, that leads to greater uncertainty in our estimates of the OFL, and so that contributes, ultimately, to the ABC setting.

The SSC, and I will say this again as part of my mantra, and I probably don't need to say it too loud, because you all seem very enthusiastic about this as well, but this is another case where it becomes difficult to determine what recruitment should be used in projections, and so, here, we have a situation where we're not even really truly -- We don't have a lot of information about recruitment in the last six or seven years of the assessment, and we're -- If we were to assume the lower estimates that you can kind of see from that 2008, 2009, and 2010 period, that were the last that were well informed by the data in the assessment, then that might not -- That might be as old as 2010. Do we use those estimates, or do we use the average? Do we use something else?

We talked about this quite extensively, and this is another strange case that we were presented with, and it's something that we would like the opportunity to have a little more time, outside of the crunch of a big SSC meeting, to really think about a bit more deeply, and so we are, again, requesting a working group that could deal with this issue and come back with some recommended best practices.

We recommend, with regard to fishing level recommendations, that the OFL be based on F equals FMSY, and we applied the ABC Control Rule. For Tier 1, we suggested a 2.5 percent adjustment,
because steepness was specified, which essentially sets your reference points. For Tier 2, we recommended the small adjustment, because uncertainty was carried forward in the projections, but, again, environmental conditions were not explicitly included, and that's pretty much the lowest adjustment that we give for assessments in this tier.

Tier 3, we selected a 2.5 percent adjustment, because the stock -- It's not overfished or overfishing, but it's close, and it's in close proximity to those benchmark values, and, as Scott pointed out, we're kind of teetering on the edge, and so there was a slight adjustment suggested there. Then, for Tier 4, we recommended a 10 percent adjustment, because the stock has low productivity and has high vulnerability and susceptibility, and so that leads to a total adjustment of 17.5 percent and a $\mathrm{P}^{*}$ of 32.5 percent. You can find the completed catch level recommendations, with the OFL and ABC recommendations, on page 16 of our report.

We were asked was past management successful in ending overfishing. As Scott already pointed out, the stock is no longer experiencing overfishing, as had been identified in past updates. However, as was already mentioned, there is high uncertainty in stock status, which is to be expected when you're fishing at or near FMSY, but, given the fact that that boomerang plot there -- About half of the runs are in the happy zone and about half are in the overfished or overfishing zone is a bit -- It's a source of uncertainty, and so it's really unclear -- We are not overfished or overfishing, but we might be on the edge, and so that's something to keep in mind.

We were asked if the buffer between the OFL and ABC is appropriate, given it's one of the largest, if not the largest, I think, perhaps, amongst the managed species for the South Atlantic, and a lot of that uncertainty is coming from recruitment, as I mentioned earlier in this presentation, and we really have almost no information on recruitment in the last seven years. There is a bit coming out of the catch-at-age from the commercial data, but there's not that many samples to really inform this whole stock assessment, and, as I mentioned, the index of abundance was truncated, the commercial longline fishery-dependent index of catch per unit effort, and so, really, we don't have a lot of information about recruitment at the end of the time series.

That leads to a higher buffer, as I mentioned before, and that uncertainty in recruitment gets kind of pushed forward. This assessment also includes -- Well, in the past, it included a wider range in natural mortality that was incorporated into the uncertainty estimation procedures, the MCBs. This time, we narrowed that range, and that contributed to the smaller buffer, and I will address that in a few slides, with regard to research recommendations, as well.

We were asked what indicators, or metrics, should be monitored for this stock, and the SSC discussed this quite a bit. Given the uncertainty in the stock status, the SSC recommended that perhaps there might be, between now and the next assessment, some sort of mid-term review of how the stock is doing with regard to landings, the SEAMAP and MARMAP index of abundance, and then any kind of length or age composition you can get from the commercial longline, handline, and general rec fisheries, but primarily the commercial longline, as well as the SEAMAP index.

Then, of course, the SSC encouraged that monitoring and data collection for tilefish be emphasized. We're very excited about the new South Atlantic deepwater longline survey and its potential application for this stock, and I will talk more about that in a moment.

We were also asked to comment on the research recommendations in the assessment, and we wanted to highlight a few that we thought would have the biggest impact. The first had to do with exploring alternative distributional assumptions for natural mortality and the uncertainty analysis, and so that's what I was talking about earlier, that, instead of just assuming a uniform distribution of natural mortality values that are plugged into the MCBE uncertainty analysis, perhaps there might be a distribution where we think it's likely to be in this range and not so likely, but possible, at the tails, and that's kind of the approach that we would like to see, but it's something that needs to be incorporated into the overall assessment and coded and evaluated, and so that's something to definitely keep at the top of the list, if possible, for the next assessment, and that will help reduce uncertainty and hopefully reduce that buffer between the OFL and the ABC.

We also highlighted that incorporation of new fishery-independent abundance data may provide some really important information on trends in abundance and life history data information, and that can come from the CRP cooperative bottom longline survey, the deepwater survey, South Carolina DNR's vertical longline survey, and the South Atlantic deepwater longline survey. These could all provide estimates, information, that we hope might inform recruitment in recent years and help reduce that uncertainty in this assessment, and hopefully provide some sort of -Eventually, when the time series are long enough, some sort of index of abundance of adults.

Then, finally, we thought it important to highlight that, if at all possible, increasing the age sampling for this stock is important, to improve the composition data, and we'll be able to pick up on any recruitment pulses that are coming through, any changes in age structure of the stock, the more samples we could get, and so that's a very high priority.

In addition, we wanted to highlight a few things that might improve future assessments that weren't mentioned in the report, the first being that it might be worthwhile spending some time investigating the relationship between recruitment that's observed and any environmental variability that might be driving that recruitment, so that we might be able to predict, or project, recruitment and help reduce uncertainty in the recent years.

We also suggested collecting information on pre-recruit abundance, and that would be less than age-seven or eight, acknowledging that this information may be really difficult to collect, and it's not that people haven't tried, but it's just that folks have a really hard time finding juvenile tilefish, particularly in the areas where many of our surveys are typically conducted in the South Atlantic. Then, finally, we thought that it would be important to identify any current or ongoing or recent studies that maybe haven't been published yet regarding stock structure along the east coast, and, if there are none, it would be important to collect genetic data on golden tilefish with relation to kind of help inform that stock boundary at Cape Hatteras.

Then we recommended that the next assessment should be an operational assessment in three to five years, and, if possible -- Ideally, we would wait and then try to incorporate the pilot survey data, particularly that deepwater longline survey data, with the hopes that some of these new sources of information might provide additional life history information and possibly a new index of abundance, to help with the truncation of the commercial longline CPUE in this assessment. That's my last slide. Thank you, and I would be happy to answer any questions.

MS. MCCAWLEY: Thank you, Genny. I noted, just like you did, that, in the PowerPoint, another request for that working group, and so I'm hoping we can squeeze that in sometime soon. Do folks have any questions? Dewey.

MR. HEMILRIGHT: Thank you. I was curious as to -- When you talk about the looking for recruitment, and you're looking particularly for fish under seven years of age, what particular weight class would that be, a seven-year-old fish, and I've got a couple more questions, please.

DR. NESSLAGE: Are they small -- You know, I'm -- So the market categories in the South Atlantic are different than the north, and I haven't reviewed them recently, and that might be a question for Nikolai. Do you know, off the top of your head? That's what you're asking, right, is essentially what's the market category?

MR. HEMILRIGHT: No, I'm not asking what the market category is. I'm asking what size fish are you all considering to be a seven-year-old fish.

DR. NESSLAGE: What's the weight. I'm sorry.
DR. SCHMIDTKE: We actually have that as part of the overview information, and so here's the weight-length curve, and these dots -- They're a little small, but you can kind of see them, and the dots here are your age classes, and so we've got age-one, two, three, four, five, six, and so, if we're talking age-seven, that would correspond to about a six-pound fish or so, unless --

MR. HEMILRIGHT: Okay, and, when you did have signs, what year, dating back, did you have signs of showing recruitment for these particular fish, or have you always never seen recruitment?

DR. NESSLAGE: The recruitment in the assessment is pretty much back-calculated, if you will, from the observed catch-at-age and the age in the commercial data and in the survey, and we don't have an index of recruitment in this assessment, and so there's no like data from a survey, for instance, informing young fish in this survey, and is that answering your question? It's looking for recruitment pulses in the catch-at-age data, and so, basically, if you see a spike suddenly show up of eight, nine, ten-year-olds, that had to have been a spike, seven or eight years ago, in recruitment.

MR. HEMILRIGHT: Do you think that the -- How does this -- Given the way regulations are, and the limited number of bottom longline permits, and this is executed, or prosecuted, in Florida, and a little bit in South Carolina, do you think the fact of the matter is that using that particular gear -That your small fish, fishing in the tide, are not showing up, because the big ones are getting to the hook sooner, and so, therefore, you don't catch a lot of small ones?

DR. NESSLAGE: That's very possible. I know that Churchill Grimes has suggested that that's very possible, that the larger, older fish tend to be more aggressive, absolutely, but I don't know the extent to which that's happening, or it's just a difference in habitat depth, where they're hanging out.

MR. HEMILRIGHT: Yes, because it seems like some of the answers that you're trying to answer might already be there, by looking at the way the fishery is prosecuted, or caught, and something else is, is it possible to go -- To my knowledge, there's not a whole bunch of dealers that deal in
golden tilefish, and has anybody looked at an exercise to see exactly what size class they are labeling the catch and then look at that, because that might help some, because I really don't think, given what you're asking here -- Unless something doesn't happen different, you're not going to find answers, and you will continue to say, well, we have no way to judge recruitment, because it's something else going on, or a methodology you're using to catch the fish, or the habitat, that it's simply not going to show up, and that's kind of all I've got to say. Thank you.

DR. NESSLAGE: Just to answer your question, I don't believe, in the South Atlantic, we've done that, with regard to looking at the dealer information, and I don't know, and Nikolai can correct me if I'm wrong, but you're right that it's highly unlikely, unless these new surveys magically encountered juveniles for some reason, and maybe they have different bait or different hooks or something like that, but, if the behavior of the fish is truly that way, you're right that we may never get that information.

MR. HEMILRIGHT: One last thing, and you know, because I suspect that, when you look at this, probably all your bottom longline catch, and a good portion of your catch of the handline is all coming from fishing in the tide, and so there might be something there that you're never going to see, because of the habitat and where that is, and, also, I believe that, when you go to the dealers, if that would be worth checking off that box, and that would help maybe explain what the catch is, because that information is -- You don't have to spend millions of dollars, and it probably wouldn't take a lot of time to gather that information, given the limited number of dealers and the amount that they handle, and so that might be something to look into that would help check a box or answer a question. Thank you.

MS. MCCAWLEY: We have some more hands up. Steve and then Kerry.
MR. POLAND: Thank you, Madam Chair, and thank you for the presentation, Genny. I've got a few questions and comments. Looking at the SSC recommendations for the council, it's got a monitor landings and index of abundance in the stock, and I guess this is more of a comment that the council can discuss when we get to a management response, but I'm just trying to think of some type of mechanism that we could include in management to facilitate that, and this might be an opportunity for the council to maybe have a discussion on interim analyses, and this might be a stock that we can test the waters with that.

As far as research recommendations, age sampling to improve composition of data, and does this just need more ages from all the fleets across-the-board, or is there certain fleets or size classes that are underrepresented in the age data?

DR. NESSLAGE: That's a great question. I am going to actually kick that to Nikolai, because I have not played with the age data recently, and so I would actually, if he's willing, look to him, because I don't remember the exact sample number of trips, et cetera, by fleet and region and whatnot.

MR. POLAND: All right. Thank you. We don't need to let Nikolai out without commenting on the assessment.

DR. KLIBANSKY: I don't recall a specific -- Just generally lower sample sizes, and it would help to have more age samples, and then, certainly, we discussed that it would be helpful to have a younger fish sampled for the estimation of recruitment, but the question is where do you get those?

MR. POLAND: All right. Thank you, Nikolai, and so I guess that's something that the Service and the states can probably work on, as far as getting more fishery-dependent samples, at least from commercial catches, and then, as far as the recommendation to consider an update in three to five years, will -- I guess, Genny, in your opinion, will that provide enough years of data in the longline, the new longline, survey to really show an index, show a trend, or is that a little too soon, do you think?

DR. NESSLAGE: Three is definitely too soon, in my personal opinion. Five to seven probably is more realistic, with regard to trend. I think one of the reasons the SSC said three to five is because all that laundry list of data sources that I mentioned of the fishery-independent survey data that might inform life history, including reducing uncertainty in some of the other life history information that's going into the assessment, and, like you said, the index of abundance probably won't be until we have a bit more information, five I would think, minimum, but that's just -That's not what the SSC said explicitly, and I'm just going off of previous experience with the group.

MR. POLAND: I would think that would need to go through a data workshop, at a minimum. All right. Then the last question, and this is more just a plug, as Habitat Chair, is the recommendation to look at the relationship between recruitment and environmental variability and to project recruitment, and this might be a question that the council can task our Ecopath with Ecosim model to provide a little bit of information and see if that model can provide us any insight on how recruitment is affected by either environmental variability or ecosystem fluctuations. That's all I've got. Thanks, Genny.

DR. NESSLAGE: Sure. If I may, Jessica, I just wanted to follow-up on one of Steve's earlier questions, and I was just looking at the assessment report, and is that okay?

MS. MCCAWLEY: Of course. Go ahead.
DR. NESSLAGE: Nikolai, correct me if I'm wrong, but I'm looking at the age comp that -- I think you spit out, in those graphs, the effect of sample size, and so the number of trips that were used in estimating the age comps for any given year, and they tend to be in the twenty to thirty range, and some of the higher ones are in the forties, high thirties, but most of them are in the twenty to thirty range, and so that's basically saying that, in any -- Again, correct me, Nikolai, if I'm wrong, but that, in any given year, the commercial longline age comps, which is primarily what's informing this assessment, you are really relying on samples from twenty to thirty trips, and so I consider that kind of low, but maybe that's par for the course for assessments that -- For fisheries that are relatively small like this one. Would you disagree, Nikolai, and did I say something wrong?

DR. KLIBANSKY: No, and I think that was well said, and that’s kind of what I was trying to say to Steve regarding his question, but they are just generally low, and so it would just be helpful to have more age comps, more age samples.

DR. NESSLAGE: Thank you.
MS. MCCAWLEY: Kerry.
MS. MARHEFKA: Thank you, Madam Chair. Genny, thank you so much for your presentation, and Scott as well. I want to circle back, and real quick to Dewey, and I am a dealer who deals with a good bit of golden tile. I mean, I don't know where I fall in percentage-wise, but, sadly, we don't, I don't, grade it in my reporting, and so I'm happy to start doing that, and I can make sure the guys get me that information, but, to this date, we haven't.

My question was about the truncation of the fishery-dependent index in 2006, which I understand, but my question is does that mean, going forward, we're just not going to ever incorporate any fishery-dependent data? Is there a way to sort of have a gap between 2006 and when things level out for the longline fishery? I think we've had new regulations in place for a little bit for them, or to look at the hook-and-line component in the logbook for golden tile, or are we just not going to ever use fishery-dependent data again as an index?

DR. NESSLAGE: That's a great question. I'm going to take a stab at it, and then I'm going to see if Nikolai -- If it's okay, Jessica, it would be good to see if Nikolai and Scott have comments as well, but I was one of the SSC reps on this assessment, and what I recall us discussing was that truncating it in 2006 -- At this point, it doesn't leave you with a lot of data points going forward, but the biggest -- If you were to do like a 2007 forward one, an index, we thought about that, as I recall, but the concern is that, given the way the fishery works now, it appears to be something more along the lines of like a derby fishery, where a lot of the effort just happens very intensely at the beginning of the season, and a lot of that is weather influenced, and so the definition of effort, as it had been used in the past, just really became kind of meaningless, and it's really hard to define what effort is at that point. As I recall, we determined that we would not use the recent data. Nikolai, is that correct? If I'm characterizing something wrong, with regard to the fishery, definitely, Nikolai or Scott, chime in, please.

DR. KLIBANSKY: I think that's basically correct, and so the question is will we get to use the fishery-dependent data again for an index?

DR. NESSLAGE: Yes.
DR. KLIBANSKY: I don't know quite what it would take to be able to use that data again, because it's just, since 2006 -- We had some really good discussions with members of the industry at the data/assessment workshop for the species, and it affected behavior, and, after those 2006 regulations, the season just got shorter and shorter, and the fleet behavior was changing to deal with those shortened seasons, and so, with that behavior continuing to change, it's hard to see how we could use that data to develop an index.

MS. MARHEFKA: Are you all talking about both the longline data and the handline data? Do you consider the handline data, or the handline fishery, as susceptible to effects of derby fishing as the longline, because, for me, they're a little different.

DR. KLIBANSKY: This was just -- We haven't been using a handline index, and we just use a longline index, and so I don't recall that that discussion -- The discussions were focusing on longline, and so I'm not sure how to really address the handline.

DR. NESSLAGE: May I jump in there?
MS. MCCAWLEY: Of course.
DR. NESSLAGE: Thanks. I agree with Nikolai that we didn't discuss developing a commercial handline index. However, in the 2016 update -- I know I looked at those data, and, once you -What I recall is that, once you apply the kind of QA/QC culling of the data, and kind of sifting through good reports and all of the information that we need to develop the index, according to the protocols that have been developed, there really wasn't much left. It's a relatively -- As you know, it's a relatively small fleet, and so there wasn't as much good information there to develop an index.

It definitely is something that could be looked at again with the next assessment, and probably should be looked at again, and so I'm making a mental note, and I hope that Nikolai is as well, that we could reopen that, and it's a good idea, but I don't know if that's subject to the same fishery behavior issues that would make it a poor index in the way that the commercial longline index ended up being in recent years, and I think we would have to have a discussion about that with industry at a data workshop, but it's a great idea.

## MS. MCCAWLEY: Dewey.

MR. HEMILRIGHT: Listening to the conversation here, it would probably be really good to have a data workshop of some type with the fishermen, to flesh some of these things out, because I think a lot of this could be fleshed out, because fishermen know, when they go fishing, what they're going to catch, a lot of times, based on experience and location and the size of the fish and where they hang out, and, to Kerry's point about she doesn't report the sizes, or different sizes or whatever, she has an idea of how many fish that comes across her dock that are less than ten pounds.

I think, if you went out to the AP, or had the twenty-five or thirty fishermen that have bottom longline permits, and, also, other fishermen that bandit fish, that you could really get a wealth of information and knowledge to help foster some ideas of what's lacking, given the limited resources we have to answer these questions.

MS. MCCAWLEY: Thank you, Dewey. Clay.
DR. PORCH: Thank you, Chair. Just a couple of points. One, just to comment on the length of the time series issue, the question that Steve asked, Genny is right that, for influencing an assessment, you probably do need at least five years' worth of information. Otherwise, the assessment doesn't react very much. You need to establish a trend with contrast, but, for monitoring purposes, and so, for instance, if you're concerned about the status of tilefish in between stock assessments, then probably three years is enough, as long as the survey is precise enough and there's enough sampling going on.

For instance, in the first year that we ran the survey, as Todd was telling you about, arguably, the sample size wasn't sufficient, and we needed to expand the spatial coverage a little bit, and so that first year was more a learning year, and, this next year, we plan to increase sampling substantially, and that will probably be sort of the new baseline, and then, the year after that, when we monitor again, we'll be able to tell you how much the stock has gone up or down, and so, for monitoring purposes, you don't necessarily need to wait five years, but, for it to have much influence in the stock assessment itself, yes, you will need a longer time series.

Then I wanted to say a little bit about fishery-dependent versus fishery-independent indices, and just to emphasize that sort of the holy grail in fisheries assessment is to have a good fisheryindependent index, because you fish the same way, year-in-and-year-out, and so, that way, if you see the stock trends going up or down, it's likely to reflect a real change in abundance. The probably with fishery-dependent information, when you try and generate an index of abundance, is, one, fishermen may change their behavior because of regulations, and those are difficult to account for, and sometimes they never really can be accounted for, and they always smooth out trends.

For instance, if you had a fixed trip limit, and people always caught their limit, then the trend for the index will be flat, and there's no way for you to use it to index abundance. What you would have to do is get really detailed information from each fisherman, trying to ascertain how long they're actually searching for fish or something, and that's hard information to get.

The other thing that happens is that fishermen change the way they fish to adapt to either changes in the distribution of the fish or the environmental conditions, and so it's really hard to distinguish -- When you have a trend up or down in an index, is that because the fishery has changed its behavior, and it's adapted, and it's adopted new technology or what have you, or is it a real change in abundance, and so the wiser investment, for an index of abundance, is to look at the fisheryindependent index, and you can look at fishery-dependent data to understand the dynamics of the fishery better, but it's not necessarily the best choice for an index of abundance. Thank you.

MS. MCCAWLEY: Thank you, Clay. Any more questions? All right. I don't see any more hands. Thank you, Genny, and thank you, Scott. It looks like, next up, we're going to go to Mike with the fishery overview.

DR. SCHMIDTKE: Thank you, Jessica. This is the third one of these that you all have seen, and it's a pretty familiar format. Again, we have the history of management, and just one highlight there is the current total ACL comes from Regulatory Amendment 28, and that specified it at 342,000 pounds gutted weight, with an allocation to the commercial fishery of I think it's 97 percent and 3 percent to the recreational fishery.

You also have the fishery performance report that was filled out ahead of the stock assessment, back in October of 2018, and so I would encourage you all to take a look at that and see some of the comments from the AP.

Next, we'll look at the information in the graphs. Again, I'm not going to spend very much time on the assessment output, and we have not overfished and not overfishing status, but our measures of fishing mortality and spawning stock biomass are pretty close to the MSY reference points, and so that's something to keep in mind. Then we have kind of our new projections portion, and we
can see that, here, we just have the one projection, landings and discards, shown, and we have the different projection scenarios here. F equals FMSY is shown by the gray line, and that would pull landings up a little bit from what they've been recently.
$F$ with the $\mathrm{P}^{*}$ of 32.5 percent, which is the ABC recommendation, and that is shown in that yellow, and that would have landings kind of right in the middle of what they've been towards the end of the landings time series, and so it doesn't seem to be a huge shift from what the current norm is, so to speak, and it sits right about the 75 percent FMSY mark, though that lines up pretty well with that ABC recommendation.

Looking at the landings history relative to the sector ACLs, again, a reminder that, when we're looking at this comparative to the ACL, for the recreational fishery, these are going to be telephone survey landings, and so this is telephone survey, and then everything else is in the FES, but what we see is very high fluctuations, every now and then, in the recreational fishery, and that's kind of what we've seen for several -- From the MRIP data for several of these kind of not-oftenintercepted species, and the commercial fishery has pretty consistently been right around the ACL.

Scrolling on down to the commercial and recreational landings shown in pounds, similar to what Chip talked about for yellowtail, this last year, this 2019 year, it's not that there were no commercial landings, but it's that the commercial data isn't included in that data point, and so we can disregard that for the time being, but we see a very heavily commercial fishery, and that's aligned with the allocation that is very strongly commercially oriented.

Looking at the seasonal component, landings are typically concentrated toward the earlier part of the year. When they have happened, commercial closures have recently occurred by the end of Wave 4, with the longline component. The commercial fishery, as a reminder, is allocated even further into the longline and hook-and-line components, and the longline component typically will close earlier than the hook-and-line component. By location within the South Atlantic, Florida and Georgia typically combine for about two-thirds, or more, of the total landings, with the rest of them coming from the Carolinas.

Then, looking at the sector-specific data, the commercial fishery, we see here -- This is an example, and it's going to be the same type of thing on the recreational side, and tilefish are a deepwater species, and so these fish are not ones that you throw back, and they are brought up from deep depths and have noticeable barotrauma effects, and so they're not typically released. Then the seasonal and regional landings trends follow similar trends to the combined fishery, as this is a heavily-commercially-oriented species.

Next, looking at the recreational data, again pointing out that releases are minimal, if any, and we have very spiky landings data, very sporadic spikes here that will go above, but most years are below 10,000 fish, and we see, from the seasonal data, the recreational fishery is a bit more sporadic, when it happens, and it's kind of spread out, and it varies pretty widely from year to year when the tilefish are brought in.

Looking on a regional scale, there's been a shift. Prior to kind of this breaking point in the late 2000s, the Carolinas were catching most of the recreational landings for tilefish, but, more recently, they've been caught predominantly in the Florida/Georgia region, and I think that's all that we need to touch on here in the overview. If there's any information that I missed that you
would like me to bring up as you go through your discussions, just let me know, or, if you have any questions, I can take those now.

MS. MCCAWLEY: I see that Dewey has his hand up. Do you want to take some questions, Mike?

DR. SCHMIDTKE: Yes.
MS. MCCAWLEY: Okay. Dewey.
MR. HEMILRIGHT: I was curious. In the recreational data, are you -- What size fish are being caught there? Are they missing the seven-year-olds and less in that fishery? I was just curious about the ages of the fish being caught. Thank you.

DR. SCHMIDTKE: I see that the axis is a little wild here on the bottom, but, I mean, just judging on a relative scale, it's pretty -- It varies quite a bit, and I'm not sure that that's a whole lot that's concentrated on that lower end, and it doesn't look like there's a whole lot concentrated on that lower end of the size range, and so there's probably some lack of the recreational small individuals, and this isn't South Atlantic, and this is personal anecdotal from the Mid-Atlantic, but I know, from my work with tilefish, we were fishing on kind of headboat and charter boat type of vessels, but we weren't catching a whole lot of the smaller ones on our trips, and so they may be difficult to come by for that sector as well.

MR. HEMILRIGHT: Yes, and, in the Mid-Atlantic, your work there, that was out of the tide, correct, and that was not the Gulf Stream effect?

DR. SCHMIDTKE: Yes, that would have been further offshore.
MR. HEMILRIGHT: Thank you.
MS. MCCAWLEY: I don't see any more hands.
DR. SCHMIDTKE: It looks like we've got Tony.
MS. MCCAWLEY: Just kidding. Tony.
MR. DILERNIA: Just to add to -- To maybe help answer Dewey's question a little bit, like what we've been seeing this year up here in the Mid-Atlantic, in New York and New Jersey, we get mixed fish, and it really depends on the area we're fishing on. We had one boat that hadn't touched an area in a couple of years and came back with a lot of thirty and forty-pound fish, the past couple of trips, and so it all depends also on how hard we're fishing a particular area, whether or not we're going to get kittens, mid-size, or larger fish. That is definitely a factor, how often that area is hit. Thank you.

MS. MCCAWLEY: Thanks, Tony. Any more questions? All right. I'm going to pass it back to you, Mike.

DR. SCHMIDTKE: All right. I think at this point is when we would transition into the management response, and I will pull back up our overview. We would be looking to the committee for a management response, and possibly, if the committee desires, eventually a motion to incorporate the results of this stock assessment into the ACLs, via an amendment.

MS. MCCAWLEY: That sounds like an excellent game plan. Would someone on the committee like to start that discussion, or make a motion? Mel.

MR. BELL: I will bite on that. Basically, we just need to agree to begin the process of moving forward to accept the new ABC, right, to incorporate that into an appropriate amendment?

MS. MCCAWLEY: I believe so. Mike, will that work?
DR. SCHMIDTKE: Yes, and so, just to give some information timing-wise for that, we could potentially have an options paper coming back to the committee for such an amendment in December, and kind of kick off that process.

MS. MCCAWLEY: That sounds good to me. I'm going to take that as a motion, Mel, and I'm going to let Mike get it up on the board there. All right. Initiate a plan amendment for tilefish. Steve, is that a second?

MR. POLAND: Is the motion appropriate enough direction to staff? Do we need to maybe reword it to say to initiate a plan amendment for tilefish to incorporate the new ABC recommendation or something like that?

MS. MCCAWLEY: Yes, and I like the addition of the specifics. He's getting it up there.
MR. BELL: That was my question, and so, yes, with the right wording, that's the motion.
MS. MCCAWLEY: All right. Then it looked like Mike was typing, above that, that the options paper for tilefish is to come back in December. Okay. The motion is by Mel, and it’s seconded by Steve.

MR. POLAND: Yes, I will second.
MS. MCCAWLEY: Okay. Sounds good. It's under discussion. Any more discussion on this motion? Any objection to this motion? I'm sorry. Andy.

MR. STRELCHECK: I just wanted to be clear, and so, with the ABC recommendation, we also need to look at allocation, since this assessment incorporates the FES data, and I realize that recreational is a small portion, but $I$ just wanted to be clear, in terms of what the amendment will include.

MS. MCCAWLEY: That sounds great, Andy. Thank you for the reminder. Mike, I don’t know if you want to add that to the motion or to the options paper. It looks like it's going up in the motion. Okay. We have modified the motion some. Mel and Steve, are you okay with the additional specificity of this motion?

MR. BELL: Yes, and that's good that Andy caught that. That helps staff and all, but that's where we're going.

MR. POLAND: Yes, I'm good. I just -- I guess I've always assumed that, now with new MRIP numbers, that that's our burden.

MS. MCCAWLEY: Right. Okay. Any more discussion here or anything else that we forgot? I don't see any additional hands. Steve.

MR. POLAND: Can you hear me?
MS. MCCAWLEY: Yes, and you broke up there for a minute, but I think we got what you were saying though.

MR. POLAND: I'm fine with it. Sorry. There's a thunderstorm here right now.
MS. MCCAWLEY: Yes, and there's about to be one here, too. All right. Any objections to this motion? I don't see any hands. The motion carries. Mike, do you have what you need on tilefish?

DR. SCHMIDTKE: Yes, I think we have what we need for tilefish, and we'll be able to bring that options paper in December.

MS. MCCAWLEY: Okay. That sounds great, and so, instead of going into red snapper, and we want to do that in the morning, I think we're going to skip over to the updates on South Atlantic Red Snapper Count and Greater Amberjack Count, and I'm going to turn it to Myra and Chip.

MS. BROUWER: Thank you, Jessica. Well, since I was called on first, I will give you the update on the South Atlantic Red Snapper Count. The steering committee reviewed proposals during the winter of 2020, and the project that was funded is going to be led by Dr. Will Patterson of the University of Florida, and so it's a thirty-month study that is going to estimate the red snapper population in the South Atlantic independent of the current stock assessment, and so you all know how the Great Red Snapper Count was done in the Gulf, and so it's a very similar sort of sister project to that.

The distribution and the population density are going to be estimated using ROV transects in habitats that are not currently sampled by the SERFS program. They're also going to do fish traps and video camera data from sites within the SERFS sampling area, and they're going to conduct a genetic close kin mark-recapture analysis using fin clip tissue samples to estimate the red snapper population, and those tissues samples are going to be collected from SERFS trap catches and from commercial and recreational fishery landings off of northeast Florida and North Carolina.

A model is going to be produced, at the end of the study, that is going to obtain a second estimate of the red snapper abundance population, based on trap, camera, and ROV survey data, and the project -- The award for this project was in March of this year, and so the team hasn't really had very much time to get things underway, and they've only had about a month, and so, so far, they've collected a few hundred fin clip samples for the genetic analysis, and they are setting up the project's website. ROV sampling, my understanding is that is going to start this month, and
recreational landings are also going to be sampled in June, and Dr. Patterson has indicated that he could provide an update to the council in September or in December of this year, and that's all I have.

MS. MCCAWLEY: Thanks, Myra.
MS. BROUWER: Sure.
MS. MCCAWLEY: Chip, are you ready? Wait. Are there any questions for Myra on the red snapper -- On the Atlantic Great Red Snapper Count? Chip. Well, I saw Mel's hand go up.

MR. BELL: Yes, I had a question.
MS. MCCAWLEY: Go ahead.
MR. BELL: So this is the original RFP, the original award, the original work, and this was the -I can't recall, but is it $\$ 1.5$ million or something like that, but, anyway, there's a second effort being discussed, or a separate second potential allocation of funds for this same sort of work, and have I got that right, that's being discussed?

MS. MCCAWLEY: Myra.
MS. BROUWER: I kind of lost audio there for a minute, but I think Mel was asking about the additional funding and what's happening with that, and was that your question, Mel?

MR. BELL: Yes, and there's a little confusion out there, I think.
MS. BROUWER: Yes, and, unfortunately, I don't have information for you on that. I would pass that to maybe other members of the steering committee, or maybe the Science Center.

## MS. MCCAWLEY: Clay.

DR. PORCH: I wasn't sure if Chip was going to chime in on that, but, yes, another $\$ 1.8$ million was appropriated, and they will run a second competition, which, ideally, would work with the first one to augment the sampling, and so, basically, the Gulf effort got about $\$ 10$ million. When you look at the area of the Gulf and compare it to the South Atlantic, that additional $\$ 1.8$ million will put the effort in the South Atlantic about on par with the Gulf effort, on a per-area basis, and so we're actually really excited about that. Obviously, the second award really needs to be tied closely with the first award, but that doesn't mean that other players can't get involved, and so Sea Grant should be running that second competition shortly.

MS. MCCAWLEY: Thank you, Clay. Chip, I didn’t know if you wanted to add to that.
DR. COLLIER: I did not. I was raising my hand so that I could be unmuted so that I could get ready for the greater amberjack discussion.

MS. MCCAWLEY: Okay. 10-4. Steve.

MR. POLAND: Thank you, Madam Chair. I was going to follow-up with the question that Mel asked, but Clay covered it, because I'm on the steering committee, at least representing North Carolina, and I will say that we did receive a request from South Carolina Sea Grant, and they're the lead state Sea Grant on this effort for a request for a letter of support for the next round of the RFP.

We provided that, as a cooperator and data provider, but the steering committee has not met again, and so we haven't been updated on the new slug of money, but I also did want to add that we've been asked, by the PIs, to help collect and facilitate collection of genetic samples during the red snapper season next month here in North Carolina, and so that's going to be part of our carcass collection efforts that we do every year for red snapper, but we will do all we can to help facilitate the collection of genetic samples in that, and I'm not sure if the researchers have reached out to other states, because I know that all four states have some type of biological sampling program for the red snapper season.

MS. MCCAWLEY: Thank you, Steve. Mel.
MR. BELL: I think all of that helps. I was just trying to sort out -- So, basically, there's the initial investment from the red snapper count, and then you've got this additional investment, and so, like Clay said, we're not up to $\$ 10$ million, but we're potentially better than we were, in terms of what we're investing in this work, but it would be a separate RFP that would be issued, and folks would be submitting proposals, but the idea -- Obviously, if you've got something already up and running, logically, it should be -- Whatever you're going to do secondarily ought to be connected to that. Thanks.

MS. MCCAWLEY: Thank you, Mel. Carolyn.
DR. BELCHER: I was just going to go ahead and follow-up behind Steve. We did get asked, by Dave Portenoy, to also collect genetic samples during the upcoming season, and we have also been asked, by Steve Brandt, to go ahead and write another letter of support, and I am also in the same cart with him, in the sense that we've been waiting to hear back, and we haven't heard anything yet.

MS. MCCAWLEY: Thanks, Carolyn. We're going to collect genetic samples in Florida as well. Any more questions on this first project? I don't see any more hands. I think we're ready to switch over to amberjack.

DR. COLLIER: All right. I will go over amberjack pretty quickly. Amberjack is a little bit different than red snapper, where the project is actually looking at both the Gulf and the South Atlantic at one time, and so they're trying to get information on the full range of the species that is being federally managed. The current grant, right now, the funding available for it is $\$ 9$ million, with a 30 percent match.

Another thing that they've done that's interesting for this project is they had a visioning phase, in which they reached out to fishermen, management agencies, scientists, and they really tried to figure out what they were looking for for this species and potentially ways of management, and, also, what information could be addressed.

They put out the call for proposal in January of 2021, and the proposals have -- They received two proposals, both of which were reviewed by eight to ten people, and the technical review panel met just last week and discussed the two proposals, and then, in the upcoming weeks, there is going to be some guidance from the amberjack steering committee on who is funded, and then the hopes are that work will start by the end of June, or the final decision will be made by the end of June, with a proposal beginning in July, if possible. This might be delayed, based on some of the reviews from the technical panel, but the steering committee is going to be working through that in the upcoming days, and that's all I have for greater amberjack. Let me know if you have any questions for that count.

MS. MCCAWLEY: Thank you, Chip. Any questions for Chip? I don’t see any hands.
DR. COLLIER: Can't we get one for greater amberjack?
MS. MCCAWLEY: It's late in the day, Chip. All right. I believe that we're going to, John, skip over maybe to the CCC report-out.

MR. CARMICHAEL: Sure. I would be glad to do that. I guess we're kind of moving into the first item on the Executive Committee first, and so I'll be giving the summary of the CCC recommendations from the meeting that was held via webinar in May. After a few initial updates, there was an update from NOAA Fisheries on the science, and this has been ongoing updates to keep the CCC informed of the COVID effects, primarily, and they've been working very hard, as Cisco Werner reported, to get back into normal conditions and status for conducting surveys.

There's been a few things still in 2021, obviously, that have not been done, but they have returned to a lot of the surveys and survey efforts and are continuing to do so within the various guidelines that they operate under and that were in place for dealing with COVID and people being out and interacting and being on vessels and all that sort of thing. Now, obviously, right after the CCC, and during it, we've seen a lot of progress, in terms of returning to normal from the post-COVID period, and so hopefully they've really been accelerating those efforts, and the outlook for continuing surveys is getting a lot more positive than even it was then in May.

We've also been getting regular updates on the MRIP situation. As you recall, we didn't get estimates during the year, during 2020, and we recently got estimates for 2020, and we at least appreciate MRIP getting those in mid-April, as was planned, and one of the comments that was made during the CCC report was that there could be some further revisions to 2020 estimates once 2021 is completed, and so, once they get a handle on the year before and the year after, maybe they change 2020 a little bit, and so that led to an obvious question from the CCC of, well, does that mean these aren't BSIA, and should they be used, and would the 2020 estimates be used for ACL monitoring and all that stuff, and the agency response was, yes, the estimates that are available now are considered BSIA. They don't anticipate any significant changes in any of the estimates, even if there are any at all after 2021 is concluded, and so they're recommending they be used in assessments, et cetera, as well.

The final on this was some discussion of potential priorities that the CCC might provide to NMFS in terms of the getting back to normal, and the CCC really felt that resuming data collection should be the top priority. We can do meetings over webinar, and we can accommodate this, but, if you miss the opportunity to collect data, you never get that back, and so that was a recommendation
that I thought was pretty important. The resuming data collection is the top priority here to get things going.

The CCC has a Legislative Committee Workgroup, and they've been working a lot recently on an aquaculture consensus statement, and it's not something that has had as big of an impact in our region as it has say in the Gulf, but they did approve a consensus statement that the workgroup prepared.

Another topic that's been discussed is the integration of the Endangered Species Act in the Magnuson-Stevens Act. There is an ESA policy directive that describes how the councils interact with the policy and with ESA consultations. There was some communication back and forth between the different councils about how this is working out in their different regions, and one of the things that we realized was it is not something our council -- We've not looked at this in a good while, and so what we're planning here, for the South Atlantic, is, probably at the December meeting, because I think that's when we're most likely to have the time, is to have some agenda time set aside to talk about ESA and to review the policy directive and to refresh the council on what's in it and what the responsibilities and opportunities are for the council to be involved in ESA consultations, for commenting on bi-ops, and just working within the ESA process. I think that would be good, to get a refresher on that and get a sense of how engaged the council wants to be, and so look forward to that coming sometime later on this year.

We're continuing to request that NMFS coordinate with all of the respective councils from the region and working on this, and we do this with our regular reports, as we received it yesterday from Jenny, and so we try to keep abreast of things and keep the communication flowing, as best that we can.

One big topic, not surprisingly, was the recent Executive Order, and so 14008 deals with the climate crisis, and the initial report, the Making America, or Keeping America, Beautiful, and I forget what the first word is on that, but that was available before the CCC, and so we received a presentation on that, and that's from the Secretary level, and it was one of the things that was required under the Executive Order.

Now, we will be getting a presentation on this on Friday from NMFS on that report, and it will be very similar to what was provided to the CCC, and this is just continuing the discussion and communication and interaction with the agency on this, because, obviously, this is going to be a long-term project that we're going to be engaged with, as we go through this.

What the CCC has done to facilitate that is create an Area-Based Management Sub-Committee, and the idea is for that to help the councils coordinate with NMFS and for there to be some dedicated staff from each of the councils to keep their eyes on this thing and know how things are progressing and what we need to do and keep up with the various opportunities to comment and other developments that might happen within this area-based and the Thirty-by-Thirty effort, in particular.

They're going to start looking at say an inventory of what areas are already protected by councils and what type of council protection exists, and there's even discussion there that says that they're producing a journal article to talk about the benefits of area-based managers for fisheries.

Offshore wind development is a topic around the nation, and the Habitat Working Group was working on that, and that was one of their priorities for 2021, but, given the climate strategy areabased management, the Thirty-by-Thirty, whatever you choose to call it, has popped up here and become a real hot topic, that's going to become a higher priority for the habitat group and dealing with that area-based management group that I just mentioned. There is, obviously, going to be a lot of overlap in the staffs and such working on those, and so the councils felt that, really, the areabased efforts needed to be a priority in 2021. If the resources, time, et cetera, allow, then it’s fine for the workgroup to continue to address offshore wind development issues.

Just a few updates on the process, they're not planning a habitat science forum this year, something that happens on occasion, and we're expecting more guidance when the CCC meets in October, and, since that comes there, I will just go ahead and put that out here, and the next meeting of the CCC will be in October, and it's late October. It's actually the same week as ASMFC is meeting, and so it's a bit of an issue for our Chair, who serves at the CCC and on the commission, but I think we're probably the primary ones with an issue, although I do think, depending on how the Mid-Atlantic chairmanship goes, there may be an issue there as well, but we'll see. Anyway, the meeting will be hosted by the Pacific Council, and it will be in late October.

There was also, out for review, finally, and we've been waiting on this for quite a while, the draft technical memorandum on managing with ACLs for data-limited stocks. This was sent around to everyone a little bit before the CCC meeting, and NMFS had asked for comments by the end of August, and we asked for an extension, because of the timing of council meetings and SSC meetings, really for all the councils, made a bit of a challenge for dealing with August.

We really hoped to get it to November 1, which would accommodate our SSC reviewing it in October, and NMFS agreed to an extension to early October. Their reasoning was they would like to get some comments, as many comments as possible, provided to them before the CCC meeting in October, so they can perhaps get feedback on the comments and discuss them with the CCC at that point. They did also indicate though that they would accept comments after that point, and so we'll need to think some about commenting before then, as well as how we fold it into our SSC and their workload and potentially dealing with this in October or during maybe another meeting between now and then, or we also have the opportunity of just soliciting email comments from our SSC.

I think everyone should take a look at it. ACLs for data-limited stocks, obviously, is a very big issue with us, and the CCC raised some concerns with portions of the document needing some more work and needing some more description, and there's a lot of focus on situations where you have a survey that is considered reliable and reflects conditions in the fishery before fishing really occurs, and so it reflects what the stock could really look like, and I think I say that and then reflect on what Clay said not too long ago about independent surveys being the holy grail, in a lot of cases, of what you need for fisheries.

One of the challenges that I already see with this is that, in our region, when we say data-limited, it usually means that we barely have landings. In some cases, we have landings that we have very low confidence in, and we very, very seldom have a survey that meets a lot of the expectations that are applied for surveys within this technical memorandum. As we discussed with tilefish, we struggle to have reliable surveys, even for stocks that have been assessed, and so I see that as
probably being the biggest direction for our comments, as we work through this technical memorandum.

Now a few updates on different standing committees of the CCC, and there is one called the CMOD, Council Member Ongoing Development, and this is taking up where the old Fisheries Forums left off, and Fisheries Forums were convened as a way for council members, a small group from each council, to come together and receive training and have discussions on topics that are of interest to all the councils nationwide.

When the Fisheries Forum dissolved, and I think it was funding issues primarily, the councils picked up the banner and are carrying this forward, and it's being paid for by shared expenses of the councils and NMFS, and so we're splitting the bill, and the councils are paying for their participants, and we're looking at three participants from each council, and it's going to be held the first week of November, and the primary topic is ecosystem-based fisheries management, and so we will soon be looking to some council members, to see who is interested in learning more about this, and your obligation then would be to be kind of a leader and champion of these issues, as the council works on it, and so there will be some expectations for those who take this trip, but I will be sharing more about this as more details come together and we start thinking about who our representatives will be. We also know that October and November is a pretty big time for us, and it’s quite busy, and so just start keeping that in mind now, as we look ahead and plan.

There is a NEPA Sub-Committee, which has been dealing with the ongoing issue of the NEPA revisions and the question about functional equivalency of the Magnuson-Stevens Act within NEPA, and they're continuing to work on that. NMFS is working on that, and I would say this is definitely something that slowed down a bit due to COVID and the change in administration, and so we're continuing to monitor this situation and keep everybody posted as it develops.

SCS-7 refers to the Scientific Coordination Sub-Committee, formerly known as the National SSC, which is, more simply, SSC representatives from each council. There was going to be a meeting, and I think it might have been in 2020, actually. If memory serves, it was another COVID casualty, and it had been pushed off until 2021, and it's now being postponed until summer of 2022, to make sure that it can take place in-person. The interaction with other SSCs is just a critical part of this, and no one felt like it was something that would really be effective to be done remotely.

The North Pacific Council is hosting, and this is another jointly-funded situation, where the councils get some money from NMFS to do it as the host, to provide meeting space, et cetera, and then each council pitches in some for travel and such, and so we all share the cost a bit, and so, right now, the North Pacific is just dealing with the budget realities and extension to be able to extend that into 2022, but we don't see any snags, potentially, on that, and so it will be exciting to be able to get that back and see us getting back to normal in a post-COVID world, even if it takes until next summer for this group.

Getting here now to some of the last topics, there was a lot of discussion of seafood competitiveness, marketing, and economic growth, and so NMFS put out a document on this recently, and one of the issues, really, that came up with the CCC was that the councils really are not marketers, and so there was a lot of, I guess, difficulty in trying to provide the kind of input that NMFS seemed to be soliciting from the CCC, and you're talking Chairs and EDs, et cetera, that are dealing with this, and so, while it's an important issue and recognized, we're not
necessarily the best people to deal with this, and so they were given some direction to maybe loop in the people who are better involved, and fishermen themselves, in particular.

There is issues where it's certainly been a much bigger issue than it has been with our region. As you can see, New England and the West Pacific have probably dealt with this an awful lot more than we have, in a lot of ways. Electronic monitoring is another regular topic that we receive updates on. There is a directive out on there, and what they've been dealing with is what is required in terms of saving and warehousing and securing and providing access to and the cost associated with all of that, with various monitoring data that exist, and, for the most part right now, this refers to VMS type stuff, and so the regularly reported and monitored locations of vessels, but it could also include things like video monitoring for discards and any type of electronic monitoring like that.

It's different from say electronic reporting, like SEFHIER, where fishermen are reporting their catch records, and this tends to be more intensive data, and, like I said, it include video, and so there's been an effort underfoot the last few years, as this data has become more common, to figure out how it fits into all of these federal requirements, where we have federal records and confidentiality, and, as it turns out, the costs, as I mentioned, are not insignificant when it comes to storing lots and lots of this stuff and keeping it stored to secure law-enforcement-level type things. You can’t just put it out in your Dropbox, I suppose, or in your Microsoft clouds, and so another topic, again, that is not something that has been a top priority with us. As you can imagine, our focus has been on things like MRIP and data-limited species, because that's kind of what we face every day.

Another policy directive, and we have lots of these at these meetings, and I will have plenty of updates on them, and this one just came out recently on financial disclosures and the recusals. Recusals are not something that happens much for us, and I can't remember the last time one of our members recused themselves from a vote, but, in some regions, it's quite a big thing, and there are some council members who are very big players in some really big fisheries companies.

I think an example comes up that Kitty has mentioned with them in the West Pacific with a council member who is involved with Star-Kist or something, and so that becomes a very big issue, when it comes to financial disclosures and such, and so there is some policy directive, and what these do is just clarify the guidance and expectations, and the main discussions there were clarifying the role between council staff, and particular executive directors, versus NMFS, in terms of dealing with issues and reporting issues and kind of being the traffic cops, in terms of recusals.

The councils asked a number of questions and were concerned that the policy directive, in some ways, seemed to overstep what the actual law said and what past practices have been, in terms of really remanding some of these things over to the councils that have traditionally been handled by NMFS, and potentially GC, and so they're going to report back to this, and we'll get some more information at our October meeting. Again, like I said, it's something we keep an eye on, but, thankfully, so far, it's not been -- Recusals have not been a big issue with us, and financial disclosures have not caused quite the stir they have in some other areas, and so we're thankful for small favors, I suppose. With that, Mr. Chair, that concludes the report from the CCC meeting, and I will be glad to take any questions.

MR. BELL: John, I guess that means I've got it then.

MR. CARMICHAEL: Yes, you do.
MR. BELL: Just so everybody is aware, we're trying to bank a little bit of time, and so we were trying to move some things in to maybe get us to 5:00 today, and knock you guys off even early, and so I will facilitate the questions or whatever, but this was originally scheduled under the Executive Committee, which wasn't going to be until Thursday, and so we're just trying to make maximum use of our time available, and so, with that, are there questions? Chester.

MR. BREWER: Thank you, Mel. John, has there been any movement on defining conservation or conserve or whatnot, and it's mentioned, but not defined, in the Executive Order.

MR. CARMICHAEL: No, and great question, Chester, and there has not been any action on that, and they're still just sort of falling back on generic language about it, and, during the discussion, I actually asked, point blank, about how they felt toward commercial activities that may occur in areas that are potentially conserved, because the report makes clear references to increasing recreational opportunities being a goal, but they don't really say a whole lot about preserving commercial access, and the answer to that was that they recognize what we do under the Magnuson Act, and we balance those opportunities, which I thought was a little bit of a non-answer.

The question is still out there of what does "conserve" mean and what kind of activities will be allowed in a conserved area, and we don't know if they're going to look like national parks or national forests or wildlife refuges or wilderness areas. I think we all know what those things mean in a terrestrial format, and they allow for very differing levels of involvement, and, at this point, no one is really saying what they mean by it.

MR. BELL: All right. Jessica.
MS. MCCAWLEY: I guess I was just wondering -- John, I didn’t know if you wanted to talk about that Legislative Committee and that report, and maybe "report" is really not the right word, and it’s really like a working paper, on legislative items and talk about how -- I guess we need to review those policy statements in there, and when you were thinking we were going to do it, and maybe at the September meeting?

MR. CARMICHAEL: Jessica, I appreciate you bringing that up, because it is something that we do need to talk about, and, for those who aren't aware, the legislative group has essentially a position statement, or a working paper, that goes through various legislative issues, things that would come up through say the Magnuson Act and other types of federal actions that lays out a CCC position, and then it also carries individual council comments on each of the positions.

It was updated somewhat and made available during the CCC, and there was discussion of doing some more extensive updates, because it still carried information on some topics that have been discussed, or maybe already been addressed, legislatively, or no longer seem relevant legislatively, or maybe they were issues that the CCC wasn't necessarily a big fan of that now seem to have fallen out of favor legislatively, and so we're anticipating a pretty big rework of that document, if not for the October CCC, at least for the next May CCC, and so, yes, Jessica, I think we need to try and find some time.

If we could fit in time for the Executive Committee to potentially review it in September, I think that would be great. We may need to look at our workload, once we wrap up this meeting, and see how things proceed, to really decide, or it may be something that we think serves well for a halfday webinar special Executive Committee meeting to review. I would be open to either.

MR. BELL: Do you have a follow-up, Jessica?
MS. MCCAWLEY: No, I'm good. Thank you, Mel.
MR. BELL: Okay. Monica, would you like to weigh-in on that?
MS. SMIT-BRUNELLO: Not on that, but, John, on your slide which talked about the integration between the MSA and the ESA, and it's Number 5, integration of ESA Section 7 with MSA, and just to remind folks, and I can send it around, when this policy directive first came out from the Fisheries Service, this council worked out a memorandum of understanding with the Southeast Regional Office on when you would want to see certain biological opinions and when you would want to be involved in that process, and so you're kind of ahead of the game on this, and I will be happy to send that around to folks when it gets closer to the -- Well, whenever. Whenever John would like you all to see it.

MR. CARMICHAEL: Monica, that would be helpful, and that's what we were thinking of reviewing along with the policy directive. As I said, probably in December we may have the time, and we gave Jenny Lee a heads-up on that too, that we wanted to have some discussion and remind the existing council members of what the policies and practices really are.

MR. BELL: Thanks, Monica, for recalling that. That’s helpful. Any other questions for John regarding anything that he presented from the CCC? Okay. I don't see any hands, and so what we could do, just for a few more minutes, is I think that Kelly is ready and available, and the other easy item, so to speak, that we had under the Executive Committee meeting is just a brief on the budget update, which wouldn't take that long, I think, and so we could use that as a filler to get us closer to 5:00 and then knock you guys off a little early, but we've banked a little bit of time. Then, when we actually reconvene in Executive Committee on Thursday, the thing we'll focus on will be dealing with the schedule and the workplan, and so that's our plan for the rest of today, if you can hang with us just a little bit here.

I'm not worried about the mechanics of -- The Snapper Grouper Committee is all of us, and so it's, effectively, bigger than the Executive Committee, and so we didn't miss anybody, and so the items that we kind of brought over into Snapper Grouper to fill is fine, I think, and so that's the plan, and so, whenever Kelly can get things queued up, Kelly and John, I guess.

MR. KLASNICK: Thanks, Mel. We'll go ahead and go over the updated budget for you all. What we have on the screen for you, and what was included in the briefing book, is the updated chart, and I will just kind of walk you through it here, and I'll go left to right.

In this 2021 Draft Budget column here, these were the numbers that the Executive Committee approved as draft back in November of 2020, and now what we're bringing to you all, as represented here in the next column over, and what we've done is we've gone through and made some revisions, based on really an impact of the lack of travel. If you all remember, when we put
these numbers out back in November, given the amount of uncertainty that was still out there, we had planned for a travel schedule in 2021, as we typically would do, but we thought it would be prudent now to come back to you all, halfway through the year, and make some updates there.

Then, also, use the opportunity to also bring you a little bit more up-to-speed on a few items that we had mentioned, particularly contractual items, that we had under consideration back in November that there was a good bit of uncertainty over, and, at that time, we hadn't actually signed contracts or entered into any agreements, but, since then, we've done a few things, and so we can provide you some updates there.

To just kind of walk you through these numbers, mostly highlighting the changes, and then, also, I will just draw your attention to this column here, on the Expended Year-to-Date, and these numbers are current as of $4 / 30$, whenever these materials were pulled in preparation for the briefing materials for the meeting.

In the personnel costs, we're not anticipating any changes there, anything significant from what was presented to you all back in November, and so that number is remaining the same. The fringe number, what you're seeing for an increase here is the $\$ 100,000$ represents an amount that we are going to plan to transfer into a savings account that the councils are permitted to maintain to cover accrued leave balances, essentially. What this is, this is an opportunity for us to fund some of what is currently unfunded accrued leave balances that are out there for staff.

Folks that have been around the council know that we've had several retirements over the last few years, and we want to be able to be better prepared to handle any of that moving into the future, and so there are some stipulations in the regulations that allow the councils to do that, and we have been doing that, but we've been mostly funding that through a monthly contribution, and this will give us an opportunity to solidify that a bit and also provide us some future flexibility. If we're not able to make monthly contributions down the road, because of some other budget changes or priorities that the council wants to pursue, this will give us an opportunity to have a little more flexibility there and keep things a little more solid in that category.

Then you'll see the travel number being reduced here, and, again, that reflects what we knew at the time that this report was created of the things that weren't going to happen, and we are still looking to be conservative, and so we're still anticipating some amount of travel to occur in the second half of 2021, but, of course, time will tell exactly how that plays out, but things are certainly looking more favorable that there will be at least some amount of that type of activity moving back online in the second half of this year, and so we've left some funding in the budget to cover that, if it does occur.

We've increased the equipment line a bit here, and, again, we wanted to be able to continue with the project that we've had ongoing to update a lot of our meeting equipment that some of you got a very brief glimpse of back in March of 2020, but we’ve been continuing to take advantage of some of this time that we haven't been on the road to continue to modernize some of that, and we're also going to look to modernize some of the workstations here at the office as well, and so that's what you're seeing reflected in that increase in that line item on the chart.

We're not really anticipating any changes in supplies. The contractual change that you all are seeing represented here, that's a combination of a few items. Back in November, as I mentioned
earlier, we put in some kind of rough estimates for some things that we had going on that have firmed up considerably, now that we're able to bring these numbers to you, and the primary addition in there is we had mentioned a website project that is currently ongoing to redo the council's website.

Many of you have been involved, and we thank you for the involvement, and we've been doing some discovery, and some of that work has already been taking place, and Cameron has been hard at work shepherding that through, and we're excited to keep moving along on that project, but, of course, we signed a contract with a vendor to lead that for us, and so that is being reflected in these numbers that you see here.

We also added in for the Commercial Fish Rules that was recently rolled out and announced to everybody. At the time, back in November, we didn't have a good sense as to what that was going to be, and so we were able to put that in there, and we also -- John mentioned that CMOD training, and that was also an agreement that the council entered into between November and this meeting, and so we were able to reflect some costs that are going to come to the South Atlantic for that as well into those contractual items.

On the Other line item, primarily the decrease that you're seeing there -- This line captures meeting space, and so that's not included in the travel, and so that's primarily what you're seeing a decrease in that line item for, and so, when you go through all these machinations, that brings us down to this total here, this $\$ 3.7$ million number, which, as you can see, is a decrease from what was presented back in November.

Then, also, as we have traditionally done, we do the draft, and we don't really know for sure what our financial allocation will be, and the money is not in the bank at that time, but now it is in the bank, and so we wanted to report that out to you as well, and so that's what you're seeing represented under this 2021 Fiscal Allocation number, and you'll see that the 2021 budget is anticipated to come in below that number, and so that's good news moving forward. We're only in the second year of this five-year cycle, and no one knows exactly what future budgets will hold, and so it's better to be in this position, and we're looking to come under and have some flexibility there.

Also, a big unknown on -- I'm sure, if you're following the news, or just going shopping, inflationary pressures are out there, and travel stuff is kind of all over the map, depending on where you look and where you look, everything from crazy rental car prices to flights, and there’s just a lot of uncertainty there, and, for somebody wearing a financial hat, uncertainty is not something that builds a lot of confidence or ease, and so we'll keep an eye on that.

Depending upon which experts you're listening to, this is going to be a short-term blip, but time will tell, and so, right now, these travel numbers that you see on here -- Those were done based on estimates that we had at the time, but, if there are some large spikes and we do get back to travel, we could see some possibly significant variations in that number, depending upon how all of that plays out, and so we'll just kind of see where that goes.

Then the expended numbers and the expended percentages kind of wrap up the chart here for you all, and so that's the overview that I had, and, John, I don't know if you had anything that you needed or wanted to add in there before we go to any questions, Mr. Chair.

MR. CARMICHAEL: Nothing to add here, Kelly. We'll see if anybody has questions.
MR. BELL: Okay, and I would note Kelly's sort of cautionary note about we don't really -- The idea is that we intend to go back to traveling this year, if at all possible, and so I think, whether it's gasoline prices or air prices or hotel prices, it may be kind of interesting, and so I think being kind of cautious as we approach that -- We certainly would like to resume normal operations, but it may cost us a little more than it did when we were thinking about this last, and so any questions for Kelly about the update? You all must be wanting to knock off early today.

MR. KLASNICK: Well, if that's the case, Mr. Chair, if I could ask for a motion here.
MR. BELL: All right, and so, technically, you were transported through a wormhole into Thursday afternoon, and so, technically, the Executive Committee consists of myself, Jessica, Steve, Carolyn, and Chester, and so, if one of them could make a motion, that would be great. I see Steve's hand up.

## MR. POLAND: Mr. Chair, I move to approve the final 2021 operational budget as presented.

MR. BELL: All right. Jessica, is that a second?
MS. MCCAWLEY: It sure is.
MR. BELL: All right. Great. We have a motion to approve the final 2021 operational budget as presented, members of the Executive Committee. Is there any objections to the -- Chester, have you got a question?

MR. BREWER: No, and Steve and Jessica were just faster than me.
MR. BELL: Okay. Gotcha. Any discussion of that motion? Seeing no hands, any objection to the motion? No hands, and so the motion carries. Thank you. I appreciate everybody's patience on suffering through the wormhole here, and so, at that point, it's just about 5:00, and we don't really have anything else to try to -- That we want to try to keep your attention until 5:30, and so you've allowed us to bank a little bit of time in the future, and that's great, and so what we'll do is we will reconvene Snapper Grouper, I believe at 8:30 in the morning, and that's the plan. Any questions? All right. Well, well done today. You can have a half-hour off, since we stole a half-hour of your lunch. All right. We'll see you guys tomorrow.
(Whereupon, the meeting recessed on June 15, 2021.)

JUNE 16, 2021
WEDNESDAY MORNING SESSION

The Snapper Grouper Committee of the South Atlantic Fishery Management Council reconvened via webinar on Wednesday, June 16, 2021, and was called to order by Chairman Jessica McCawley.

MS. MCCAWLEY: If we're good, and it sounds like we are, we're going to jump back to the Snapper Grouper Committee, and we are going to rearrange the agenda just a little bit this morning, and we're going to start with Jimmy Hull to cover the AP recommendations that were on items not covered elsewhere on the agenda, because Jimmy has to leave in a little bit, and so, if that's okay with folks, another rearranging there, and we will go back to the AP recommendations and go back to Jimmy, if you guys can unmute him.

DR. SCHMIDTKE: Jessica, just, before we get to Jimmy, I just wanted to give a heads-up to the committee, to just let them know kind of where the AP's recommendations are going to be talked about, for the items that are delayed.

MS. MCCAWLEY: That sounds great. Thank you, Mike.
DR. SCHMIDTKE: Okay. So Jimmy will be on to give the AP recommendations for the items that are basically not scheduled to be talked about within this meeting or within the September meeting, and the AP talked about a lot of different topics at their April meeting, and some of those items, because of kind of the heavy schedule in the June meeting, have been moved to September, and Jimmy will be back with us in September to give the AP's feedback on those items, and those include the greater amberjack amendment, Amendment 49, the snowy grouper amendment that's underway right now, the two-for-one commercial permit policy, and the vermilion snapper trip limit, and so those items aren't going to be covered in today's presentation. Jimmy had a couple of other items that he will cover from the AP's discussions, and he'll be back to cover those in September. With that, I can pull up the presentation for Jimmy to go.

MR. HULL: Thank you, Mike. Thank you, Madam Chair, and good morning, council members. The AP discussed discard information for red snapper and possible approaches to reduce recreational discards. We had a great discussion about it, and I think some pretty good ideas to maybe look into.

There was mixed opinions about starting time of the red snapper fishery, and some members suggested opening earlier in the spring, or later in the fall in the year, and that could alleviate the big start to the fishery that has happened in the summer months, to potentially extend the season. Other members commented that they were opposed to the previous non-summer season, as the anglers want to maximize the short season with good weather.

Also, consider red snapper season before the shallow-water grouper opening was a suggestion, and it may be better, in some locations, to fish, weather-wise, earlier in the year, and fishing outside the red snapper spawning season, which really peaks right in the middle of summer, may help. Some other ideas were potential gear changes of requiring larger hooks; single-hook rigs; smaller, lighter leaders; and possibly no natural bait. Those are some things that we could think about and look into. The council could consider a spatial or time closure or consider closing bottom area by depth. Descending devices have helped, but not everyone may have descending devices, and so continue to educate on the best releasing practices.

The AP also reiterated the need to improve estimates of recreational fishery participants. The AP discussed a potential red snapper tag, though noted logistical difficulties, and such a tag would not reduce release mortality when targeting other species, and they also brought up the idea of a red snapper stocking program.

We had some good discussions on the ideas of how to reduce recreational discards, which are driving a lot of the overfishing, and especially in the red snapper stock, and, as far as the other items that we considered that were not on the agenda, there was the recreational licensing, and we did make a motion, and it passed unanimously, to recommend that the council consider requesting the National Marine Fisheries Service to have a recreational federal fishing license for the snapper grouper fishery.

We also recommend that a stamp, or endorsement, for deepwater species related to snowy grouper, which would provide some reporting and accountability, and possibly even have a portion of the fishery report, could be useful, and a motion was made for that, and it passed unanimously. With that, I will turn it back to you.

MS. MCCAWLEY: Thank you, Jimmy. Are there any questions for Jimmy Hull? Just a reminder of what Mike said, that the other items -- Jimmy will come to the September meeting to talk about those, but we have some hands going up. Chester, you're up.

MR. BREWER: Thank you, Jessica. Jimmy, when you say to not use natural bait, are you talking about across-the-board or only when focused on red snapper? I would be curious to know what the thoughts were of the AP.

MR. HULL: Thank you, Chester, and good morning. Yes, I think we were focused on red snapper, primarily, and that was the focal species that we tried to concentrate on that, as a way to possibly reduce the dead discards. You know, as you know, it doesn't take much to catch a red snapper these days, and to try to just limit -- If you use a natural bait, it tends to attract a lot of the smaller animals, whereas, if you use a jig, or some other type of bait, maybe you could reduce -- Because everybody is -- They're high-grading. They want the biggest. If you've got one snapper, they're going to catch the biggest snapper they can get for the day, and so you know they're going to be releasing the smaller animals, and it was try to get bigger animals instead of smaller ones.

MR. BREWER: Okay. Thank you.
MS. MCCAWLEY: Spud, it looks like you're up.
MR. WOODWARD: Thank you, Jessica, and good morning, Jimmy. Thank you. It's kind of interesting, because what Chester just talked about, and your response, kind of puts my question in a different context. Like you said, folks these days are high-grading, and you've got people going through dozens and dozens, if not triple digits, of fish, to try to cull out the biggest fish, and so it seems like we're almost putting selective pressure on the larger, possibly older, fish that we're trying to actually add back into the population.

Folks had asked me about a slot size limit, and, if we went to a slot size limit, recognizing that, as we improve people's use of descending devices, we are, theoretically, going to reduce at least postrelease mortality, and has that ever been talked about in the AP, some sort of slot limit that says,
okay, once you get this fish that's -- Let's just say between eighteen and twenty, or fifteen and twenty, or whatever it might be, and that might disincentivize continuing to pound a group of fish to try to get that twenty-five to thirty pounder, and so I would be interested to hear what you've got to say about that, Jimmy.

MR. HULL: Good morning, Spud. Thank you. Yes, we did have a discussion on slot sizes, and there is lots of different opinions on it. I don't have my notes in front of me for that particular item, but I can tell you that, overall, I believe that the AP, both recreational and for-hire and private rec, thought that there was some merit to that and that, when you look at what you said, the larger animals, older animals, which is what we're trying to achieve, they should be protected, and farmers don't generally get rid of the momma cow.

They get rid of the calves, and so that's kind of the idea that we all agree with, that maybe we should be harvesting the more abundant younger animals and try to leave the older animals alone with a slot size. Also, the charter/for-hire sector, as I remember, did have some opposition to that, because people were looking for larger -- There was some opposition to it also, and so it was mixed, but, overall, I think that the idea is something that would be useful to look further into.

MS. MCCAWLEY: All right. Andy.
MR. STRELCHECK: Thanks, Jimmy, for the presentation and the AP's recommendations. I have a question and then a comment. The question goes back to the mixed opinions on timing of the season. I'm curious, for those that maybe were not supportive of a spring or fall season, kind of understanding that better, and certainly the core summer season is where the bulk of our fishing effort -- When you get into fall, you then get into hurricane season and a lot of disruptions because of weather, but I'm curious, for those that may be opposed, if those are the reasons, or if there was other reasons as well, in terms of not wanting a summer season, or, excuse me, but not wanting a spring/fall season.

MR. HULL: Good morning, Andy. Thank you. Yes, primarily, that was a sector-type opinion, and the commercial sector was more wanting to get away from the middle of the summer season, and also the charter/for-hire, to some degree, because they have plenty of business at that time, and plenty of fish to catch, other than snapper, right in the height of the summer.

The private recreational side much preferred the middle of summer, the best weather, when most of their fishing activity occurs, and there was a lot of discussion about why do we have a season in the prime spawning time for these animals, and I can tell you that, off of the Florida coast, right in the middle of July, it's prime spawning for sure. Everywhere you go, they are up in the water column, and they're everywhere, and so there was -- It just depended on your sector and how you felt about that. As I say, again, to reiterate, the commercial side was more or less we would like to do it before or after, and then the charter was kind of in the middle, but the private recreational sector definitely wanted it right in July.

MR. STRELCHECK: Thanks for that, Jimmy, and then a couple of comments regarding Spud's comment about a slot limit, and I know, in the Gulf, we contemplated that at some point in time, and the debate largely centered around differences in opinion with sectors, as well as because of some longer seasons in the Gulf, tournaments that were happening that wanted to maintain a larger fish, rather than having a slot limit.

In terms of the gear limits, way back when I was actually still working on some scientific issues, I did a study with Will Patterson looking at different circle hook sizes, and, interestingly, what we found, for red snapper, is that catch rates didn't change between a 9, 12, and 15/0 hook, but, as you point out, Jimmy, the size of the fish did go up, and I believe it was on the order of three or four inches is the difference in kind of the average size fish between the smaller hooks and the larger hooks, and so there is some merit to them selectively catching larger fish, based on the larger hook size.

MR. HULL: Yes, sir, and, you know, I do this myself in the shark fishery, and I will go to lighter leaders to break off these huge animals that I don't want. I'm fishing for small coastals, good eating sharks, and so there is ways with gear, in all gear fisheries, and we are able to be more selective by certain types of gear and changing our gear, mesh sizes and leader weights and hook strengths, ways where larger animals will break the hook also, will break off, and so I think there's things to look at here, more ideas and smart people to look at this, and maybe we can come up with something that will help to reduce these discards and maybe target the animals that the scientists say that we should be targeting, and it seems like they certainly are looking for more twenty-year-olds in the stock, and, if this would be a way to get more twenty-year-olds in the stock, maybe we can get out of this overfishing status someday.

MS. MCCAWLEY: Are you guys -- Does anybody else have any more questions for Jimmy? Tony.

MR. DILERNIA: Thank you, Madam Chairwoman. I just want to say thank you for this discussion. This is an issue that I’ve been trying to bring to the front in the Mid-Atlantic Council, the relationship between hook size and how recreational fishermen can focus on catching larger fish using different sized hooks, and it's very helpful to hear this conversation, and I wish I could have this conversation at the Mid, and so I just wanted to thank the folks that were having it. I've been sending Dewey notes the whole time, saying, see, why can't we do this in the Mid? Thanks a lot.

MS. MCCAWLEY: Thanks, Tony. Any more questions for Jimmy?
MR. HULL: Madam Chair?
MS. MCCAWLEY: Yes, sir.
MR. HULL: One other thing that we did have quite a bit of discussion on also is on the spatial or time closure of bottom area. That's a tough one, but, if you can remember back when the overfishing status came out on red snapper, and it’s been nine or ten years ago, originally, we were going to shut down the deep water to all bottom fishing, and so to reduce barotrauma and dead discards, and so we did have a talk about that, and we didn't go too deep into it, but, obviously, that is a way that -- A for-sure way to eliminate a lot of dead discards, if you could only bottom fish say inside of a hundred feet of water. That, obviously, would probably yield a whole lot of plus for that, and you would still have bottom fishing for everybody, and they would just have to fish inshore, but, anyway, that was kind of controversial at that time, and it was then, but we did talk about that quite a bit.

MS. MCCAWLEY: Thank you, Jimmy. Clay.
DR. PORCH: Thank you. I just wanted to comment a little bit about the high-grading, which, as you guys have noted, it's obviously a very destructive practice, but, in the context of the Gulf, where we have a quota that's set in pounds of fish, it's a little bit different animal. In the case of the South Atlantic, the quota for the recreational fishery being set in numbers of fish, it almost kind of begs high-grading, as Jimmy mentioned earlier. I think the argument in favor of a slot limit is a little different than it might be in the Gulf. In the Gulf, it probably wouldn't make that much difference.

I mean, generally, I'm not a big fan of putting in maximum size limits, because one of the things that happens is you have to catch an awful lot of small fish to make up for big fish, and so it doesn't necessarily put you in a better place with respect to the stock, but, in the case of when you have a quota that's in numbers of fish, it actually makes more sense, simply because it would limit the amount that people can high-grade, and so they can't just fish through thirty or forty sevenpounders until they get to a twenty-pounder, and so I was just going to support the idea that it makes a little more sense in the case of having a quota that's measured in terms of number of fish. Thank you.

MS. MCCAWLEY: Thanks, Clay. Any more questions for Jimmy? All right. I don't see any more hands. Thank you, Jimmy, for your flexibility in putting this upfront this morning, and we really appreciate it, and we appreciate all the work that the AP does, and I think we'll see you hopefully in person with us in September.

MR. HULL: Thank you, Jessica. I hope so. Thank you.
MS. MCCAWLEY: All right. Mike, I think that -- I am looking for Snapper Grouper agenda for what is up next, and I believe that we're going to get an assessment presentation from the Science Center on red snapper?

DR. SCHMIDTKE: Yes, and I believe Clay will be presenting that, and I will get it up on the screen.

DR. PORCH: Yes. Should we go ahead and get started?
MS. MCCAWLEY: Sounds great.
DR. PORCH: All right. I'm going to talk about SEDAR 73, South Atlantic red snapper. The first SEDAR assessment was SEDAR 15, where the last year of data in the assessment was 2006, and you can see, at that time, the stock was found to be overfished, severely overfished, as a matter of fact, relative to the reference point, only 3 percent of the reference point, and undergoing overfishing, and pretty extreme overfishing, where the fishing mortality rate was almost eighttimes what was expected with the reference point.

They did change the reference point with SEDAR 24, to go from F 40 percent to a lower bar, F 30 percent, but the stock was still estimated to be overfished and undergoing rather severe overfishing. The same thing was found in SEDAR 41 and SEDAR 73, except you can see that, in general, the stock seems to have been improving. It's still overfished and undergoing overfishing, from this
last assessment, but stock status has definitely improved, relative to previous years, with the spawning stock being about 44 percent of the target value and overfishing now about double the target value, as opposed to in the early years, when it was almost eightfold.

Together, all these assessments indicate some progress towards rebuilding and ending overfishing. Despite that each assessment has some differences, they're all telling a pretty consistent story, and, as I mentioned, since SEDAR 24, the proxy for MSY is 30 percent SPR.

SEDAR 73 was technically an operational assessment with a topical working group, and it's the first one of those that we fully operated in the way that operational assessments were meant to be done, although I would say it’s actually more thorough than intended, and they looked at a lot of things that were outside of the statement of work, and so I would say the assessment staff and all the members of the topical working group bent over backwards to turn over just about every stone out there, to make this as thorough an assessment as possible.

This just tells you some of the things that -- You know, we had the data scoping webinar back in July of 2020, and then you had a selectivity working group that met from August to November, and then you had a big data workshop in December, and then there were a series of webinars, an SSC webinar, three assessment webinars after that, and then the final SSC review, and so I think it was a very thorough process, more akin to a benchmark assessment than a typical operational assessment.

Some of the data that they looked at was they used the current MRIP methodology, which includes the FES estimates of effort that you all are familiar with, although I would say they also used the State of Florida estimates for the short season, and they re-looked at life history, batch fecundity, and natural mortality rates. They reexamined several indices of abundance, including the trap and video surveys as separate time series, and they also looked at the FWRI repetitive time drop survey and used it in a sensitivity run, although it was not adopted for the base model runs, and then they looked at a series of discard length compositions, to see how useful those would be for the assessment and what the effect would be. Then they also re-looked at discard mortality and the effectiveness of descender devices.

Just to get into some of the input data, this slide shows the landings and discards, in numbers, and dead discards that is, and you can see, in the early period, things look fairly smooth from 1954, and we have actual estimates of the commercial landings all the way back to 1950, although there's a few gaps here and there. For recreational data prior to 1981, however, we had to rely on some spotty information inferred from U.S. Fish and Wildlife, and so not all of that is based on actual observations, and so we looked at the effect of that on the assessment through the MCMC analysis that is typically run with BAM, where they looked at different levels of recreational catch back in time, but these are sort of the point estimates that we used in the assessment.

After 1981, of course, we have the estimates from MRIP, and you can see that recreational catches are generally much higher than the commercial, and there's -- The blue is headboat, and green is the general recreational private boat, and red is commercial, and then you can see -- Starting in 2010, you see the moratorium, where there weren't any landings allowed, and then you can see the effect of the seasons, with very low landings allowed, and that's the area in the red circle, and then, generally, in recent years, the landings have been increased, although certainly much lower than what they were historically.

The problem is that those low landings have been offset by the very high discards, and this is a story you've heard before. You can see, historically, there were a lot of discards, but, as soon as you start having closed seasons and bag limits and size limits and those sorts of things, then you're going to have more and more regulatory discards, and, particularly in the recent years, you see the highest discards ever, and some of that is because of the minimum size limit, because we've had really strong recruitments in the recent years, and that's probably the bulk of this big piece, but, as we've just heard, high-grading probably contributes to that too, to the extent that it's picked up in the marine recreational survey. The bottom line is lots and lots of discards, and you will see that alone contributes to overfishing, even if there wasn't any allowed landings.

The other key piece of information that goes into this assessment, besides the age composition information, is the indices of abundance, and, in particular, this headboat survey is a really important driver, and five indices were used in the assessment. There was the headboat survey, and then some information from the headboat observer program, which gets undersized fish, under twenty inches, and then you have the SERFS chevron trap and the SERFS video, which it's the same set of gear put down, but they see different sized fish, the video seeing presumably all size fish and the chevron trap having sort of a dome-shaped selectivity. Then there's an index derived from the commercial handline fishery.

In the early period, all we have is the headboat survey, and it's the most reliable information that we have, and it's been reviewed many, many times and deemed to be the best available scientific information for that early period, and that extends from 1976 to the recent period, and I am just showing you right now the early period, where we don't have any other competing indices of abundance, and I think the key point I want to emphasize here is the headboat survey shows more than a tenfold reduction in the total numbers of fish. Remember this is an index of abundance, and so it standardized catch per unit effort.

That alone tells you the stock was overfished, because there was a fair amount of fishing going on prior to 1976, and so you can imagine the stock already was reduced relative to the unfished level, and then, from 1976 to 1992 or 1993, you see this huge decline, and so the model can't help but say that the stock was overfished in 1993, and not only overfished, but badly overfished.

This is sort of the middle period now, where we also have the commercial handline index and the headboat observer index, and what you can see is, during the middle period, the trends are generally fairly flat until the end, and, I mean, you have that M shape in the early 2000s, in both the commercial handline and the headboat survey.

Don't worry about the fact that the scale is different between the headboat and commercial handline, because this is only trend information. It's not that this is saying commercial handline catches more than headboat or anything like that, but it's the relative trend that matters, and what you can see here is the trends are almost the same, except commercial handline catches fish a little bit bigger sized, and so you can see that that little uptick towards the end of 2008 and 2009 is a little bit delayed compared to the uptick from the headboat survey, which is delayed relative to the uptick from the headboat observers, which is exactly what you would expect, because headboat observers is picking up young fish, and, as those grow up, they move into the headboat fishery and then into the commercial handline, and so that's why you see that time lag there, which is very consistent with a recruitment pulse in 2006 and 2007.

This is the most recent information, where have, as I said, the holy grail fishery-independent surveys, where we fish the same way every year. Even if it's not the most efficient way, the most important thing is that it's done the same way every year, so that any trends we see are really reflecting changes in the abundance of the stock.

What we can see is, since 2010, we've had, according to all indices, an enormous increase in the number of fish out there. Depending on which index you look at, it's between a four and eightfold increase in abundance, and so our data is very consistent with what the fishermen are seeing out there, in that there's been a very large increase in the number of fish out there in response to the regulatory changes, and also big pulses in recruitment.

The results are about what you would expect. In the early period, we didn't have much information, and we don't have any indices of abundance, but, since the catches really were starting around the 1950s, you would expect some decrease from the unfished level, and this is what it's showing, but the headboat index begins in 1976, and the results, in terms of numbers, and this is numbers here, pretty much track that headboat index, and you see the very large decrease down to -- All through the 1990s.

Then the video and trap surveys begin around 2010, and then you can see that very rapid increase that tracks those surveys, and, as we'll see, a lot of that increase is due to elevated recruitment in the last few years. I guess one other point to bring up, and you can see it here, but, if you look at the early period, the expectation was that there were a lot of older fish out there. That kind of violet number at the top is age-twenty and older, and you can see that's lot of fish in there. When you look at the more recent period, you don't see those big violet bars, or even the blues that are the older fish, and that's a key point. You're seeing lots of fish, in terms of numbers, but they haven't grown up into those older big, fat sow red snapper that we want to see, to make sure that the spawning biomass is up, and we'll talk about that a little bit more later.

This is just the biomass-at-age, and it's just reinforcing the point that I just made. We expect to have a lot of weight of fish being contributed from the older age classes if the stock was fully rebuilt, and so it would look more like what you see in the 1970s and 1980s, and that's what our goal would be, but, in fact, when you look at the more recent years, even though there's a lot of fish, the total biomass hasn't really built up to what we might expect for the older fish, and so numbers is off the charts, probably as high as we have ever observed, the highest estimate since 1950, but biomass hasn't quite gotten up that high, and you will see, later, that spawning biomass is lower still, because fish grow in terms of egg production even faster than they grow in terms of weight, and, because there aren't many age-twenty, fifteen to twenty-year-olds, there's not as much egg production as you would like to see.

This is just showing the estimates of recruitment, and you've seen it before in previous assessments. In the early years, there really isn't any indices or age composition, and so we can't estimate recruitment fluctuations, and so it's just going back to the overall average recruitment, but, once you start getting to the more recent period, where we have catch information and age composition information and indices, we start seeing all these fluctuations, and the key point is that, in the most recent years, you have that -- What you can see is the big spike that I mentioned earlier, around 2006 and 2007 and 2008 of high recruitment, and then that happened again in the
more recent last five years, since 2020, and so that's going to be a key point when we start talking about projections.

In terms of the fishing mortality rate, this is the big concern, that, no matter what we do, even if we reduce landings to near-zero, we still have high fishing mortality, because of those general recreational discards. The discards from the commercial fishery appear to be pretty low, and some of the other fisheries are generally low, but the general recreational discards are pretty much driving the bus here, and, as I said, some of that is because of undersized fish being released, recruitment, but, to the extent that high-grading is occurring, that may also contribute to this problem, hence the reason for needing descender devices.

This is the plot of spawning stock, and you can see that, although spawning stock has increased tremendously relative to the low point in the 1990s, it's not up to that purple dashed line, which is the MSST, and it's not near the rebuilding target yet, which is the SSB at F 30 percent, and so the olive dashed lines, and so that's why it's still considered overfished, and it will require several years more before it rebuilds to that olive dashed line.

This is just showing the uncertainty analysis, and remember that the BAM model does an MCMC analysis, where it includes alternative states of nature. In particular, they looked at things like different levels of natural mortality, and they looked at different discard rates, and they looked at different levels of recreational catches in the historical period and a number of other things, and they integrate it all together, and what comes out is this sort of banana plot, where you can see that almost all the observations are falling in the red zone, where you have both overfishing and overfished, and so the assessment is pretty clear that overfishing is occurring, and the stock is still pretty heavily overfished. There is very little indication that there is any chance that it is in better shape than estimated in the point estimate.

Just to summarize the assessment results, South Atlantic red snapper are not yet rebuilt, and that's simply because the number of fish is there, but it will take a little time before they grow into those big sow snapper that produce most of the eggs, and overfishing has continued through 2019, and it results primarily from recreational discards, and the estimated red snapper abundance has increased substantially, and it's really at the highest we've ever seen, and so that part is very consistent with what the fishermen are seeing on the water.

As I mentioned, the age structure hasn't filled out all the way, and it's starting to fill out, and we're seeing good progress, but it's not yet to the level expected with the spawning potential ratio of 30 percent. Natural mortality does remain a key source of uncertainty in this assessment, as it is in most assessments, but they looked at a pretty broad range, and, no matter what you looked at, the stock still came out as overfished and undergoing overfishing.

This is where we start getting into the hand-off to the SSC, and the assessment process itself looked at six scenarios that were identified by the SSC working group, three fishing mortality rate scenarios and two recruitment scenarios, and so, for the fishing mortality rate scenarios, they looked at, of course, F equals F 30 percent, and that's for the OFL, and the thing that I want to emphasize here is that, according to the National Standard Guidelines, OFL is a risk-neutral calculation, and so that means that you take your best estimate of F 30 percent and you apply it to your best estimate of the abundance of the stock.

Now, in the case of projections, where you're projecting OFL into the future, that means you have to determine what's the most appropriate assumption for near-term future recruitment and then the effectiveness of regulations that have been put into effect, and, in this case in particular, the effectiveness of the implementation of descender devices from Amendment 29.

Then they looked at an F rebuild scenario for generating the ABC, the allowable biological catch, and they looked at it with a 50 percent probability of rebuilding, which apparently was used previously, and then, presumably, there would be some buffer on top of that, like the typical P* approach, and then they looked at an alternative way, where you generate F rebuild with a 67.5 percent probability of rebuilding, and that they got from the SSC's P* control rule, and so that's where you're buffering to account for scientific uncertainty.

Then they looked at two different recruitment scenarios, and one was the long-term average recruitment, and so that was given more or less by that flat line that I showed you in the recruitment plot, in the early part of the time series, and then they looked at a run where they looked at the very recent high recruitments, and so the fundamental question is, for OFL, what recruitments are most likely to occur in the near-term future, continuation of the recent high recruitment, or will it go back to the longer-term average recruitment?

Then that also applies to the reference points. Typically, the reference point is based on that longer-term average recruitment, or a spawner-recruit relationship, if one has been established, and so those six scenarios are in the assessment report.

The SSC requested twelve additional forecasts and information about the methodology that they wanted to review later. As those of you who listened into the SSC meeting are aware, the Science Center and the Regional Office had talked a lot about alternative projection methodology, and they gave some examples to the SSC, where we tried to incorporate not only the high-recruitment scenario, but also a plausible effect of the descender devices, and it was just something to give the SSC some more options to talk about in how you might move forward in the projections.

The key decision points were what is future recruitment most likely to look like, and is it going to follow recent trends or return to the long-term average, and that's particularly important for an OFL calculation, because remember that's risk-neutral, and so you want to make the most realistic assumption about future recruitment, and then what is the expected use of descender devices, and the SSC put a lot of thought into that, and I think it's still under consideration. I don't want to step into Genny's territory, and so I'll let her pick up the details of that discussion.

Then, of course, there is the discussion about the probability of rebuilding. Should you work with 50 percent, because the ABC does need to be based on F rebuild, and so do you work with a 50 percent probability and then buffer after the fact for scientific uncertainty, or do you use the 67.5 percent, which does implicitly buffer for uncertainty, and so that's where we left off, and that's where the SSC picks up, and I think that's the last slide. I will open it up for questions here, and I do have Kyle Shertzer on the line, in case there are any technical questions that I can't answer, since he was the assessment lead, and I'll open it up for questions.

MS. MCCAWLEY: Thank you, Clay. We definitely have hands going up. Spud.

MR. WOODWARD: Thank you, Jessica, and thank you, Clay. My question is -- I just want to make sure that I understand this correctly. When you have an age structure from 1950 to 1980, that includes an increased proportion of older fish, and is that age structure based on any empirical data, or is that strictly a back-calculation based on the life history and the maximum age of the fish?

DR. PORCH: It's definitely an inference, because we don't have age composition that reaches that far back, and we don't have any indices of abundance, but, once you get into the 1970s, we do start having some information there, and it's better informed, and keep in mind that unfished level still has been -- There's not direct information back there, but there's a reasonable inference, based on all the information that we have collected since then, and they did look at different assumptions, such as total recreational catches, in that MCMC analysis, where they look at the effect of different uncertainties on the assessment input, but, I mean, the short answer to your question is we don't have any direct information, other than the commercial landings and some spotty information on recreational landings back then.

MR. WOODWARD: Okay. Thanks, Clay.
MS. MCCAWLEY: Art.

MR. SAPP: Good morning. Is it the science community's belief that a ten-year-old, twenty-fivepound red snapper produces less eggs than a twenty-year-old, twenty-pound red snapper?

DR. PORCH: It's not so much whether they produce the same amount of eggs or not, and it's how many are out there, and older red snapper are more likely to be the larger size than younger ones. Yes, there are some younger ones that can achieve a larger size, but, for the most part, if you look at the growth curve, you will see that the probability of a fish weighing twenty pounds increases substantially as they get older, but, having said that, there's not a one-to-one relationship between egg and production and weight.

There is a tendency for older fish to be a little more productive than the same sized fish at a younger age, although the data isn't perfectly clear on that, and certainly, for a number of other species, we have shown it conclusively, that older females tend to produce a higher quality of egg, even compared to fish of the same weight that are younger, but I do want to defer here to Kyle, because he was more involved with the actual data that was available for South Atlantic red snapper, and see if he wants to correct anything that I just said. Kyle, are you on?

DR. SHERTZER: Yes, I'm on. No corrections, but I would just reemphasize what you just said, that there's a higher probability of being larger, or larger fish at age-ten would produce more eggs, and, as the fish continued to age, there's a higher batch fecundity, and, also, more frequent spawns, so that the older fish are more valuable towards the egg contribution, or the total fecundity, in the population.

DR. PORCH: That's a great point, Kyle, and I just want to say that we've got a lot of fecundity information in the Gulf of Mexico, and, in fact, I was one of the authors on a paper on it, where you see exactly what Kyle said, that older fish tend to spawn a lot more frequently, and, like I said, for a number of other species, it's been shown that the quality of eggs of older fish is higher than that of younger fish.

MR. SAPP: Can I respond real quick, please?
MS. MCCAWLEY: Go ahead, Art.

MR. SAPP: All right, and so we're seeing the highest recruitment, and so clearly these guys are successfully reproducing out there, and I've got countless and countless videos from our diving community showing giant plumes of very big fish that clearly, with you all's age sampling, are not twenty-year-old fish, or even fifteen-year-old fish, but they're definitely twenty-five-plus-pound fish, as the fish that they take the weight at.

Again, like I said, a video, a giant plume of these things, and they take one of them that all appear to be similar in size, and it's really, really hard for the people that I have to talk to every day to keep hearing that they aren't recovered, when they're catching giant red snappers, and seeing a lot more of them, and you all are saying that they're successfully reproducing, but I'm on record having said so, and so hopefully they won't be mad at me. Thank you.

MS. MCCAWLEY: Thank you, Art. Go ahead, Clay.
DR. PORCH: I can understand exactly where he's coming from there, but, again, we don't have a good picture of what it was like back in say the 1950s, when the stock was more lightly exploited. We do have some indirect information, just looking at photographs and observations, that fish were generally larger in the catch, but the bottom line is that we -- None of us fishing today were able to go look on the bottom and see what was out there in the early period, or what it would look like if we were actually at 30 percent, and so you're always having to infer things from data, and the data that we have now suggests that the number of very large adult females is not what we would expect in order to achieve F 30 percent.

Yes, there's lot more fish out there, and there's a lot of fish spawning. What we're saying is there -- In a little while, there will be even more of that, because we'll have more females that are producing more eggs when they spawn, but just seeing fish out there, a lot of decent-sized fish, and seeing them spawning, doesn't demonstrate that there is as many as there should be in order to achieve that F 30 percent reference point.

MS. MCCAWLEY: Mel.
MR. BELL: Thanks, Jessica. Thanks, Clay. I appreciate the presentation and you walking us through that. It was very helpful. Could you go back to -- It's probably Slide 9 or 10, but the one that shows numbers of biomass-at-age. That one. It's kind of following-up on where Spud was already coming from, and I had the same question. You can, obviously, see, from about the mid1970s backwards to the 1950s, that looks very structured and very clean, and so I guess you answered that question, and that was sort of inferred, or back-calculated, somehow.

One question I have is that, in terms of what we're rebuilding to, the model we're following and the plan we're following, is that what we're trying to achieve, in terms of the -- If you want to put it real simply, the color spectrum there, realizing that we need more of those larger, older, more fecund fish, and I get that, and I follow that, and it makes clear sense, what you were describing
as you go on and working towards the 1990s, and you start losing the older fish, and you're losing a lot of your spawning potential, but what is it that we're actually trying to rebuild?

Are we rebuilding towards an inferred population that may never have actually existed, and therefore we're trying to -- I'm just asking, but are we kind of building towards something that we can maybe never get to, just given the amount of abundance that we're seeing right now, and I can't imagine crowding many more fish out there, and, to Art's point, I hear the same thing from our divers, and even my own divers that are working for the state going out, is that they've never seen anything like this off of South Carolina, and, of course, my memory only goes back, in the water, to the early 1980s, and I never saw red snapper, and now we're seeing the same things that the divers and the fishermen are reporting, but I guess what I'm trying to focus on is what is our goal?

When we achieve the rebuild that we're looking for, it isn't necessarily going to look like that, the portrayal back into the inferred stock, is it, because you kind of -- I am trying not to focus on just the pretty colors, but, if you look at the number of ones and twos we've got now, they're much higher than the ones and twos back then, and so that would tell you that, gosh, somebody is reproducing out there, and so there's obviously a lot of reproduction going on, to make all those one and two-year-olds, but I totally understand that what we've got out there is a population of like adolescents, or teenagers, running around, and they don't have the spawning potential we need to carry us through to the goal, but I guess my question is kind of about the goal. What will it look like when we get where we want to be? I hope that wasn't too rambling.

DR. PORCH: No, and I appreciate that, Mel. We definitely are not trying to achieve, looking at this graph, something like the 1950s, because that's closer to the unfished level. We're trying to achieve F 30 percent, which is, again, more like a third of that total level, and probably the age composition would look more like what we see in the early 1980s.

I agree with you, and, I mean, recruitment has been off the chart, and that's what is driving that big increase in the recent years, and it could be that we've just had a particularly favorable environment, maybe the most favorable environment, for red snapper since we started collecting indices of abundance, and so back to the 1970s, and it could be that we're missing something in terms of spawning potential, and that's why we're looking forward to the South Atlantic Great Red Snapper Count, and we can see if there is any cryptic biomass that we're missing in the assessment, like we did in the Gulf. That's possible.

So far, what we've looked at, to-date, suggests there isn't a big cryptic biomass, but, once we complete that $\$ 3.3$-million study, then hopefully we'll have more definitive information, and so, again, we're looking forward to that, but, right now, all we can say is there were some fortuitous high recruitments, and there is definitely lots of fish out there, and we agree with that. We're just not seeing the proportion of older fish that we might expect in order to achieve F 30 percent, but there's definitely a lot to learn about red snapper, and it is always conceivable that we're missing something, but, at the same time, I would say this assessment has been reviewed and reviewed, every piece of it, many, many times, and, right now, I would have to say this is the best available scientific information.

Maybe, if you scroll down towards the extras, I think there's a slide there that might answer Mel's question, once you get into the extras. There should be a plot with expected age composition, and

I thought it was in this extras. There it is, and so you've seen this one before, and I think you just saw it in tilefish, but this gets at, for those of you who are more technically inclined, what we're trying to rebuild to.

That black line is the age structure once you achieve an equilibrium at F 30 percent, and so, sort of once you actually achieve the rebuilding target of F 30 percent, and so you can see that you would expect as many twenty and older, and so that twenty category is twenty-plus, twenty and older, and you would expect about as many of those as five-year-old animals, and, if you look at the estimates for 2019, that's in yellow, and you can see that those values are generally higher than what we've seen in the past, but they're not quite to the target level yet, and so, Mel, I think this gets more directly at your question of what did we expect it to look like.

We can see that we have about as many twelve-year-olds and younger as we would expect, and maybe not quite in some of the middle range, but it's close, but where we fall short is in the number of fifteen to twenty-year-olds, and so it will just take a little time before those younger fish grow into the older, more productive age classes.

MR. BELL: That's a helpful picture there, Clay. Thank you.
MS. MCCAWLEY: All right. I had a couple of questions myself, and I'm going to try to intersperse them in between all these hands. Clay, what's the degree of confidence we have on the MRIP discard estimates? In other words, what's the degree of uncertainty for those estimates?

DR. PORCH: I don't know, offhand, what the PSEs are on them. Obviously, they are highly uncertain from year to year, but, if you look across years, they're consistently high, and so, on average, I think they probably are pretty close to what has happened out there, keeping in mind that this is self-reported data. I will ask Kyle to chime in, because I know that they've had extensive discussions about that during the assessment.

DR. SHERTZER: I don't think there's any more or less uncertainty in the MRIP estimates for red snapper than for some of the other species, and they are the ones that are for the full year, since discards are happening throughout the full year.

MS. MCCAWLEY: Thank you. Chester.
MR. BREWER: Thank you, Jessica, and thank you, Clay. Clay, I will admit that I am extremely frustrated, and the problem with dead discards has been identified, and we actually have put in place regulations to require the descending devices be on all boats essentially bottom fishing, and that went into play -- I think it was effective as of July of last year, and I could be wrong on that, and then people were enthusiastic, and we told everybody. The council told everybody. Fishing clubs told everybody that, hey, this is the way around the disaster that we're seeing in red snapper.

Then we turn around, and, about a week or so ago, we get information that the 2021 season is going to be three days for red snapper, as opposed to the four days that we got last year, and that is a PR disaster, and it's a credibility disaster for us. I would like to try to figure out some way to lessen the disaster, if I could use that term, and, while I think folks on the council understand where the SSC is coming from, and they don't necessarily agree with it, but they understand it, and we can question certain parts of it, but it just seems to me, and I would like to get your thoughts on
putting out some sort of a very, very simplistic paper that we could give to people, as opposed to trying to explain this, and, at the end of our explanation, really the pretty much universal response is "bullshit".

There are more fish out there than I've seen in my life, and I've been fishing for forty years. We get reports, and photographs actually, of this fish coming up the St. Johns River, and we get photographs of people catching them while trolling artificial baits, and so, I mean, it's a really hard sell, and I am, quite frankly, tired, tired, of this council acting as a buffer for science that a lot of people do not believe. My thought is do you think that the SSC could put together a very simple paper that could be put out to people, and, essentially, at the end of it, say just be patient, and this will end if we stay the course, and, with that, I will be quiet.

DR. PORCH: The question was directed to me, but I'm not really the most appropriate person to answer on behalf of the SSC. I mean, I will remind you that the three-day season is actually not based on the assessment, and the assessment does agree that there are more fish out there than anybody has seen in probably -- Well, certainly since the 1970s, and so there weren't that many of us that were fishing prior to the 1970s, and so the assessment does agree with you that there's more fish out there than there has been for a very, very long time.

The only issue is whether it's actually rebuild to the management target, but, again, the three-day season is not based on the assessment results, and that's what I will leave you with, and I don't know if we want to let the SSC, or John Carmichael or someone, answer the rest.

MR. BREWER: Just as a quick follow-up, the general public is not going to see much except a three-day season and we've been using -- You know, we've been using these descending devices, and they're going to associate those two with and ask -- I mean, when we answer some of this stuff, we have to start talking in terms of assessments and what the assessments are showing us, and so the general public is not going to get that nuance.

DR. PORCH: Chester, I agree that we have to take some account of the impact of the descender devices, but keep in mind -- You know, as you said, that didn't go into effect until very recently, and so it actually doesn't show up in the assessment. There is some improvement, and they show the increased use of descender devices and decreases in release mortality according to three distinct phases in the assessment, but it doesn't include the most recent one, which I think is Amendment 29, because that happened after the last year of data that's incorporated in the assessment. Where that would come in is in the project scenarios, and I think that the SSC presentation will talk a bit about that and the concerns that the SSC had.

MS. MCCAWLEY: All right. I'm going to keep moving through the list of hands, and it sounds like we'll come back to that, maybe, in one of the follow-up presentations. Andy.

MR. STRELCHECK: Thanks, Jessica. I guess I have the benefit of having heard a lot of other comments, and so I've added a few additional questions. I first wanted to go back to Chester's comment, and I really appreciate it, and I think this is a key discussion point that the council is going to need to have moving forward.

I think the Science Center, in my view, has done an excellent job of conveying the results of the assessment and why it's reaching the conclusions that it has. Where the disconnect is occurring is
kind of this perception that the science isn't matching the on-the-water observations, and I don't necessarily think that's the case, and even with Chester's own comments about seeing more fish than he has in forty years is pretty consistent with what the assessment is telling us.

I think the disconnect, and the challenge, is that we are talking abundance right now and not the biomass, right, and the recreational fishery -- For a long time, we've talked about not necessarily benefitting from increased biomass and wanting more access and availability, whereas the commercial fishery benefits from biomass and increased yield, and so this is a Magnuson Act challenge, in my view, with regard to the requirements under the Magnuson Act and what we're required to rebuild to.

I just wanted to make that comment, first and foremost, and then, in terms of questions directed at Kyle and Clay, I have two questions. One is related to recruitment, and the other is with the OFL comments that you made, Clay, and so, with regard to recruitment, I expect that recruitment will be a key discussion, not only for the SSC, but also this council. What surveys and information do we have available to kind of estimate recruitment, and the reason I say this is, if we make decisions and assumptions about using high recruitment versus average recruitment, how can we tell whether we're right or wrong between now and the next assessment, as management proceeds?

DR. PORCH: I think I'll let Kyle answer that one.
DR. SHERTZER: I think our best source of information will be the SERFS survey, the video trap survey, and, unfortunately, they didn't operate in 2020, because of COVID, but they are operating this summer, and, going forward, that will be our best information on age structure from the chevron trap.

MR. STRELCHECK: When they conduct their summer surveys, when is that data then typically available, Kyle? By the end of the year? Do you know?

DR. SHERTZER: It varies. As far as the ageing goes, they have a long list of species on their priority list, but I'm sure that red snapper would be moved to the top, if that's what was needed to be worked on, and usually the video index itself, which I think is a little less informative on recruitment, but still has some information, is typically available the following summer.

MR. STRELCHECK: Okay. Thanks. Then Clay, you made a comment regarding OFL being risk neutral, and I would like you to maybe expand upon that, and, in particular, how that relates, obviously, to some of the scientific decisions that are made or the scientific information that is provided to the SSC and what's being considered by the SSC.

DR. PORCH: I guess I'm not quite sure what you're getting at with the last point, but the OFL is -- If you think of your P* distribution, the OFL is the central tendency, and so it’s essentially the 50 percent chance -- The catch level that has a 50 percent chance of preventing overfishing, and so, in that sense, it's risk neutral. The easiest way to think of it is, again, it's the best estimate of your fishing mortality reference point, F 30 percent, applied to your best estimate of abundance.

The challenge is, in projections, one of the things that contributes to abundance is recruitment, and so you have to make a guess at what future recruitment will look like, and then the question is do you think recruitment will go back to levels that are associated with a spawner-recruitment
relationship, or, in cases like red snapper, where we don't have a clear spawner-recruit relationship, will it go back to the long-term average, or will it tend to stay at the higher levels, at least for the most recent years, and so that's a key question they need to answer.

Then, beyond that, when you're making projections, you have to make some assumption about how the fishery will behave, the relative effort of the commercial and recreational, but, in this case, more importantly, what the impact will be of Amendment 29 mandate for having descender devices onboard the vessels, and that's where I think there's some conversation -- A lot of conversation that the SSC had about what's the most reasonable level.

Again, risk neutral means basically a 50/50 chance that the OFL is going to prevent overfishing, and so, again, the easiest way to think of it is it's your best estimate of what that overfishing limit is, and so there's no buffer to account for scientific uncertainty applied for the OFL, or management uncertainty, for that matter. It's just what you expect to happen, but the ABC, of course, is the OFL buffered by scientific uncertainty. I don't know if I got at all of your question, Andy. Like I said, I wasn't quite sure what you were getting at with the second part of your question.

MR. STRELCHECK: No, you did, and I was wanting to better understand kind of the moving parts, and certainly I understood, obviously, the OFL is based on the best estimate of abundance and your fishing mortality rates, and that then is influenced by recruitment, which you answered, and so thanks.

## MS. MCCAWLEY: Steve.

MR. POLAND: Thank you, Madam Chair. Thank you for the presentation, Clay. I've got a couple of questions that I would like to hear your thoughts on, and hopefully the council will discuss in a little bit more detail when we get to our management response discussion, but so the SEDAR -- I think the proxy for MSY is set to I think 30 percent SPR, and it's a proxy, because the assessment hasn't been able to estimate MSY, and so my first question is could you go into a little detail on why the assessment hasn't been able to estimate MSY for this stock, and I assume it's because there's no spawner-recruit relationship, but I would like to hear a little discussion on that, and then I have a second part.

DR. PORCH: I will start, and then I'll let Kyle pick up, but, first of all, I would say that we can't see what the spawner-recruit relationship is, and there's not a discernable pattern where we can specifically identify a spawner-recruit relationship, and that's not to say there isn't one. Of course, at some level, there has to be one, right? I mean, if you take out all the mommas, you're not going to have any babies, and so, at some level, there is one, but, because of uncertainty in the data, but also environmental fluctuations, it's really hard to see what that relationship is.

In the Southeast, I would say that's probably more the rule than the exception, just because it's a highly-variable environment, and, also, there may be an underlying spawning-recruit relationship, but it can change through time, in response to changes in the environment, and, when that happens, it makes it really hard to see what that relationship is, because you just simply don't have the contrast in data to see it, especially if it's changing every few years, and there's just no way that you will ever be able to predict it from stock assessment data.

In this case, with red snapper, there may very well be one there, and it may be that changes through time, but, in any case, we can't really discern what it is, and so I think I sympathize with Genny's comment earlier that there needs to be an SSC working group to talk about how to deal with situations like this. In fact, there's discussions at the national level, and we're developing technical guidance to address just this sort of thing. What do you do when you really can't identify a spawner-recruit relationship, and, therefore, you can't calculate MSY and have to use a proxy?

I will say that, if you look across the nation, there's a lot of different approaches taken, and it definitely is a complicated problem, but I want to circle back and emphasize that, just because we don't see what the spawner-recruit relationship is from our data, that's not to say that there isn't one, and I think people get confused about that. I mean, there may very well be one, and so what we want to do is pick a proxy that is likely to get us in the sweet spot where we're maximizing production for the fishery. Then, for any specific comments related to discussions that may have happened with South Atlantic red snapper during the assessment process, I would defer to Kyle.

DR. SHERTZER: I don't have much to add to that. That's a fairly complete answer, and, on the technical end, there's the steepness parameter that we could not estimate in this assessment, or in previous red snapper assessments, and that's a parameter that tells you, as spawning biomass decreases, how quickly recruitment approaches zero, and so that point that Clay mentioned of, if you have no mothers, you have no babies, and we do see high recruitment in this assessment, and low biomasses.

The assessment panel decided that we would just estimate average recruitment across the full time series and then estimate variability around that, when the data allow us to estimate the variability. We could not estimate a spawner-recruit curve, and that's why we can't estimate MSY, and so we fell back onto this F 30 proxy for FMSY, which was the proxy that the council actually chose, and so that was the reason why we used F 30 .

MR. POLAND: Thank you for that, Clay and Kyle, and I certainly agree. You need spawning to make babies and have recruitment, and your last comment there, Kyle, is kind of a segue to my second question, and so our targets are based on the MSY proxy of 30 percent SPR, and, just given the recent performance of the fishery, I would just like to hear you guys' thoughts on if that is an appropriate MSY proxy.

I mean, we're seeing record recruitment in this fishery, and it's still being overfished, but just a slight decrease in the F by really restricting harvest. I mean, we've seen this stock really rebound quickly, and so that kind of leads me to believe that maybe that target is a little too high, and maybe we need to reconsider what that MSY is, and so I would like to hear if either of you have any comments on that, the appropriateness of our current MSY proxy.

DR. PORCH: I would say that F 30 percent is probably not too high of a bar. Generally speaking, for species like red snapper, the agency is leaning towards recommending more like F 40 percent, which is what it used to be for red snapper, and that's just based on a lot of simulation analyses trying to determine what SPR proxy is most likely to get at MSY, and usually it's more like F 40 percent or F 45 percent for animals similar to red snapper.

Having said that, there is a lot of variability in the productivity of any given species, and I would defer to the experience that we had in the Gulf of Mexico, where, for a long time -- Well, it still
is, but the reference point was 26 percent SPR, and the thought there was that red snapper were extraordinarily productive, on a per capita basis, and then along came the Great Red Snapper Count, and what we saw was that a large fraction of the stock lives outside the area where the fishery is normally prosecuted.

The fast recovery we saw in the areas that were actively fished may very well have been because there was this large, cryptic biomass that was feeding it, and so it's not that the stock was really resilient on a per-capita basis, but it's that there was a big, cryptic biomass that was fueling it, and so the discussion that's going to go on at the next assessment is whether F 26 percent is actually appropriate for the entire stock.

It might be appropriate for that smaller segment that actually occurs on the high relief, where the fishery operates, but, for the stock as a whole, it probably is too high a value of fishing mortality rate and too low a value for SPR. It's really hard to say whether we should go up or down with South Atlantic red snapper, and, again, I'm hoping to gain more insights from this Great South Atlantic Red Snapper Count, and then I don't know if, Kyle, you want to add anything to that.

DR. SHERTZER: I will just add that, at this point, we don't fully understand what leads to high and what leads to low recruitment with red snapper, and we are seeing the numbers and biomass recovering, but we don't know yet if that's what is leading to the high recruitment, and we did see very high recruitment in the mid-2000s, 2006 through 2008, but then that was followed by four or five years of below-average recruitment after that, and then it bounced back up to be high again, and so, yes, I will just reiterate what Clay said, that we don't fully understand what is driving recruitment in red snapper right now, and, at least relative to proxies that are used in other parts of the country, F 30 is actually fairly aggressive. Other places, particularly on the west coast, are using F 40, or F 45, percent.

MS. MCCAWLEY: Steve, did you have more questions?
MR. POLAND: Not at the moment. I appreciate that, Kyle and Clay, and I will probably have some questions when we get later on into the discussion. Thank you.

MS. MCCAWLEY: All right. Sound great. Kerry.
MS. MARHEFKA: Thanks, Jessica. I have a sort of dumbed-down science question for my own education, and I'm not really trying to make a point, but, back in the 1990s, when the stock was really depleted, is it possible that the species sort of adapted and started growing really fast in response to that and reproducing, or spawning, earlier, this making sort of a permanent shift on how big these fish get and how early they spawn or size they spawn at?

DR. PORCH: I mean, I will start by saying it's possible. I don't think we have the database to discern that, because we don't have reproductive samples back in the early pre-exploitation phase, and it would have been a fascinating thing to look at. Kyle, do you have any thoughts on it?

DR. SHERTZER: I would be surprised if there weren't some adaptive response in the life history of this animal to exploitation. I think what science is showing is that that's probably more common than not, and red snapper is unusual, in the sense of its longevity and early maturation, and so, like Clay said, we don't have any data to really analyze this right now, but I suspect that there is some
type of response, and, in particular, earlier maturation than we would otherwise see if it were lightly exploited, but, again, I can't offer any evidence to support that hypothesis.

DR. PORCH: There are certainly other stocks in the world where that's actually been demonstrated, where they have a longer time series, I think some the hake populations in South Africa, where, actually, they don't grow as big as they used to, because they have been genetically selected against fast-growing fish, and so they spawn earlier, at a younger age, and they don't grow as big, and it's conceivable that red snapper have done something like that, and we just don't know. We don't have any data to determine it.

MS. MARHEFKA: Could that cause a problem for us in the future, in that we may never see sort of that biomass at those higher sizes rebuild to the -- I know we're talking now like more the 1970s, what we saw in the 1970s, versus what we saw in the 1950s, and are we setting ourselves up for some unattainable goal if some sort of adaptation has happened?

DR. PORCH: I don't think so, because all the growth information that we have is for the more cent period, and all the batch fecundity information, and the way the National Standard Guidelines are set up is we're supposed to base all of our estimates, our ABCs, OFLs, on the prevailing environmental conditions. I think we're fairly safe on that front, and the bigger question is really how to deal with the massive discards during the closed season, which is most of the year, but you're still catching red snapper, and some fraction are dying.

MS. MCCAWLEY: All right. I don't want to cut off questions, but the Chair's bladder needs a break, and so let's take a ten-minute break. When we come back, we will continue with this line of questioning. Thanks, everybody.

MR. BELL: Good call. Be sure to raise your hand when you get back.
(Whereupon, a recess was taken.)
MS. MCCAWLEY: All right. It looks like we have a fair number of folks that are back. We're just missing maybe three folks, maybe four folks, and I think we're going to go back to -- Go ahead, Mel.

MR. BELL: I was just going to say that I would go ahead and go for it. One thing you might want to consider is just other items that we want to try to get through, but we've got a lot of good questions.

MS. MCCAWLEY: Yes, and I think we're set to go until lunch, and we've covered everything else in this committee, other than Other Business, and so I think red snapper is kind of the only thing left, and so I think we're good to go back to questions, and I'm going to go back to the list. Dewey, you're up next.

MR. HEMILRIGHT: Thank you, and I had a couple of questions, and probably a comment. I was curious to -- How, in the future, going forward, is -- Are you going to be able to account for the use of the descending device, and how does that work, how to quantify the bang of what you get out of that being used? Is the descending device -- Is it mandated for use, or is it mandated to be on the boat and ready to be used? Then I've got one more question after that.

DR. PORCH: There's a couple of people that could weigh-in here.
DR. SHERTZER: I will jump in on this. I think the regulation is that it's required to be on the boat, and it's encouraged to be used as necessary, but it's not required to be used, because, in some cases, it's better to get red snapper back into the water more quickly, if it was say caught in shallow water, than it is to hook it up to a descender device and keep it out of the water for longer.

The way it's quantified in the assessment is in the projections, and so this is something that I'm sure Genny will talk more about, and something the SSC is still considering, but we have that information from a study from the State of Florida on the effect of descender devices on discard mortality, and that's what the assessment relied on, is their work, and so we do see reductions in discard mortality with increased use, and some estimates of how will actually be used, and they are shown to be effective, but, also, keep in mind that they're effective at mitigating barotrauma, and there are other sources of discard mortality that a descender device can't really address, such as injury to the fish from the hooking location, if they're gut-hooked or throat-hooked, and, also, depredation, particularly by sharks. Their use does reduce the discard mortality rate, but the overall effect is perhaps smaller than what we had expected to see.

MR. HEMILRIGHT: Is there like a histogram of the age structure of the size fish that are being discarded?

DR. SHERTZER: There are some discard length compositions that are shown in the report.
MR. HEMILRIGHT: I was curious -- Similar to what was shown with the very colorful graph of like the headboat indices and the video indices, is there anything like that that would show the size of the fish being discarded, because I think, to Chester's point about showing something to the public, that histogram type of thing, with the color code of showing where we used to be, and where we're at now, and maybe where we've got to go, is very informative, showing that there's, you know, tons of smaller-sized fish, but not the bigger ones, but I appreciate it. Thank you.

DR. PORCH: Just to jump in there, we certainly have challenges getting the size of fish from the recreational fishery. With the MRIP, we're just getting recall, when they either made the phone calls, in the early days, or the mail-in survey, but not necessarily size comp of discards. We have had a few programs, here and there, where we asked fishermen for the size of the discards, but they're spotty, and I don't know how far back in time they go to make that comparison. Kyle, do you know? Do we have the ability to compare, especially from the private recreational fishery, where most of the discards are coming, the size composition of the discards in the earlier years of the fishery compared to now?

DR. SHERTZER: Unfortunately not. Most of our data from the recreational fleet on discards, for length comps, are really -- We only had three years, and it was 2013 through 2015.

MS. MCCAWLEY: I am going to jump in with one of my questions here. I was just curious about kind of the high-grading, and if that's being picked up by MRIP or any of these other state fisheries surveys that are being conducted during the mini-seasons.

DR. PORCH: I will answer in general, and, I mean, MRIP doesn't have the cause of the discarding. In other words, they don't distinguish high-grading from other reasons of letting fish go, and so there's not a real way to directly analyze, from the MRIP information, whether high-grading is increasing or not, and we can just see whether the number of discards is increasing or not, but there are many reasons why that could happen.

MS. MCCAWLEY: Thank you. Chris.
MR. CONKLIN: I am going to save mine for the management response. Thank you.
MS. MCCAWLEY: Thanks, Chris. Tony.
MR. DILERNIA: Thank you, Madam Chairwoman. I was listening to Chester speak about the three and four-day season, and I was thinking to myself, huh? In the Mid, for bottom species, we have black sea bass that goes for maybe a three or four-month season, and the same with summer flounder. Scup maybe goes for a seven-month season, and so, when I hear talk about seasons of three and four days, it's very peculiar to me, and so my question is, and I'm not sure who can answer it, but what's the goal here in managing this fishery?

I mean, where are we trying to go, as far as the directed season is concerned? I mean, could someone tell me like where perhaps the council or the agency -- Where we hope to get to, as far as an open season for red snapper? I would like to hear that, compared to, again, like what we have up in the Mid. Thank you.

MS. MCCAWLEY: I think that one of the presentations -- I think we're going to ask John Carmichael to give us a short presentation, after Genny's presentation, that maybe gets to this a little bit more, Tony.

MR. DILERNIA: Okay, because, to me, it's like I'm on a different planet. Again, we're -- Black sea bass -- My fishermen up in the Mid, they're screaming at us, because they can only keep three or five fish on a ninety-day season, and I say to them, well, you should see what's happening in the South Atlantic, and they don't want to hear that at all, and so, again, I'm curious to see how the recreational community responds, or reacts, or what they're happy with in the South Atlantic when it comes to red snapper. Again, that's all. It's just curiosity. Thank you.

MS. MCCAWLEY: Thank you, Tony. Monica, I see that you have your hand up. Would you like to jump in?

MS. SMIT-BRUNELLO: Not really. That was a joke, but Kyle answered the question. I was going to respond to Dewey's question about whether descending devices were required to be used or required on the vessel, and Kyle answered that.

MS. MCCAWLEY: Thank you, Monica. Mel.
MR. BELL: Thanks, Jessica. My original question was answered in the queue, but I would like to -- Based on something Dewey said, I would point out that, in talking about being able to see, you know, what's being discarded, what's actually being caught, when we have these very short seasons, we do everything we can to get our hands on every single red snapper carcass we can,
and so it just shows the importance of the public taking that opportunity to help us acquire data that we need and give us information related to what you're discarding, and give us the racks. In South Carolina, we have the rack program, and those end up over in MARMAP's hands, and we work those up. It's just really important, even though the seasons are short, that we get data from it, and so that's just kind of an advertisement, I guess. Thank you.

MS. MCCAWLEY: Thanks, Mel.
DR. PORCH: If I could add something to that, keep in mind that the discards are happening most of the year, because the recreational fishery doesn't stop, but just the time period where landings for red snapper are allowed, and that's the big problem, right? I mean, red snapper are being killed as they're discarded, all throughout the year, and it would be certainly interesting to have more direct information on the number of discards, rather than relying on self-reported information after the fact, and, also, it would be great to have information on the exact size of the fish.

Maybe some of the things like MyFishCount are helping with this, and, of course, the challenge is getting enough people to report faithfully, and, by faithfully, I mean consistently and accurately, and, the better we can do at that, the more effective the assessment will be, and so I agree with Mel that it's extremely important to get this information.

MS. MCCAWLEY: Thank you. Art.
MR. SAPP: Thanks for the opportunity again. I have brought it up several times before, and I've been reminded to do so again, and the fishermen have an issue with the sampling methods that are being done, and so the way -- The larger species generally don't hang on the bottom, where, really, the only method currently being used to see them would be the cameras on the chevron traps, because the bigger fish aren't going in, and the bottom longline generally isn't going to catch the bigger fish.

We've found that the bigger fish suspend higher in the water, and so, again, we firmly believe there's a lot more bigger fish than are being reported through these -- I'm drawing a blank here, and sorry, but the thought, from a lot of us, is create some kind of exempted fishery season for everybody involved in this fishery, and get great data that way, especially through the commercial sector. A lot of these guys go fishing, and get the data you need, and then we potentially have real seasons in the future, but these three-day seasons you're never going to see and get the data we feel like you need to get and we feel like is out there to be had. Thank you.

MS. MCCAWLEY: Thank you. Spud.
MR. WOODWARD: Thank you, Jessica. Yes, I just wanted to offer, I guess, a minor player in the fishery's perspective on this discard quantification challenge, and that is, over the last several years, as I have interacted with people fishing around here, they have been telling me that they're discarding more and more fish each year, and I don't know if that's coming through the MRIP survey or not.

Five years ago, it would be, okay, well, we discarded thirty or forty fish to get whatever we were going to keep that day, and really -- Then, outside the season, they're all over the place, and it's from dozens to sometimes triple-digit discards when they can't keep anything, and so I'm not sure
if that's a bias that is reflected in MRIP that may be leading to an overestimate of discards, or I don't know, and we all know that's a challenge.

I also think that, in the minds of a lot of fishermen, they are trying to express the fact that there's a high abundance of red snapper biomass by telling how many fish they have to discard, and I don't know if that's a potential bias, but, really, the one thing, and I kind of hate to put you on the spot, Clay, but I have to ask this direct question, and that is, given the current management approach and the current goal, and the fact that we have these levels of discards, and we have discard mortality, and we have already heard a little bit about it, that maybe we aren't getting as much benefit out of descending devices, are we doomed to perpetual overfishing and overfished in this fishery, under this current approach?

DR. PORCH: I don't know if "doomed" is the word that I would use. It will be interesting to see how effective the descender devices actually are once the regulation has been in effect. I mean, right now, we're kind of getting an educated guess, and that was that paper that Kyle referred to, and I think FWC was the lead author on it, and we're assuming I think it's something like 75 percent effective implementation, et cetera, but it would be great to see what happens once we actually can collect some data once it's been implemented.

Maybe "doomed" isn't the right word, but I do think that we're going to have to get a handle on these discards. I think what you're hearing from fishermen is actually consistent with what I was showing with elevated discards in the more recent period, and keeping in mind that those discards can happen all throughout the year and not just when the open season is.

Somehow, we have to get a handle on the fact that there are more and more recreational fishermen fishing more and more effectively. I mean, this is not -- The fishery now is not what it was back in the 1970s, or even the 1990s. I mean, the technology is far superior.

As you all know, you can go now on a fish mount and hook up your autopilot to your trolling motor and just sit right on top of it, sitting still in the current without even anchoring, and you can put your line right on a school of fish that you can see on the fish finder, and, I mean, it's completely different than when I started fishing in the 1970s, and somehow we have to come to grips with that, and it's just the fishing power of the recreational fishing industry, and the commercial fishery too, for that matter, but especially the recreational, and it's just increased dramatically over the history of the fishery. How are we going to deal with that? I think it's going to require some creative approaches, and maybe we need to look at some of the examples set by terrestrial management, deer and other animals.

MS. MCCAWLEY: Thank you. Andy.
MR. STRELCHECK: Thanks, Jessica, and I'm really commenting based on other people's comments, rather than directing questions at the Science Center, but I really appreciate Tony's comments and Spud's comments, as well as what Clay just stated. I think Tony hit the nail on the head, and it really comes down to what's our goal objective for this fishery, and I could sit here and focus and preach to you on what Magnuson says, and that's not really, I think, helpful or beneficial, with regard to what we're trying to achieve with regard to maximizing yield.

I look forward to John's presentation later, and I think, really, the focus for the council, going forward, needs to be on this issue that's been laid out, which is we are seeing this resurgence in the fishery, but we're not happy with where we're at with management and access, both on the commercial and recreational side, and so how do we go from where we're at today to where we want to be in the future, and I think a lot of that goes to then some of the things that Clay and others have brought up, which is discards continue to be a huge problem, not just for red snapper, but a lot of our fisheries in the Southeast, and we have immense fishing power, both in the commercial and recreational sectors.

How are we able to then convert some of this discard catch, this wasteful catch, that isn't contributing to the landed catch, to landed catch, and, ultimately, give that greater access and great yield levels that we all desire to allow for those expanded fishing opportunities from where we're at today, and so I don't have any of the answers at this point, and I think there are a lot of creative and innovative solutions, some of which the AP has mentioned as things we may want to explore, but certainly I think the focus of the council does need to be kind of where we want to get to with regard to goals in this fishery and how we then get there, and so thanks.

MS. MCCAWLEY: Thank you, Andy. Thank you, Clay. I don't see any more hands, and I say we move on into Genny's presentation on the SSC recommendations.

DR. NESSLAGE: Thank you. At our April/May SSC meeting, we had the opportunity to review the SEDAR 73 red snapper assessment, and the SSC appreciated the thoroughness of this report, and we agreed that it appropriately addressed all of the TORs, and, given the available data, it is the best scientific information available for managing this stock.

We also agreed that it used methods for addressing uncertainty that are consistent with our expectations and all of the available data and is an adequate basis for determining stock status and supporting fishing level recommendations.

That being said, we, as you will see as I get to later in the presentation, we did not get all the way through our agenda to actually setting an ABC, and we tabled the final ABC setting determination, or recommendations, pending some additional review and getting ourselves educated about the new forecasting methodology and the available data that's used in that forecasting that was presented to us at our meeting, and so I will talk a little bit more about that in a moment.

We were first asked what factors might be affecting reliability of the stock status estimates and fishing level recommendations that would be generated from this assessment, and we pointed out that the results are a bit sensitive to natural mortality, but not hugely, as Clay pointed out, but the stock status should -- If we are underestimating M, the stock status could be different, and so that's something to keep in mind. However, most of the -- Within the range of what we think natural mortality at-age is, the results were relatively robust, with regard to stock status.

However, we did point out that natural mortality may be density-dependent, and that may be some of what's going on here, as we have huge fluctuations in the abundance of this stock over the last few decades. We noted that the fits to the catch-at-age for the older fish appeared to be a bit either over or underestimated, which may be impacting accuracy of the model, and we also noted that the model assumes an average discard mortality rate, and it's not size or age dependent, and that
may impact the accuracy of our overall fishing mortality estimates, because the discard mortality, of course, fits into that.

Continuing on, we noted that the proportion of mature females is estimated to be relatively high at young ages, given this is a pretty long-lived fish, and it's high -- Excuse me. The maturity-at-age for females is actually quite low, compared to its sister stock in the Gulf of Mexico, and that's not what we expect, as scientists. Typically, you see a long-lived fish, and you expect them to mature at moderate to older ages, and a lot of these fish are maturing at relatively young ages, and so that is an indication that there may be a density-dependent response to the fact that the stock size had been previously quite low, and I think Kerry mentioned that this might be something that could be going on with regards to when a stock is highly exploited or experiences some large decline in the total stock size, and they may respond by having earlier maturity.

If that's actually what is going on, that may be contributing to the high recruitment that we're seeing in recent years, but it’s also important to note that there may be some -- As the population recovers, we might see the opposite happen, that maturity may return to a higher age, and, if that occurs, then you wouldn't expect to see as productive of a stock, depending on what the age structure of the population is.

We also noted that, although current recruitment is estimated to be at an all-time high, and I think Clay mentioned this several times, environmental conditions are very likely influencing recruitment success, and we see this in almost every stock, when we start studying what's actually causing trends in recruitment and good recruitment pulses, and so, yes, management may be affecting this, but it may also be the fact that there may have been a series of really good years, and that may not continue, and it's really -- We don't know what's causing it and what the environmental drivers of that good recruitment might be, and so it's really hard to say, going forward, what recruitment we can expect.

We would also -- I just wanted to note that the high productivity that we're seeing now, for instance, may not be sustained if the age structure isn't allowed to expand further, and so, for instance, if this high recruitment is due to good environmental conditions, then, when those environmental conditions change, there's really no buffer, in the sense that -- Not in an ABC sense, but more in the sense that we don't have that expanded age structure, those bigger, older spawners who are spawning more frequently and tend to have bigger, more viable eggs, if red snapper are like other species that have been studied with regard to egg viability.

Continuing on with factors affecting reliability, there were a couple of major changes in this assessment that could be impacting our understanding of the stock, and I think Clay mentioned that we've got the new, revised MRIP estimates in here, which could be impacting the results we're seeing, as well as there was a separation of the SERFS trap and video indices, which the SSC was supportive of and appreciated seeing in this assessment, but, if you look at -- I didn't label the slides, and I apologize, and, in the stock assessment report, and I think this is Figure 44, if you compare the characterization of stock status from the last assessment to this current assessment, you can see that our understanding of the status of the stock prior to 1990 is a bit different, but it's important to note that, in recent years, the stock status and the trends in the stock are quite similar across assessments, and so, yes, there's been major changes in the data that have gone into this assessment, but we're getting similar results.

We were asked about whether this stock -- What the stock status is and how the stock is relative to its rebuilding targets, and, unfortunately, the stock status has not changed. The stock is still overfished, and overfishing is still occurring. The stock does appear to show indications that it is responding to the rebuilding plan. As has been noted many times already this morning, we've seen the highest recruitment here in recent years, as well as the highest abundance.

Biomass is increasing, and the age structure is expanding, and that's all good things, but what is still lacking here is the age composition of the stock. It's not terribly robust, and we've got a stock that's still composed primarily of young fish, ages-one to four, and so, for a long-lived fish, that is an indication that we're not yet rebuilt.

The overall conclusion is that we agree with the assessment's conclusion that rebuilding of the spawning stock biomass has not yet occurred, given the target of SSB over SSB at F 30 percent, and so the stock is not yet rebuilt, and, although the total fishing mortality did decline after 2010, as you can see in that lower-right-hand graph, as we've mentioned, as has been brought up several times today, losses due to discarding are quite high, and they appear to be hindering rebuilding. The major source of mortality is the discards, and that is still a significant source of mortality for this stock.

We were asked specifically to comment on what recruitment scenarios should be used for ABC setting and to justify that. The recruitment estimates in the assessment indicate that recent recruitment is quite high. The one caveat that we just wanted to point out is that there was a retrospective analysis conducted for the stock, and it indicated that, in a couple of those peels, where they drop off the last year of data and rerun the assessment, some of those were lower than the lower bound of the uncertainty band that's estimated with the MCBE analysis, and so that suggests that recruitment may not be estimated within the reported level of certainty, and so there's -- What I'm trying to say there is -- That's a really geeky way of saying we're still kind of uncertain about the magnitude of the recruitment we're getting, but it is relatively high, and that appears to be the case.

With regard to our decisions about what recruitment assumptions should be made in the forecasts that are used to set the ABC, the SSC talked about this at great length, and we did have a couple of things that we could agree on. The stock has demonstrated exceptionally strong year class strength in recent years, and we have shown the graph on the right several times here. They're at well above-average recruitment in the last few years.

However, there is no guarantee that this recent high recruitment will continue to occur in future years. Since 2000, there have been nine years of high recruitment, but also five years of very low, below-average recruitment, and we know -- You can see, from our estimates of previous recruitments, that it tends to have highs and lows, and we've been at a high for a while, and we can't predict how long that high is going to last, and the high recruitment may be influenced by environmental conditions, which are outside of our control, and we're benefitting from them now, and that's great, in the sense that we're getting high recruitments and the abundance has definitely increased greatly, and biomass and spawning stock biomass are starting to rebound, but there's no guarantee how long that will last.

The way fisheries scientists think of these things is that having a robust age structure in your population, where you've got a bunch of old spawners, or older spawners -- At this point, it would
be nice to have some middle ages to fish in there as well, who are bigger spawning, more frequently, and, in theory, have more viable eggs, is kind of your bet against those bad years, where you can still get decent recruitment even when environmental conditions are not ideal, and so that's why we're emphasizing this idea that the high productivity may not be sustained until we get a broader age structure in this population.

Now, I know it came up at our meeting, and I'm sure it's a question on the top of many of your minds, and those of you who have been around for a while know that the SSC has reviewed several other assessments for other species recently, and we have recommended ABCs, and, in those cases -- Unfortunately, for many of those stocks, red grouper, red porgy, black sea bass, we were looking at stocks where recruitment was declining, either over the long term, like red porgy, or had shown low recent recruitment in the last ten or so years, and, in those cases, the SSC made a decision that, in the forecasts that are used to recommend an ABC, that we use the recent lower recruitment in doing those projections.

You might ask yourself, well, here's a situation with red snapper where it's just flip one of these graphs upside down, and you have increasing recruitment, and why wouldn't you then include high recent recruitment, or recommend that be used in the projections?

We had extensive discussion about that, and several SSC members asked that very question, and this idea of what is the appropriate approach for projecting recruitment if recent trends are increasing is, unfortunately, not a situation we've had to deal with in the recent past, even though it's a good situation to be in. However, at the end of the day, and I will make a day-and-a-half of deliberations -- I will sum it up in this statement that, basically, given red snapper stock status is still overfished and overfishing, and the fact that we're not yet rebuilt, the SSC recommended that average recruitment be used in the projections to set fishing level recommendations, with the idea that we don't have a fully-rebuilt, or even close to, a robust age structure in this population, and we can't be certain what future environmental conditions are going to be like.

All that being said, we recognize that this is a very difficult decision, and all of these decisions, frankly, that we've had to make recently about recruitment assumptions that will be used in projections to set ABCs have been heated and difficult discussions, and so, again -- This is the third and last time I will put a plug in there that I think the SSC really needs some time to deliberate about this, outside of our normal busy agenda and meeting weeks, where we can put some real thought to this and review other practices and think about the unique cases we're seeing in the South Atlantic and how best should we approach setting ABCs and what the best practices should be for making recruitment assumptions in those projections, because we've been thrown a wide variety of non-standard recruitment trends in the last few assessments, and it's really been difficult for us to come to consensus on how to treat each of those situations and what the best science recommendation should be.

I think that's all I had to say on that, but I will -- With regard to the actual fishing level recommendations based on this assessment, we -- As I mentioned earlier, we tabled the final recommendations, pending an additional review, hopefully at a meeting at the end of July, I believe we're trying to schedule that, and that review would go over a couple of things.

First of all, the information that was used to characterize discard mortality and the uncertainty around those estimates -- We had a lot of discussion about how those estimates were generated
and how they should best be used. We also were not as up-to-date and familiar with the descender device usage and compliance rate information that was used to inform these analyses, and so we needed a bit more time to digest that and make recommendations on how best to use that information, or I guess review how it had been used or was being suggested to be used, and then the Center had proposed a new two-step forecasting method that would be used in projecting forward the red snapper stock and setting ABCs, and that would possibly account for the use of descender devices in a way that we haven’t really before.

The SSC was intrigued, but I think we didn't quite understand exactly what was done and what the implications of all the assumptions that go into that approach were, and so we needed a bit more time to review that and digest it before we made our final recommendations, and so, just to recap where we're at in our decision-making stages, we have a number of different decisions we have to make along the way to recommending an ABC , and the first decision that we did come to consensus on was that average recruitment should be used in the projections.

We also did come to consensus that, of course, OFL should be set using projections at the FMSY proxy of F 30 percent, and the recommended ABC be based on -- When you're talking about the probability of rebuilding, it would be the F 50 percent plus the buffer based on our ABC decision tree, and so that would come to 67.5 percent.

We were also asked what indicators, or metrics, could be used to monitor the stock between now and the next assessment, and we agree that definitely it's a good idea to keep tabs on any trends in recruitment that might be evident in the SERFS trap and video data, and I think we definitely felt that a close eye should be kept on trends in that dataset.

Also, any changes in age composition from the available catch data, as limited as it may be, is important, and we also felt that continued and improved monitoring of recreational landings and discards -- Anything that can be done, especially on the discard side, would be welcome, and it would certainly improve the accuracy of the assessment. We also felt that increased sampling with the stereo video cameras would be helpful, and, obviously, the results of the Great Red Snapper Count in the South Atlantic will be welcome, and we're looking forward to seeing the results of that study as well.

We were also asked to review the research recommendations that were included in the stock assessment report and highlight any that we thought would be most likely to reduce risk and uncertainty in the next assessment. Given that most of the fish at this time in the stock are younger fish, we felt that it was important to try and get a handle on natural mortality, especially for those younger fish, using empirical estimates. Right now, we're using kind of meta-analysis assumptions, based on studies done for a lot of other fish, and so that would -- That might be a source of uncertainty that would change our understanding of the stock, and so getting any empirical information on natural mortality would be a boon.

We also felt that monitoring usage of descending devices, venting, circle hooks, and, in particular, the depths at which those devices are being employed, would be important, to continue to monitor that over time, and that will help reduce uncertainty in our discard mortality assumptions that are used both in the assessment itself and in the projections used to set the ABC. We also felt that it was important that the model be modified to account for non-independence of the trap and video indices, given they're really the same survey, and just two different methods, of surveying the
animals in the same event, and that can be accounted for -- That autocorrelation error can be accounted for in the likelihood function, which is something that we've talked about extensively with Kyle and that hopefully will be incorporated in the next assessment.

There were a number of other high-priority research recommendations we had that we thought might improve future assessments that we would bring to your attention. We felt that it would be really important if we could start, especially for red snapper, and, ideally, for other species as well, but doing -- Now that we've got -- We're starting to get a set of assessments with the new revised MRIP estimates under our belts, and we've got a set of projections for each of those assessments. The next time we do these assessments, it would be informative to get an idea of how those projections performed, and so, essentially, go back and see, okay, at the last assessment, we made these assumptions, and here's what actually happened.

Assuming that there's no major changes in the management that would explain those changes, or those differences, then we can get a better handle on how our projections are performing, and so we recommended that. We also recommended that the assessment, next time, explore alternative start years. In those early years, obviously, there is less data in them, and the previous assessment that had been had looked at the impact of the start year, and it wasn't a ground-breaking difference, but there were some differences, and so hopefully, with the next assessment, there will be a little bit of time to explore the impact of start year in this particular red snapper assessment.

We also felt that it would be important to study timing of peak spawning, especially given climate change and oceanographic changes that we're seeing in the South Atlantic, and then, kind of going back to this idea that bigger, older spawners are really important, we felt that it would be important to know exactly, or get a better handle on, egg size and quality, as well as batch size by age, for red snapper, particularly for these younger females, given that they're making up the bulk of the population right now.

Maybe they are more fecund and have reasonably viable eggs, but given, right now, we don't have that information, we're going off of assumptions based on general fisheries science and other studies that have been done for other long-lived fish like red snapper, and that may not be the case, and we don't know, and so any studies that can help nail that down would be really helpful.

Then we also recommended investigating size dependence of discard mortality using descending devices, given that it might not be a one-size-fits-all, and maybe smaller or larger fish may have higher or lower discard mortality with the use of descending devices, and then we also suggested, if it's possible, to investigate the impact of climate warming on red snapper distribution and how that might be impacting our understanding of the stock with this assessment.

Our final recommendation is we're always asked when should the next assessment be, and it seems as though, given the Great Red Snapper Count in the South Atlantic is scheduled for completion in 2023, it would be ideal if the next assessment could incorporate that information, and the trick will be, of course, how do you incorporate this very different type of information that will be generated by this important study.

It's not what is typically available for our use, and, as we saw in the Gulf, it's kind of tricky to incorporate that into our standard assessment methodologies, but it can be done, and putting some time in ahead of the completion of the study, if that's at all possible, so that we can make progress
on this in advance of the actual assessment being done would be ideal, because it's going to require some real thought about how best to use this information once it's gathered, but it would be really good if that information could be incorporated in the next assessment, and so hopefully folks will keep that in mind when scheduling the next red snapper assessment. That's my last slide, and so I'm happy to answer any questions you might have.

MS. MCCAWLEY: All right. Thank you, Genny. Mel.
MR. BELL: Thanks, Jessica, and thanks, Genny, for that presentation, and thanks for your leadership of the SSC and your -- I always appreciate your calm, cool voice, and I was on the SSC meeting, and I do appreciate all of the efforts that you guys put in on this, and I know it wasn't easy, and we have got a plan forward to kind of work through some things, and so thanks so much for all that.

One thing you mentioned, at kind of the beginning and the end there, was the environmental factors, and my whole trying to picture this, and we've talked about what are we rebuilding, and what are we rebuilding to, and so, if you were to be able to go back in time to the 1950s, or that timeframe, or even earlier, like the 1960s or 1970s, I don't think the environment that existed then is necessarily the environment we have now, and I think we've seen, particularly in the past ten years ago, documented, in a lot of other fisheries, the influence of warming water temperatures over time, with different species expanding ranges and shifting ranges, and perhaps some of that is a little more obvious in the New England and Mid-Atlantic area, but we've seen it here as well with other things.

I am wondering, is -- The environment we have now is not the environment we had back then, and I'm thinking that, particularly off of South Carolina, from what I've heard in talking to a lot of people and my own observations, is what we're sort of building out there, in terms of the prevalence of red snapper on our offshore reefs, I don't know that it ever existed like that before, and maybe it did, but, when you talk to, I would say old-timers that are still around, I don't think their impression is that they've ever seen anything like that.

It may be that we have, and I'm speaking for South Carolina, that we have an environment now that is much more conducive to red snapper, and they're taking advantage of that, and certainly in abundance out there, even if a lot of them are younger, but then you kind of step back, and this is more of just an academic question, and it's like, okay, what does that do to the overall ecosystem out there?

You've now got a species that maybe wasn't there in such a great prevalence decades ago, and now it is, and there's implications for all the other species out there, and interactions and competition for food sources or predation or whatever, but it's -- I think your point about environmental factors, and then, at the tail-end, you mentioned that you guys discussed a little bit what's going on with the changing climate and all, but I'm just -- From our perspective, I think we're seeing that, and, you know, not knowing exactly what things looked like decades and decades ago, it's hard to quantify the change, but, just from talking to fishermen and divers and people that I know, it looks like we're now building something that didn't exist, and okay fine, but now maybe we're in the sweet spot for red snapper that we didn't used to be in.

That just means there is more habitat available for them, perhaps, preferred habitat, than there was in the past, and I don't know how you -- You basically just -- I guess that's a good thing, if you like red snapper, and you say, well, great, we're a winner in perhaps the range expansion of red snapper, but, in terms of trying to manage for that, I don't know that you can, and it's just -- You brought up the environmental thing, and I just thought that's an observation that I think we're seeing in this, that, gosh, we're building something that perhaps never really existed like it did, at least in recent decades or memory or that kind of thing, but what do you do about that? I don't know, but you guys have touched on it, and so it would be interesting to follow through with some additional work, as we can, in that area, as you guys mentioned.

MS. MCCAWLEY: Okay. Thank you. Spud.
MR. WOODWARD: Thank you, Jessica, and thank you, Genny. I've got a question, sort of following-up on some earlier discussions, and do you think that we've got what we need to evaluate the efficacy of a slot limit for maybe minimizing the deleterious effects of discard mortality, maybe taking off some of the selective fishing mortality of these larger fish that we're trying to move into older age categories?

DR. NESSLAGE: That is a great question. I might -- I don't have, off the top of my head, the actual number of like samples, et cetera, we have, length samples, and we have the issue of how many discard -- What the discard estimates, the quality of the discard estimate data, and, Kyle, do you -- I'm sorry to punt on this one, but I don't have the numbers right in front of me, with regard to do we have the adequate information, and we have to make a number of assumptions, and I'm assuming that --

I think folks were talking previously that the discard mortality estimates are based on MRIP estimates, which may or may not be accurate, and so I'm babbling a little, because I'm hedging about the quality of the discard data, but it's clear that we could get at, I think, some idea of how the magnitude of the discards would change if we have adequate length information, and I don't know if Kyle or Clay want to jump in, and I don't have that information right in front of me.

DR. SHERTZER: I haven't done any analysis on that, and so I guess the short answer is, no, we don't have any information to give you on it, but I guess my initial reaction is similar to Genny's, is that I'm not sure how a slot limit would address the big issue here, which is the recreational discarding. You would still have -- Even with a slot limit, you would still have the discarding of the fish that were outside of the slot limit.

DR. NESSLAGE: We could do simulations of what-if, but whether they would be realistic would be hard to gauge, and sorry that's not a great answer, but I fear it's an accurate one.

DR. PORCH: Maybe I will jump in here. I mean, I agree with everything that's been said, but I do think that would be a worthwhile analysis, even if we did it theoretically, and there is no question that, in terms of benefit to the stock, if the quota is in numbers, it's better to catch more small fish than large fish.

If the quota is in weight, it often is better to catch large fish, because it takes a lot of small fish to make up for one large fish, and so it really depends on what the natural mortality rate at-age is, where the sweet spot is, in terms of the target size, but, in this case, the quota is in numbers, and
so it's pretty clearly better to -- In terms of the recovery of the stock, to fill it with smaller fish, and, to the extent that a slot limit might actually discourage high-grading, that would be a good thing, but, there, I would need to understand better how fishermen react to a slot limit, if it really changes that behavior, but certainly we want to discourage high-grading, and, in terms of recovery of the stock, if the quota is in numbers, then we definitely want to catch more small fish, rather than more large fish.

If you will indulge me, I did want to correct the record, and I may have misstated something with regard to how discards are calculated from MRIP. I'm not sure that I did, but someone suggested to me that I may have, and so I just wanted to clarify that the number of fish discarded actually comes from the intercepts that are conducted at the dock, and the total -- It is self-reported information, and so that I remember saying, and that's correct, but the actual number of discards for a given trip come from the intercepts, and what comes from either previously the phone survey or now the mail-in survey is the total effort, which, again, is based on recall, and it's self-reported, but the bottom line, the critical point, that I wanted to get across is that the MRIP discard information is self-reported, and we don't get size composition from that. Thank you.

MS. MCCAWLEY: Thank you. Andy.
MR. STRELCHECK: Thanks, Genny, for your presentation, and I really appreciate the work of the SSC, and I don't envy the position that the SSC is in with red snapper and some of the tough decisions before you. I wanted to go back to recruitment and talk a little bit more about recruitment. You answered one of my questions, in terms of why choose lower recruitment for some of the other stocks, and, in this instance, you're seeing kind of more recent high recruitment, and why you selected average recruitment rather than the high-recruitment pattern.

What I did want to ask is, with your rationale for not choosing the high recruitment, what I heard was some uncertainty, obviously, related to environmental conditions and whether or not that high recruitment would persist, but a lot of it was anchored with regard to the stock not being rebuilt and the fact that the stock is overfished and undergoing overfishing.

My question to you is, based on that, if I'm understanding your rationale correctly, is the SSC kind of taking into consideration kind of two levels of scientific uncertainty, in terms of setting the ABC, in that you're reducing the kind of starting point for how the OFL is calculated, based on using average recruitment, and then you're taking into consideration similar factors, including stock status, to then potentially reduce the ABC from that, recognizing, obviously, you haven't made a decision about those at this stage.

DR. NESSLAGE: Sure, and so you're completely correct that the assumptions, all of the assumptions, that go into the projections impact the OFL, and recruitment is, in this case, one of the most influential, and it's not always, but, in this case, it certainly is. I am not going to comment yet on what the ABC is going to look like, because we still haven't quite finished our discussions yet on that, but I will say that the -- If I were to characterize the SSC's consensus decision, which nobody was completely happy with, but it was consensus, I would say that there was hesitancy to assume a higher recruitment, because of this uncertainty in understanding, our scientific understanding, what's driving it.

So you've got -- If you look back at Slide 32, I think, just for a visual, we're looking at recent very high recruitments in the last five years there, and then the previous five years were well below average, and I think the concern there is that there's a lot of uncertainty in our understanding of what's driving that, and so we have to make a scientific judgment on what we think recruitment is going to be like in the future, which is -- We don't have a crystal ball.

Given that we don't understand what's driving this, and it doesn't necessarily -- It doesn't appear to be stock recruitment, because you don't have a clear stock recruitment function for this stock, and it doesn't seem to completely make sense that a stock that's made up of one to four-year-olds would be this fecund, just on their own, without good conditions, we just felt that our inability to understand and explain what recruitment will be in that projection period was what was driving, I guess, our decision about the OFL, what recruitment would be used to run the projections and set the fishing level recommendations. I don't know if that answered your question, but it was my best attempt.

MR. STRELCHECK: Thank you for that. I guess I'm a little concerned that we might be doublebuffering for the consideration of stock status, since the ABC Control Rule explicitly accounts for that, and then we're using that as rationale as well for determining the recruitment level, and I guess the other comment that I would make is the recruitments that we're talking about -- We're kind of dealing with the extremes, right, and we're dealing with the low recruitment, which is our average recruitment, which you can point to those low recruitments in the time series, which are kind of in line, or maybe a little bit less, than average recruitment, as well as the high recruitments, which are way above.

There is the potential, I guess, to deal with uncertainty in recruitment, where there is something in between those two sets of values as well, and it takes into consideration some level of risk, but is more conservative than this high-recruitment assumption, and so I would hope that at least the SSC could kind of further discuss recruitment, and I certainly support that working group that you've mentioned several times now, because I think this is a key consideration in not only red snapper, but a lot of other stocks.

DR. NESSLAGE: Thank you. I appreciate your support, and I agree with you.
MS. MCCAWLEY: Mel.
MR. BELL: Thanks, Jessica. Genny, my long explanation of what I think I'm seeing, this is the question, and it's related to recruitment, and so you say there are environmental conditions that may be influencing recruitment, and so, if part of that environmental conditions, on top of a potential range expansion, and now let's say you've got a species with a much broader area that it's comfortable in, could that be a contributing factor to this recruitment we're seeing?

Assuming environmental conditions stay the same, or similar, over the next decade, or even -Well, we probably won't go back to cooler waters, and I don't know, but could that be -- Could that be kind of the potential cause of this recruitment that you're seeing? Then, therefore, if that stays the same, you could be a little confident that maybe your recruitment could be above average, because average is in the world that was, and now we're in the world that is, in terms of the changes in the distribution, perhaps, of the species and the environment, and so could that where some of that is coming from?

DR. NESSLAGE: Sure, it certainly could, and I think one of the reasons -- What you're talking about is kind of this directional shift that we're seeing with climate change and the --

MR. BELL: The expansion north.
DR. NESSLAGE: Yes, and I think, if their habitat has expanded, then, sure, that gives them -There is less competition, and there is more opportunities for spawning areas, and certainly that could be the case, and I don't know that we know that for sure, or have empirical evidence of that, but it certainly could be, and, if this is new norm, we will see that -- I'm sure there will always be fluctuations, but we'll see that long-term average is going to be higher.

I think what the SSC got really hung up on is there was a peak in 2007 or 2008, and then there was that big drop, and now we see another peak, which is great, but, if we stop seeing those big drops to the lower-than-average-recruitment scenario, I could definitely see our understanding how productive this stock can be changing, and that will be evident in the assessment, the next assessment, I'm sure, but you're right that, if conditions have changed, then our expectation for productivity of the stock will change, and we haven't seen enough sustained information here yet to think that we've got some sort of a --

I guess what you're talking about is kind of a regime change, right, where you've got a new environmental condition, and it's new and stable in a new state, right, where it's varying around a new average, and I'm not sure we're there yet, with regard to the evidence for that, but it's certainly a possibility, and hopefully it will be elucidated with the next assessment, and hopefully we'll get some more information out of the Great Red Snapper Count as well. Did I answer your question, Mel?

MR. BELL: Yes, that's it. Thanks. If that changed, then there's also impact on other species as well. If your whole ecosystem is kind of undergoing a change into something that would have been more prevalent at a lower latitude, then that has implications for other species as well, obviously.

MS. MCCAWLEY: Clay.
DR. PORCH: Two points. One, again, with respect to recent recruitment, I really want to support the idea of having a working group look at a consistent way to deal with this issue and treat this -- I think it should be across at least the Gulf and South Atlantic, if not the Mid-Atlantic too, and one approach, for example, that's been used increasingly is to use the average recruitment over the last ten years, on the basis that a number of important environmental drivers occur over decadal time scales, but there is certainly no scientific consensus on that approach, and it's an evolving field, in terms of how to get scientific advice when you have this level of uncertainty, but I just, again, want to support the idea, and I would suggest that maybe this working group cross multiple councils that face similar issues.

Then the other point that I wanted to bring up was just to elaborate a little bit on the two-part projection approach that we were suggesting, just so people are aware of what that meant, and the idea is you would run the F rebuild strategy that normally is used for generating the ABC in the
usual sorts of ways, and that would give you an idea of the total recreational, or total discards, that are killed.

Then you can adjust that by the amount that would have been killed had the descender devices been in place according to Amendment 29, and that's where some assumptions are being made, which we've already talked about and were addressed in the reference paper, but, if you were, for instance, willing to assume that, 75 percent of the time, they would be used, you would come up with a little bit lower discard mortality rate than was assumed in the last time period of the assessment, and so you go back then, and you apply that lower discard mortality rate to those discards, and you come up with then fewer fish that would have died during the discard process over the projection period, and those, presumably then, could have been landed.

The second stage is to recalculate the projections with the same number of fish that are discarded alive, but a lower discard mortality rate, and then compute how many fish could actually be landed, basically benefitting from the lower discard mortality rate, if that makes sense. So run the F rebuild projection the usual way, get the total number of discards, and then calculate how many of those would have died with Amendment 29 in place, and then the savings that you get, because fewer would have died, actually could go turn around and be landed, which should lead to a longer season, and that was the logic behind it, but the devil is always in the details, and so I can understand why the SSC would have wanted to look at it more carefully, because it is a different way of doing things that actually tries to account for changes in management regulations other than just reducing the landings.

MS. MCCAWLEY: Thank you. Dewey.
MR. HEMILRIGHT: I've just got one question. In the last year of the assessment, what was the estimation of the dead discards? Is it in millions of pounds or in fish, and what would that number be? Thank you.

DR. NESSLAGE: I don't know, off the top of my head. Kyle, can you help me out? Do you have that in the report?

DR. SHERTZER: I am trying to find it, and it is in numbers, and I don't know it off the top of my head either, but I will dig through the report and look for it.

DR. NESSLAGE: I see it in a figure, but I would have to guesstimate here. It looks like it's a little over five million, but that doesn't seem right.

MS. MCCAWLEY: All right. While you guys are searching for that, we've got another hand from Steve.

MR. POLAND: Thanks, Jessica. I just wanted to follow-up, real quick, on Clay's last comments and say that I do appreciate that the Science Center thought outside the box and provided a way to provide projections and account for descending device use and a way to potentially turn some more of the dead discards into landings, and I would support the SSC, or asking the SSC, to spend a little bit more time considering that and reviewing that.

DR. NESSLAGE: I'm hoping that will be top of the agenda at our July meeting.

DR. SHERTZER: Just to answer Dewey's question, I found this, and it's Table 21 in the report, and the total dead discards were 524,000 fish. Of those, about 507,000 came from the general recreational fleet.

MR. HEMILRIGHT: What would be that if it would be in pounds? I mean, is that like -- I don't know, and I'm just trying to get an estimate, and that's a lot.

DR. SHERTZER: The estimate in pounds is Table 22, and it's a little over two million pounds.
MR. HEMILRIGHT: Thank you.
MS. MCCAWLEY: All right. Thank you, Genny. I think now we're going to move into -- I'm sorry. We have another hand from Tony.

MR. DILERNIA: Thank you, Madam Chairman. Just to follow-up on Dewey's question, you had a little over two million pounds that were dead discards, but the stock is still responding by growing, is it not?

DR. NESSLAGE: It appears to be, yes, in numbers, and it's slowly growing in terms of biomass, yes.

MR. DILERNIA: So, even with all those dead discards, the stock is still rebounding, and okay. I'm just trying to understand the management scenario after that. Thank you.

MS. MCCAWLEY: Thank you. All right. Thank you, Genny. I think we're going to move into the fishery overview from Chip.

DR. COLLIER: Thank you. This is a similar overview to what you've seen in the past. This includes the history of management, and red snapper has had some recent changes in it, and so you guys can look through all the recent changes for red snapper, and there's been some significant management occurring for this species since basically 2010, when the closure went in place, and then some minor recreational mini-seasons, along with some of the commercial seasons that have occurred.

If you want to see what the advisory panel recommended, they did a fishery performance report in November of 2020, and then, going into the graphs, this is what Genny and Clay had talked about, and this is all the assessment outputs, and Clay went through these in great detail. He also talked about some of the projections, and I just want to focus on a couple of these items, real quick, and really looking this first graph, and this comes from a combination of Table 10 in SEDAR 73 along with Table 32 from SEDAR 73.

It's combining the historic landings here, represented from 1950 all the way up to 2019, and then this darker-gray color are the landings, and then this brick color are the estimated landings of dead discards over the time period, and you can see that, since about 1980, and then really in the 1990s, as you start to see the increase in the number of dead discards in the fishery, and then, since 2010, we've had a significant portion of the harvested population -- It's coming from dead discards.

Going forward, based on the projections going forward in this blue box here, you can see that, with this level of dead discards, the landings are held at a pretty low level, and the immediate response was, well, let us just have all these dead discards. Well, only a portion of the fish that are released are actually dead discards, and I believe the last estimate was around 25 percent, and so threequarters of the fish going back into the water do survive, and so just changing all the dead discards into landings is going to be a little bit more complicated than just a quick shift.

SEDAR 73 also included a high-recruitment scenario, and I think this highlights the point a bit more. Even under a high-recruitment scenario, you do get back to more landings that were probably represented a little bit better in the past, but you still have this huge issue of dead discards in the fishery, and so that is one thing that's going to be keeping the landings at a lower level, and the council will need to be considering that as they're developing some management measures going forward.

Going into the combined sector information, we do have the allocation information here, looking at the commercial and recreational, and do have the blanks in here when the season was closed, and so you can see the years when they were open and the years when they were closed, and then the landings that are provided in comparison, and I do want to point out that the landings that are included in this figure, and in this overview, are based on MRIP, and, if you remember back to some of the discussions that have been held, the landings in the recreational sector aren't necessarily coming from MRIP, and a lot of them are coming from -- A large portion of the landings in MRIP come from Florida, and, for the mini-seasons in Florida, the information that is used is the FWC survey.

If you guys recommend, what I can do is actually change these graphs that are provided here, where you're seeing this over million pounds, or close to a million fish here, in 2017, or 2018, and maybe it would be better represented by the FWC survey, and I can incorporate that, and I will tell you the reasoning that I did not do that, and that's because, when I'm going into some of these figures, when I'm looking at the size distribution, you would look in here and you would say, oh, look at all these sizes of fish, and those are based on MRIP numbers. It would be a little disjointed, at least in the beginning, to have it represented by two different number streams, as well as the catch streams, and those were represented through MRIP as well.

If you recommend, what I can do is actually important the data from the FWC and remove the Florida estimates from MRIP and put those into this overview, as well as there's been considerable discussion on discards, and I could look at putting the seasonality of discards into this app as well, and that's all I have for you guys. I think you guys are familiar enough with all the information, and we have talked about quite a bit of this already, and so I just wanted to -- If you're thinking about red snapper over the evening, this information is available to you, in hopefully a pretty digestible fashion.

MS. MCCAWLEY: Thank you, Chip. Any questions for Chip? Steve.
MR. POLAND: Thanks, Chip, and, to your last question, as far as reporting or showing discards at a seasonal level, I would appreciate seeing that.

MS. MCCAWLEY: All right. Any other questions?

DR. COLLIER: Would you like me to also put the FWC data in here, as opposed to the MRIP data, as far as landings?

MS. MCCAWLEY: Steve.
MR. POLAND: Sure.
MS. MCCAWLEY: Chester.
MR. BREWER: Please.
MS. MCCAWLEY: All right. I don't see any more hands. Thank you for going over that, Chip. Now I think that we're going to call on John Carmichael, maybe, to talk about a couple of red snapper things.

MR. CARMICHAEL: I think we are, and I am ready, Madam Chair. Thank you. First of all, I want to thank everyone for the great discussion this morning, and Clay for the thorough review of the assessment, and I think that saved me some trouble for things to explain, but it will help this be a good capstone of all that we've heard about, and also pointing out, on that fishery overview that Chip just displayed, that's something that we hope the council comes to see as a useful tool, as you're having questions, as we work on amendments that can take a while.

It's something that we developed, that Chip developed, and he's been great with that, and it can have all kinds of other information added to it, and so, if you come up with things that you think you would really like to know, just give us a shout, and we'll incorporate it in there, to help keep it being helpful for you.

With that, what I want to do is move into this pictorial tour of what the assessment shows, really borne from the realization that there is a lot of misunderstanding between what's going on in the assessment and what it shows versus what people see on the water. We've heard, for quite a while, this perception that the council doesn't recognize how many fish are out there and that perhaps the science doesn't show how many fish are out there, and I think the foundation that Clay gave this morning pretty well shows that that's not fully true, and the assessment does show the stock is at an all-time-high abundance, which is definitely a very important point, which is in fact the first point.

You recall this picture that Clay was showing earlier, and this is Figure 14 from the stock assessment, and it does show the stock is at record abundance. Now, Clay mentioned these earlier years, and what I did here in this is I have sort of grayed them out, because they are not as well informed by the data as the more recent situations.

Just a few of the points that I put in there to describe it, the headboat was separated out as its own catch in 1978. As Clay mentioned, the headboat survey, the fishery-dependent survey, actually started in 1976, but we have MRIP that came online in 1981, and we have some ages in 1978, and there's a pretty good run of headboat ages, with decent sample sizes, from 1978 to mid to late 1980s, and then the ages go away for a while, which I think is another point that Clay made, and he did mention that there were ages earlier in the fishery, which we presume really help inform what this population looked like in this grayish area.

In 2004, the ages come on strong across all the fisheries, and we have our independent surveys coming on in 2010, and I think we had 2012 where the video comes on, and so, in this period here, we really do have a lot more of the data that's considered the best to have for the fishery, to really understand what's going on out there, but, as we all know, we do have a fishery that relied a lot upon discards, and we know less about discards than we do landed catch, primarily because no one is there to observe them and measure them, and the other issue is the lengths aren't all that informative about age, and so what we would really love to have is some otoliths from those discarded fish, but, you know, that's a pretty tough lift as well.

With that said, we sort of have a data period, and then we have an inferred period, and one thing we have to show here, right off the bat, is you look in the last few years and the population that we're seeing right now in this population is at an all-time high, and, as Chester said, it's more than he's seen in forty years, and this assessment totally shows that. It's actually higher than any of this data-intensive period, and so it's not only higher than the period when we sort of think we might have an idea of what the stock looks like, but it's higher than any of the periods when we actually have the more robust data to tell us what it is.

If you notice, most of this is made up of the reds and the oranges, and those are ages-one, two, three, and so it's a very young population, as has been stated, and I will also point out too that one of the issues is that you can look at 2020 and say, man, the stock is declining. Bear in mind that we don't have any surveys that tell us how abundant the age-one fish are, and so the number of fish that's in the population for 2020 age-ones is based on this number over here, this long-term estimate of what recruitment might be.

What is likely to happen is, when we get some more data, we'll know more about this cohort, and we'll see that recruitment estimate potentially change, and we hope that it's like recent years, and it goes up here, obviously, but, again, no one knows that future recruitment looks like, and so that's anyone's guess, really, as to what this number is actually going to do, but what it does tell you is that you should take this drop from here to here with a little bit of grain of salt, because we really are just assuming what the recruits are in 2020.

The other point to make is that the biomass is also at all-time highs, and this is the similar figure, but, instead of numbers of fish, it's actually the stock biomass, and we can see that the biomass is as high as it's been at every time since going back to say 1980, and so we've got to go back into this sort of pre-data period to really see a stock with a higher biomass than what we're seeing, and you'll also notice that, unlike the numbers, where you see the big colors down on the bottom, with biomass, obviously, you see more of the big colors up on the top, with the higher, heavier, older fish, but the point here being that both biomass and numbers are at record levels, and the assessment supports this, along with all of the public testimony that we heard, but the stock is young.

SSB has not recovered as much as biomass, and Clay mentioned this earlier, and so here's a couple more figures from the stock assessment. We're looking at total biomass here on the left, and we're at 78 percent of the biomass that's expected at F 30 , and so consider that the goal. Overall stock biomass, we're getting pretty close, but, if you look at the SSC, and, in this stock, we're using the proxy of total egg production, we're at 59 percent of the MSST, and so the minimum stock size threshold, and so we're a little over halfway toward declaring this stock not overfished, and we're
at 44 percent of the target, which is the egg production expected at MSY, based on our proxy of F 30 for MSY, and so we're not quite halfway to rebuilding the population, and I highlighted these two lines, because they're important in a rebuilding plan.

One is overfished, and that's based on MSST, and that's the purple. Once we cross that, the stock won't be overfished, but the rebuilding plan doesn't end, and the stock is not rebuilt until we reach this green line, which is the level of a stock being rebuilt, and so that's one of the fundamental factors of a rebuilding plan under the Magnuson Act. It's not enough just to get your stock to where it's not overfished, but, once you're in a rebuilding plan, you have to get your stock back to that level that's capable of producing MSY.

Again, looking at a young stock, while we're at an all-time-high abundance, we do still have some way to go, in terms of recovering the overall spawning population and the egg production that we presume is necessary at this reference point.

Another way of reinforcing that point is to look at the numbers three ways. We have lots of ageone fish recently, and so the recruitment is shown in the blue area plot, and what you see is this early period, where we're crunching along at this assumed average level of recruitment, and we had some spikes in the earlier years, but we have a population that we know got fished down, and we know that recruitment got low, but we had a few interesting events in recent years, and so here is the 2007, 2008, and 2009 recruitment, back when we were first dealing with red snapper being overfished, and we were talking about those various area closures, as mentioned earlier, and this stock produced some amazing year classes, and you see them right here.

What happened in that time is the regulations were not as stringent as they are now, and this population really got fished down, and these year classes themselves got fished pretty hard. In a couple of years, you had the age-three fish in those times, which is shown here as the red line, and so this is just all the fish in the population that are age-three or older, summed up, and so it leaves out the ones -- It follows a similar pattern, but there's a little shift, because we're talking about three and older.

What you can see is that, after the good recruitment here in the blue, the three and older spike up, and that's to be expected, but they drop really quick. They were fished really hard here in the late 2000s, and I think, in 2008 and 2009, the age-three cohort, in both of those years, supported -Something like 50 percent of the abundance of those fish was removed by the catch in those years, and so that's a pretty high load on a particular cohort, and what happened is they got driven down.

What that did, overall, when we look at the green, the ten-plus, is you really didn't see much spike in ten-plus abundance, and you would expect a little bit, because we're a little bit higher, but it was kind of slow. Now, moving out to the more recent period, we see this big area of blue, with lots of recruits, and we know that we have very stringent regulations in place on red snapper now, and what that's done is that has driven this three-plus population way up.

In fact, it's higher than any period, really, we've seen, other than a short blip here, and so we're definitely seeing more three-plus population, and that's the fish that fishermen are really seeing, and so they are seeing more fish than anytime that anybody can remember, and, again, I will make the point of the terminal year issue, and I wouldn't put a whole lot of stock in this little drop, and we don't know a whole lot about those cohorts yet, and so we're waiting to see where that will go,
and I will point out, here on the bottom, if you look at the green, the ten-plus still has quite a ways to go, and that's really about the rebuilding.

This is what the rebuilding is intended to do. We start out kind of slow, and we've got to build the threes before we build the tens, and that's why we've got a 2044 rebuilding target, because, with a long-lived fish, we know it's going to take time to rebuild this entire age structure, and so I know there's a lot of concern that's been expressed that the stock is not recovered, and it's still overfished, and how can that be, and this is sort of why, because our recovery is young, it's early, and we're still waiting for this population to get older, but it doesn't mean that we're not on track, and it doesn't mean that we're not having a lot of good things happen in the population.

One thing we are seeing also is a lot of big fish, and this has been an age-old question with red snapper, and the reality is that long does not equal old when you're dealing with red snapper, and the best parallel that works often for people that are a little more familiar with inshore fisheries is it's a lot like red drum, and these fish grow pretty fast early in their life, and then they reach their asymptotic size pretty young, and they just don't get a lot longer, but they do get bigger.

The best way that I can think of explaining this to people is to say how many of you are the same height you were when you were eighteen years old, but how many of you are the same weight you were when you were eighteen years old, and most humans are kind of like me, and I'm the same height that I was when I graduated from high school, but, unfortunately, my biomass is quite a bit heavier than what it was when I graduated high school at eighteen years old.

These fish are doing a lot of the same thing, and so the challenge there though is, if the fisherman catches a fish that's twenty-three or twenty-four inches, maybe that's a decent-sized fish, but, as we see here in the red, that fish could be about two-and-a-half years old, or it could be maybe eight years old. If you catch a twenty-eight or thirty-inch fish, you don't really know if that fish is three or four years old.

Three years old is shown in the green, or maybe four to twenty is shown in the blue, and that's a big challenge when you're managing red snapper, because we just kind of naturally tend to believe, as fishermen, that, if you catch a big, long fish, that he's maybe an old fish, but, really, what you've got to catch as a fish is big and long. He needs to be heavy and long before you really can assume that the fish is old, and this is why it's so important that we have those age samples, and this is a pattern that's common for our tropical fish.

In the Northeast, they rely upon things like age-length keys and sampling more lengths than ages and using a conversion, and we really rely on random ages, because of this very pattern. Lengths are simply not informative about age, and we need to have those otoliths, and we also need to factor this into perceptions of what's going on in the fishery. There is a lot of these twenty-eight or thirty-inch fish being caught, and a lot of those fish are probably relatively young. If you recall the earlier figure, showing just how abundant those three-year-old fish are, they are really abundant, and a lot of those fish are young, and that's what I think a lot of people are seeing.

This is a quick summary of sort of what the assessment says, and the stock is rebuilding, and it's largely as expected. We have a target of 2044. As I said, that's to allow this population to expand. What that means is we've got a lot of years ahead of us of seeing a lot of fish in the population, while the age expansion continues, and we do have to get a handle on discards, and that's been a
key point of discussion today, to make sure that we can continue this expansion without losing our headway, due to the discard losses.

The stock is absolutely at a record high abundance and biomass, and I will say at least relative to the observed history. What it looked like back in 1950, as Clay said, is really hard to know, because we can't go back, and we can't look, and we don't know what was in the water, and we don't know, very well, what was even caught, and we don't have a lot of age information to tell us about it, and so we're got a lot of assumptions built into trying to figure out what it really looked like, but we do know the SSB is not quite recovered, as far as the overall biomass, and we do know that more fish equals more encounters.

This is just an unfortunate reality of rebuilding, and it's why it makes rebuilding and postrebuilding regulations seem so different from whatever the conditions were when you went into rebuilding. When there aren't a lot of fish, it really doesn't matter a whole lot what your regulations are, because nobody is catching them. When there are a lot of fish, then suddenly everyone is catching fish, and there's a lot more encounters, and things really get out of control in a hurry, and that's just the factor of every rebuilding population that I have ever dealt with.

When we look at the recent recruitment, we see it's been very strong, and there is no guarantee this will continue, as stated, and there's no guarantees that it won't, and so here we have an assumption that carries a lot of risk, and it probably is something the council wants to weigh in on and consider its risk with that assumption.

We do see the recruitment is two-and-a-half-times higher than long-term expectation, and, if you consider the second projections plot that Chip showed, using the high recruitment, you see how much population that puts out there relative to what we've ever seen, or even assumed, historically, and we saw very high catches that fished down the 2006 and 2008 spike in the population, spike in recruitment, and that's certainly something we should guard against in the future, for the current recruits that we're seeing, and, as I sort of said, and it came out earlier today, this strong recruitment is good for the stock. It's good for rebuilding, but it's tough for management. It's resulting in high discards, and it's creating a real challenge for the council.

We're seeing an increase in age composition, and it's early yet, and there's more progress yet to be made on ten-plus, and you can get into theories of big, old, fat females and all that stuff, and it will be interesting to see how that plays out, as this population begins to get older and as we really start to think about how much SPR is necessary for a stock like this.

Finally, we're seeing plenty of big, old fish in the population, and, well, I won't say old yet, and they're big fish. They are long fish, and that doesn't necessarily mean that they are old fish, and I think that is very important to keep in mind. That's what the assessment shows us.

Now, the last bit I have here is really the past and future, and so this is the figure that was in the overview, and it's something that, at least for me, when dealing with a situation like this, or really any stock assessment, I find it very useful to put the projections of the future and the estimates of the past together, to really give us a holistic picture of what this population is doing and how the future measures up with what we know.

The future is all predicted. It's all assumed, and we're hoping that it will turn out, and the past is our best guess of what we know, and, in this assessment, we sort of know this middle period in here is the best guess, really, of what we know, and so, first of all, remember the spike in recruits in 2006 to 2008, and so, thanks to those good year classes, we had a big spike in catch, and so this the thousand pound whole weight fishery catch.

As you notice, that was short lived, and this was a true catch spike, and it dropped right down, and it dropped down for a couple of things. One reason was we put in very strict regulations, and so that drove the blue down, but you will notice that the red, the discards, didn't stay up high. The red, the discards, the total size of this, really tells you how many fish are being encountered by the overall fishery, and that didn't stay up, because there weren't as many fish in the population here after that spike. It's because, as I said, how many were caught.

50 percent of the abundance of age-threes that existed in 2008 and 2009 were removed in those years from the catch, and so that really slowed down seeing any increases in population. They were born, and they entered the fishery, and they went through the gauntlet, and they got removed, and so they didn't contribute to really long-term goals, as we would have hoped. They contributed some, and maybe those fish being older today is contributing to some of this increased recruitment that we see.

That brings us to the green then, the increased recruitment, and we see, as we talked about, a big increase in the three-plus population, spikes in recruitments, and what this is doing is shown right here. We have a severe discard problem in this fishery, very extremely high. I will also point out too that look at just recently, and look at this level, these couple of spikes, and notice how this is higher than really the general tendency of the long term. There are a few better spikes, but look at it relative to where we think this population is going.

This is going to be a pretty serious perception issue that the council is going to have to grapple with going forward. What the fishermen are encountering, what they're seeing in the population, right now, what they saw the last few years, what they are inevitably going to see this year, is much higher than what the estimates say this population is going to be like, in terms of what can be removed, in future years, when we get to the end of rebuilding, and notice this. This spike is much higher than this, and that's a key issue that the council is going to have to deal with, in terms of establishing realistic expectations, and I think, getting at the question that Tony mentioned about what is our goal.

Our goal, within red snapper, to me, cannot be separated from our goal within the overall snapper grouper fishery. One of the reasons that we have this spike here in recent years is because we allow the rest of the snapper grouper fishery to exist the other 361 days of the year when you can fish but not keep a red snapper.

We mentioned earlier, and the AP mentioned it, and I think Jimmy did, and Clay acknowledged it, the efforts to put in various area closures, which probably would have brought down red snapper discards, but the cost would have been enormous to the rest of the snapper grouper fishery, and so I think, as we consider where we're going, we've got to consider not just red snapper, but the overall snapper grouper fishery as well, because this is one part of a larger complex. That's why it makes it so vastly different than other fisheries, than the king mackerel fishery, or, as Tony
mentioned, the Mid-Atlantic dealing with black sea bass and the summer flounder. We have this multispecies fishery that creates a serious challenge.

I will move on now to the F rebuild, and so we're now fishing this stock on our F rebuild at 98 percent of FMSY, and so we're pushing the fishing mortality right about as far as you can push it. A couple of things that means is there's not likely going to be an increase in the allowable F, once the stock is rebuilt, and, now, that could change, if we choose a different F rebuild moving forward, as we evaluate this rebuilding plan, but we know that the population, given the expected recruitment, is not going to give us a big windfall, and so there's no huge spike in the population that's coming here once we get past this point where the stock is rebuilt, and it suddenly is going to support a fishery that looks like the total removals that fishermen saw in the recent years or that they saw in the late 2000s. The estimates all show us that's not likely.

Maybe climate change is having an impact, and maybe red snapper are evolving, and maybe future recruitment will be much higher, and we will support a much greater fishery, but we'll probably need to see that concurrent recruitment continue over a longer period before we're really comfortable with taking that full risk.

Also, notice that the expected future and total yield that we're getting, when you look at the blue and the red here, with this kind of tannish-colored line, that's fairly consistent with the past productivity, on average, of the fishery, but a lot of that, if we don't change things in the fishery, is going to be lost to this red, which is the discards, and so the goal of having a fishery with a lot more fish being put in the cooler than being put back in the water and dying is shifting these discards into landings.

The AP seems to understand that well, and Jimmy mentioned some of the things they've thought about, in terms of gear changes and behavioral changes that might help do this, and I think, as the council considers long-term management, that's going to be something they really have to focus on and consider how we can do this effectively. How do we do this for red snapper within the context of that larger snapper grouper fishery that is really part of our goals and objectives?

Then we'll also see that recent landings here, and so, if we look at the last couple of years, and you look at this blue line that lines up here, and so recent landings here, it's around the dotted line, and here's where we see landings getting long term in the future if we don't deal with discards. They're pretty close to what we expect to get out of the rebuilt population, and so that recent high R has really helped us get there, and to give us some decent landings out of this population, but I think what this tell us is, realistically, if you're not happy with the level of landings now, under the status quo management, the regulations that allow these discards, you're probably not going to be happy with where we are even when the stock is rebuilt.

What I'm trying to do here is just really make the case that a big problem the council is going to have to come to grips with, and we're going to have to find a solution for, is really shown in this red here. We've got to deal with these discard losses, and the important to keep in mind, and I think all of you guys know, is this is a hook-and-line fishery, and it's predominantly recreational, but even the commercial is hook-and-line. Fisheries like that respond strongly to abundance.

You see it right here on paper, and that's what happened in 2006 and 2008, and we see it right now in the discards, with the high recruitment, and so this fishery responds to abundance, and so a lot
of fish out there is going to be a lot of encounters. A lot of encounters is going to be a lot of discards, and we've got to come up with a way of dealing with that, so that we don't have the discards jeopardize our overall rebuilding effort.

I think I addressed a number of the issues that have come up and the comments that we have heard, because Tony mentioned that question, and we said we would look at that, where are we going, and I tried to get on that, and the assumptions of future recruitment are certainly going to play into this.

One thing we know is, if we assume future recruitment at too low of a level, we assume we're going to get discards here, as we see in the projections, but, if we get discards more like we've seen in the last few years, then it's going to be that much harder for the council to be managing, and so, on one hand, it is a risk decision to be made, and it does have something to do with where the stock is going to go, but I think it's going to directly affect how successful the council can be at managing.

If we get estimates of future recruitment wrong, given the issues in this fishery, it may not play out the same as it does in many other stocks, and certainly more of a single-species directed fisheries stock, where fish can be thrown back and live, and so that's the conclusion of the presentation, Jessica, and I will be glad to take any questions and discussion and go back to any other slides, if folks would like. Thank you.

MS. MCCAWLEY: Thank you, John. That was a great presentation, and, actually, I've been talking to Chair Bell, and I think we're going to take a lunch break here, and we're going to come back at 1:00, and, when we come back at 1:00, we're going to start with questions on this presentation, and I think that that's going to end up leading into the next discussion, which is the management response that the council wants to take, and so we're going to go ahead and cut it off right now, and everybody write down your questions and be prepared to ask them and talk about the management response when we come back at 1:00. All right. Thank you.
(Whereupon, a recess was taken.)

MR. BELL: Just to make sure everybody is clear, what we're going to do now is kind of get into the management piece that John left off on, have some discussion about that path forward, and then we'll take the time necessary to do that. Looking at the agenda, we have Dolphin Wahoo, but we'll pick up Dolphin Wahoo when we've given this adequate attention. We're going to have a hard break at $3: 45$, because of public hearing, but we have Dolphin Wahoo slated for tomorrow morning as well, and so we can roll over whatever we need to into tomorrow morning, and then remember that we bought a little bit of time on Thursday afternoon, and so we've got some flexibility in the schedule, and so that's the plan, and we'll just roll back into red snapper here and let Jessica help us to finish this up.

MS. MCCAWLEY: All right. That sounds great. Monica, you had your hand up when we left for lunch. Did you have something for us?

MS. SMIT-BRUNELLO: Yes. Thank you. I just wanted to -- All the presentations have been just excellent today, and, John, could you and Kelly make sure that your PowerPoint slides get into the briefing book, into the record, and certainly everything you discussed would be in the
record, but I think it would be really beneficial to have this in the record, along with everybody being able to look at it and think about it more, as well as the public could see it. Thank you.

MR. CARMICHAEL: Yes, definitely, and this was posted this morning, and so it's all out there on the website.

MS. SMIT-BRUNELLO: Super. Great.
MS. MCCAWLEY: All right. Are there questions for John? Steve.
MR. POLAND: Thank you, Madam Chair, and, John, thank you for this presentation, and it was fantastic, and this is really just to Chester's point from this morning, as far as putting together something to help the public really understand the issues that we're dealing with with this stock and the management of this species. I could see taking this presentation and a lot of the points you made and creating some type of public information document, or virtual, just to have handy to help us explain to our stakeholders that this is what's going on, and this is what the science shows, through the assessment, and this is some of the challenges that we have for management of this species, and so I think something like this could go a long way in helping us.

MR. CARMICHAEL: Thanks, Steve. We can do that, and we've talked to some of the staff about various stuff for dealing with the red snapper situation, and some of these graphics could probably really help and definitely be worth a thousand words.

MS. MCCAWLEY: Yes, I think so, too. Dewey.
MR. HEMILRIGHT: I will pass. I will save my comments for later. Thank you.
MS. MCCAWLEY: Thank you, Dewey. Tim.
MR. GRINER: Thank you, Madam Chair. My question was going back to the ages, and I thought it was very interesting, the comments about the age-at-length and how the lengths don't necessarily correlate to age and weight. Can you tell me, or can somebody tell me, how many actual otoliths were aged during the last three open seasons, and is that data available on those otoliths readily, or were any otoliths aged at all during the last three years? Thank you.

MR. CARMICHAEL: Tim, that is available, and there's a table in the stock assessment report, one of the first tables, actually, if I recall, that lists the lengths and ages that were available throughout the entire time period of the assessment.

MR. GRINER: As a quick follow-up, are these from say -- I mean, can we pull out the otoliths say from last year?

MR. CARMICHAEL: I think it includes otoliths I think through 2020, and that was the terminal year, and so it includes otoliths either through 2020 or 2019, and it lists them by fishery and by gear.

MR. GRINER: Thank you.

## MS. MCCAWLEY: Chester.

MR. BREWER: I was kind of thinking back to the days when -- Jessica, I think it was you and I were going through or heading up the search for a new Executive Director, and a lot of staff came into us and they said, you know, we really love John, because he is able to explain things so that we understand, and, by god, this is an example of it, and so, John, thank you so much, and I've got to tell you that my anger began to ease as you went through this presentation.

To sort of echo what Steve had to say, it probably would be extremely helpful to get some of these graphics out on the website, I guess, so that, when we do get the angry phone calls, which I think are coming, we can refer them to it and say, okay, I may not be able to explain this very well, but there are some graphics that explain what is going on, and you can find them at -- Again, thank you.

MR. CARMICHAEL: Thank you, Chester.
MS. MCCAWLEY: Spud.
MR. WOODWARD: Thank you, Jessica, and, yes, thank you, John. It's very helpful, but I will admit that that last slide is rather sobering, and I think all of us are trying to look into a cloudy crystal ball and see what the future looks like, and the prospect of having an ACL for the recreational sector that isn't significantly higher than what it is right now is pretty doggone sobering. It reemphasizes that we have got to look at every possible option for minimizing the discard mortality.

I mean, we've got issues with estimating discard mortality, and we all know that, and MRIP has got its warts and hairs, and we've all got that, but, in reality, we've got a discard mortality challenge, and we've got to figure out a way to address it, and I think we need to probably sort of stand down and ponder on this and maybe get our minds right and figure out what tools in our toolbox are really going to give us the most effect, and which ones are most practicable, because there's things we can do that we will know will change the status quo, but they may not necessarily be practical, and so, anyway, I appreciate you putting this out there for us to think about and react to.

MR. CARMICHAEL: Thanks, Spud, and it had the same impact on me, to be quite honest with you, and I sort of talked to Chip, and he was like, yes, I can put that together and put it in the Shiny app, and I was like, wow, this is -- It is eye-opening, but, also, thinking about it, you've got to bear in mind, as we discussed at one point, where there was consideration on the table to close large parts of the bottom over a large part of the year to all snapper grouper fishing, and so, in a way, this is somewhat the result of that.

We knew there would be increases, or there would at least be discards, of red snapper while all that other snapper grouper fishing is going on, and so I think, as we consider this, we do need to bear that in mind. It's not just a red snapper situation, and we can't just solve it by just saying, well, don't go out and catch red snapper, because we know it's multispecies. You don't have as much control over what you catch as you might in some other types of fisheries.

MS. MCCAWLEY: Chester.

MR. BREWER: John just touched on this, and I hate to even say, but I think that we may need to look at essentially very large, if not all of the South Atlantic waters, or having a season for all snapper and grouper that is not the full year. In other words, having it closed down for part of the year, and I'm not sure what the numbers would work out as, but, I mean, I was vehemently opposed to that back when we were looking at what to do about red snapper, but I am now seeing that, if we are looking at the reality that the ACL may not change much, given our current management regime, we need to think about, okay, is that going to be acceptable to us, and you may not like it, but is it going to be acceptable, or do we take perhaps more drastic measures, and it's just something that I throw out to be thinking about, and we may have to visit it in the future. Thank you.

## MS. MCCAWLEY: Thank you. Kyle.

DR. CHRISTIANSEN: I just wanted to go on the record as -- Chester used the word "disgusting" earlier, in his comments, and Spud has talked about it being sobering, but, when we look at these dead discards, this is a vicious circle. I mean, there is -- We have sort of put ourselves in this position, and there is no reasonable way out of it. I mean, I don't understand why the -- We've got two-million pounds of dead discards, and the stock is still growing, and I understand the math, and I understand the science, and I understand all that, but, at some point, to me, that two-million pounds are wasted fish.

Why aren't we allowing the fishermen to bring home the two-million pounds, because the stock is still growing, in the face of the dead discards, and so this is wanton waste. I don't know what else to call this, but this is conscious wasting of our resource, and we say we have the dead discards, and we say have to count them, and we say we have to account for them, and I understand that.

If we had the dead discards, and the stock was decreasing, or recruitments were going down, then there's an argument there, but we're wasting these fish by watching them float behind the boat, and people are culling and culling and culling to get to something they can keep, yet we're saying, hey, this is how it is, and that's not acceptable. The council is taking a beating, left and right and left and right, for decisions that we're not even making, and we just happen to be the ones in the face of the public, and NMFS needs to stand up and say, hey, this is what we're doing, and the council are just the beating boys.

MS. MCCAWLEY: Thanks, Kyle. Mel.
MR. BELL: To just follow-up quickly on Kyle's point, I think, as Andy or someone said, in looking at the fishery as we move forward, one of the things that did come up was exactly what Kyle is saying, is how do we, within the limitations of what we can do legally and all, how do we shift, if we can, dead discards into landings somehow, and that becomes, obviously -- Is there a way that we can convert some of those dead discards into actual landings? That's the challenge, but I was -- A couple of people have already kind of touched on what I was going to say, which was that I think John's points about -- So we really don't have a snapper grouper -- We don’t have a red snapper fishery.

What we have is, in our area, a snapper grouper fishery, a bottom fishery, of which red snapper is a component, and, again, dealing with the dead discards, it's going to be an interesting balancing
act moving into the future, sort of looking at that more holistically, perhaps, and how those red snapper fit within the context of our overall snapper grouper bottom fishery, but that was a point that John made that I thought, in addition to what Spud has already talked about, is then looking at the future potential yield we might have, even when we're rebuilt, and that's a little interesting, but, again, we're going to have to start thinking perhaps more holistically about that fishery and how red snapper fits in there as one of the species that we're harvesting when we're out there, and that's it.

MS. MCCAWLEY: Thanks, Mel. Dewey.
MR. HEMILRIGHT: Given the -- You know, there's not probably a whole bunch of options here, and, given the discussion that Chester was talking about of a total possible South Atlantic closure, I would just like to remind the council that, north of Cape Hatteras, in forty fathoms and out, I've never seen a red snapper, and so I would hope that, if it comes down to this, that this would be a pinpointed area where something -- Because we lived through 17B that the council did, a closure of forty fathoms and out, for some weird reason, and we don't have nothing else to fish up here, and so we're not part of a mixed fishery of down there where red snapper is.

Maybe you need to focus on exactly where the fish are at, or the biomass, and go accordingly there, but just make sure, if you go down the route of closure areas, that, north of Cape Hatteras, we've done research and showed that we don't catch red snapper, and so please don't close us down. We've already been closed down once, and it affected a lot of us, and we had to go further looking for fish, and so please don't do it again. Thank you.

MS. MCCAWLEY: Thank you. It seems like we're kind of transitioning into what is the management response going to be, and I feel like we're not really still in the questioning phase, at least on John's presentation, anymore. I guess maybe we need to transition over to the next item that we have on the agenda, which is determining a management response, and I believe that Mike is going to help walk us through some ideas that some of us have thought about, and I hope we can start a path forward on that.

DR. SCHMIDTKE: Jessica, let me just pull up my screen. In preparation for this discussion, staff, as well as Jessica and some of the council leadership, we've kind of had some discussions, and we put together some draft items. Some of this stemmed from what the SSC requested related to a summer meeting, and that's something that we would need to get official direction to do from the council, and so that's something that we can bring up here as part of this response, but, also, responding to the results of the assessment, kind of figuring out what the path forward is for doing that.

We came up with three kind of general categories that responses fall into, and so, first of all, there's the summer SSC meeting, and what are the discussions that are going to be had there, what's being requested, what things do we need to request of say the Science Center for the SSC to review at that meeting, what is the council requesting of the SSC for them to discuss and address within that meeting, and then there is a short-term response, which would be kind of more immediate actions.

An amendment could be initiated today, and, if that were the case, then we could have -- We could start working on an options paper to bring back in December of this year, to have kind of more immediate reactions to the assessment, things like revisions to the ACL based on the SSC's
recommendations from their summer meeting, and things of that nature, and I will walk through kind of the items that are here, and then, finally, we have these long-term responses, and so something to follow that short-term amendment, or action, that would be done on more of a longterm basis, looking forward, and look at these items kind of individually.

The hope for this discussion is that, as you all are looking through these drafted bullets, and feel free to add any or delete, as you see fit, and what I will be doing is capturing what you want from these bullets, and we would take these as kind of like our council staff marching orders coming out of this meeting, and so these items would go to the SSC, and also give direction for us as staff, as we're working on and planning on tasks for the future.

For the SSC, the topics that were brought up were -- Jessica, I reordered this, just for chronological order, because, coming out of here, we would have to make the requests of the Science Center first, before the SSC's discussion, but we would have a request that would go to the Science Center asking for projections based on recent recruitment, a ten-year and a five-year period, for the most recent years of the assessment, and that would be something that the SSC could consider.

An option that was thrown out, and this is up for council discussion, and kind of if it would be useful, potentially considering a scenario with a short-term recruitment that uses the midpoint of recruitment, between the long-term and short-term averages, and then the items that would be requested of the SSC would be to provide short-term management advice, short-term looking at kind of a three-year window, based on the alternative recruitment projections, and that would take into account recent trends in the recruitment.

There would also be a request that they would provide the council guidance on the effects of using the alternative recruitment assumptions, versus the average recruitment, and how that could impact the stock rebuilding by 2044, as well as considering what are potential effects for preventing overfishing within the short-term three-year timeframe. Then requesting of the SSC to further evaluate the discard mortality reductions, due to descending devices and Regulatory Amendment 29, and to document the justification for any recommendations that would deviate from what was listed in SEDAR 73. Then, finally, to review the alternate assessment projection approach that was offered by the Science Center at the April meeting that accounts for shifting the yield from discards to landings.

Looking at some of the drafted short-term response items, the first would be to revise the ACL based on SEDAR 73 and the SSC's recommendations, to potentially evaluate alternative proxy reference points, as appropriate, and there are a couple of examples of other FMSY proxies that are listed here, and, again, it's up for discussion, and we would welcome input, as available, from members on this idea.

Then potentially brainstorming short-term ideas that could help in the more immediate timeframe, shifting discard loss to retained catch, possibly an exempted fishing period, or a longer season, and this is not -- This doesn't need to be a comprehensive list at the end of this meeting, and there will be, inevitably, red snapper discussion at the September meeting, and we'll have the SSC's report there, if you all -- Assuming you all would direct that meeting, and so items can be added after that report is given in September.

Then, finally, looking at the long-term responses, one of these would be to consider recommendations of the Recreational Reporting Working Group and evaluate potential data improvements, so that we can try to better characterize the discards, and then exploring management strategies that would potentially reduce discards and increase the landed yield, and then, finally, there would be the direction to staff to develop a management strategy evaluation that would help consider different approaches to management, with the overall goal of trying to help minimize the dead discards and increase the landed yield.

I know that the term "management strategy evaluation" is something that can be a bit intimidating, with these times, and it is -- There is no kind of mistaking about it is, and it is a tall task, but it's essentially we would simulate the population, and then we would put in different management measures and see what those effects would be on the population, and so, if we wanted to try out putting in a slot limit and see, theoretically, what would this do to the simulated population, or if we would try out a timed closure or something like that, or the combination of those options, and those are things that we would try to evaluate and at least get some theoretical backing to what these long-term ideas may -- How they may affect the red snapper population.

These are the items that were kind of thought up in the pre-meeting discussions, and now I would pass it back to Jessica and open up the floor for people to edit, change, add, delete, as you all see fit.

MS. MCCAWLEY: Thank you, Mike. That was an excellent explanation, and so I'm just going to try to get the discussion rolling here, as people's hands are going up, and so you can see that what's laid out here is kind of a three-pronged approach, and one would be to direct the SSC to have a meeting in the summer, and then some short-term responses that the council would direct staff to work on, and you heard Mike mention that there would be discussion at the September council meeting, because the SSC would be reporting back, but, ultimately, this options paper, in the short term, could come in December of this year, and then the third part of this approach is a more long-term response, looking at more ways that we can take these discarded fish and turn those into landings.

Looking at a management strategy evaluation is definitely something that would have to occur on a longer time scale. I guess I would be looking to see what people think about this three-pronged approach, and then we can dive into each one of these things, starting with what we would like the SSC to consider this summer, and so I'm going to go hands, first Spud and then Andy.

MR. WOODWARD: Thank you, Jessica, and thank you, Mike. This certainly helps me to sort of begin to coalesce this in my mind, about where to go next. I mean, I was a little panic-stricken there for a while, but this made me a little less panicked. I'm still not happy, but less panicky. I guess a couple of questions, and maybe a suggestion or two.

Down under short-term, I know, at our last meeting, we talked about options for being able to modify the ACL in as quick of a process as possible, and so, under short-term responses, if an amendment was initiated, would that be a -- I know we talked about the whole issue of allocations and all, but did we ever come up with clear guidance on, if we got an ABC recommendation from the SSC based on the things that are sort of listed up at the top of the document, that allows for an increase in the ACL, and would we do that -- Can we do that through a framework amendment and have any effect for the 2022 season, or did we decide that it would require an amendment that
may be more prolonged, and so that's the first question that I just wanted to have some clarification on.

Then the second one is down under this management strategy evaluation, and I think that that really needs to be done in the context of the overall snapper grouper fishery. I mean, obviously, we're trying to remedy a red snapper problem, but I think there always has been, and there is a growing recognition of the fact, that we have got to manage this as an aggregation, and it's like filling a water-filled balloon. It's going to bulge out somewhere where you don't want it to, and so that's one suggestion that I've got for that, and so thank you.

MS. MCCAWLEY: Thank you, Spud. Monica, did you want to respond to the first question?
MS. SMIT-BRUNELLO: Yes. Thank you. Spud, you do have an abbreviated framework process for these kinds of situations in which there's a stock assessment in the Snapper Grouper FMP on a stock, and then you get a new ABC recommendation from your SSC, and then, through the abbreviated process, you can use an abbreviated document, if you will, and get those new ACLs implemented.

The reason I would caution against that, and advise against it, is because now you've got -- Like many of the other new stock assessments you've got, you've got a new kind of MRIP methodology that changes the estimation of what the recreational catch has been, which seems to necessarily involve you looking at allocations as well. I am happy to look into it further, to see if something changes, but my advice would be to do a plan amendment and see if you can take care of a number of these things, and I think you would have to look -- Well, I know you would have to look at allocations via a plan amendment.

MR. WOODWARD: Can I follow-up, Jessica?
MS. MCCAWLEY: Yes, Spud.
MR. WOODWARD: Okay. Just to make sure, if we have to do a full plan amendment, then we would be looking at possible ACL changes that would be in effect for 2023, at the earliest, is that reasonable?

MS. SMIT-BRUNELLO: If I could, I guess it would depend on the workload of the council and how you prioritized things, as well as taking into account what the Southeast Regional staff is able to accomplish. You know, you would need to get your analyses done and all that, and so I guess you should just kind of put that in your planning hopper, and it's June of 2021, and I'm not sure whether it would possible to get it done in 2022, and I think it would depend on the number of things and the -- How difficult they were to accomplish, in terms of analyzing whatever kinds of actions you wanted to consider. More complicated things take longer, and so I guess it's a little hard to judge when we don't have it in front of us right now.

MR. WOODWARD: All right. Thank you, Monica.
MS. MCCAWLEY: Thank you, Monica. Andy and then Tim.

MR. STRELCHECK: To build upon Spud's comments and Monica's comments, I see this as one of the highest priorities for the council, and we may need to move faster, with regard to this amendment, or at least as fast as we can, to see if we can't make changes to the 2022 season. Obviously, we need to wait for the SSC guidance and advice, but I would hope that we could have an options paper for consideration in September, and this is something that I think we should talk about at the Executive Committee, in terms of priorities.

We were talking about doing this for 2021, and I would hate to delay this and wait until 2023 to get something implemented, and, even if we couldn't get it implemented by summer of next year, maybe we can implement some changes to the season, or regulations, in the fall of next year.

In terms of the short-term advice for the SSC, I really like what you've put together. A couple of comments. I had suggested, earlier, the midpoint between the long-term and short-term averages, and I think the ten-year time series largely accomplishes the same thing, because it accounts for some of those highs and lows, and so I don't see a need for both, and certainly I value the fact that we look at kind of the recent five-year timeframe versus ten-year timeframe.

The other comment I will make relates to the descending device guidance, and I would like -- I would recommend that we treat this similar to kind of recruitment, where it's very scenario based, and I don't -- I see this just as much as scientific uncertainty, in terms of understanding usage rates and reduction rates coming from descending devices, as much as management and our ability to influence how much people are using and educate them about that, and so I would hope that the SSC could come back to us, not just with kind of a definitive answer of why they might have deviated from SEDAR 73, if they do, but the kind of reasonable range of options that could be considered, based on various assumptions and uncertainties that they considered, as well as the advice and recommendations they have for usage of those scenarios.

MS. MCCAWLEY: Thank you, Andy. Mike, I like how you're editing this document as we're making comments, and I didn't know if you wanted to also edit the descending device bullet as well, which is the next-to-last one up there at the top, based on what Andy said, and you could add something, and then Andy could review, and we can make sure we captured that. While you're working on that, I'm going to go to Tim.

MR. GRINER: Thank you, Madam Chair. Going back to this abbreviated framework, and I wanted to make sure that I understand Monica's comments, and I understand the MRIP recalibration and how that plays into taking a look at allocations, but our true allocation trigger here is the assessment itself, if I'm understanding correctly from our triggers, and so we've had a new assessment, and we don't have a recommendation yet from the assessment, but we do have an assessment, which means we have to review allocations, but that doesn't mean that we have to do anything with allocations.

I really want to make sure that I understand that we can review allocations regarding red snapper, but they don't have to go into a plan amendment right now, and we can still do an abbreviated framework just to handle a new ABC, and am I missing something here?

MS. MCCAWLEY: Well, I guess I would ask Monica. They're using the new FES, and don't we have to react to that, and so it seems like we can't just leave that hanging out there. Monica.

MS. SMIT-BRUNELLO: I was going to pull up, if you give me just a second, the Snapper Grouper Framework, and sorry, and I should have had that up. I had it up earlier, and somehow I closed it out, and so it says, in that framework that the council voted on and got implemented, if the council chooses to deviate from the formulas for specifying ACLs and ACTs, and even from the ABC Control Rule that has some of those formulas in there that the council has previously approved and that were already implemented in an FMP, then the abbreviated process wouldn't apply.

Tim, I'm happy to try to figure out if there's any other way that we could do portions of implementing the results of the stock assessment and the SSC's recommendations sooner rather than later. I was thinking, along the lines of some of the questions that Spud asked, whether maybe you wanted to take this in different bites, and maybe have even a single issue. If you needed a plan amendment, you could have a single-action plan amendment that you wanted to implement while you were working on another plan amendment, and you don't have to bite off all of this at the same time. You can do it in increments, and I'm happy to, between now and September, try to figure out if there's a way that you can move some things through quicker than others, so that maybe you could potentially affect the harvest for next summer.

MS. MCCAWLEY: Thank you, Monica. Let's go to Steve, and then we'll come back and see if we can edit these bullets a little bit more specifically and make sure we captured what Andy was suggesting. Steve.

MR. POLAND: Thanks, Madam Chair. I like this approach forward, and specially the request to the SSC, but I did have a question about that last bullet. As far as the alternate assessment projection approach that was discussed at the SSC meeting, I recall that there was a legal question that came up about that, and I think it had something to do with, based off of the projections, to actually project F over the F rebuild, or something to that effect, and I apologize that I can't find the presentation in my notes from that portion of the SSC meeting, but could someone who was at the SSC meeting remind us of that discussion, and, if there is this kind of hanging legal question out there, I think that's something that needs to be addressed at the SSC meeting, probably right off the bat, before they really get into the weeds of discussion of that approach.

MS. MCCAWLEY: Thank you, Steve. I see that Genny put her hand up.
DR. NESSLAGE: Thanks, Jessica, but it wasn't -- I put it up before Steve asked his question, and I'm not sure that I understand the nature of his question, and so there's concerns about the legality of the discard projection assumptions, and is that what you're saying?

MR. POLAND: Yes, and I remember there was some question there, and John Carmichael might be able to expand on this a little bit, but there was a question direct to counsel at the SSC meeting about the potential legality, under the Act, of that approach, and I don't think we got a clear answer during the SSC meeting, and so, John, if you can weigh-in, if you recall.

MR. CARMICHAEL: Sure, Steve. As I recall, in those alternative projections, they had an F that exceeded the MSST, and so it exceeded the stock assessment's estimate of F 30 percent SPR, which is the MSY proxy, and, thus, the MSST, and we can't have projections that knowingly predict that overfishing will occur, and, if you exceed MFMT, then overfishing is occurring.

MS. MCCAWLEY: I saw that Shep put his hand up as well, and is this about this legal question, Shep?

MR. GRIMES: Yes, it is.
MS. MCCAWLEY: Go ahead.
MR. GRIMES: Thank you, Madam Chair, and I was just going to say that I don't really remember I guess a specific legal question, especially one that I didn't answer clearly, and I'm sorry if I didn't, but I do -- I was going to say I thought the discussion -- What I recall discussion of is whether the ABC recommendation for red snapper was just a regular ABC recommendation to the control rule or whether it was -- Maybe it wasn’t red snapper, but whether it was to get to rebuilding, rather than just preventing overfishing, right, but I thought that we had addressed that, and we didn't ultimately need to address it, because they didn't provide an ABC recommendation, but I do recall some discussion of it, and so hopefully it will be reflected in the minutes. Thank you.

MS. MCCAWLEY: I wasn't at the meeting, and so I'm not sure if that cleared things up or not, Steve.

MR. POLAND: I need to go back and find my notes, and, again, I apologize, but I can’t put my hand on them, but I just wanted to raise it, in case there was a legal roadblock to moving forward with that new approach, but, based off of Shep's input, it sounds like there may not be, and so I wanted that to be addressed, or at least acknowledged, in case it needed to be addressed, so it wouldn't bog down this discussion at the SSC. I'm good.

MS. MCCAWLEY: Thank you, Steve. Okay. I see some more hands going up. Let's go to Genny.

DR. NESSLAGE: Thank you. I just wanted to clarify my understanding of the first bullet, and so, as I read this, it sounds as if the council is telling the SSC what the assumptions should be that go into the projections used to set the ABC , and is that correct?

MS. MCCAWLEY: I am trying to glance back at my notes, because I have some more detailed notes, and this is kind of a summary, and so I don't know if council staff wants to jump in here while I scan through my notes.

MR. CARMICHAEL: Genny, my recollection is the council would like to have some alternatives and have the SSC comment on the risks and uncertainty associated with them, so that then the council can weigh those risks in terms of making a decision.

DR. NESSLAGE: So is that taking the final ABC recommendation setting task out of the hands of the SSC and putting it in the hands of the council? I am worried about precedence, and I want to make sure I know what I'm doing, going into this meeting, as the Chair.

MR. CARMICHAEL: I think the council would like to have some input on something like the recent recruitment, since it is an assumed value, and we don't really know, and it does have risks and uncertainties associated with it.

DR. NESSLAGE: I agree completely, and I understand that request, but I just want to make it clear that I understand whether or not we have the ability to still recommend an ABC that does not include these alternative recruitment assumptions. My understanding of National Standard 1 is that we still recommend the ABC .

MR. CARMICHAEL: Yes, and I think the council is trying to get at a range, which has been done in other cases, and I think most recently king mackerel comes to mind, in the prior assessment, where a range was recommended, and I think it actually, in that case, was based on assumptions about future recruitment, and so I don't think we're totally off of past precedent to recommend a range for a parameter like this.

DR. NESSLAGE: I agree, and I am just hesitant, because that was discussed at our previous meeting and was rejected, and so, again, I'm going to ask. Do we still have the flexibility to make the final ABC recommendation, if it's not what is shown on the screen here?

MR. CARMICHAEL: I mean, I suppose so, but then I think, also, the council has the option then to still come back to you yet again, and I think we're trying to avoid too much back-and-forth, if we can, but I think that the Act does say the SSC recommends the ABC, and it's a value, the one value, in the system that the council cannot exceed.

DR. NESSLAGE: Thank you.
MS. MCCAWLEY: All right. I'm going to keep going through the hands. Andy, was it on that point or a different point?

MR. STRELCHECK: I just wanted to add to that point. Genny, thanks for the question, and I think it's a very valid one. Magnuson is clear, and the National Standard Guidelines are clear, with regard to the SSC's role in setting fishing level recommendations, and I know this maybe deviates from past process, and, in my view, whether we're talking red snapper or other species, there is certainly a number of uncertainties here, some science related and some management related, and I think it's valuable to be able to capture that level of uncertainty and provide advice to, obviously, managers to understand the scope of that uncertainty and what risk that those might pertain to.

I think, in direct response to your question, if you provide a range of plausible ABCs, based on these different scenarios, it's certainly then the SSC providing us that advice, but it's the council's purview to then choose, within that range, what the ABC should be, and so, if that's a concern of the SSC, then that would be something that would need to be discussed, and I think what we're trying to do is capture that there's a lot of uncertainty here, and, if there is a plausible range that the SSC is willing to consider, as well as weigh-in on the validity of that range and the risk associated with that range, then we would ask you to do so.

MS. MCCAWLEY: Thank you, Andy. Kyle.
DR. SHERTZER: I actually raised my hand related to the legal question of F greater than MFMT, but it's also related to this current topic as well. That came up during the assessment and during the SSC review, not related to this two-step approach for the projections, or this alternative
assessment projection approach, and so it's under the wrong bullet point. It actually came up related to the high-recruitment scenario.

If the recruitment stayed very high, going forward in time, the F could be higher than MFMT. The $F$ rebuild would be higher than MFMT, because of the high recruitment supporting F that was higher than F 30, and so that came up as the legal question, and the answer we got was, no, that's not legal, and so that would mean that the F rebuild wouldn't be a legal alternative, but I guess one thing we could do is take the maximum of the F rebuild, or F 30 , if F rebuild did go higher than the MFMT, and so that was the first comment.

Also, related to these projection requests, a counter request is that the council would coordinate this with the SSC, because the SSC has already requested twelve different new forecast scenarios, and it would be good to sort of have a single set of requests that the SSC and the council agree that they wanted to see, and that would be helpful for the Science Center.

MS. MCCAWLEY: Thank you, Kyle. Clay.
DR. PORCH: Kyle addressed one of my points, and I wanted to make sure that was clear, and the next one has to do with the recruitment scenarios and the role of the SSC, and I do think we're kind of on a slippery slope here, and we have to be careful. It's perfectly fine for the council to request the SSC to consider some alternative scenarios, but, when the SSC does that, they have to make a judgement call on which is the most plausible, and, in fact, if they looked at multiple recruitment scenarios, and, implicitly, they do that already, but, if they were going to give you a range of values, then they would need to associate with it some probability.

Let's say they assume all the scenarios are equally likely. Then, essentially, if you think of it in terms of they need to discount for scientific uncertainty, then it would be -- The ultimate scenario would be something like the average of those scenarios and then decremented by some probability, and so maybe 40 percent or something like that. In other words, you would have to combine all of those things in a weighted way and run them through the projections and stitch it together and then come up with something that's an ABC that accounts for the scientific uncertainty.

What you wouldn't want to do is put a range of values not associated with any statement and then let the council pick whatever they wanted, presumably the one that gives the highest level of catch, because then you're not explicitly accounting for the scientific uncertainty. Remember the ABC has to be less than the OFL, and the way that would be set up is you run the OFL on multiple scenarios, and, instead of picking the risk-neutral one, you could end up picking one that just happens to give the highest value of catch, and so it's not a simple question.

I do support, again, the SSC request to have a workshop to talk through some of these things, including things like using a ten-year recruitment window, because, while I am personally comfortable with that ten-year window, and it's been used in other venues, that doesn't necessarily mean that your SSC is, and there may be other approaches that they're more comfortable with, and I just want to caution against the suggestion that the SSC could put a range of values and essentially equal probability to them and then forward it to the council and have the council pick which one they want. That's really not consistent with the NS 1 Guidelines.

MS. MCCAWLEY: Okay. Monica.

MS. SMIT-BRUNELLO: Two things. One, I think Clay covered the NS 1 Guidelines, probably even better than I could, and, Genny, yes, of course, the ABC is still within the recommendations that -- That's the SSC's purview, is giving the council their fishing level recommendation, which is the ABC. I think the council may have been trying to get at -- You know, there was a long discussion at the SSC meeting about which recruitment scenario to use, and so I assume that's where some of these suggestions of what the SSC ought to look at came from.

Then the other point was way back to Steve's question. Steve, we'll go through the minutes and look at the two-step approach that was presented to the SSC and make sure that, if there's any outstanding level questions, that we get them cleared up before the SSC meeting.

MS. MCCAWLEY: Thank you, Monica. Andy, I want to go back to one of your original comments, and I'm not sure we captured it, because Mike was typing in another part of the document, on the short-term item down there, and so I think it had to do with the descending devices, the next-to-last bullet. Do you mind looking at that and seeing how we can clarify what you were suggesting?

MR. STRELCHECK: It relates to the conversation that we were just having, and so I noted -Like with the projections, in the first bullet, we say provide short-term management advice based on alternative recruitment projections, whereas, with descending device guidance in the fourth bullet, we're very definitive, in terms of evaluating reductions due to descending devices and thoroughly document the justification for any deviation from SEDAR 73. To me, I think the better approach is to evaluate the alternative descending device scenarios and then provide, obviously, that justification for whatever their preferred management advice would be from that. Does that make sense?

MS. MCCAWLEY: Yes, and I was taking my own notes. Let me look up at the screen, to see if Mike captured that.

DR. SCHMIDTKE: I guess I may need some specific wording, because I'm having trouble like coming up with the change.

MR. STRELCHECK: I guess you could try: "Further evaluate discard mortality reductions due to descending devices in Snapper Grouper 29 and provide short-term management advice based on alternative descending device usage rates." Then document -- Yes, that's fine.

DR. SCHMIDTKE: Okay. Thanks. Sorry, but I wasn't quite picking up what you were putting down.

MS. MCCAWLEY: Thank you, Andy. Are there more comments on this portion of the document at the top here, where we're suggesting that the SSC have this summer meeting? I guess one thing I would like to discuss is something Clay brought up was the fact that the SSC wants to have this workgroup, or workshop, to talk about how to deal with recruitment. I guess I'm looking to Clay or Genny, and does this need to occur before this summer SSC meeting, or is the summer SSC meeting okay to have that discussion on red snapper and then this further recruitment discussion comes later?

DR. PORCH: I would look to Genny for the timing, and I personally don't know how you would get something of appropriate scale arranged by the summertime.

DR. NESSLAGE: I agree completely, and I think a whole day -- We could probably spend a whole day just on the recruitment issues just for red snapper, and so I think this is -- I was anticipating this would be a longer-term project, but I don't think it can be done at the same meeting, no.

MS. MCCAWLEY: I wasn't thinking the same meeting, but I was thinking that, if this needed to proceed it, but good point, that you could end up having an entire discussion about red snapper recruitment, and so I don't think it's feasible to try to put this in front of this summer SSC meeting, where we're making all these requests about red snapper.

DR. SCHMIDTKE: So should that go down in the long-term responses, as part of that?
MS. MCCAWLEY: Although it's not specific to red snapper, but it is kind of an overall need, that the SSC wanted to have this workshop, and I'm looking for the particular language that Genny used. She actually called it a working group to develop best practices for making recruitment assumptions and projections. I think that will work. Genny, will that bullet work?

DR. NESSLAGE: Yes, although we wouldn't be able to put those best practices into place for red snapper, if you want us to make red snapper decisions in July. That's just a caveat.

MS. MCCAWLEY: Yes, I understand. I just wanted to capture this, so that we didn’t lose it.
DR. NESSLAGE: I appreciate that. Thank you.
MS. MCCAWLEY: All right, and so back up to the items for the SSC. It sounds like we're wanting the SSC to have this summer meeting to consider a number of items specific to red snapper, and we have a number of bullets listed here, and we've had some discussion that -- Mike, I assume we would need a motion to request that the SSC have a summer meeting to address these issues?

DR. SCHMIDTKE: Other staff can correct me if I'm wrong, but I believe, for the meeting, we don't necessarily need the motion. We just need the direction from the committee. For the shortterm response, if we're initiating an amendment, we would need a motion for that.

MS. MCCAWLEY: All right. 10-4.
DR. SCHMIDTKE: I do have one question, before we move from the SSC items. The second bullet of considering long-term and short-term averages, this would have included both the tenyear and the five-year, and it came up that we may not need the five-year. If we're just going with the ten-year recruitment, then would we want to delete that bullet, and is that what the committee wants?

MS. MCCAWLEY: Thoughts? Andy.

MR. STRELCHECK: Maybe I was presuming wrong, but I thought the five-year was that shortterm recent recruitment, and is that different than what's been presented to us in the highrecruitment scenario?

DR. SHERTZER: It may be easier to show it in one of the presentations. Here, this kind of shows what the recruitment looks like. If we're looking on a five-year timescale, then we're cutting off about here, and the ten-year would go a little bit further back and would include some of this down.

MR. STRELCHECK: Right, and so my question is what does the high-recruitment scenario include currently, and is the five-year markedly different from that? I don't know if Kyle can answer that, or Clay.

DR. SHERTZER: The high-recruitment scenario that's in the report included the last six years, not including 2020, and so the last six years of high recruitment.

DR. PORCH: Just to be clear, it didn’t include 2020, because there is no information there to estimate that recruitment, and so, when you say five years, you would have to be specific, but I don't think there's any need to do that one.

DR. SHERTZER: The terminal year of the assessment was actually 2019, and the 2020 year is just a forecast based on the average recruitment, I think as John Carmichael pointed out.

MR. CARMICHAEL: I was thinking the idea of the years was more defined by recent, rather than high. There is a correlation, obviously, but high gives you one thing, and ten years is like 800,000, and five years is 1,100 , and the F 30 is 437 , and so there's a number of options there, which I think what the council is really hoping for is some further consideration and some strong justification of why it's the best estimate, as has been discussed, as Clay mentioned, and to make sure that consideration of what is potentially conservative, or how it may affect rebuilding, et cetera, is left to a decision of the council.

MS. MCCAWLEY: Andy, are you good?
MR. STRELCHECK: I can go either way. I don't see it as much different than the highrecruitment scenario, but I'm happy to consider it.

MS. MCCAWLEY: Okay. Anything else we wanted to discuss?
DR. SHERTZER: Jessica, if I could, the -- Does that mean take out the five-year, or take out the ten-year, or what are we settling on, just so that we can give clear direction, or clear requests, of the Science Center?

MS. MCCAWLEY: I think I just want to see both, but -- Andy or John.
MR. STRELCHECK: I guess I'm going to go back to Clay or Kyle here, and, from what I heard Clay say, he didn't feel like it was needed, because of what's already been run, but John, obviously, made a good point that it's not necessarily a high recruitment, but it's just a recent time series, but it's similar to the high recruitment.

MS. MCCAWLEY: Clay.
DR. PORCH: Thank you. Two things. One, I would rather not ask folks to make a bunch of unnecessary runs. I mean, everybody is busy, and so I don't really see the advantage of doing the last five years, considering we already have done the high-recruitment scenario. Now, if we were talking about a matter of general procedure and whether a ten-year moving window or a five-year moving window is appropriate, that would have some merit, in the context of say a simulation study, and we can see which one tends to perform better, but that would -- That kind of analysis would fit more into the workshop that Genny was talking about and not so much for just giving advice on red snapper, especially -- Like I said, the high-recruitment scenario is fairly similar, and I don't want to ask people to make projections where there's just subtle differences in what the assumption for recruitment is.

MR. CARMICHAEL: Jessica, my two-cents is I think Clay makes a good point there. The last five, the last six, are quite similar, both in time period and results, and, if you do the last ten, you do end up with something that falls sort of between the long term and the most recent, which at least gives some options for the SSC to consider regarding risk of uncertainty and to provide guidance to the council about.

MS. MCCAWLEY: That sounds good. Do we need to edit these bullets? Help Mike.
MR. CARMICHAEL: I think Mike's strike-through is good.
MS. MCCAWLEY: Okay. I think we're good. Anything else for the SSC meeting relative to red snapper here? Spud.

MR. WOODWARD: Thank you, Jessica. I just want to make sure, down under long-term, if it’s appropriate, and I'm not really sure that it is, that this evaluation of the efficacy of a slot limit is somehow kept on the radar screen, both the merits of it for helping us move through rebuilding, but also, perhaps more importantly, does it have value, once we're rebuilt, for ensuring that we are continuing to move cohorts through the fishery into the spawning stock biomass, and I was sort of thinking of the red drum example, that we allow our percentage of the young fish to be harvested, but we also ensure that an adequate percentage is moving through into the spawning stock biomass, which is completely protected.

MS. MCCAWLEY: Thank you, Spud. It looks like Mike captured that. Kyle and then Clay.
DR. SHERTZER: This is just for my clarification on the projection request, and the SSC has already requested twelve different scenarios based on the long-term average recruitment, and now we're looking at a recent recruitment average over the last ten years, and I guess this gets back to coordinating with the SSC, but is the intent to double the number of forecasts, and so would we be repeating all twelve that the SSC is asking for, just with different levels of recruitment, or are there specific scenarios that the council is interested in?

MS. MCCAWLEY: I wasn't at the SSC meeting, and so I don't know if I'm the best person to help here.

DR. SHERTZER: Maybe that doesn't have to be answered right now, but I guess it does get back to us coordinating with the SSC, or with Genny, when the request comes to the Science Center.

MR. CARMICHAEL: Jessica, I think it's best to just let staff coordinate on a projection request that includes all of this and make sure we get what we need.

MS. MCCAWLEY: Thank you, John. Clay.
DR. PORCH: Thank you. I think John's solution is the right one. We don't want to just expand the factorial analysis by doubling everything, and so, yes, we'll work with staff and Genny and whoever needs to weigh-in on this, to come up with some kind of reasonable compromise that gets at what the SSC wants to look at.

I have another question. Under short-term responses, I wasn't sure if you were quite through with the list, or if we're going to continue through this. If the answer is we're essentially done here, then I did want to raise a question about these alternative proxy reference points, just evaluate that, and, if you're still going through it, I will hold it.

MS. MCCAWLEY: We were just about to dig into this a little bit further, and I felt like we hadn't really dug into these short-term responses yet.

DR. PORCH: I can hold off until we come to it, if you prefer.
MS. MCCAWLEY: That's fine. Thank you, Clay. A question for staff, based on what Monica brought up, and, actually, I think Andy brought it up as well, but we have an options paper in December, and is there a possibility of bringing something back in September, and then we would look at the entire workload, to figure out how we can fit red snapper in there and determine the priorities, I guess, during the Executive Committee?

DR. SCHMIDTKE: This is kind of a staff timing question, and so it might be above my paygrade to make this decision.

MS. MCCAWLEY: I saw Myra put her hand up. Myra.
MS. BROUWER: I think this is something that we're going to have to give it a little bit of thought, relative to all of your other priorities in the workplan, and, also, I would say that it would depend on whether you're okay with -- Like I feel uncomfortable bringing something to you without you having received the SSC recommendations, or receiving those at the same meeting at which you would look at an options paper. Maybe I'm not quite understanding the timing, but that would be just my initial reaction to that.

MS. MCCAWLEY: Thank you, Myra.
MR. CARMICHAEL: I would echo that. That was some of the thinking, Jessica, is we need to schedule an SSC meeting, and we need to get a request to the Science Center, and there's quite a few scenarios to be explored, and so there is some concern about getting that accomplished and getting a working paper, or options paper, done in time for the September briefing book.

MS. MCCAWLEY: Thank you. All right. Let's have some more discussion about these shortterm responses. Staff is continuing to edit them. Monica.

MS. SMIT-BRUNELLO: There have been times when the council schedules another council meeting, like via a webinar, to discuss something specific, right, like maybe red snapper, if you could not get something before -- Like an options paper by your September meeting, and I completely understand why that would be really difficult, and you haven't received the SSC's recommendations, and you could, potentially, schedule something between your September and December meeting, and not that all of you have a lot of time, but you could schedule something just to discuss an options paper further, or different management options, and so, if it couldn't come in September, maybe it could come between September and December. That's just something for you to think about.

MS. MCCAWLEY: Great point, Monica. All right. I feel like we're in the post-lunch lull. Where are my committee members at? Let's go ahead and go back to Clay.

DR. PORCH: My concern was the bullet to evaluate alternative proxy reference points, and so I wanted to understand what was being asked. Keep in mind that role of the proxy, and the intent of NS 1, is that the proxy should get us in the vicinity of what the MSY is. We may not know exactly what MSY is, and we can't calculate it, because we don't know the spawner-recruit relationship, or other density-dependent processes that could affect it, and so we try and pick a proxy that is likely to get us in the vicinity of that unknown MSY.

To be honest, the analyses that have come forward now -- We're developing guidance along those lines at a national level, and the research that's come out now is really looking at things more like F 40 percent and not these low values, and so I'm not sure what's being asked here, but I think it's unlikely that any of those would qualify as a better proxy for MSY than F 30 percent, and the SSC would have to weigh-in on, from the scientific perspective, which proxy is most likely to approximate the MSY.

I guess I'm asking what are you looking for, but I can tell you that certainly F max, the maximum yield per recruit, will not be a good proxy, and that's actually the extreme that only would be appropriate if you were certain that there's no spawner-recruit relationship, and I don't think there are many people that would go out on that limb. It's not that you can't detect it, but it's that you would have to say there is in fact no relationship between spawning and recruits for F maximum yield per recruit to be the equivalent of FMSY, and so that almost certainly is going to be out.

Some of those other values -- Like I said, there's been a number of papers that suggest those will be low for a life history strategy like red snapper, and so you may very well come in with -- If we review proxies, you could come in with a higher value than F 30 percent, F 40 percent or something.

MS. MCCAWLEY: What is the management goal in the Gulf? Is it 26 percent, or is it 20 percent? I can't remember where it is.

DR. PORCH: 26 percent, but that will probably be revisited at the next assessment, because that was that issue with the huge cryptic biomass. What we thought, for a long time, is we had a smaller, highly-resilient population, and so you saw it rebound quickly when we reduced the quota
substantially, very quickly, as a matter of a fact, but the Great Red Snapper Count suggested that, in fact, there was a big cryptic biomass that was lightly fished that was re-seeding those heavilyfished areas that were reflected in the assessment.

What that means is, on a population-wide basis, the stock probably isn't as resilient, but it's just that the fraction of the population that was being fished was being re-seeded by the population that wasn't being fished as heavily, and we don't know that that's the case in the South Atlantic or not, and that's something that hopefully we'll find out from the South Atlantic Red Snapper Count, but, again, 26 percent was based on a perception that almost all the population was on the artificial reefs and high-relief natural relief areas, natural reefs, and, in fact, the bulk of it is on what we are calling the uncharacterized bottom, which is a lot of low relief occasionally punctuated by a piece of riprap, bio-excavations, things like that. Does that make sense?

MS. MCCAWLEY: It does, and I guess that maybe I would like to have the SSC have this discussion, but there's other hands up. Let's go to Andy and then Genny.

MR. STRELCHECK: I am going to let Genny respond, because I assume it's specific to what Clay just talked about.

DR. NESSLAGE: Thanks, Andy. I just wanted to echo Clay's comments, and, just for reference for the council, when you get into the F 20 percent range, you're talking SPR levels that we use to manage crustaceans and short-lived decapods, and, I mean, we're talking about very, very super productive stocks that we have no idea where that production is coming from. I highly doubt the SSC will recommend a lower F percent. I'll just leave it at that, but I'm happy to ask them.

MS. MCCAWLEY: Thank you, Genny. Andy.
MR. STRELCHECK: I wanted to make a recommendation, in terms of kind of how we're thinking about short term and long term, and I guess my view, with the short term, goes back to some earlier comments, which is what can we do to influence 2022 and any sort of management changes that could occur, and then longer term would be 2023 and beyond.

At least my opinion and perspective here is, for the short term, the focus really would be on any ABC and ACL adjustments, as well as changes to allocation, and things like proxies and our ability to even reduce discards, relative to retained catch, might have to be kind of more longer-term initiatives, but it wouldn't preclude us from continuing to brainstorm and work on ideas to meet that long-term goal, and so, given the concerns about the timing with the SSC meeting in July and then bringing something back to the council in September, or even an interim meeting between September and December, to me, I think we should try to limit what we do in the short term and not bog down an action with too much changes or too many management considerations, and so I just propose that we keep it simple.

MS. MCCAWLEY: Thanks, Andy. Chip and then Steve.
DR. COLLIER: Thank you for recognizing me. In SEDAR 41, the analyst, Katie Siegfried, did an analysis trying to figure out what is the best proxy for red snapper, and I believe there was some indication that it might be below F 30 percent, and so it would be interesting to get that analysis rerun for consideration by the SSC, maybe at their fall meeting, or when they're discussing this.

MS. MCCAWLEY: Thank you, Chip. Steve.
MR. POLAND: Thank you, Madam Chair. I had a discussion with Chip about that a while ago, and I was going to prompt him to bring that up, and so I'm glad that he did, and I would be interested in having the SSC look at the analysis that Katie did and weighing-in on it.

MS. MCCAWLEY: I am re-reading all the new things that we've typed up here.
MR. CARMICHAEL: Jessica, if I may.
MS. MCCAWLEY: Go ahead.
MR. CARMICHAEL: I think the purpose of this being on there is to have some discussion of alternatives to address issues that have come up from the council and the public about what is the best reference point for this stock. To do something that, at least to many, better reflects what the stock is currently doing, compared to what it maybe is perceived to do, or assumed to do, under different reference points.

I'm aware of the literature that tends to favor higher SPR values, and certainly the agency clearly favors higher SPR values, and I wonder, in some cases, how much of that literature is tied to Pacific stocks, to North Atlantic stocks, and I think it would really behoove us to look at conditions of more stocks that are similar to red snapper that occur in these warmer waters.

Snappers, just because it's long-lived, as we've seen, it doesn't necessarily mean that its life strategy is the same as a grouper. I recall, earlier this morning, we were discussing life strategies, and red snapper's life history and its very low age-at-maturity, with it's very long spawning life cycle, and that's kind of a different situation, and I think even Kyle admitted that it was unusual, and it's been discussed a number of times, and it just seems like, at some point, maybe we do need to reconsider making assumptions about this stock that are not necessarily based on truly similar stocks, and I think that's all really the point of this exercise, is to fully document whatever choice we end up with and to recognize that, through multiple assessments, we have no stock-recruitment relationship.

We have an assessment that assumes the same level of recruits from 1950, when it says the SPR was 80 percent and we're near virgin, to what it would assume you would have in 1990, when the SPR was half a percent, and to what will be at equilibrium in 2044 at 30 percent SPR, and so I think, at some point, we do have to come to some grips with SPR assumptions relative to what the model is telling us and what the observations of this particular stock are telling us about its recruitment performance and maybe look at stock-recruitment relationships again.

I think Amy made the comment, in the SSC, that she could squint and see a stock-recruitment relationship in the data, and I kind of agree with that, because you do see something, and it looks more like Ricker than say Beverton-Holt, and so I think there are some issues there, but we just don't have the information now to necessarily decide, but it could be an interesting discussion, and I think the council has raised this a number of times, and so we do, at the very least, need to do some evaluation of it and consider some of these alternatives.

MS. MCCAWLEY: Thank you, John. Clay.
DR. PORCH: Thank you. I agree with John, fundamentally. I think we need to revisit some of these things, and I think we need to revisit how we do projections and what assumptions we make about recruitment when we don't have confidence in the spawner-recruit relationship. There will be some national guidance to that effect, and I think it would be useful to revisit some of these analyses and look at alternative proxies, although, like I said, you may find that you end up, even when we do analyses that are centered on red snapper here, that you actually get something that's higher than F 30 percent. I mean, I don't know that will be true, but that could be the result, and so I guess, in that case, the council would have to be prepared to live by whatever comes out of that, because where you could go is the SSC ends up recommending a proxy for MSY that is higher than these values, but I do think it's worth looking into that.

It's not something we're going to do in the short term. That's going to require fairly extensive simulations. The only thing we could probably do, in the short term, is demonstrate what the lower bound for that SPR level would be, and, as I mentioned, that's pretty much the SPR that corresponds to F max, and so something like that could be done relatively easily, but the comprehensive analysis to find out what the best proxy is, and not the lower limit, but the best proxy, is going to require quite a bit more work, and that's not going to happen this year.

MR. CARMICHAEL: So this becomes a potential long term, and maybe the range goes up some. We have some higher values that are actually considered, or make sure it's clear that that's an opportunity, or a possibility.

DR. PORCH: Yes, I think so, John, and I definitely am against asking folks only to examine lower ranges. I mean, the question really should be what's the best proxy and not what you get with F 20 percent, or F 25 percent, and just pick a select range.

MS. MCCAWLEY: All right. Back on the short-term items, and Mike is down there editing the long-term items right now. Short-term items, committee members. I think it looks okay. Ultimately, it sounded like we need a motion to have staff return with an options paper. Steve.

MR. POLAND: Thank you, Madam Chair. I can make that motion, if need be, but I wanted to ask, as far as the plan amendment, and is that enough direction for staff, and are we clear on what exactly this amendment would include, and do we need to add any additional potential actions, because, right now -- I'm going back and reading it. It's a single action to make it faster, but what exactly will that mean, and I guess that's what we'll get in the options paper, and so I just wanted to make sure, if we're going to move forward in initiating an amendment, that there's not anything else hanging out there that we can go ahead and advise staff on adding.

## MS. MCCAWLEY: Mike.

DR. SCHMIDTKE: Thank you, Jessica. I guess the question that I have is what -- It was brought up, and I think it was Andy that brought it up, that the short-term timing, that that definition could be affecting 2022, and I have it as a question-mark here, but it would be helpful to get a more definitive answer. How quickly is the committee wanting this short-term action to be, ideally, completed? Is it something to affect 2022, because, as I understand it, a plan amendment probably would not affect 2022, and it would probably be finishing up, if we're moving quickly, towards
the end of 2022 and affecting 2023. Myra, or John Carmichael, if I’m off on the timing, please let me know.

MS. BROUWER: Mike, I think you're good, and it's pretty much the way you summarized it. I think the main thing that would stretch out the timeline would be if there were additional actions the committee, or the council, wanted to consider besides just catch level changes, and then, of course, there's the issue of the allocations. As soon as we get definitive guidance that we can in fact address that under an abbreviated framework, if the committee and council wants to retain the original formula for allocations, even though we're going to be revising the catch estimates for that, then we could move forward with an abbreviated framework, and I think we could get that done to affect 2022.

## MS. MCCAWLEY: Mel.

MR. BELL: No help here, and Mike -- I had a similar question to what I guess Mike was talking about, with scheduling and what are we trying to achieve in the short term, and is that -- Is the 2022 reasonable, and then, going back to the first sub-bullet, possibly a single-action amendment, and that would be faster, and that would be the only way we could get something in 2022, but then, in there, we have staff explore options.

We know we want to go through an amendment process, but it's just, in terms of advising staff now on ready, set, go, we're not sure yet, because we're kind of waiting for some feedback on what we could actually do, and so I guess we know we want to do an amendment, but it's just what type, and, to affect any kind of change in 2022, we're going to have to use that single-action approach, I think, but, again, the sub-bullet says staff will explore options, and when will we be able to make that decision, I guess is what I'm getting at here.

MS. MCCAWLEY: It's almost like we need to see something in September and then make a decision about what we want to do, and if we want to have a special meeting between September and December, and it's almost like we need a little bit more information first.

MR. BELL: Yes, and that's how that reads, to me, and so that's what I was getting at.
MS. MCCAWLEY: Okay. Steve.
MR. POLAND: Thanks, Madam Chair, and that's why I was hesitating making a motion, because I'm still not 100 percent clear on what we need to, or if we need to, initiate in a plan, but didn't we have a discussion in March, and wasn't there a motion to initiate an amendment, in anticipation of receiving an ABC recommendation at this meeting?

## MS. MCCAWLEY: Myra.

MS. BROUWER: Thank you, Jessica. Yes, there was direction to staff to explore whether an abbreviated framework could be brought to you at this meeting if we received an ABC recommendation from the SSC at their April meeting.

MR. POLAND: Madam Chair, if I may.

MS. MCCAWLEY: Go ahead, Steve.
MR. POLAND: So, I mean, could we not just provide direction to staff right now to begin an options paper, in anticipation of receiving an ABC recommendation at the SSC meeting in July or August, whenever it is?

MS. BROUWER: Jessica, if I may.
MS. MCCAWLEY: Yes, please.
MS. BROUWER: I think you're more than welcome to do that, and we'll do our best to incorporate the SSC's recommendations into an options paper, if the council is comfortable with that.

MS. MCCAWLEY: Mike is getting that typed up there. Mel.
MR. BELL: That's what I was thinking. In order for us to kind of keep this thing moving, the quicker we can get some momentum that's in the right direction, great. The options paper, kind of getting that going, will help us move along, but I think I'm fine with that, adding that bullet, if that's what the question was, and then I wasn't going to bring it up until we kind of got into discussing the overall workplan or whatever, but Monica brought it up.

In the past, we have worked through other issues by, if need be, trying to expedite things by a special meeting, and, now that we've become experts at these quick webinar-type meetings, maybe that's a tool we can rely upon to help us move even quicker, as we try to maybe get something done for 2022, and so we've certainly done it in the past, and, again, realizing everybody's schedules are taxing sometimes, but it certainly is a tool that we can apply.

## MS. MCCAWLEY: Myra.

MS. BROUWER: Thank you, Jessica. I'm just wanting to get some clarification on that last bullet, and so you would want for the SSC to provide the recommendations to you in September, and, at the same meeting, we would bring to you those same recommendations in an options paper format?

MS. MCCAWLEY: I think that's what we're saying.
MS. BROUWER: Okay. Thank you.
MS. MCCAWLEY: Andy put his hand up.
MR. STRELCHECK: Thanks, Jessica, and I guess, to comment, it's certainly unusual, I think, for the South Atlantic Council to have guidance, advice, brought at the same meeting as an options paper, and it's been done with the Gulf Council on a number of occasions, just due to time constraints. What I think I would suggest -- It would be good for, I think, Myra and John and team to talk to my team, just from a timing standpoint of what's kind of realistic to accomplish between September and next year, when do we think the council could take final action, if
everything kind of goes smoothly and perfectly on the amendment, and then, also, the timing for the proposed and final rulemaking, because a lot of this hinges on influencing the 2022 season.

If we get too late into the council schedule next year, say by summer, we might not be able to do that, and so it's really, to me, can we pull off a plan amendment between now and March, or between March and June, and then NMFS implement the rulemaking in a timely fashion, so that there could be some adjustments later in the year, and so I would ask that maybe staff get together and talk a little bit more about that schedule and bring back, at Full Council, some guidance and advice, if there's concerns about meeting a very tight schedule.

MS. MCCAWLEY: Thank you, Andy. That was helpful, and we captured that, or Mike did, there on the screen. I guess I would -- I am going to start with staff. All the bullets listed here under the short-term response, is this clear as mud? Do you want a motion right now to work on this short-term response, or do we wait until Full Council and make a motion and do a timing and tasks, or what would staff like here?

MS. BROUWER: Jessica, thank you for that. I think we don't need a motion at this time, and I think just leaving it as direction to staff will allow us a little bit more flexibility, and so let's keep it that way for now, and then maybe, at Full Council, if there's a need to reaffirm some of your direction, in the way of a motion, then we can do that then.

MS. MCCAWLEY: I think that sounds great, Myra. Thank you for jumping in. All right. Mike.
DR. SCHMIDTKE: Thank you, Jessica. Just before moving from this, we kind of have these two items. From the discussion, it sounds like we want to keep this amendment as short and sweet as possible, and so should we move the whole brainstorming about discards and additional items maybe considered in September, but, if we're keeping it short, we might want to just keep it ACL and allocation, and do you want those moved down to long term?

MS. MCCAWLEY: That's a great question. It does say though that we would brainstorm on the items, and so, to me, the brainstorming wouldn't be so bad, even if we're just having a one-action amendment that is happening simultaneously, but I guess I would look to other committee members to weigh-in. To me, I saw these as possibly two actions that were happening simultaneously, the brainstorming to start this going that would ultimately end up in the long term, but maybe this is too many things to ask to do at the September meeting, and I saw that Steve put his hand up.

MR. POLAND: Madam Chair, I was kind of thinking like you, and this would be something that ran beside any amendment discussion, or amendment decision, that we have on the red snapper, because I think the brainstorming on ways to reduce discards and shift dead discards into harvest needs to be a discussion that we have in the context of the committee, the entire community, the entire fishery, and so, I mean, I think that, every opportunity we have to discuss and work on that, we should probably go ahead and get started, if there's time for staff.

MS. MCCAWLEY: That's what I was thinking as well. I guess that that's partly something that we would also discuss in Executive Committee, if we thought there might be time for that, starting that discussion, and Mike was indicating there that, ultimately, that's going to go in the longerterm response, but this is just brainstorming how to do some things. To me, this brainstorm
includes things like do we open up the fishery for a month and see how that changes angler behavior, et cetera. To me, that's part of what this brainstorm is. Mike, did that help?

DR. SCHMIDTKE: Yes, that helps.
MS. MCCAWLEY: All right. Maybe we can scroll down to the long-term response here and see if we want to capture anything else here under the longer-term response, and I'm going to pause here and let people glance at this. Steve.

MR. POLAND: Thank you, Madam Chair. Based off the first bullet, I think we should also add a bullet to consider any of the recommendations that come out of the Section 102 workgroup.

MS. MCCAWLEY: Great idea.
MR. POLAND: Again, that needs to be in the context of all the fisheries in the snapper grouper complex and not just red snapper.

MS. MCCAWLEY: Yes. Agreed. Andy.

MR. STRELCHECK: It's already been a long day, and so I've forgotten all of the recommendations that the AP had offered up, and can -- Was one of those recommendations the idea of spatial area closures to reduce discards of not only red snapper, but other reef fish?

MS. MCCAWLEY: I am searching for it. Hold on.
MR. STRELCHECK: I know that was mentioned by a few others today, and so I just wanted to make sure that that's included in the AP recommendations, or added, if it's not.

MS. MCCAWLEY: They wanted those additional licenses. I am trying to scan through there. Yes, and the whole no natural bait, single-hook rig, smaller leader, larger hooks, and so gear changes. Changing the starting time of the commercial fishery and getting it away from the recreational fishery. Maybe Mike is pulling some of this up.

DR. SCHMIDTKE: Yes, I will copy that over.
MS. MCCAWLEY: While you're copying, and we're trying to find that for Andy, Chester, did you have something to add here?

MR. BREWER: Yes, and I just wanted to say that I'm pretty sure that was in their recommendations.

MR. STRELCHECK: It is, yes.
MS. MCCAWLEY: It looks like we're pasting it down there, and so, yes, spatial or time closures, gear changes, changing the start date for the commercial season, which I don't see on Mike's bullets yet, and they also discussed the red snapper tag again. Spud.

MR. WOODWARD: Thank you. Under that second bullet, I just want to make sure that that's accurate, and so we're talking about recommendations from the joint Gulf and South Atlantic Council workgroup, or is that intended to mean the South Atlantic's private recreational reporting workgroup?

MS. MCCAWLEY: It's the joint workgroup, right, Steve?
MR. POLAND: Yes, that's correct.
MR. WOODWARD: Okay. Just maybe if you can elaborate on that a little bit, and are you talking about the flexibility, what flexibility we might have to apply to the snapper grouper fishery?

MS. MCCAWLEY: Yes.
MR. WOODWARD: Okay. All right.
MS. MCCAWLEY: Mel.
MR. BELL: I am just going to say, in the short term, we had initiated the sort of concurrent brainstorming, which really didn't result in necessarily action, and do we need a placeholder to kind of carry that into the long term, in terms of response, whatever comes out of that?

MS. MCCAWLEY: It looks like Mike is looking for it.
MR. BELL: Because you're not going to really come up with a particular response, but we just wanted to initiate that process, but we would carry that into the long term, I guess.

MS. MCCAWLEY: Yes, and he's fixing it. Mike, I don't know if you have a new hand up or if this is left over from before.

DR. SCHMIDTKE: It's left over.
MS. MCCAWLEY: All right. This is a good discussion. As folks look at the long term, anything else you see? Steve.

MR. POLAND: Thank you, Madam Chair. For the MSE evaluation, and I guess this is more of a question to staff, and kind of timing and strategy on that, but do we need to provide a little bit more information, or direction, as far as kind of what strategies we would like to see included in that MSE? If we do, I feel like a lot of the AP recommendations could be considered as part of that MSE simulation, as well as what we heard from Chester earlier, as far as just the snapper grouper season throughout the region.

MS. MCCAWLEY: Yes, and I felt like that brainstorm was one of the things that we would talk about at the next meeting, and we're over a little bit today on this committee, and we probably need to move on to Dolphin Wahoo, and I was hoping that we could work on some of those specifics, as well as give staff the flexibility to think of some and add them in there, at another meeting, and is that okay, Steve?

MR. POLAND: Yes, that's fine. I just wanted to make sure that intent was captured.
MS. MCCAWLEY: Okay. Any other things that we need to add here for later discussion on these long-term responses? We've got a lot of things on the list here, and I feel like we've had a good discussion. Mel.

MR. BELL: Nothing to add, but I was just going to -- I would assume we're going to send this around to folks, so we can kind of think about it a little bit, because we're going to come back in Executive Committee or something, if there's anything else that we want to add, or Full Council tweak, but make sure this gets out to everybody, I guess, today.

MS. MCCAWLEY: Sounds good. I'm also hoping that maybe Myra can work some magic and pull some of the action items out of here, and we could talk about them during the Executive Committee, because I feel like we've added some what could be significant time discussions, and we need to figure out where they're going to go at these future meetings, and if other things need to slow down, and so I’m hoping that Myra can work some magic on that.

MR. BELL: Yes, and our eyes may be bigger than our ability to process, but, yes, that's a good idea.

DR. SCHMIDTKE: I will make sure to send this out to staff and to the council.
MS. MCCAWLEY: Thank you, Mike. Mike, do you need anything else right now on this discussion?

DR. SCHMIDTKE: No. I think I'm all set.
MS. MCCAWLEY: Okay. Committee members, any more discussion on this topic? This is kind of the last part of the discussion on our list on red snapper. The only other item remaining was Other Business, and I had one item that Monica had called me about at lunch. Monica, do you want to quickly talk about the gag timing under Other Business?

MS. SMIT-BRUNELLO: Sure. The other day, we were -- The other day. I think it was yesterday, but we were looking at the assessment for gag and trying to determine what the appropriate rebuilding time period would be for gag, and we kind of reached a little bit of a confusing point, and so I propose that the Fisheries Service and our office work on that over the summer and then bring back recommendations and advice to you at the September meeting, and I don't think that that will be a bad timing period, because the SSC then meets in October. If the council determined what the rebuilding period ought to be for gag at the September meeting, that then could be given to the SSC at their October meeting, and you could have ABC recommendations that come out of that meeting.

MS. MCCAWLEY: Thank you, Monica. I am good with that timing. Does anyone have any questions for Monica? I don't see any hands. Mike is capturing that. Mel, I believe this concludes all the business of the Snapper Grouper Committee. Let me just say we're way over, but I'm going to pass it back to you.
(Whereupon, the meeting adjourned on June 16, 2021.)

Snapper Grouper Committee
June 15-16, 2021
Webinar

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Amanda Thomas
July 22, 2021
SAFMC June Council
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