

SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL
JOINT GULF OF MEXICO AND SOUTH ATLANTIC SCIENTIFIC AND
STATISTICAL COMMITTEES

Webinar

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Transcript

SSC Members

Dr. Genny Nessler, Chair
Dutin Addis
Dr. Jie Cao
Dr. Fred Scharf
Dr. Churchill Grimes
Dr. Wilson Laney
Dr. Yan Li

Dr. Jeffrey Buckel, Vice Chair
Dr. Walter Bublely
Dr. Scott Crosson
Dr. Jared Flowers
Dr. George Sedberry
Anne Lange
Dr. Amy Schueller

Council Members

Chris Conklin
Mel Bell

Steve Poland

Council Staff

Dr. Michael Errigo
Christina Wiegand
Dr. Brian Chevront
Kathleen Howington
Dr. Julie Neer

Myra Brouwer
Dr. Michael Schmidtke
Dr. Chip Collier
Allie Iberle
Cameron Rhodes

Observers and Participants

Rick DeVictor

Other observers and participants attached.

The Joint Gulf of Mexico and South Atlantic Scientific and Statistical Committees convened via webinar on October 30, 2020 and was called to order by Chairman Genny Nessler.

INTRODUCTION

DR. NESSLAGE: Good morning, everyone. Welcome to the joint meeting of the Gulf and South Atlantic Scientific and Statistical Committees. My name is Genny Nessler, and I am Chair of the South Atlantic SSC, and I appreciate your attendance at this meeting and your willingness to revisit our discussions of SEDAR 64 and yellowtail snapper, which we'll be discussing this morning, and then we'll have a little bit of business with regard to SEDAR 79, mutton snapper, as well.

I would like to remind everyone, if you could, to just -- Given that we're on webinar here, to mute yourself when you're not speaking, and, if you would like to speak, please raise your hand, and then staff will place your name on the list on the left side of the screen, and I will call on folks in the order that I see those hands raised, and, if you are having issues, please chat staff in the chat box, in the questions box, and they can help you out with technical issues as they arise.

I would just like to say that I recognize this is a joint meeting, and, typically, for the South Atlantic, what we do is we don't entertain motions, but we do entertain consensus statements, and then we caveat and address any concerns that are raised in the text of our report, and so I would like to proceed in that fashion this morning, and so hopefully we'll be able to come to consensus on fishing level recommendations in that matter. I think we need to go through the roll call and get everyone's voice on the record. Chip, do you want to lead us through that, or Mike, whoever is ready to do that?

DR. ERRIGO: Sure. I can do that. You guys can see your names here on the left, and so why don't we proceed down with the South Atlantic SSC first, and just call out your name, so that we can do a voice recognition. Genny, you've already introduced yourself, and so we'll start with Anne.

MS. LANGE: Anne Lange, South Atlantic SSC.

DR. ERRIGO: Scott.

DR. CROSSON: Scott Crosson.

DR. ERRIGO: Wilson.

DR. LANEY: Wilson Laney, here.

DR. ERRIGO: Dustin.

MR. ADDIS: Dustin Addis.

DR. ERRIGO: George Sedberry.

DR. SEDBERRY: George Sedberry is here.

DR. ERRIGO: Church.

DR. GRIMES: Church Grimes, South Atlantic SSC. I'm here.

DR. ERRIGO: Wally.

DR. BUBLEY: Wally Bublely.

DR. ERRIGO: Yan.

DR. LI: Yan Li is here.

DR. ERRIGO: Amy.

DR. SCHUELLER: Amy Schueller.

DR. ERRIGO: Jie.

DR. CAO: Jie Cao is here.

DR. ERRIGO: Jared.

DR. FLOWERS: Jared Flowers.

DR. ERRIGO: Fred Scharf.

DR. SCHARF: Fred Scharf.

DR. ERRIGO: I think Fred Serchuk is unable to attend today. Now we'll proceed to the Gulf members. Joe.

DR. POWERS: Joe Powers Gulf SSC.

DR. ERRIGO: Jim.

DR. NANCE: Jim Nance is here.

DR. ERRIGO: Bob.

MR. GILL: Bob Gill is here.

DR. ERRIGO: Dave.

DR. CHAGARIS: David Chagaris, here.

DR. ERRIGO: Camp.

MR. MATENS: Camp Matens is here.

DR. ERRIGO: Harry.

MR. BLANCHET: Harry Blanchet, Gulf SSC.

DR. ERRIGO: Kai.

DR. LORENZEN: Kai Lorenzen, Gulf SSC.

DR. ERRIGO: Luis.

DR. BARBIERI: Luis Barbieri, Gulf SSC.

DR. ERRIGO: Andrew.

DR. ROPICKI: Andrew Ropicki.

DR. ERRIGO: Ken.

DR. ROBERTS: Kenneth Roberts, Gulf SSC.

DR. ERRIGO: Will.

DR. PATTERSON: Will Patterson is here.

DR. ERRIGO: Jim Tolan.

DR. TOLAN: Jim Tolan is present.

DR. ERRIGO: Lee.

DR. ANDERSON: Lee Anderson is present.

DR. ERRIGO: Doug.

MR. GREGORY: Doug Gregory is here.

DR. ERRIGO: Jack.

DR. ISAACS: Jack Isaacs is here.

DR. ERRIGO: If I missed anybody, please feel free to call out your name now. I think we're good.

DR. NESSLAGE: Great. Thank you, Mike. Our first order of business is to approve the agenda, and hopefully you all have the copy of the overview. Are there any suggested changes or questions

or concerns? Please raise your hand if you have anything on the agenda. I am not seeing any hands raised, and so I'm going to -- I will give it one more second here, in case folks are trying to figure out where the hand-raise button is. If your hand is raised, the little hand thing is red, by the way, and it's very confusing. Just know that, if you're green, your hand is down, and, if it's red, your hand is raised. I am not seeing any hands raised, and so I'm going to assume the agenda is approved.

The next item is to approve our minutes from the July 21 to 22 meeting, and that's Attachment Number 1 in the briefing book. Does anyone have any edits or comments on the minutes? If not, we will consider them approved. Please raise your hand, if you have any edits. Harry, please go ahead.

MR. BLANCHET: On page 42, line 15, there is a "weighted age matrix", and I think that is a "weight-at-age matrix". Then, on page 123, and following, there are several other of that same issue, where they got a "weighted-age matrix", and someone later is going to try to figure that out, and I think having that correct would help.

DR. NESSLAGE: Excellent suggestion. Thank you. Any other edits or corrections or comments? I am not seeing any, and we will approve the minutes from our July meeting with the suggested corrections.

DR. ERRIGO: We will go back and fill those in and get those corrections from the minutes.

DR. NESSLAGE: Great, and you can recirculate the final version?

DR. ERRIGO: Yes.

DR. NESSLAGE: Excellent. Thank you, Mike. All right. I believe that's everything for the beginning of our agenda here. I would like to take a moment, at the beginning of every one of our meetings, to entertain general public comment. There will be opportunities, after each of the presentations, to provide public comment as well, but, if there's any public comment in general for the beginning of the meeting, please raise your hand. Do we have anyone on the phone? Everyone is on the webinar, it looks like. Is that right, Chip? Okay. Thank you. No public comment.

Then we'll move on to Agenda Item 3, Determining Fishing Level Recommendations from SEDAR 64 for Yellowtail Snapper. I will draw your attention to Attachments 2 through 5, and I would note that -- I think Mike sent out more recent versions, as early as maybe an hour ago, I think, for Attachment 2.

DR. ERRIGO: Attachment 2, yes, the presentation.

DR. NESSLAGE: So please check your email for the latest and greatest versions, and I believe we'll be hearing from Shanae first, and is that correct?

MS. ALLEN: Yes, that's correct.

**DETERMINE FISHING LEVEL RECOMMENDATIONS FROM SEDAR 64 FOR
YELLOWTAIL SNAPPER**

DR. NESSLAGE: Great. Just to give a brief overview, for those -- I know some of you were in attendance at that meeting, and others are joining new to the issue. Basically, in July, we met and reviewed the SEDAR 64 yellowtail snapper assessment and deemed the assessment best scientific information available.

We had a number of questions though, as we went through, trying to determine what the recommended fishing levels would be for this stock, and there were questions about projections and questions about the magnitude of the MRFSS versus MRIP units for the ACLs and differences between the old and new models and what might be causing that, and so, ultimately, we requested a bit more time to discuss this before setting the final fishing level recommendations, and I believe that Shanae is going to address a number of our questions in her presentation today, and so, without further ado, would you like to walk us through your presentation, Shanae?

DR. ERRIGO: We have some hands raised.

DR. NESSLAGE: Sorry. Chris Swanson, please go ahead.

MR. SWANSON: Thank you. I just wanted to say that Attachment Number 3, the P* analysis and results, was also updated and sent out, and so you should have an updated copy of that.

DR. NESSLAGE: Excellent. Thank you. That was from last night, right, I believe, or yesterday?

MR. SWANSON: Yes.

DR. NESSLAGE: If they're looking by date, look for yesterday, and the most recent Attachment 2 is from this morning. Doug Gregory, please.

MR. GREGORY: Thank you. I just wanted to confirm that the links go to the latest documents online as well.

DR. NESSLAGE: In the briefing book online? Is that correct, Mike?

DR. ERRIGO: I know that for sure the links go to the documents that were sent out overnight, and I am having the person who updates the website upload the most recent version of the presentation now.

MR. GREGORY: Thank you.

DR. NESSLAGE: Do you need a copy emailed to you again, or are you just worried about folks being able to access it from the public?

MR. GREGORY: Right, the latter, and I don't need another email. Thank you though.

DR. NESSLAGE: Understood.

DR. COLLIER: Cameron mentioned that the SEDAR 64 projection presentations -- Those might not be linked, and let me check with her, to see what's going on with that.

DR. NESSLAGE: Thank you, Chip. All right. Are there any other questions, before we begin? I am not seeing any hands raised. Can we switch over to Shanae's presentation then?

DR. ERRIGO: Sure. Let me switch over to her. One second.

DR. NESSLAGE: Thanks.

MS. ALLEN: Good morning, everyone. I am Shanae Allen from the Florida Fish and Wildlife Conservation Commission, and I will be presenting the projection results for SEDAR 64, yellowtail snapper. Chris Swanson and I are the lead analysts on this assessment, but, of course, we've gotten a lot of help along the way from others in our group, especially Joe O'Hop and Bob Mueller.

Today, I will first go over the stock status, as determined by the base model, and then I will present the projection methods and results, and, if there's interest, I will put these projection results into context with the current ACL and the previous assessment.

The SEDAR 64 base model determined that the stock was not currently experiencing overfishing, as the current fishing mortality rate was about seven-tenths of the MFMT, and it was not considered to be overfished, as the current spawning stock biomass is over two-times the MSST. The stock may have been undergoing overfishing in the 1990s and had lower stock sizes the following years, but it has rebounded since.

Moving on to the projections, here is a summary of the updated methodology. Deterministic projections were run to estimate landings for the years 2020 to 2037, under several different fishing mortality rates. The selectivity for each fleet was taken from the terminal year of the assessment, and relative harvest rates were assumed to stay in proportion to the terminal three-year average, and this resulted in an allocation of 56 percent commercial and 44 percent recreational, and so recruitment for the first year of the projection is equal to the terminal three-year average, and the stock-recruit parameters are equal to the base model estimates, and there are no recruitment deviations from the stock-recruit curve in the projections.

For the interim years, 2018 and 2019, retained landings for each fleet were incorporated, and this is an iterative method that was provided by the Southeast Fisheries Science Center that specifies fishing mortality rates for each fleet per year, so that fleet allocations are kept constant each year. The use of this method required us to switch from versions of SS, because of a bug in the forecast file in the version that we were using, which was 3.30.14. This bug prevented the ability to specify landings in numbers in 2018 and 2019 and fishing mortality rates for the following years. However, differences in base model output between the two version runs were observed to be very similar.

Here are the fishing mortality rate scenarios considered in these projections. The last scenario of F at 40 percent SPR was not requested in the TORs, but it was included here because it was defined as F at optimum yield in the previous assessment.

The figure to the right shows the estimated fishing mortality rates from the base model in black, followed by 2018 and 2019, highlighted in yellow, and those are the years for which we have landings data, and the following five years of the projections in green, and so that's 2020 to 2024. Projection scenarios are ordered by the magnitude of fishing mortality rates, and so F at 30 percent SPR is the highest, and F at 40 percent SPR is the lowest. All scenarios except for F at 40 percent SPR lead to increased fishing mortality rates, as compared to the recent average, or F current. F at 40 percent SPR is about equal to the fishing mortality rates estimated in 2019.

The P* scenario is based on a P* value of 0.375, and that was decided by the SSCs this past July. The distribution of the overfishing limit, or OFL, is quite narrow, and it has a coefficient of variation of less than 0.1, and so the P* scenario is very close to FMSY.

Age-zero recruits, in millions, as estimated by the base model, are presented here in black, followed by the recruitment in each projection scenario, and so, as shown the recruitment has trended upward slightly, but it has remained at the long-term average in recent years. Recruitment in the first year of the projections, which is 2018, was set equal to the average of the 2015 and 2017 recruitment from the base model, which happens to be very close to the long-term average, as shown by the dotted line. The highest fishing mortality rate scenarios, which is the F at 30 percent SPR in our P* scenario, leads to a slight decrease in recruitment.

Spawning stock biomass, in millions of pounds, is shown here, for the base model in black, again, and the 2018-2019 in yellow, followed by each projection scenario. Note that spawning stock biomass is made up of primarily ages two to six, and the spawning stock biomass in 2018 and 2019 is estimated to be lower than that in 2017, which is the terminal year of the assessment, primarily due to the delayed effects of lowered recruitment.

Since F at 40 percent SPR is about equal to the fishing mortality rates estimated in 2019, spawning stock biomass remains close to that level for the projection years, and that is shown in purple. All other F scenarios lead to higher Fs, and, therefore, declines in spawning stock biomass, but spawning stock biomass declines quickly to the management target and the FMSY and P* scenarios.

Shown here is the retained yield, in millions of pounds, for the base model in black, followed by the gap years and age projection scenario. Retained yield has remained elevated from 2013 to 2017, mostly over four-million pounds, but it declined in 2018 and 2019. Retained yield increases from 2018 levels in all but one projection scenario, as fishing mortality rates increase. Then the initial increases in yield wane as biomass declines to equilibrium levels. These equilibrium levels range from about 3.5 million pounds to 3.3 million pounds, for the highest and lowest fishing mortality rate scenarios.

Here are just some tabulated values for retained yield and spawning stock biomass for the first three projection scenarios, which is F 30 percent SPR, the P* scenario, and 75 percent of F 30 percent SPR. There are other scenarios that are provided in the Word document, and they also can be shown, if requested. This wraps up the first section of this presentation, and, if there's interest, I can go over a discussion of why OFLs and ACLs may decrease under many projection scenarios this time around.

DR. NESSLAGE: Would you like -- Should we entertain some questions first on what you have already presented and then go into that, or do you -- Would you like to continue?

MS. ALLEN: Yes, and that's all up to you.

DR. NESSLAGE: Why don't we stop here, given that there are some folks who are new, and see if there are any clarifying questions regarding what you just presented. Then we will dive into -- Harry.

MR. BLANCHET: Thank you. At one point, you mentioned a management target, and I'm assuming that's the F 30 percent SPR, and this is maybe semantics, but, really, if that is our metric for overfishing, I don't like that considering that, that we're really trying to target right at overfishing, and I would rather say that that is a management threshold, or some other term that doesn't sound like, well, if you're close, you're good, because, if you're below, you're not good. This is not the center of the runway, and this is the warning stripe on the edge.

MS. ALLEN: That was referring to this plot here, which shows spawning stock biomass declining to spawning stock biomass at F 30 percent SPR, were the two scenarios, and, since that is considered the target, and the threshold being the MSST, which is 75 percent of that value, shown in the dotted line at the bottom there. Then, in terms of spawning stock biomass, the management target would be spawning stock biomass at F 30 percent SPR, and does that help?

MR. BLANCHET: Yes, and I just think that -- Well, honestly, I think it's problematic that we're talking about a minimum stock size threshold as being the threshold, and I think we really -- The idea is we're supposed to be managing for OY and not 30 percent SPR, and, in this case, we have a situation where we're on the good side of everything, and we see tremendous variation in annual landings in the stock, and in recruitment, and so, to me, we have a situation here where the overfishing benchmark is -- To me, that is our -- Yes, the falling off the cliff is the MSST, but the management should not be running right next to the edge, and it's supposed to be moved away from that, and so let's not use the cliff-edge as the target, if that --

DR. NESSLAGE: I think that's an excellent point, and we should return to that when we begin discussions of what the fishing level recommendations are, but I'm glad that, least, Shanae, you've been able to clarify what you meant by that. Are there any other clarifying questions?

DR. COLLIER: There is three others. Kenneth Roberts, followed by Doug Gregory, and then Jie Cao.

DR. NESSLAGE: Kenneth, go ahead.

DR. ROBERTS: Thank you very much. This is a question asked out of ignorance about the time periods involved here, but, anytime I see a projection going seventeen or eighteen years out, out to 2037, what is the basis of that? Why not just project to something within the first five years or whatever? That's just a general question about why the projection periods have to be out seventeen years, and what do we gain by doing that, compared to a shorter time period? Thank you.

MS. ALLEN: That's a great question, and we were going back and forth on how to present this, but the reason why we brought it out so far, to 2037, was just to show that everything levels out at

that point in time, so that that would be considered to be the long-term expected value, but what is highlighted in green, which would be the first five years of the projections, or that project landings, and that's 2020 to 2024, and that would be the focus of this discussion, and so it was really just to show that we ran it out long enough for everything to settle to like long-term equilibrium values.

DR. NESSLAGE: Thank you. Doug Gregory, please go ahead.

MR. GREGORY: Thank you. To Harry's point, this is confusing, in the sense that F of MSY is a limit, and that's our overfishing limit, and our ABC-quasi-OY is the more conservative target, but, with SSB , it turns out that MSY is kind of the target, and the limit is $MSST$, and I think we have learned a lot in the last ten years, since we started doing things based on the authorization in 2006, and I think it is time for us to kind of reevaluate how we provide our advice to the councils, but it is confusing, since, in one sense, in a fishing mortality sense, it is the limit, but, in the spawning stock size sense, it's treated by the administration as a target. Thank you.

DR. NESSLAGE: Thank you. Jie is next, correct?

DR. COLLIER: Yes.

DR. NESSLAGE: Go ahead, Jie.

DR. CAO: I am just curious, because I remember you mentioned the distribution of the OFL is narrow, and I am just curious. The standard deviation of that distribution is the net estimate from the assessment model?

MS. ALLEN: Yes, that's correct.

DR. CAO: Thanks.

MS. ALLEN: We also compared an estimated distribution, assuming a normal distribution with the mean equal to MSY , and then the standard deviation that comes out of the stock assessment model, and we compared that to an MCMC analysis that we did, and the distributions were very, very similar. They gave almost the exact same results, and so we felt like the approximation was good enough.

DR. CAO: Thanks.

DR. NESSLAGE: Doug, go ahead.

MR. GREGORY: Thank you. Shanae, in the retained yield that goes down in 2018 and 2019, are those based on actual complete landings, because it seems unusual that they would go down so much, when the stock is as healthy as it appears to be.

MS. ALLEN: Those were landings -- I will show this later, but there were closures for the commercial fishery in that year, and so it was really a decline in recreational landings that was driving that decline, and so we only input -- There is only a way to input retained landings for those years, which we got from our data providers, but you don't input discards, and so dead discards are then inferred by the retention and the selectivity and all of that, but this is only showing

retained yield, and so that discussion doesn't really add much here, but, yes, those are based off of the retained landings in those years.

MR. GREGORY: Thank you.

DR. NESSLAGE: Are there other raised hands?

DR. COLLIER: I am not seeing any others.

DR. NESSLAGE: All right. Any other clarifying questions for Shanae on projections? If there's no other hands raised, Chip, then, Shanae, would you like to move to your next set of presentations here?

MS. ALLEN: To facilitate the discussion on why OFLs and ACLs may decrease under many projection scenarios this time around, I will go over management quantities and definitions for the previous assessment, the quota history, and then I'll go through a comparison to an alternative SEDAR 27A model.

Here is a summary of SEDAR 27A management findings and their definitions. There's a lot going on here, and so I apologize. As shown, the current condition of spawning stock biomass under SEDAR 27A is much higher compared to this assessment, and the current fishing mortality rates were much lower, and so about 0.05. Then, highlighted in orange there, the equilibrium value MSY, which was defined as the total yield at FMSY, was about 3.75 million pounds, and the maximum fishing mortality threshold, or MFMT, was defined as F at MSY, which was 0.24. As shown in the top-half of this table, FMSY was lower than F at 30 percent SPR, and so 0.29 versus 0.24 for MSY.

The overfishing limits was higher than the equilibrium MSY value by about 750,000 pounds, which is highlighted in the second box in orange there, because it was based on stochastic P* projections with a P* equal to 0.5, and the definition of OFL there, the 98 percent of the total yield at FMSY, that was to get to retained landings and remove the effect of dead discards. Then, progressing down this table, the allowable biological catch was based on the OFL, with a P* of 0.4, which ended up being 4.05 million pounds, and annual catch limits were set by apportioning the ABC, with 25 percent going to the Gulf and 75 percent going to the South Atlantic, and the Gulf Council defined the ACL as 89 percent of the ABC.

A fishery quota and closure history is shown here, and the total ACL, as shown at the bottom there, was increased in 2013, according to the values decided upon after the completion of the previous assessment, that being about 3.9 million pounds. There's a note here that there have been multiple commercial closures since 2015. Those occurred in 2015, 2017, 2018, and 2019. Here, I will present results for an alternative SEDAR 27A model and compare it to both SEDAR 27A and the current assessment model.

DR. NESSLAGE: Shanae, do we want to stop for one brief moment and make sure there's no questions on what you just presented?

MS. ALLEN: Yes.

DR. NESSLAGE: This looks like a little bit of a departure, and so are there any clarifying questions from the SSCs for Shanae on the ACLs and the quota history?

DR. COLLIER: I am not seeing any hands raised, or any questions.

DR. NESSLAGE: All right. Well done. Please continue.

MS. ALLEN: I will walk you through all of this, but just to say there was a limitation with the ASAP Version 2 platform that was used in the previous assessment, in that it did not allow for a separated weight-at-age matrices for landings and discards, and so, when we used the same data as was used in the SEDAR 27A, but we added additional weight-at-age matrices, the results, as shown in purple, align with the current base model in orange, and so, compared to the previous assessment model results in gray, spawning stock biomass is much lower, and fishing mortality rates would have been increased.

Again, there's a lot going on in this table, but we'll focus first on the top portion, and so the current conditions of the stock, in terms of spawning stock biomass and fishing mortality rates, are vastly different in SEDAR 27A compared to the alternative model and SEDAR 64, and that was also shown by the previous figure, and it's highlighted in orange, the first row there, that the MSY, defined as the total yield at F 30 percent SPR, is much lower for the alternative model, compared to SEDAR 27A, and the MSY for SEDAR 64 is surprisingly similar to that that was estimated in SEDAR 27A, and so about 3.69 million pounds for SEDAR 27A and 3.67 million pounds for our base model and 2.79 million pounds was what was estimated in the alternative SEDAR 27A model.

Next, the OFL value that was defined in SEDAR 27A, again highlighted in orange, is much higher than the equilibrium OFL value, for both SEDAR 27A and SEDAR 64, and so then there are values highlighted in pink that have not been decided upon for this assessment.

Just to summarize all of that, while it's expected that the ACL would increase after incorporating higher recreational landings, and for a stock that's in such good shape, the ACL for SEDAR 64 may be lower than the current ACL, for a couple of reasons. First, the OFL for SEDAR 27A was above the equilibrium OFL by about a million pounds, and, second, the MSY was estimated to be much higher in the previous assessment, primarily due to a limitation of ASAP Version 2, and the last point, which is in here in all projections, is that assumptions of future recruitment may change projections of spawning stock biomass and yields. That's all I have.

DR. NESSLAGE: Thank you. Are there questions for Shanae?

DR. COLLIER: I am not seeing any hands raised. John Froeschke has his hand raised.

DR. NESSLAGE: John, please go ahead.

DR. FROESCHKE: Can you clarify, just for my recollection, with regard to -- Is this assessment in CHTS or FES, and the previous one was in CHTS, and is that correct for this one as well?

MS. ALLEN: This assessment is in FES, and so it's FES-calibrated.

DR. FROESCHKE: So the slide you just presented, with the equilibrium values, et cetera, that doesn't account for the differences in the change in currency? That slide there. The equilibrium yield, the 3.69 and the 3.67, they look very comparable, but, in fact, they're not comparable, because of the --

MS. ALLEN: That's correct, yes, and so SEDAR 64 is the calibrated MRIP with FES, and so they are not comparable. They're in different currencies, but the alternative model, the SEDAR 27A alternative model, that is in the same currency as the SEDAR 27A final.

DR. FROESCHKE: Got you, and so that gives you a -- I guess I'm just struggling to understand how the stock biomass has continued to increase, even though we now think we probably set the catch values too high, yet the biomass responded by continuing to increase, and, based on what I think I'm understanding for the projections, we're going to reduce landings going forward, and it's not clear what the anticipated effect is on spawning stock biomass, given that we're already above the target.

MS. ALLEN: Just to clarify a little bit, there has been a leveling-off of spawning stock biomass since like 2015 and then a decline of the -- Starting to decline, but that could be because we would be over, possibly, MSY, or, also, because recruitment has declined as well. If I can clarify any other way, please let me know.

DR. NESSLAGE: Did that answer your question?

DR. FROESCHKE: Yes, but I am just finding it very difficult to square all of this up and communicate it, and I'm just trying to wrap my head around -- I understand the quantitative aspects, but I'm just having trouble squaring that with some of the long-term trends in the data.

DR. COLLIER: Harry Blanchet has a question.

DR. NESSLAGE: Please, go ahead.

MR. BLANCHET: It's on this same slide, on that same line as John was talking about, and the primary difference -- As I understand it from your presentation, the primary difference between the total yield at 30 percent SPR of 3.69 and the alternative of almost a million pounds, or almost 30 percent, less is primarily due to additional weight-at-age matrices, or did I get that wrong, because that seemed surprising, to have that much difference, due to -- Was that because of most of the fish coming out of one end of an age class and the discards or something, or what is going on there?

MS. ALLEN: I would surmise -- I mean, there's a couple of things that might be happening. I mean, it might be that it optimized to a different solution after those differences were resolved, and this is not always so clear-cut, but there's a lot of overlap, and there's a lot of variability, in yellowtail snapper growth, so that a single age class can have lengths that are above the minimum size limit and lower than the minimum size limit, and so the weight-at-age for a discard could be very different than the weight of a landed fish of the same age. Does that help?

MR. BLANCHET: So they had the same -- Say, within age-three, you had some that were discarded, and you had some that were retained, and the initial was taking all of the age-three and giving them the same weight, and is that a simplification of what you're saying?

MS. ALLEN: That's correct, yes.

MR. BLANCHET: Thank you. That helps.

DR. NESSLAGE: Shanae, can I follow-up on that question then? So, how confident are we in the weight-at-age for the discards, in particular for the recreational fishery, and could this be adding more noise than information?

MS. ALLEN: I believe, in SEDAR 27A, the weight-at-age came from recreational discards, and let's see. I think Joe or Bob may be on the line, and they could maybe help, because I actually was not --

DR. ERRIGO: For recreational, there's only a few places where you can get discard information like that, and it's through the observer program, and so it would be headboats, and I think Florida has some charter boat information with observers.

MS. ALLEN: Yes, and, at the time of SEDAR 27A, I believe it was only a few years of available data from those sources, but I believe though that there were other data that came from retained fish that were below the size limit, and so they would be assumed to be discarded, on average, and so I do believe there was some sharing of information among sources, but I can definitely look into that and answer your question completely.

DR. NESSLAGE: Sure. I just -- We can come back to that in the discussion. Thank you. Are there other hands raised?

DR. COLLIER: Bob Mueller has his hand raised.

DR. NESSLAGE: Bob, please go ahead.

DR. MUELLER: In answer to the size of discarded fish, the Florida program headboats, and then later on the charter boats, started in 2005, and so we had information from 2005 to I believe 2011 for 27A, whereas, now, we have discards going all the way to 2019, and so that would be where that size information came from.

DR. NESSLAGE: Can you comment on, for instance, the sample size and the spatial variability, et cetera?

DR. MUELLER: It's kind of strange, because it started out in the South Atlantic, which, of course, in the Keys is fine, and then you had samples on the Gulf as well, and there are some years missing from the Gulf, but, for yellowtail snapper, that isn't that big of a deal, because most of the yellowtail snapper catches are made in the Keys and the South Atlantic, and South Atlantic meaning southern Florida on the Atlantic side.

As far as the sample size, I didn't actually work on this, and I have worked on other species that use those data, and that's why I know where the data generally are collected and how they're collected, but, yes, that's observer information, and another source we have, but I don't know if it works for yellowtail yet, is the iAngler line, which anglers give us the size of the fish they catch, whether they're kept or not kept and all of that, and so we actually have information on discard sizes, but it's only in the last say decade, and we don't really have much information going back historically.

On those average weights, the big difference is, as Shanae was pointing out, the discards and landings are treated the same, as are both fleets, the commercial and the recreational. They're being treated the same, as the same age fish, and, again, when you have multiple ages for the same size animal, it depends on the selectivity and the fishing practices, and you can get a systematic difference, and so, by having the specific fleet-specific average weights for landings and for discards, we're able to capture that, and that's what that alternative run was, and, in ASAP 3, that's done, and so it's no problem anymore, but that was just a limitation of ASAP 2.

DR. NESSLAGE: Thank you very much, both of you. Are there other hands raised?

DR. COLLIER: Harry had his hand up, and I just wanted to check to see if he had another question. Then, after that, Joe O'Hop has his hand raised as well.

DR. NESSLAGE: Go ahead, Harry.

MR. BLANCHET: No, I didn't.

DR. NESSLAGE: All right. Then thank you. Joe.

MR. O'HOP: Bob has it right. By and large, the early sampling on headboats started in the Keys in 2005 to 2007, and we also were doing some samples appropriate for yellowtail on the southeast Atlantic, and they all came from headboats. Later on, we expanded our fisheries monitoring program to include charter boats, and so you're starting to get a little more data on discards from charters.

All the weight of discards is calculated based on the length, and that's also where the release mortalities are coming from, and they are immediately observed release mortalities, and nothing is coming out of iAngler, and so it's all coming out of the at-sea sampling programs that we have, and so thank you very much.

DR. NESSLAGE: Thank you.

MS. ALLEN: I just wanted to add, quickly, that there's a working paper that Dominique Lazarre put together on the data workshop, and that sums up all of the sample sizes and years and spatial coverage.

DR. NESSLAGE: Great. Thank you. Other questions? Are there any hands raised?

DR. COLLIER: Lisa has her hand raised.

DR. NESSLAGE: Lisa, go ahead.

DR. HOLLENSHAD: Shanae, I had a quick question. Looking back on our notes from the July meeting, I was just curious if this is a sort of reflective characterization of sort of what we've been talking about piecing these conversations about weight-at-age together, and is it possible that the recreational, and certainly maybe the private, is taking out fish that are right at that size limit, and with the move over to FES, that may account for an increased effort than we thought before, and so what you have are more fish being removed, but they're at a smaller size, and so, even though perhaps some of the abundance is there, the biomass is not, and that that was overestimated in previous models, and is that sort of a general characterization, or a possible explanation? I was just curious on what your thoughts on that would be.

MS. ALLEN: Sure. On these plots here, we have the gray line being SEDAR 27A, which was the final base model, and then that alternative model in the purple, which is much lower, and on the lines with the SEDAR 64 base model, which is in orange, and those -- The purple lines here are based on the CHTS, the MRFSS, landings, so that the data that went into that alternative model was the same exact data that was used in SEDAR 27A.

The move to FES did not affect the differences that you see here between the gray and the purple line. That calibration didn't happen until the SEDAR 64 base model, and so those two are using different landings currencies, and so, I guess to answer your question, but please tell me if I can do it better, the alternative model for SEDAR 27A wouldn't have taken that change into account, and it was solely using the same data.

DR. HOLLENSHAD: Okay. Thank you. That's really helpful.

DR. NESSLAGE: Great. Thank you. Other questions? Chip, are there any hands raised?

DR. COLLIER: I am not seeing any other hands.

DR. NESSLAGE: All right. It looks like you have -- Are you continuing with these presentations?

MS. ALLEN: That's all I have to present.

DR. NESSLAGE: Is Chris going to present on anything?

MS. ALLEN: No.

DR. NESSLAGE: So these are just additional slides as backup that we have in our PowerPoint here?

MS. ALLEN: That's right, yes.

DR. NESSLAGE: Okay. Great. All right. If there's no other clarifying questions from the SSCs at this moment, then I would like to take public comment, if there is any, and please raise your hand.

DR. COLLIER: I am not seeing any hands raised.

DR. NESSLAGE: Great. Thank you. All right then. It's ten o'clock, and we've just finished the presentations. We have a lot of discussion ahead of us, and I would like to take a five-minute break and have everyone come back then at -- Let's go for six minutes. Let's say 10:10, and we'll begin our discussions on fishing level recommendations. Thank you.

(Whereupon, a recess was taken.)

DR. NESSLAGE: It's 10:10, and I would like to get going again. I have asked Mike if he could just bring us up-to-speed on kind of our thought process on where we were at the end of the last meeting, and we had a couple of options on the table, and we had discussed the South Atlantic's decision tree and established P^* , if we were to go that route, with a 0.375, and that was based on this set of decisions, and, Mike, if you wouldn't mind just walking us very quickly through that, for those who weren't on the original call.

DR. ERRIGO: Sure. We have our current ABC control rule, when determining the P^* value, that has four dimensions that we made decisions. One is the assessment information, and we decided that was a Tier 2, because we're using SPR proxies, and there are absolute measures of abundance and exploitation, and so that gives a -- We decrement by 2.5 percent, and then there's the uncertainty characterization, and, because SS 3 does not use the same method of MCMC analysis to look at the uncertainty in the modeling estimates, we decided it would be a Tier 3, which is a minus-5 percent.

The stock status, the stock is well above its SSB reference points and well below the F reference points, and so there was no decrease from that, and that was a Tier 1. Then the PSA analysis ranked it as -- Using the MRAP PSA analysis, it ranked it as a Tier 2, moderate, which is a minus-5 percent, which gave us an adjustment of 12.5 percent, and that's how we settled on our P^* value of 37.5 percent, or 0.375, which is actually fairly conservative for most of our stocks.

DR. NESSLAGE: Do you have that quick summary that you could present as well, of the South Atlantic stocks at least, relative to --

DR. ERRIGO: Yes, I do.

DR. NESSLAGE: While you're making that point, you might as well just follow-up with that, very quickly, if you could, just to give folks some context.

DR. ERRIGO: Yes. What this is, is it's a list of our species that have ABCs, that have assessments, and the OFL is in the first column, and the ABC, what the units are, and then the difference between the two and the percent buffer, which is -- That's the important category here. Some of them have pretty high buffers, and tilefish is one, because of the amount of uncertainty that was in that assessment, but there are some with extremely small percent buffers, and greater amberjack is one, and vermilion snapper is another one.

Those two are in the same situation as yellowtail snapper, where they were well below their FMSY values and well above their SSB MSY values in their assessments. Therefore, the stocks were in good shape, and so their buffers are rather small, and, also, the uncertainties were fairly low, and

so their buffers were really small, and so yellowtail snapper is not the only stock that we have, at least on the South Atlantic side, where there is tiny buffers between the OFL and the ABC.

DR. NESSLAGE: Great. For reference, I'm trying to remember, from our discussions last time, what would the buffer then end up being, if we went with the P* approach, and does anyone know, off the top of their head?

DR. ERRIGO: I'm sorry, but I don't remember what it was.

DR. NESSLAGE: I know we discussed it.

DR. ERRIGO: Let me see if I can look it up.

DR. NESSLAGE: Just for reference. Of course, if we have concerns about additional uncertainties, we can always deviate from that, but this is just letting folks know this is where -- It's just to give you the context for this P*.

DR. ERRIGO: I think it's right here. It's 2.8 percent.

DR. NESSLAGE: 2.8 percent. Okay. Thank you very much for that, Mike. Okay. At this point, I would like to open up the floor for discussion amongst the SSC members regarding concerns, recommendations, and discussion of uncertainties, and so I know folks had some initial comments, and I would ask you to raise your hand, and we'll start discussion, and then we'll see where we seem to be moving, with regard to a consensus statement, and so are there initial comments? Maybe it would be helpful to bring up Shanae's PowerPoint, perhaps Slide 10. Joe Powers, please go ahead.

DR. POWERS: I am just going to kind of characterize where I thought we were when we finished the last meeting, in terms of this, and that is that there were -- In my mind, there were sort of two concerns that people had with these sorts of projections. One of them was the overall uncertainty, the P* and how much buffer to put in there, and then the other one, also, was, because the stock is overfished, or is not overfished, you get into a fishing-down sort of operation, and, when you project individual years, you start out with catches high that go down as the stock equilibrates towards the equilibrium.

If you specify those overfishing levels for each individual year, it's really implying that you really know something about how that stock changes from year-one to year-two of the projection, and so there was, I think, some concern about that, about to give some flexibility to the managers, in terms of how they might want to operate during that three to five-year projection period, and so I think those were sort of the key points that we're discussing here. Thank you.

DR. NESSLAGE: Thank you. Jim Tolan.

DR. TOLAN: I am going to bounce this off of what was just stated by our Chairman, and I'm going to sort of go out of my league, and it's going to be sort of an economics question, because, given the stock is not overfished, and not undergoing overfishing, and we're projecting this fishing-down scenario, for this species, is there sufficient capacity, both on the recreational and the commercial side, and the market need, to have such a catch level as a recommendation?

I am still trying to wrap my head around the fact that the biomass is increasing dramatically, and we're still not overfished or overfishing, and is that market there to project these scenarios? Again, I'm not an economist, and I will defer to the economists that are on the Gulf SSC, or even the South Atlantic SSC, but I am trying to see if this is the real direction that the stock needs to be going. Thank you.

DR. NESSLAGE: Thank you. Is there someone on staff who would like to comment on the capacity of the fishery to achieve these projections, or Shanae, whoever might be able to best answer that question?

MS. ALLEN: I am still slightly confused about the question. My apologies.

DR. TOLAN: Well, simply stated, is there a market need, and is there sufficient capacity to achieve these levels of F values?

MS. ALLEN: I believe -- Well, since the commercial fishery has experienced closures since 2015 -- If the question is would additional quota help and be used, utilized, I think the answer would be yes, because of those commercial closures.

DR. NESSLAGE: Great. Thank you. Maybe Scott Crosson can shed some light on that as well. Scott.

DR. CROSSON: An economics question. Actually, Mike Travis, and I don't know if he wants to chime in on this, but the economist in the Regional Office, did a regression on price elasticity for yellowtail snapper, and it's very different from most of the other snapper grouper species, because the market for it is mostly confined to south Florida, and it's mostly a fresh market, and there is some evidence that, when the quota has gone up, the price has gone down a bit, and vice versa, and so, because of the limited capacity and limited demand, there is some relationship here, and it's not easily substituted for, as with a lot of other species, and it's commercially sold whole. I mean, I see it all over the regular grocery stores down here.

DR. NESSLAGE: Thank you. Doug Gregory.

MR. GREGORY: Shanae said most of what I was going to point out about the commercial closures, and it is true that, over the years, recently, yellowtail snapper has become the de facto fish-of-the-day in most of the restaurants in the Keys area, whereas it used to be imported mahi-mahi, but yellowtail is -- I'm not surprised that it's a local market, and the local market probably, pandemic notwithstanding, the local market probably could handle whatever the commercial fishery can bring in.

DR. NESSLAGE: Great. Thank you for that. John.

DR. FROESCHKE: I apologize again if this is a point of confusion, but I'm looking at the retained yield on the slide on the screen, and are those values for the entire South Atlantic and Gulf stocks? If so, given the conversion to FES, I'm not sure that this would result in an increase.

MS. ALLEN: Those are combined South Atlantic and Gulf numbers there, and you are correct that -- I believe the previous slide, that shows the retained yield situations and how it compares to recent values, the highest two scenarios there, MFMT, F at 30 percent SPR, and the P* scenario, they would average to be a little less than what it has been since the high at 2017 values there.

DR. FROESCHKE: So, on the black line you have presented, is that in the MRFSS units, and then the going forward would be in FES, or is this all in FES?

MS. ALLEN: This is all in FES.

DR. FROESCHKE: Do you have a similar plot of the retained yield in the MRFSS units, for comparison?

MS. ALLEN: I believe, in the extra slides, I grabbed one from Amendment 32. Let's see here. It does go to 2017, but it's only for the South Atlantic, unfortunately, and that would be Slide 21.

DR. FROESCHKE: Okay. Thank you. I will take a look.

DR. NESSLAGE: Thank you. Are there other questions or comments? Doug.

MR. GREGORY: Thank you. In a previous slide of spawning stock biomass, there's a similar decline in the gap years that we saw in retained yield, and what is driving the decline in spawning stock biomass? Is it the reduction in recreational harvest?

MS. ALLEN: We would surmise that it would be -- Again, because spawning stock biomass is primarily made up of ages-two to six, and because there was that -- Recruitment was estimated to be lower, or to decline, I believe, starting in 2015, and so -- This shows the recruitment, and so, actually, the decline started in 2012, from that peak, and so we believe that that would be -- Projected declines in spawning stock biomass would be more driven from that decline in recruitment.

MR. GREGORY: Thank you. I see that.

MS. ALLEN: One more point here, just because I realized that I did not make this point when I was presenting, but those gap years -- The recruitment is not estimated like they are in the base model, and so, just to be clear, that recruitment there that you see in the yellow, that's what is assumed by the projections, and so it's kept at the 2015 to 2017 average, or very close to it, we'll say, and so just to make that clear.

DR. NESSLAGE: I am not seeing any other hands raised at the moment. Doug, go ahead.

MR. GREGORY: This isn't necessarily for Shanae, but, in general, if there was a decline in recruitment, are we seeing that, or would we see that, in the length of the commercial fishing season over time? I see there were closures in 2015, 2017, 2018, and 2019, and I would surmise that, in 2017, 2018, and 2019, or at least the last two years, 2018 and 2019, that the season would be longer than in previous times, and that's kind of an indication of a reduction in abundance, and is the commercial fishery showing any reduction in abundance over these years, whoever can answer that, or is familiar enough with it?

I see, looking at the quota history table, the season closed in June of each of the last three years, but the fishing year was changed, and so, in 2015, the season was closed for two months. In the last three years, it was closed for two months, approximately, and so there's no notice of a trend with the commercial fishing, I guess, catch rates, or total catches. Do the commercial guys catch bigger fish, and so a decline in recruitment wouldn't show up with their catches, necessarily, for another couple of years?

DR. NESSLAGE: Do we have the selectivity plots by fleet?

MS. ALLEN: I can pull those up. It just will take me just a minute. I do know that we looked at age-four fishing mortality rates, because that was the age at which they were fully selected by the commercial fishery, but, Chris, you can correct me if I'm wrong here.

MR. GREGORY: Apparently these closures occurred during low-recruitment years, if recruitment started going down about 2012 and hit rock bottom in about 2015, and so they have probably -- They might have been fishing on the larger fish that were more highly recruited.

MS. ALLEN: Definitely I would say that the commercial fishery is excellent at avoiding smaller fish, with little discards, and, yes, focuses on the largest fish, but, again, I don't think -- I mean, the decline in recruitment really just went to the long-term average, and it was very similar, as it was in 2003 to 2008, say, and so I guess I don't know if it would be enough to affect what the commercial fishery selects, or encounters.

MR. GREGORY: If I could just make a comment. It seems then that, during the years of higher recruitment, the commercial fishery didn't meet their quota, and that's kind of curious, because I assume the quota has been in place quite a number of years before 2014, and so I was curious why they started meeting their quota in 2015, and I guess fishing effort, in general, has gone up, for various reasons. Thank you.

DR. NESSLAGE: If I may tack onto that, are they switching -- Is this a very species-specific fishery, or are they possibly switching over effort from another fishery?

MR. GREGORY: Prior to the season change, the fishing year change, there was what you might call excess fishing capacity in that, at the end of the lobster season, and the stone crab season, in the spring, a lot of those fishermen would go yellowtail fishing, and so what happened in 2015 is, when the season closed before Christmas, the full-time, year-round yellowtail fishermen complained about wanting to protect spawning stock biomass, and they wanted income right before Christmas, and so, by convincing the council to change the fishing year to June, or July, whatever it is, August 1, they essentially curtailed some of their summer yellowtail fishing competition, but, even with the trap fishermen somewhat excluded from this fishery, they are still meeting their quota, and so there is some dynamic going on, but it's just not clear.

DR. NESSLAGE: I think you're hitting on, starting to hit on, some of the uncertainties that I think we should try to capture. I think, at this point, it would be good if we could start to -- Mike, if you don't mind, but just start to list some of the uncertainties and concerns that folks have, and then we can work through that to come up with an appropriate buffer. Doug, how would you like to

describe your concern, essentially, here? Is it that we're not seeing the effect of reduced recruitment yet in fishery catches? Perhaps that's not capturing your concern.

MR. GREGORY: I was just trying to figure out, based on Jim's question about capacity, and knowing that we had commercial closures, and so clearly the commercial fishery has greater capacity, yet, since 2016 or so, their season has changed to, in effect, reduce potential capacity from the trap fishermen, and so I guess maybe the yellowtail fishery has just become more popular as a commercial item in south Florida, but the capacity is certainly there, as indicated by the closures. I don't have a -- The only uncertainties I'm expressing are more economic and social, what is the dynamics of the fishery itself, but the capacity is there.

DR. NESSLAGE: Right. Okay.

MR. SWANSON: Looking at the catch rates for the commercial, there is this decline that is occurring between like 2008 to 2015, and that's kind of synonymous with some of this lower-level recruitment that happens in the beginning, and then, all of a sudden, we're getting higher recruitment levels, like in 2012 and 2013, and our Fs -- As Shanae was saying, we chose the age-four Fs because they are fully selected across the multiple fleets that we have, and so, when I'm looking at these catch plots for the commercial, it's like, come 2016 and 2017, they are starting to go back up.

That, to me, kind of makes sense, because these recruits that have occurred, these higher recruitment levels that have occurred, are catching up, and they're growing and becoming selected by the commercial fishery by that time. From what I remember, from the data workshops and talking with the fishermen, it's they are very good at targeting these yellowtail above the size limits and in those age ranges that are good for market and a part of the spawning stock biomass.

MS. ALLEN: Also, let me add, very quickly, to that point. Another thing to keep in mind is that the catchability of the commercial fleet has been increasing, and that's mainly due to power chumming and how well that technique works for yellowtail, and so I think it became a ubiquitous practice. We had a catchability block, because we used the commercial index of abundance, starting in 2010, I believe, but emails between us and fishermen would say that, from 2015 on, it really was the most common way of fishing, and so that might also play into this.

MR. SWANSON: Right.

DR. NESSLAGE: Thank you. Andrew.

DR. ROPICKI: I was just curious. Do we have any data available on commercial landings per month and how it changed with the change in the seasonal structure? Would we maybe see something where -- Doug mentioned that the guys who are year-round fishers wanted it shifted, so that they would have money before Christmas and they were fishing, and have we freed-up effort somewhere else though with this shift, and could we see it on landings data on a monthly basis, if we go before and after?

MS. ALLEN: I believe that was presented in a working paper, and I will try to track that down.

MR. SWANSON: Shanae, did we get that monthly, or was it just annual, and it was parsed by region?

MS. ALLEN: I believe that we got the data, eventually, just aggregated over months, but, initially, Chris Bradshaw and Steve looked at it by month, I believe. Let me try to find that first, before I make any promises.

DR. NESSLAGE: Will Patterson.

DR. PATTERSON: I know that we do things differently in the two SSCs, but, in this current discussion, a lot of it is actually coming from members of the Gulf SSC, and it seems to me that quite a bit of what we're talking about, with this issue of commercial effort and seasonality and shifting, a lot of that falls under management uncertainty and not necessarily scientific uncertainty, and so I'm just a little confused with why that component would factor into the buffer on OFL to ABC.

DR. NESSLAGE: That's an excellent question. I think some of the concern that Joe had raised earlier was that, in selecting the buffer -- I think some folks were concerned, at the last meeting, as to whether there was capacity in the fishery and whether we should be concerned about -- Given the uncertainties in the assessment, in particular, but perhaps also with management uncertainty, whether or not we -- How close we should be to the actual -- To F 30 percent, and so the question was do we need to place a larger buffer there, I think, and correct me if I'm wrong, folks, but do we need to consider a larger buffer, given uncertainty in how the fishery might respond?

Perhaps that is a management question, and an allocation question, perhaps, even, and I would be very interested in having folks concentrate on the assessment uncertainties, the stock uncertainties, and, if we can get those laid out, then perhaps we can have a clearer discussion on which of these buffers we would be most comfortable with, but that's an excellent question. Implementation of this is a choice -- Actual risk of management uncertainty is something that the council can consider in setting ACLs. Mike Travis, go ahead.

DR. TRAVIS: I did want to speak a little to the capacity issue, which also goes to the allocation issues that you just brought up, because I know I brought this up at the last SSC meeting, but I think it's worth raising again here, and so, if you go back to I believe it's 2012, when the ACL was last changed, and you look at the percentage of the allocation that was used in the commercial sector of the South Atlantic and the recreational sector of the South Atlantic and then the combined commercial and recreational sector in the Gulf, since they don't do sector allocations in the Gulf, you basically -- As people have already said, we've seen the closure, and the South Atlantic commercial sector has been consistently harvesting at around 100 percent, and, specifically, it's 98 percent, but that's -- You're harvesting your entire sector ACL there.

When you go to the recreational sector in the South Atlantic, they've been harvesting around 60 percent, and so clearly not close to 100 percent, and then, when you go to the Gulf, it's only 43 percent, and so we talked about is there enough capacity there, and I think the answer is obviously yes, when you talk about the South Atlantic, the South Atlantic commercial, but, when you get to the recreational, and particularly the Gulf combined, that may be a totally different issue.

DR. NESSLAGE: Thank you for that, and so I guess the question, from the biological point of view, is, if there is capacity to fully implement these ABCs, which assuming it's close to the ACL, how much uncertainty is there in the assessment that we need to consider when setting these fishing level recommendations? I know folks, earlier in the call, and on the last call, discussed some concerns with the fact that we have a large change in the assessment results between the last assessment and this one, and I think that's always a cause for concern.

I would love to hear from both SSCs with regard to how comfortable folks are with the incorporation of the new discard weight-at-age information in the assessment and its impacts on the assessment, and that certainly adds to the uncertainties. We said it was the best available science, and it sounds like everyone is in agreement that that was the appropriate treatment of the data, but that does add a degree of uncertainty. There were other concerns raised about some of these discrepancies, and we seem to be increasing in biomass, despite some of the declines in recruitment, and when can we expect that to hit, and, if we could get some of that down on paper, I think that would really help us. Harry, can you help us out?

MR. BLANCHET: I was going to throw another one in there.

DR. NESSLAGE: Good. Please.

MR. BLANCHET: To me, too, and this goes back to the discussion that we just had about the different harvest percentages in the different fisheries in the Atlantic and Gulf, and we're taking this as a single stock, and, if you have seemingly adequate capacity for additional harvest in the South Atlantic, and the Gulf is not harvesting its quota, let's call it, then, mathematically, the stock might be fine, but it will really depend, in terms of, and I won't say local depletion, but regional depletion, what your mixing rates are between the Gulf and South Atlantic. Now, I know, in some cases, that's just swimming underneath U.S. 1, but that's not the whole story, and so I just throw that out as an additional uncertainty.

DR. NESSLAGE: That's excellent, and I think we can try and capture that, and so there's uncertainty in the treatment of this as a unit stock, given spatial differences, and is that -- Help me out with the wording there.

MR. BLANCHET: Mixing rates between sub-units of different capacity within sub-sectors and the ability of local stocks, given that variation in fishing capacity.

DR. NESSLAGE: Excellent. Thank you. Let's give Mike a chance to catch up here. We can wordsmith the report later, but does this roughly capture what you were trying to say there?

MR. BLANCHET: Yes, and, again, this is me just kind of restating what some other folks have said, and so feel free to --

DR. NESSLAGE: If we could, I would personally like to add a bullet point about the change in assessment magnitude, given uncertainty in discard weight-at-age, please. Joe Powers.

MR. POWERS: Thank you. I made a comment before about what I felt like the major issues were from the previous meeting, and I think people misconstrued, when I was talking about what happens in the projection years, and misconstrued that as a discussion about capacity and that sort

of thing, and no. What I was really talking about is that we are projecting as if we really knew what the stock was in each one of those individual years, and so, therefore, in the first year, you project a high catch, and, in the second year, you project a much lower catch.

One of the ways to address that would be smoothing out those over the years, and that's been done in other stocks as well, and I think that was the issue that I was trying to bring up, and then the other thing that I would really, as a question, ask is we are -- What we're really talking about is deviating from the P^* approach, and I would like to ask the question, from the South Atlantic standpoint, of how have you deviated from the P^* approach? Have you done it before, and what were some of the mechanisms to do that, like 75 percent of OY or something like that? Thank you.

DR. NESSLAGE: Good point. Good point. Thank you for clarifying on the capacity issue, and I don't know, Mike, but are -- You would probably have the best summarization of our at least recent deviations from our decision tree.

DR. ERRIGO: I am thinking about it, and the only deviations I can think of are ones where the situation was really weird, like blueline tilefish, although we did get a P^* for blueline tilefish, but we constructed the distribution with a certain standard deviation based on the data-limited projections that we did, or data-limited methods, and so one way I could think for deviating from exactly how the P^* is run is to modify the CV in the distribution around the OFL, so that it's wider, because, right now, it's less than 1 percent, or something like that, and it was very small anyway, the CV, and so one thing you can do is modify that CV so that it's wider, to give you a larger buffer, but, other than that, I can't think of a situation where we have deviated from the control rule in a situation where we've had an assessment like this.

DR. NESSLAGE: Most of our deviations are in our data-poor or unassessed stock decision trees, as opposed to the P^* decision trees for the more quantitative assessments like this one. In just looking at our decision tree, the Dimension 2 uncertainty characterization, we currently have it at Tier 3, and that would be one, just because the -- We had argued, at the last webinar, that the uncertainty analysis was simply using the asymptotic standard errors coming out of the assessment, and we typically do -- The Beaufort Lab typically does an MCMC analysis that ends up with much broader uncertainty estimates, but we could revisit that Dimension 2 as well, and would you agree, Mike, that that's an area, if folks feel the uncertainty is under estimated?

DR. ERRIGO: We could. The next level down though is pretty basic, I think, and I think this assessment meets the criteria for the next level down, but, I mean, you could reduce it anyway, to decrease the P^* value. I'm not sure if that would satisfy people's need for a larger buffer, and I'm not sure how much modification to the P^* would help.

DR. NESSLAGE: Okay. Will Patterson.

DR. PATTERSON: We run into these issues all the time in the Gulf, about getting the P^* , and, really, this idea of uncertainty, scientific uncertainty, is either biased, potential bias issues, or precision issues, and we -- It's a good exercise to list all the potential biases that we see that are adding to uncertainty, and clearly, as you work through the control rule, the South Atlantic's control rule, you are moving the percentile lower and lower with the PDF to compute the buffer from OFL to ABC, but, if you have an assessment results that produces a low CV, then your

precision estimate is low, and so it doesn't really matter how big the buffer gets. You're still going to have a pretty small reduction from the OFL to the ABC.

I don't know -- Mike's proposal to pull in a CV from elsewhere -- You know, we've toyed around, in the Gulf, with the idea of using the Ralston et al. analysis, meta-analysis, from the west coast, and I think that CV was 0.36, and so there is some precedent nationally for that, but it almost becomes an arm-waving exercise here. I mean, the assessment was done, and the precision estimate came from the assessment, and the appropriate buffering from using the P* approach was applied, and why don't you just go with the -- Was it a 2.8 percent reduction from OFL to ABC, and then tell the council that it's your prerogative to reduce the ACL from this, the ACL or the ACT from this, based on management uncertainty.

Then there's also the issue that Joe mentioned about averaging the projection estimates across years in that time period, so that you don't have this ratcheting-down effect that you see. I mean, I understand that our mentality is to buffer and avoid and buffer and avoid, but we have followed the process here, and so why don't we just live with the fact that this is the reduction and the fact that the stock is estimated to be in a pretty good spot?

DR. NESSLAGE: All right. I am hearing a proposed consensus statement, which folks can comment on, that we recommend P*.

MS. ALLEN: If I may, and I'm sorry, and I just added a comment to the chat, and I don't have a hand-raising -- I don't have the ability to raise my hand.

DR. NESSLAGE: Go ahead, Shanae.

MS. ALLEN: Anyway, I just wanted to add to the uncertainty conversation and to point out that a huge piece of the uncertainty that's not included in the OFL is the uncertainty in recruitment going forward, and so that's all I really wanted to state.

DR. NESSLAGE: That's a good statement. Thank you for chiming in, and I think we can add that, unless there is concerns from the SSC members. I think it's also fair to add, once Mike catches up here, that there is concern with the potentially underestimating the uncertainty just straight out of the model, and I think we just need to be straight-up in saying that, that it is what it is, and I hear what Will is saying, but it could be underestimated, and we don't know by how much, and that's the conundrum, right? It would be uncertainty in recruitment and underestimation of uncertainty. While Mike is catching up, Luis, please go ahead.

DR. BARBIERI: Thank you, Genny, and you just made one of the points that I was going to bring up myself about this uncertainty being likely underestimated in the assessment, and I don't disagree either with the points that Will made, but, as a reminder to the committees listening here, we had discussed this issue, I think in more detail last time, because we had just had a much longer and detailed presentation of the full assessment last time, and we were able to discuss all of these issues, I think, in more detail.

I think that this issue came up, that the uncertainties are not being properly captured, for different reasons, like the inability of stock assessment modelers, in many situations, to capture the full extent of uncertainty, and I think that was one of the reasons, and correct me, anybody here if I'm

wrong, if I'm misremembering this, but I think this is one of the reasons why we had to come up with a proposal to have yield streams, projected yield streams, that would be at an F level equal to 75 percent of FMSY, and so we wanted to have some level different than what was being produced by the P*-based projections, just so we have an idea, and we wanted to be a bit more explicit to the council in potential --

In the Gulf, as Will mentioned, we have departed from our ABC control rule a bit more than I guess the South Atlantic SSC has, but being more explicit to the council in explaining that, because we felt the assessment had a number of uncertainties that were not being properly captured, for different reasons, and that the P* process of assessing that buffer, we felt was not being capable of properly representing true uncertainty, that we would come up with an alternative, and that was the yield stream at F equals 75 percent of FMSY, and so I just wanted to bring up those points, Genny, for the committees to discuss, number one.

Then number two, another issue that has been brought up about the commercial closures, and I agree, and this is something that, to some extent, needs to be resolved, but I wonder if the commercial closures are not actually more related to the current allocation scenarios the council has established than the actual biological capacity of the stock or ability of all fleets to capture, really to catch, all the ACL there, because it looks like the commercial sector is either meeting its quota and having to close, or being a bit below, but then the recreational is leaving more on the table.

In terms of us thinking about potential future projection scenarios relative to the commercial fishery closures, I wonder if this is not a message that we need to send to our councils regarding whether the current allocation scenarios are properly reflecting how these fisheries operate in the dominant sector for these fisheries, and, having said that, it will be great to hear from some of the economist and the other social folks on the committee that have more experience with this issue. Thank you, Genny.

DR. NESSLAGE: Thank you, Luis, and so you raised two good points. The first one, we should probably put a placeholder in there for some comment to the councils on allocation, and perhaps we can hear from our socioeconomic folks in a moment. The other thing that you mentioned was the alternative options for -- An alternative to P* being the 75 percent of F 30 percent SPR, and so that would be smaller retained yields, slightly higher SSB, and I guess just a quick follow-up question for Shanae, though.

It looks, to me, from the spawning stock biomass projections, and so Slide 8 versus Slide 9, the retained yield, it looks like there is a bigger difference in retained yield than perhaps -- Excuse me. Between the P* approach and the 75 percent of F 30 percent, there's a bigger -- It looks like there's a bigger difference in retained yield than there is in spawning stock biomass, and so I guess could you -- It's all coming, and I think this is where Joe is coming from, is it's all coming in those first few years, or largely coming in those first few years of the projections, and so how much -- I guess my question for Shanae is how much do we -- Is this really a -- This doesn't look like much of a difference in the end, and it's a slight difference, and is that correct, in spawning stock biomass?

DR. POWERS: May I interject here? I think it would be helpful if we looked at Table 2 and Table 3 of the A03 document she has, which actually gives the numbers related to these projections.

MS. ALLEN: While we're scrolling to get there, I agree, Genny, 100 percent that it's not a very discernable difference between the P* scenario and the F at 30 percent SPR scenario, as you can see by these numbers there in the first two columns for those gap years.

DR. NESSLAGE: Right, but retained yield for the biomass looks like a less -- Well --

MS. ALLEN: It's less of a difference.

DR. NESSLAGE: Yes. In real terms, that's probably much less of a difference, and so how much are we actually achieving, I guess is my question, by reducing or increasing the buffer a bit more? That's just an existential question for you all. Doug Gregory.

MR. GREGORY: Thank you. We always seem to get so-called wrapped around the axle over this P*, and it's been a very laudable effort over the last ten years and a lot of energy has been put into trying to make this part of the National Standards work, but the truth of the matter is that our uncertainty is never captured in the stock assessment. In the beginning, we looked at let's try to do a joint probability distribution of our different scenarios, and that proved to be unworkable.

If you look at the differences between ASAP 2 and ASAP 3 in this assessment, therein is a better measure of our uncertainty. It's really measured by what version of SS do we use, or what version of the stock assessment model do we use, because, in reality, we're dealing with samples of fish from an ocean that's completely always variable, and we'll never capture the true uncertainty, and so the National Standards have set us up for failure, in that regard.

I agree with what my colleagues on the Gulf side are saying about let's reevaluate our approach to advice to the council and say, well, we think this is an appropriate buffer, and it either could be -- I know we like to quantify things, and we don't want to be subjective, and we could choose something that has consistently given us a reasonable buffer that we're comfortable with, and so I -- Whether we use P* or not, I'm fine either way, but we spend a lot of energy having the same discussion at every stock assessment, and so I support whatever direction the group wants to go. Thank you.

DR. NESSLAGE: Just to follow-up then, are you suggesting perhaps the 75 percent of F 30 percent is more consistent with the uncertainty recommendations we've made in the past?

MR. GREGORY: That's consistent with what the Gulf has done. Now, granted, the South Atlantic has always been a little more conservative, and so your OY definition is 40 percent SPR, and I think our 75 percent of F of MSY, as an OY, would be probably closer to 35 SPR, and, again, I don't think the differences are that great, but I would just like for us to kind of reevaluate our approach to this and try to simplify it and allow us to provide advice in a consistent manner. I am being philosophical, and I apologize for that.

DR. NESSLAGE: No, it's an excellent point, and I would just add -- I think that's an excellent point, especially from the viewpoint of the Gulf SSC, and I would ask the South Atlantic SSC folks to think on that and raise your hands with comments, and, while we're thinking on that, Harry, please go ahead.

MR. BLANCHET: My comment was on that fifth bullet in the projected recruitment, and the point has been made elsewhere, but I just thought that it might be captured in this bullet, and the current assessment -- As I understand it, the last estimate of recruitment is 2017, and, typically, the last estimate of recruitment is not very well defined, because that's not yet in the fishery. Well, you know what? That actually is now in the fishery, and so just to the point that the estimates of recruitment that are in the model are currently, what, three years old, or two years old, and that's all.

DR. NESSLAGE: Absolutely. Maybe we can make a note about the terminal year estimate and under the uncertainty in recruitment. Will Patterson, please go ahead.

DR. PATTERSON: In looking at the table that I think Mike put up earlier from recent assessments in the South Atlantic, and looking at the buffer between OFL and ABC, oftentimes, it was between 10 and as much as 25 percent, I think, in the case of bluefin tilefish, and I'm wondering if the experience that we've had in the Gulf, versus what is apparent, given those buffers in the Atlantic, how much of that is due to the difference in how the P* approach is implemented, because there are some differences, but, also, the difference in the assessment approach.

In the South Atlantic, typically, the BAM model has been utilized. In the Gulf, SS -- Almost all of the assessments I think now have been converted to SS, and, in the SS assessments, the CV estimates that come out of the assessment are typically pretty low, and I think it has a lot to do with how the preeminence of the catch-at-age and how that's -- Especially the pretty tight decision estimates on the catch-at-age matrices that go into that, even with downweighting effective sample size, and we end up telling the model that we know that stuff really, really well.

Really, this issue, in the current situation, is that we think there -- We talk about uncertainty, but, really, what we're talking about in the model is modeling error and misspecification and process error, lots of sources of potential bias that don't necessarily just reflect variance, like process error would.

We have an issue where you're trying to correct for a precision issue, in that you have a pretty tight PDF, by talking about uncertainty, but not really saying what causes it, and so what's causing the errors are potential biases, and not necessarily precision issues, which is what the P* is pretty good at, right?

If you have an imprecise estimate, then the PDF is broader, and then, if you use your control rule and set up buffers, it's going to be some distance that you may feel comfortable with the ABC being away from OFL, but, in the current circumstance, no matter how much we talk about uncertainty, we can't change how the P* is going to work unless you change what that distribution is, by either injecting an outside source for the CV, and just broadening it artificially, or simply using a different approach, like has been talked about, but I think, in this discussion -- Again, I think it's important to catalog what the sources of uncertainty are, but we should think about them as potential bias versus imprecision, and you can't solve bias issue with P*, if you have a low CV coming out of the assessment.

DR. NESSLAGE: That's an excellent point, and I would argue that Point 3 is definitely a bias concern, and would you agree, Will?

DR. PATTERSON: Yes.

DR. NESSLAGE: I am thinking the 0.4 would be a broad initial statement, that we are concerned that uncertainty would be -- That it is being underestimated, for these reasons, and then we can list them. The unit stock would be a bias issue, and I'm just trying to think of what here isn't a bias issue. Perhaps the first one, although that's more of a projection issue, interpreting projections properly.

DR. PATTERSON: Well, if we're worried about recruitment being estimated correctly, that could be process error, or it could be misspecification, and so it could be both.

DR. NESSLAGE: Yes. Perhaps can we wrap that one down under the recruitment concerns, unless folks disagree. Stop me if I'm mischaracterizing what you're saying, and grab "the uncertainty is" -- We should be likely underestimated, right, and it's not could be, but it's very likely could be underestimated, given how tight it is right now. Pull that up to the top as the general statement, and say that we are concerned about biases, the following potential biases, and then we'll make those other ones bullet points under, and does that capture what you're trying to get at, Will?

DR. PATTERSON: Yes, we're getting there.

DR. NESSLAGE: Are there other sources that you're concerned about that would be causing -- That we think we could potentially list as justification for our concerns about bias?

DR. PATTERSON: I think we could put together a really long list, but, given this assessment, I think we should focus on ones that really rise, and I think these are those.

DR. NESSLAGE: I agree. If folks have additions, please raise your hand. Unless you had something else, Will, I was going to move on. Did that --

DR. PATTERSON: That's great. Thanks.

DR. NESSLAGE: Cool. All right. Jim, please, go ahead.

DR. TOLAN: Thank you. Doug really captured a lot of what I was going to say. These little mini-wars that we fight with P* and uncertainty, at least on the Gulf side, are battles that we fight with nearly every assessment, but I wanted to return to something that Will had said earlier, in that -- Because we're not taking official motions, and we're drafting this consensus statement, it really has been a one-sided conversation, and I'm really curious to get the perspective of some of the South Atlantic members on how they feel and how this consensus statement is moving along, because I haven't really heard a whole lot from their side. Thank you.

DR. NESSLAGE: Thank you, because, right now, I'm hearing -- Most of the folks who have spoken so far, perhaps with the exception of Will, seem to be moving more towards the 75 percent of F 30 percent, and so, unless we hear otherwise, we might need to revisit that last bullet, and so, Scott Crosson, shed some light on this, on the South Atlantic perspective.

DR. CROSSON: I wasn't going to shed light on that, and there was the question earlier about allocation, and so, when we get to that point, I can contribute that.

DR. NESSLAGE: Well, why don't you do that while -- Hopefully, in the meantime, the South Atlantic folks will generate some comments, and so why don't you comment on allocations, please?

DR. CROSSON: I agree, as some of our stock assessment ponder these things, and I think it's important that I give them a chance to write anything down. On allocation, the Socioeconomic Panel, which, for our Gulf SSC members that are present today, that's the economic sub-committee, social and economic sub-committee, of the South Atlantic SSC, and, when we had our April meeting, we endorsed -- In terms of allocation, we endorsed the concept that, if you have one sector that is consistently underharvesting its allocation, and another one that is constantly pushed right up against the limit and maxed out, then you should begin a process for considering and analyzing whether reallocation between sectors is justified.

There should be some initial analysis, and the SSC itself endorsed that, because they endorsed the sub-committee's report at their May meeting, and the first step -- Because there is some evidence of price elasticity with yellowtail snapper, the first question should be whether an increase in the commercial allocation would increase economic value, and so there should be some assessment about what MEY is, if that's possible, or MEY proxy, based off of the regressions that we already built for this species, and, if that is the case, that an increase in the commercial quota would increase economic value, then they should begin the assessment process.

There is other stuff in there, but that's further down the line, and we're nuanced, in terms of the analysis that can be performed, but I think we should definitely be on the record as stating that this should be a candidate for examining potential reallocations, and I can't speak to reallocation between the Gulf and the South Atlantic, and I feel like that's more of a biological issue, and localized depletion, of course, is an issue with that, and so I would have to defer a little bit more to my biological counterparts on this SSC.

DR. NESSLAGE: Thank you very much for that, Scott. Will, go ahead.

DR. PATTERSON: Just speaking to the issue about a recommendation for examining the potential for reallocation, in the Gulf SSC, we've been really careful to avoid making any statements about reallocation unless we're asked directly from the council for a scientific opinion about what the effect of a potential reallocation might be. Secondly, that really is venturing into management, and so I'm not sure that we would need to say anything about the potential for reallocation or examining whether it might be appropriate or not in statements about the buffer between OFL and ABC.

DR. NESSLAGE: No, and I don't think this would -- This would not be part of that comment. This would be an additional -- Maybe perhaps "recommendation" is too strong of a word, and we should just go with -- Or at least perhaps you might consider the language that Scott has suggested, and so perhaps we just make that "consider whether" then blah, blah, blah, or "conduct analyses to consider whether reallocation", blah, blah, blah, and get rid of "recommendation" in the above part. Right?

DR. PATTERSON: To me, that still seems like an endorsement of that process, and I wouldn't be comfortable with that.

DR. NESSLAGE: Do you all have a socioeconomic sub-committee or panel, on the Gulf side?

DR. PATTERSON: We have folks that are on the SSC, and then there's a panel. There's been a recent reorganization, and I will let somebody else speak to how that organization is currently done, and it's hard to keep up sometimes.

DR. NESSLAGE: So I think part of -- I hear you completely, and I think part of where this was coming from though, if I remember the discussion correctly, was concerns about how realistic the projections would be, given current allocations, and so maybe I am misconstruing the discussion, and so that might -- I guess that's where I was seeing this as potentially having an impact on the discussion about fishing level recommendations, but perhaps we will -- This might not be a consensus statement. Let's consider the last two bullet points here to be still up in the air, and let's hear what Anne Lange has to say.

MS. LANGE: I was going to say that I agree with the points that have been brought up so far, including the final P* recommendation. The next-to-last issue, I think I agree with the Gulf comment about it being more of a management concern, but, if the discussion, or the bullet itself, and I guess it's improved here, but to identify to the councils that, because of the results of the assessment, and the modeling, it does make a difference in how the projections will come out, or how close the projections will be, if there isn't -- If one sector is not achieving and the other sector is overachieving its quota, or its allocation, and so, if it can be couched as a scientific issue, then I think it should be included. If not, I agree that we aren't supposed to be doing management points. That's probably kind of confusing, but anyway.

DR. NESSLAGE: No, that makes sense. That makes sense. Thank you. I guess, Shanae, I would ask you a follow-up question then. When you did your projections, you said you used the Southeast Center's method that allowed you to -- So it's constrained by the allocations, correct, those projections?

MS. ALLEN: Yes, and the allocations are currently set to be the average of the last five years or -- sorry. They're the last three years, 2015 to 2017, but those allocations can be specified, and it can be rerun.

DR. NESSLAGE: So, should the council wish to consider alternative allocations, this might come back to us, if they ask you to do different projections, correct, and is that what you're implying, or suggesting?

MS. ALLEN: Yes, because the selectivity is different between the recreational fleet and the commercial fleet, and so the allocation does make a difference, or I would expect it to make a difference, and change the projection result.

DR. NESSLAGE: Thank you. Luis.

DR. BARBIERI: Thank you, Genny. Just to clarify a couple of the points that I made earlier regarding allocations, the allocation issue. One is that the committee may remember that we were,

for a while there, discussing how much the commercial closures might be impacting the fishery, and we were considering scaling the buffer, or making different choices, on projections going forward, based on whether we would be constraining the fishery too much, given the fact that it's not overfished and not undergoing overfishing, and it seems to have a pretty high level of biomass. It was really, basically, to make sure that we captured this in our reports, that explained that that issue was more related to the current allocation of the fishery and the fact that the commercial sector was bumping against its quota more often and having closures, and that's number one.

Number two is raise that awareness to the council, and so the council does receive recommendations from its Socioeconomic Panel and from, in the Gulf, the socioeconomic members of the SSC, and you may remember, Will, that we had the allocation revision process presented to the SSC several times before it was presented to the council, and so the idea is that allocations that are conducted by the council can, and often still are, be informed by some information and scientific evaluation, socioeconomic factors, among others, and, in that case, it's just to raise their awareness of this, so they could actually consult with their SEP in getting guidance on whether this was an issue worth pursuing.

I think the point that Scott made earlier about how the South Atlantic SEP met and discussed and made recommendations to the council were exactly on point of some of the issues that I had brought up, and so it's just to clarify that my recommendation wasn't to have us making any advice to the council related to changing allocation or weighing-in beyond the scientific components of allocation going forward. Thanks, Genny.

DR. NESSLAGE: Thank you, and I'm wondering if it would help if we moved that bullet down, and that's really more of an afterthought, or an FYI, to the council than it is related to the P*, or whatever fishing level recommendation we end up making, which I think was Will's concern, and we can maybe make a separate section on caveats or comments to the council. Andrew, please go ahead.

DR. ROPICKI: I had my hand up related to something, and I put it down. I don't have anything else.

DR. NESSLAGE: Okay. Thank you. Will, go for it.

DR. PATTERSON: Thanks for the clarification, Luis, and I don't think what you just said and what I said earlier contradict each other, but, in the end, if the language here is that the councils - - Regardless of where it appears in the document, if the language is that the council should consider conducting analyses to evaluate the potential for reallocation between sectors, to me, that still sounds like an endorsement from the SSC that we think that process is something they need to go down, or should go down, and so I just think it's a slippery slope.

There is a clear difference between having allocation, potential allocation, decisions come before the SSCs that the council initiates and says we're considering this reallocation scenario, these reallocation scenarios, and please comment what you feel the scientific implications would be for Scenario A, B, C, or D. That's entirely different than saying we think you should consider examining whether reallocation should occur in this fishery.

DR. ERRIGO: If I could jump in right here, and I can't raise my hand either, but, to what Will just said, the council -- Because an assessment occurred for yellowtail snapper, they necessarily have to consider allocations for yellowtail snapper, especially because of the change from the CHTS to FES MRIP numbers, and that amendment will come before the SSC again for you to comment on, and that might be a more appropriate place to make a recommendation such as this.

DR. PATTERSON: That seems like a good way forward.

DR. NESSLAGE: This discussion has been excellent, and I think we've raised several points that the council can take to heart as they move forward with the recommendations on fishing level -- Or our fishing level recommendations. Perhaps then -- Would anyone be very upset if we did remove the last bullet point? We have documented our concerns and caveats in the minutes, but perhaps this wouldn't rise to the level of a recommendation at this point. Jim, Harry, and Joe, is it to this point or another point? Jim.

DR. TOLAN: It is to this point, and my original question about the capacity wasn't meant to be a hand-grenade thrown in at the last second. The OFL numbers that were in that table that we were looking at for projections -- Those are the purview of the SSC, and, again, like Will said, we're not in the business of recommending allocations, and I brought up that issue of capacity completely out of the realm of allocation, because I just wanted to know, given this fishery, and the answers that I got back, in terms of the commercial closures and them meeting it perfectly answered that question, for me, in terms of the capacity, and so it wasn't meant to be a hand-grenade for the discussions here.

DR. NESSLAGE: Thank you. I appreciate that. Harry, is it to this point?

MR. BLANCHET: Actually, Mike made most of the point that I had raised my hand about, and it goes back to the allocations currently on the fishery are in CHTS currencies, and so, if that is already going to be captured, then, like Mike said, it's a moot point at this point.

DR. NESSLAGE: Thank you. Joe.

DR. POWERS: I just would mention that all the councils are tasked with a process to define when things are -- When reallocations are supposed to be addressed and what criteria are, and that committee -- There was a report to us, the SSC, and we agreed that it was a good process and that maybe SSC members might want to participate in it. The councils themselves are setting up schedules for how this would occur, and, for those reasons, I think we're really overstepping our bounds, in terms of the last bullet, and I would recommend that we actually remove the last bullet. Thank you.

DR. NESSLAGE: Thank you. Okay. I haven't heard anyone arguing for it, unless, Will or Scott -- Will, do you want to change your mind, or, Scott, is it to this point?

DR. CROSSON: Yes, it is to this point, and I don't see any harm in leaving it in there, and I think it's a good reminder to the council that there is input that we've given in the past, beyond just the automatic process that begins with stock assessments, and so this is in keeping with sort of the recommendations that we've done before to the council on policy issues, and so I don't think it's

problematic. I mean, if people object to it, then take it out, but I don't see the harm in leaving it in. What we really need to do is get over to these ABC recommendations, and that's my concern.

DR. NESSLAGE: Yes, and perhaps we can -- This is my quick suggested solution. Would folks be amendable to saying, if the council reconsiders allocations, the SSC recommends conducting analyses, similar to what -- Was what your report called, Scott? Would that -- I don't think suggesting that they conduct analyses, similar to what has been done in the past, is overstepping our bounds, is it? Scott, help me out here.

DR. CROSSON: I am not sure where you're heading, and I think it's fine the way it is, but, if there are people that are very uncomfortable with it -- Obviously, I guess this is something -- This report is really addressing the ABC issue, and the way the councils choose to deal with their respective quotas after this is something that maybe could be better addressed in a non-joint SSC meeting. Perhaps this is something that's better left to the individual SSCs, and I don't have a problem with that.

DR. NESSLAGE: That's a good point, and so would you be upset if we removed this then, too upset?

DR. CROSSON: No, and that's fine. At this point, that's fine, and it's going to happen anyway, because it's a new assessment.

DR. NESSLAGE: Exactly. Exactly. I think that was the early point. Will, is it to this point or a different point?

DR. PATTERSON: Actually, my hand was just left up from a previous one, and I pass.

DR. NESSLAGE: It's getting tired. Luis, is it to this point?

DR. BARBIERI: Yes, and, just to clarify, you wouldn't bother me by removing this bullet point either, but, just for you, when you present this to the council, as the SSC Chair, there might be questions from the council, and I think that was my point, to try and raise this issue, and there might be questions from the council on whether the SSC catch level recommendation was taking into account closures, repeated closures, on the commercial sector over several years, and they might have questions on whether we took this into account or not, and so then you can explain some of the reasoning behind those closures, that they may not have to do, really, with the biological capacity of the stock or the total ACL, but it's really a more sector-related type of issue, if that makes sense, Genny.

DR. NESSLAGE: It does, and I think we have had a thorough enough discussion, and I don't know, Joe -- Hopefully you agree that we can go back to our respective councils and explain the background on this.

DR. POWERS: Yes, and that's fine.

DR. NESSLAGE: Thank you, Luis. Jeff.

DR. BUCKEL: I'm okay with deleting it, and it looks like it's already been done, but just sort of remind -- When the presentation is being made, to remind the council, and maybe this is already on the radar, but, if reallocations are done, the projections have to be redone, but it will affect the projections, just to reiterate that point. Thanks.

DR. NESSLAGE: I think Joe and I can handle that adequately, and I have said it on the record, and so we promise that we will reflect your concerns and the comments that have been made. I would like to move back to the big question of what is our ABC recommendation, and there really have been two suggestions on the table. One is the traditional South Atlantic P* and the other is 75 percent of F 30 percent. We have heard arguments for both, and I would like to hear a lot more from South Atlantic folks and any other Gulf comments that there might be. Scott Crosson.

DR. CROSSON: I'm sorry. I didn't realize that I had my hand up. I will put it down.

DR. NESSLAGE: So far, there have been more comments in favor of 75 percent of F 30 percent, which would be a slightly more conservative buffer, given the uncertainties we have raised above, some of which are quite substantial, in particular the change in the assessment magnitude. However, that would be a deviation from the South Atlantic's traditional approach, and most of the breakdown in the allocation is to the South Atlantic, and so I would love to hear from those folks. Harry, please go ahead.

MR. BLANCHET: I am not quite ready to jump on the 75 percent of F 30, but I do think that that is an appropriate yield stream to provide to the council for their consideration, and I think that where I would come from is that this is what the assessment came out, and here's our uncertainties about it, and here is the P* estimate of the ABC, and here is an estimate of fishing at OY that could be considered, because a lot of times, when we go, we go to the council, and you've got the F 30 percent yield stream, but we don't have something that relates to some of the other yield streams, and, in this case, we do have those others that were provided by the assessment team, and I think that that is a -- I think it's providing both of those to the council, and it just gives them some better perspective, but I also agree that the thing that we have not yet provided is to Joe's point about what is something that looks like an equilibrium harvest going forward, rather than this decline after the initial peak.

DR. NESSLAGE: Thank you. Are the changes that Mike just made reflective of your comments, for at least the first part of your comment?

MR. BLANCHET: Yes.

DR. NESSLAGE: Great. So then I have a question, regarding the latter part of your comments, and maybe it's directed back at Joe, but is this a projection issue, or is this perhaps a phase-in issue, and then it would be the council's purview to suggest that and bring it back to the SSCs, and I don't know if you guys -- Do you have phase-ins?

DR. POWERS: Well, my concern is, if we specify individual years, what it amounts to is an overfishing limit for each individual year, and then the law says that you have to interpret each one of those years. If it goes over that limit, you get demerits for it, and so what we're saying, when you have those large declines, is you're implying that, scientifically, we know that the catches should be less that second year, and clearly we don't, and so that's some of the logic about

why you would end up smoothing, but, again, it's largely because, if we give individual years, the law will interpret those years as actual limits, and, if it goes over in one year and under another year, that wouldn't bother us, scientifically, but, from the law standpoint, they would have to address that, and that's some of the reasons for using averages and things like that.

DR. NESSLAGE: Thank you. Mike Errigo, correct me if I'm wrong, but we don't typically do that in the South Atlantic.

DR. ERRIGO: We do not, and the other thing is that, if we were to smooth, we would still have to take it year-by-year. If you went over in one year, you would still take penalties in that year, and, if you go under the next year, you would be fine, and so it's still processed the same way, but, no, we haven't ever smoothed here, and we could ask for constant yield projections, but those have their set of issues.

DR. NESSLAGE: Agreed. Thank you.

DR. POWERS: That's essentially what smoothing is, is making a constant yield projection.

DR. ERRIGO: Or you can suggest -- If the council wanted constant yield, they could set the ACLs at a constant yield below the ABC values.

DR. POWERS: Yes, certainly.

DR. NESSLAGE: I think that reflects an interest in maintaining more constant catch advice from year to year, and that's something that I would argue would need to come from the council, that that's a value that they would like with regard to how management is implemented, and they can come back and ask for that, if they would like it, but this is really more a traditional approach, unless folks are very strongly opposed to that. Doug Gregory, please.

MR. GREGORY: I am looking at the tables of retained yield with the two different levels, the P* and the 75 percent, and the 75 percent starts -- They converge pretty quickly over time, and so, at the end of five years, they're all pretty close, but, in the beginning, the 75 percent of F of 30 percent SPR is a 22 percent reduction from OFL, whereas the P* is a 6 percent reduction, and they both seem a little extreme on opposite ends, but the uncertainty I'm seeing, I'm hearing, and maybe I am misunderstanding this, but we have a population that is, for all intents and purposes, looks very healthy.

The uncertainty we're talking about are uncertainties that have made the assessment more conservative than they would have otherwise, and so are we double-penalizing our advice by being more conservative, because we've raised some issues with changes that were made that resulted in a more conservative assessment? I am just asking that, and I may totally misunderstand what the other uncertainties are, but I was thinking of the age matrix thing, with the discards, and that made the population estimates more conservative, but, yet, things look quite healthy for this population.

MS. ALLEN: Would it be okay if I interject for a moment?

DR. NESSLAGE: Please. Go ahead.

MS. ALLEN: I did put together another plot that shows also a comparison with SEDAR 3, and so that was the first SEDAR assessment done for yellowtail snapper, and to see how everything aligns, comparing it to SEDAR 64 and SEDAR 27A and the alternative model. It might add a little bit more to the conversation about changes in magnitude and what has happened, that SEDAR 27A seems to be the outlier, pretty much, out of those models.

DR. ERRIGO: I can transfer to the screen to you, so we can show everybody.

MS. ALLEN: Great. It's only one slide. The colors are different than last time, and so I apologize for that, and I just put this together quickly, and this is looking in terms of ratios, and so spawning stock biomass in relation to spawning stock biomass at F 30 percent SPR, and the reason why it can't be on absolute terms is because SEDAR 3 was done on male and female spawning stock biomass, and so the absolute values aren't comparable, but the SEDAR 3, which is shown in yellow, aligns fairly well with the SEDAR 27A alternative model, which is in green, and SEDAR 64, which is in orange, on the left. Then, similarly, on the right, is the average F, or F current, to the F at 30 percent SPR. I think that should just be fishing mortality rates in relation to F 30 percent SPR. Anyway, this was just to add to the conversation that the 27A magnitude may have been an outlier.

DR. NESSLAGE: You're losing me, Shanae, and so how does this address his question, exactly? Can you just rephrase?

MS. ALLEN: Because of the uncertainty in changes in spawning stock biomass, the magnitude and relation to the management benchmarks, how that has changed from the last assessment, and we're bringing up the weight-at-age matrices and how that brings everything down, but yet those are very uncertain as well, and I thought that adding the results from the first SEDAR kind of gives it more of a continuation of different models to choose from, I guess.

DR. NESSLAGE: In a way, his point that we're double-penalizing -- You're arguing that the weight of the evidence is that we probably -- The extra weight-at-age matrices is probably closer to the truth than the 27A, and, therefore, we shouldn't be as concerned about the sudden decline in spawning stock biomass, that this is a huge improvement, and is that the argument?

MS. ALLEN: Yes, and, of course, we will never know.

DR. NESSLAGE: Right.

MR. GREGORY: Thank you, Shanae. Obviously, Bob Mueller was your mentor. You don't leave a stone unturned, do you? Thank you.

DR. NESSLAGE: I don't know if there are hands raised, but, in the meantime, I would just still - I am going to take off my Chair hat and put on my stock assessment scientist hat for a moment, and I am still always concerned when there are changes of that magnitude in an assessment, and I am encouraged by the amount of discard information that you all seem to have gathered in the last few years, but discard weights are hard to get, and given the -- What you're saying the spatial variability is in growth in this animal and getting adequate sample size across all those different fleets, and I'm still very concerned about maybe we need to rephrase this, but uncertainty in discard

weights-at-age, because, if you suddenly got a ton more samples, you might get very different weights-at-age from those discards, and your magnitude is going to change again, and would that be correct, Shanae, possibly?

MS. ALLEN: Yes, but, again, and I may have incorrectly put too much focus between the discards and the landings, because what we also did was increased weights-at-age for the -- Sorry. We separated the weights-at-age for the landings for recreational and commercial, which that difference -- We did not parse out exactly what difference -- We didn't do the changes piece-wise, and so we did them all at one time, and so I can't say how much separating the landings from the discards made versus separating the recreational and commercial fleets made, and does that help?

DR. NESSLAGE: Yes. That helps a lot. That makes me feel a bit better. Thank you. Chris, please go ahead.

MR. SWANSON: That was just the point that I was going to address as well, was that it wasn't just the discards, like Shanae was saying, and, I mean, it's the weight-at-age matrices for the landings and the discards and for each of the different fleets, and they were all the same in ASAP 2, SEDAR 27, and, when ASAP was renewed to Version 3, and we were able to reconfigure those things, that's when you get more results that align with what our assessment, 64, is, and what the assessment was saying for the ICA assessment from SEDAR 3. This was just addressing that bullet point that is currently highlighted right now, and so the points have been made.

DR. NESSLAGE: Great. Thank you. I am looking at the clock, and we are scheduled to go until one o'clock, and I would like to take a five-minute break and come back. Hopefully everyone was prepared to have a late lunch, and then we really do need to focus on what our final decision is, and so please come back prepared to finalize our recommendation for our ABC, and we'll meet back at noon, please. Thank you.

(Whereupon, a recess was taken.)

DR. NESSLAGE: I am going to crack the whip and keep moving here.

DR. ERRIGO: Tell those South Atlantic folks that, if they don't start raising their hands, you're going to call on them.

DR. NESSLAGE: I just sent them a nasty-gram. We had this meeting for them, and I want to hear from South Atlantic people, especially those who have not already spoken, in particular with regard to which ABC recommendation we would like to make.

MR. GILL: Madam Chair, I can't raise my hand, but, when it's appropriate, I would like to make a comment.

DR. NESSLAGE: Absolutely. Please go ahead.

MR. GILL: Thank you. A few things. One, my recommendation is that we consider the years of 2021 to 2025, since 2020 has passed us, effectively, and we utilize, for whatever method we use, that set of years, and I choose that in preference to three years due to the current health of the stock. Secondly, I would recommend following Joe's suggestion that we include -- Even if we include a

yield stream, that we include a constant catch scenario, and that can be easily calculated, because the Science Center has confirmed, and the Gulf SSC uses it frequently, and it's merely the average of the sums over the years in question. Thirdly, to get to that number, I am in favor of the 75 percent F 30 percent SPR schedule. Thank you.

DR. COLLIER: Other SSC members have their hands raised, and I just lowered them all, because everybody was returning, and so please raise your hand again if you have a comment.

DR. NESSLAGE: Amy, go ahead.

DR. SCHUELLER: I will just go ahead and say that I'm fine with the consensus statement as it's currently written, and so recommend using the calculated P* value is fine, and recommend the council consider adjusting the ACL, and so that implies we're recommending the values based on the P*, correct?

DR. NESSLAGE: Yes, as it's currently stated.

DR. SCHUELLER: Okay.

DR. NESSLAGE: So, when folks are commenting on whether they are in favor of the P* approach or the 75 percent of F 30 percent, it would be really good if you could provide some justification for your concerns, in particular biological justification for your concerns, because, ultimately, Joe and I are going to have to justify this decision to the council, and so I don't know, Amy, if you can elaborate, and, anyone who comments afterwards, if you could please give me some idea of what you're thinking.

DR. SCHUELLER: Do you want me to elaborate on why I'm fine with the statement as posted?

DR. NESSLAGE: Yes, please, Amy.

DR. SCHUELLER: Well, I mean, I think that we're following the ABC control rule, and we're stepping through like we should. I think that the council needs to consider some of the uncertainties, and it's a tough situation, because I think the Gulf is used to seeing assessments with these narrower uncertainty bounds, and the South Atlantic is not, and we could argue all day about which way to go is the right way to go, but, in the end, to me, we're sort of following the guidelines that we've set out for ourselves, and we've stated what uncertainties we're concerned about, and we're making a recommendation that they consider something, and, beyond that, I guess I don't have very strong feelings one way or the other.

DR. NESSLAGE: Thank you. Dustin.

MR. ADDIS: I completely agree with what Amy just said, and I think she stated exactly how I feel about it.

DR. NESSLAGE: Thank you, Dustin. Anne.

MS. LANGE: I concur with the recommendation as written, and I agree with dropping the 2020 and going 2021 to 2025, and it's appropriate. I think using the P* is consistent with the South

Atlantic SSC's recommendations and our ABC control rule, and I also think that including -- For uncertainty levels, being able to recommend to the council that they could drop to the 75 percent F 30, which is a little more conservative.

DR. NESSLAGE: Great. Thank you. The folks who were in favor of 75 percent of F 30 percent, it would be helpful to note, if this wording, as in suggesting that the council use a more -- Add an additional buffer when setting the ACL, if this addresses your concerns about uncertainty in the assessment, and, if not, I would like to hear more about which uncertainties you are most concerned about. Wilson Laney.

DR. LANEY: Thank you, Madam Chairman. I was just going to say that I agree with all of the consensus statements of uncertainties as we have them written, and I think you know me well enough to know that I would certainly favor a more conservative approach to certainly address those uncertainties, but I am fine with the recommendation as written, and hopefully the council will take those uncertainties into consideration, and it really is a challenge with yellowtail, because of that weight-at-age issue, when you have -- It's sort of similar to weakfish on the east coast, where you have individuals at the same length that can be multiple ages, and it makes it a real challenge to try and come up with something, and so I'm good with it as it is. I think it's worded appropriately, and, while I personally would favor the more conservative level, I think the council will take those uncertainties that we have pointed out into effect.

DR. NESSLAGE: Thank you, Wilson.

MS. ALLEN: May I add a clarifying statement, quickly?

DR. NESSLAGE: Sure. Go ahead, Shanae.

MS. ALLEN: Just to be aware that SEDAR 64 was in Stock Synthesis, SS, which does not incorporate inputted weight-at-age matrices, as it is in ASAP, and so I just wanted to make sure that everyone was clear that weight-at-age matrices were not provided to the model that is our current base model. They are internally calculated though, of course.

DR. NESSLAGE: From the length-weight relationship or the weight-at-age relationship?

MS. ALLEN: From the length-weight.

DR. NESSLAGE: Okay, and so we need to be careful about what we're saying here in the second sub-bullet, is what you're saying, and so change in assessment magnitude given uncertainty in weight-at-age, and just say weight-at-age, and I think we clarified earlier that it wasn't just the discards, and so I am happy removing -- That was my concern, and, unless others disagree, I am happy removing the bit after the comma. Will Patterson.

DR. PATTERSON: I think we should just be specific when we know what the source of the uncertainty is, and so, in the case of the weight-at-age issue, don't we really just mean variance in weight-at-age? If we just say a blanket uncertainty, that means maybe we perhaps don't have information that we think is accurate, and, in this case, it's just imprecise.

DR. NESSLAGE: Excellent suggestion. Thank you. Wilson Laney.

DR. LANEY: Thank you, Madam Chairman. I think Will just answered my question, which I was going to ask Shanae, and, even though they didn't use the actual weight-at-age data, that is still a source of uncertainty in the model, and I think Will's modification of that statement captures that.

MS. ALLEN: Yes, I agree.

DR. NESSLAGE: Good. Thank you for catching that, Shanae. Given the uncertainties we have stated here, are they great enough that folks who were initially leaning, or proposing, the 75 percent of F 30 percent as the ABC very concerned about going with the P* approach instead and recommending the council set the ACL at 75 percent? Is this a decent compromise, or are there folks who are still adamantly in favor of using 75 percent of F 30 percent, given the uncertainties we've stated here, or any additional ones you would like to add to the list?

MR. GILL: I have difficulties with that, because what we're effectively saying is that we believe the science is -- Whatever the number is, two-and-a-half percent, and so, in four-million pounds, it's a 100,000-pound difference. We're that accurate and that precise, and we really have nailed it, and that's not true. I don't think anybody on this call believes that, but that -- By going and accepting the process that we have both adopted, in one form or the other, that is what we're telling everybody, and that simply is not so, and so I have difficulties with that.

DR. NESSLAGE: I don't disagree, and we have no idea about -- We are very uncertain about how uncertain we are, but the question is, is 75 percent adequate to really capture that as an ABC, or, if it's implemented as an ACL, does that address the uncertainty? Probably not, honestly, right?

MR. GILL: I would argue that it more adequately covers the scientific uncertainty, and the council then can account for their concerns about management uncertainty from that or set their ACL equal to the ABC.

DR. NESSLAGE: So you're in favor of 75 percent of F 30 percent for the ABC. All right.

MR. GILL: Yes, ma'am.

DR. NESSLAGE: Jim Tolan.

DR. TOLAN: To put a bow on this last bullet point, and Bob brings up a very good point, but I was just saying that, earlier on in the discussion, I think it was very eloquently stated that, in terms of the ABC control rule and getting to the P* value, and it is what it is, and so I think we have a pretty good foundation to go to the council and say, based on the rules that have been set forward to come up with these ABC numbers for these years, here is what it is, and based on the control rule, and so that's where I'm --

DR. NESSLAGE: I guess I would ask folks who aren't in favor of the P* ABC, what makes this stock so different from our other stocks in the amount of uncertainty that we are not capturing, because that's what we need to explain to the council if we deviate from our traditional decision tree. Anne Lange.

MS. LANGE: I was just wondering if we could go back to the P^* calculations and see if there is something in there that the group as a whole might suggest be changed in one of the tiers that would regenerate the P^* . If people are really concerned about the uncertainty, are we not accounting for it within our P^* calculations in a way that we should. Rather than trying to not use the P^* and go to another method, is the P^* properly calculated, based on our concerns? I'm not sure if that can be changed or not.

DR. NESSLAGE: Mike, can you bring up our normal decision tree that has the Dimension 2 options? This is what you're talking about, Anne, right?

MS. LANGE: Yes, or the summary that Mike had presented earlier, at the beginning of the document, but this will work.

DR. NESSLAGE: We need to alternate -- If we don't go with the --

MS. LANGE: Correct.

DR. NESSLAGE: Currently, we're using Tier 3 for Dimension 2, which takes off 5 percent, and we were at Tier 3, and so that would be medium, and so full uncertainty not carried forward in the projections, and that's because we felt -- At least the South Atlantic is typically used to seeing MCBs, and that's usually what we assign an assessment that doesn't use that. However, because the -- I think what Mike was arguing earlier is that, if we go to low or none, our definition is that the distributions of MSY and FMSY are lacking. They're there, but perhaps our justification would be not that they're lacking, but they are underestimated, and is that where you're going, Anne?

MS. LANGE: Again, the -- Yes, I think that it is. It's just that, if we are more concerned about uncertainties than the P^* -- Do we have justification to go to low, as opposed to the medium that we selected, based on discussions we've had? I don't know the answer, and I'm just suggesting that may be a way of continuing to use P^* , as we in the South Atlantic do, but I don't know if there are comments.

DR. NESSLAGE: Right, and so that's another suggestion on the table. Wilson Laney.

DR. LANEY: Thank you, Madam Chairman. I was just going to ask if, relative to the issue of the weight-at-age, even though those data are not being used in the model, is it a fair statement, and this is mostly a question just for my own edification here, but is it a fair statement to say that yellowtail snapper has more variability, in terms of age at a given length, then a lot of the other species with which we deal?

DR. ERRIGO: I have seen a lot of the length-at-age, or weight-at-age, distributions for a lot of our species, and some of them are really variable, and I can't imagine that yellowtail snapper is significantly more variable than any of our other species.

DR. LANEY: Okay. Thanks, Mike.

DR. NESSLAGE: Thank you, Wilson. Amy Schueller.

DR. SCHUELLER: I wanted to speak to what Anne said, I guess. My take on this is that, yes, we could fiddle with the P* value in some way, and change it, and that's fine. That's in our purview, but I don't think it's going to ultimately change the results a lot, because the distribution and uncertainty is narrow, and it's in the projections and within the uncertainty analysis within the model, and so somebody brought up discussing a different CV value to be used, and it seems to me that might be a bit more fruitful, but maybe not, and it's a fundamental construction of the way the uncertainty is dealt with in the assessment and the projections that we're really struggling with, in my opinion, and it's not just that we didn't pick the right P*. I don't think that's going to get to where people maybe want to go.

DR. NESSLAGE: Thank you, Amy. Will Patterson.

DR. PATTERSON: I was going to make a similar comment to Amy's, and, really, it's in the distribution and the CV that's coming out of the assessment that's driving this, and you could have a P* maybe in the 20th percentile before you saw an appreciable buffer between OFL and ABC, and so, to me, it seems like, if the unease is caused by the small percentage difference between OFL and ABC that comes from applying P*, how the South Atlantic control rule does, then it seems to me that there are only two potential ways to change that.

One would be to pull in a CV, like the Ralston meta-analysis, borrowed from elsewhere and impose that, and the second would be to broaden the PDF. The second would be to just use a different approach, like the 75 percent of F 30 percent SPR yield stream, as an alternative approach. In either case, you're really just imposing something different, because you're uneasy, the group is uneasy, with the current buffer that comes out of the control rule, but changing the P* really isn't going to -- That percentile is really not going to have much of an effect, I don't think, unless you change the distribution, and that's really what is driving it.

DR. NESSLAGE: Right. Thank you. That all makes sense, and so I guess the crux of the argument then is what makes yellowtail, uncertainty in the yellowtail assessment, so much more uncertain than all of our assessments that it would make us deviate from our decision tree, as we normally would. Yes, we're uncomfortable with the potential, and likely underestimation, of uncertainty, but this is our normal -- The amount that we normally accept with most of our other stocks, and so, as folks comment, I would like you to -- If you're arguing in favor of a larger buffer, then we need to know what makes yellowtail distinct. Jie, please go ahead.

DR. CAO: I just want to say that I pretty much agree with Amy, and I think it's more of an issue of how narrow that OFL distribution is. I think an alternative way that maybe we can look at the variation among assessments is see how big that variation is, and maybe we can use that as an alternative way to quantify the assessment uncertainty. I think there was a paper published in 2018 that was basically proposing a historical retrospective analysis to sort of look at the uncertainty of assessments.

DR. NESSLAGE: Thank you, Jie, and so there's a number of alternative options we can make, but, again, Joe and I are going to have to justify why we're deviating from the decision tree that we normally would apply, and, as Mike mentioned earlier, we have made these similar decisions with underestimates of uncertainty of similar magnitude in the past, and so there's a number of different ways we could go, if want to incorporate more uncertainty, but we need to justify it.

I am just playing devil's advocate here, because I know the council is going to pepper Joe and I with questions, and so there are several stocks that we have unit stock issues with and high spatial variability, and there's tons of other stocks with weight-at-age variability, and there's tons of uncertainty in projected recruitment, and what makes yellowtail different? I am asking that specifically to the folks who are in favor of 75 percent of F 30 percent. I would like to hear from them. Again, I'm not trying to be a strong-arm, but we do have to, one, be consistent and, two, justify our decision. I am happy with whatever we do, but we need to do those two things, very clearly. Anne Lange.

MS. LANGE: Back to my suggestion. Without looking at the results, and, again, people have said that the change would be minimal, but the point is that our P^* is set up to account for uncertainties. If we feel something is more uncertain, that tier, or not tier, but that option, the uncertainty vector, is where it's accounted for.

I wasn't looking, or concerned, about how much more poundage we were talking about, or how much less, but I was looking at the process that we have set up. If we consider something to be more uncertain, then we increase that tier to a higher tier, or a lower tier, and so, again, I wasn't looking at the bottom-line output. I was looking at how we account for uncertainty, and I still think that would be a better way of doing it than dropping to a different methodology, even if the outcome isn't a great number change, and that's how our P^* was set up to account for those things, for uncertainty.

DR. NESSLAGE: That's a good point, and I guess I would ask Mike -- If we're arguing that we're using the decision tree though, if it doesn't -- If the justification for picking that level doesn't match what the description is, are we -- Then we're just deviating from the decision tree anyway, right?

DR. ERRIGO: If you can justify your decision for changing that, like you said, that you feel that, even though there are distributions for MSY, you feel that they're not -- They're really not taking into account the true uncertainty, and, therefore, they're lacking in what they're meant to do, and, therefore, you feel that this tier is warranted, and so you can make that argument and then just change that, and then what you say is -- I would just change this to recommend using the recalculated P^* value of -- It would be 35 percent rather than 37.5 percent, and then the analysts would recalculate that and get that to us.

DR. NESSLAGE: Right. Okay. Thank you. Will Patterson.

DR. PATTERSON: I am curious how many times, or how frequently, the South Atlantic SSC has tried to work through their control rule with assessment output from SS models versus BAM or ASAP or some other approach, and I'm wondering if some of the heartburn here is really a function of the platform, because we've dealt with this same heartburn quite a bit in the Gulf, because so many assessments in the Gulf are done in SS, and it may be a recommendation that comes out of this to look closely within the region -- I know the assessment scientists have plenty on their plates, but try to figure out how the uncertainty -- How this precision estimate that's coming out of the assessments, how it's tracked in the two different platforms, and I'm really talking here about BAM versus SS, if that is really the source of the consternation here.

DR. NESSLAGE: That's a great point, and maybe that's part of our -- I think you're hitting on something, a way to get us out of this. In other words, we struggle -- We need to communicate to

the councils that we struggle with what we consider to be inadequate characterization of uncertainty coming out of SS models, and either the platform needs to be modified, changed, or we need to reconsider our ABC setting protocols to better incorporate that uncertainty, whether it's Ralston or it's another approach, MCBs that Beaufort runs, and so maybe it's not that we make an exception for yellowtail at this point, because this is very similar to what we just went through with several assessments in April that came out of the Miami Lab, and so I guess, at least to be consistent for now, but maybe the long -- What you're suggesting, what I'm hearing, is that the long-term recommendation is that we figure out a way out of this quagmire. Is that what you're saying, Will?

DR. PATTERSON: Yes, and I think it's a structural problem, potentially, or, I mean, that's my hunch, and I think one way to deal with that, because it's going to take more analysis, clearly, to do so, but it seems to me that perhaps is the root of the problem here.

DR. NESSLAGE: If folks are amenable, I would like to add another bullet after the P* bullet there to try and capture this, unless there is great disagreement with what Will and I are saying. Something along the lines of -- I am just going to brainstorm here, and we can wordsmith, but something along the lines of, however, the SSCs are concerned with recurring potential underestimation, or likely underestimation, of uncertainty from assessments conducted in certain platforms, especially SS, or particularly SS, as in the case of yellowtail. We recommend the -- I don't know who it would go to, and I guess the Center and FWRI, to consider -- For assessment teams in the region to consider -- You said it really well, Will. A comparison, or an evaluation, of the best -- What would we call it, the best practices for generating uncertainty for fishing level recommendations?

DR. PATTERSON: I would say an evaluation of how these predominant platforms are tracking uncertainty in the models and how that is expressed, both in the estimates of stock status benchmarks and then carried forward into the projections.

DR. NESSLAGE: Excellent. Thank you for that. I think that summarizes the underlying issue well. Does anyone have thoughts or comments on that? If we do, if Joe and I have that conversation with our respective councils, would that adequately address concerns with our P* recommendation, in that we're following our standard process, but we're uncomfortable with it, for these reasons, and we think something needs to be done long-term, because this has been a reoccurring problem, essentially is how it would be presented. Is this a reasonable compromise?

MS. ALLEN: May I add something, Madam Chair?

DR. NESSLAGE: Yes, please. Go ahead.

MS. ALLEN: Just from looking at the previous assessment, and so SEDAR 27A, which was an ASAP, and the CV on the OFL was almost identical, 0.1, and so it does seem to be a problem across platforms for yellowtail snapper, and I can't speak to other species, but I just wanted to add that.

DR. NESSLAGE: So they weren't doing anything extra, correct, like MCB or anything, and ASAP doesn't allow for that, and it's just the standard uncertainty point estimate.

MS. ALLEN: Uncertainty, whether it came out of the ASAP or whether it was produced by doing some MCMC, I am not entirely sure. All I can see is that the CV was 0.1 for the OFL, but I would have to look into it further to see exactly where that distribution came from, and I assume the modeling platform was ASAP, too.

DR. NESSLAGE: Right, but we've seen that, and the devil is in the details, right, of how you incorporate, or address, uncertainty, and I think Joe might have something to add to your comments, I'm guessing. Joe.

MR. O'HOP: The software we used for the P* calculations for 27A, they came out of the Beaufort Lab, and it was the Version 1 of their software, and so it's pretty dated by now, I'm sure, but, basically, it uses bootstrap datasets drawn from the SEDAR 27A ASAP run, and so the ASAP configuration bootstraps a number of samples out of that, and then it runs it through the probabilistic calculations set, or in that particular set of runs that Kyle and Mike Prager developed, and so they are fundamentally different than what is coming out of the SS 3 projections, and I don't know if that helps any, but that's my guess as to where some of the differences are lying.

DR. NESSLAGE: Thank you. Okay. I would like to hear from SSC members on both coasts. Have we worn you down yet? It's fair if there are, but are there major objections to the general consensus statements on the screen? I am not seeing any hands.

I promise you all that Joe and I will do our best to communicate to each of our councils the difficult conversations we've had regarding yellowtail. I think the assessment team has done a great job, and they have put up with all of our questions, and we thank you, and I think there's still a lot of angst about the level of uncertainty that's being incorporated in these fishing level recommendations, and I promise you that we will communicate that very clearly to the Gulf and South Atlantic Councils, and hopefully something good will come out of this, because, as Will pointed out, this is becoming a persistent problem, and it would be good if we could have more consistent methods for estimating uncertainty to inform fishing level recommendations going forward, so we don't have to bang our heads against the wall so hard, and we can make a much better, well-justified set of decisions. Unless there are any parting comments or questions, Julie, are you still on the horn here?

DR. NEER: I am.

DR. NESSLAGE: All right. Then we actually are going to manage to squeak in some discussion of mutton snapper, and so this is Agenda Item 4, Attachment 6, and we have TORs proposed and a schedule, and I think Julie is going to walk us through that. Do you want us to pull it up, Julie?

SEDAR 79 MUTTON SNAPPER ASSESSMENT TORs, SCHEDULE, AND APPOINTMENTS

DR. NEER: Yes. Mike, can you please pull up the email that I sent you this morning? It has updated TORs, and the analysts sent me something yesterday afternoon, and they wanted to sneak in a few more clarifications before we reviewed it this morning, which is now this afternoon. Perfect. The additional modifications are highlighted, and so you will see it as you scroll through it, and it was not emailed to the entire panel, I don't believe, but the modifications are minor.

As I was saying, these are the terms of reference for the next mutton snapper assessment, and this assessment is going to be run, again, by the State of Florida, and Shanae is currently scheduled to be the lead analyst for this assessment, and so you'll get to see her again, and this is being conducted under the guise of a benchmark assessment, and the reason it's called a benchmark versus a research track, just real quick, is because benchmark assessments do produce management advice at the end, as opposed to research tracks, which require that operational assessment after the fact, and the State of Florida simply doesn't have time to do a research track and then an operational, because they have enough state assessments that they need to be running as well, and so just so you know.

It does have the three stages, the data workshop, assessment process, and then a review workshop at the end. What you see here are the terms of reference for the data workshop portion, or the data portion, which is up on the screen right now, and there was only one modification, which I don't even think it shows up, but it was just the deletion of that little statement right there, and it was just funny wording, and we wanted to clarify the intent, and so I'm not going to read these, and you guys have had all of these, except for these couple minor changes, and so this is the data terms of reference.

We'll scroll down to the assessment, and there was one additional change under this as well, and they wanted to add an additional component right there that's highlighted in yellow, and it was under the projections, and they wanted to -- They wanted to give themselves more work, essentially, and they added a little more detail to that term of reference. Then, finally, the review workshop terms of reference are also included.

I guess we'll just open the floor for comments or questions or concerns that the group might have. It is, again, a joint assessment being run by Florida, and both regions will be included in the one assessment approach.

DR. NESSLAGE: Are there questions for Julie or comments on the TORs? Let's give folks a minute, because I think everyone was really intent on yellowtail, and they're probably frantically scanning the TORs now.

DR. NEER: I can tell you that these were modeled heavily off of yellowtail to begin with, and the analysts spent a good bit of time redefining and clarifying things in this version for mutton from lessons learned from what we just went through with yellowtail, with regard to the terms of reference.

DR. NESSLAGE: I do have a question. There are several socioeconomic TORs in here, and are those -- I guess how in-depth and quantitative are those typically addressed? How quantitatively are those typically addressed? Is this something that Shanae would be expected to produce, or would the whole SEDAR team be expected to address these, because I feel like this might be outside the realm of a stock assessment person, and I would be scared if I saw those.

DR. NEER: Yes, and the thought is that the SEDAR panel as a whole, the team, would be able to provide some insight on some of those, and this is a move that we're seeing to try and incorporate, more explicitly, socioeconomic concerns and have these things in there, and we do have socioeconomic representatives on the SSC, and hopefully some of them will volunteer to be part

of the assessment process, to help out in some of these things. Shanae is on, and so she can clearly make comments, or Chris, and Dustin reviewed these.

MS. ALLEN: Those points were mostly in the yellowtail snapper TORs as well, and, of course, we always added the “if practical”, and so to give some leeway as to we would like it to, at minimum, be a discussion that we have, preferably during the data workshop or something like that, to get others involved in that conversation, but it’s something to mention in the report, and, if it’s not practical to incorporate in the stock assessment, then that’s also okay.

DR. NESSLAGE: Great. Thank you. You’re anticipating -- Is this an SS model previously, or will it be?

DR. NEER: I think, last time, it was ASAP, maybe.

MS. ALLEN: Yes, I believe so, and, this time, we probably would do the same, I’m guessing, because we like to work ourselves to death, and we would do both SS and ASAP, but we’ll see.

DR. NESSLAGE: I see there are bullets for continuity runs, and that’s good. Any questions or concerns with the TORs? Please raise your hand now.

MS. ALLEN: As Julie mentioned before, yellowtail snapper has been a learning process, and so I actually just -- Something occurred to me today, just with the discussions we’ve had, and that is that, should allocation, fleet allocations, be talked about during say an assessment workshop, because they will change projections, and, for these TORs, compared to yellowtail, we tried to be as explicit as possible, so that we knew what to expect, and the projection methods and everything wouldn’t change as much as they did for yellowtail, simply because we were so new to the process, and we didn’t know what to expect at the time.

DR. NESSLAGE: Thank you. Chris, did you have something to add to that?

MR. SWANSON: No, not anymore, and I’ve been having technical difficulties all morning, and so, by the time that things get squared for me, the points have been made, and so I’m fine now. Thank you.

DR. NESSLAGE: Thank you.

DR. COLLIER: Joe O’Hop indicated that it was ASAP 3 that was used for the SEDAR 15 update for mutton snapper.

DR. NESSLAGE: Thank you, Joe, and so you’re anticipating that you will probably transition it to SS and do a similar model comparison, like you would with yellowtail, and is that what you’re anticipating, Shanae?

MS. ALLEN: I think we would leave that up to the assessment panel, but, again, we feel strongly in doing a model bridging, like that was done in yellowtail, where it’s pretty extensive, and so it would also have an ASAP base model, before it’s deemed to be the base model, but it would have a comparable run in ASAP, as well as SS, is what I’m hoping we’ll be able to accomplish.

DR. NESSLAGE: Great. Thank you. I am not seeing many concerns being raised here, or questions, or modifications, and these are very thorough TORs, and so -- Doug Gregory, please go ahead.

MR. GREGORY: Thank you. Shanae and Joe O'Hop, I see to remember, from the very first mutton assessment, some question about an abundance of species on the southeast coast of Florida, abundance of juvenile or undersized muttons, very small muttons, and I don't know if that ever got resolved, but, in the data workshop, I think that's worth taking a look at, if you're looking at indices of abundance, and is that a recruitment area for the south Florida mutton population? That's what it looked like in the very original assessment. That's all.

MR. O'HOP: Doug, what we have -- The choices we have made for the previous mutton snapper assessments have been to balance the southeast and the Florida Keys information and combine them into a single commercial or recreational or headboat strata, and so we have -- I'm not sure we can localize it to a particular area in the assessment, but, for indices of abundance, those are done out of the reef visual survey, and that's mostly in the Keys, and it's expanded a little bit into southeast Florida, and, for that, that's what we're typically banking on for our indices of abundance for at least the fishery-independent survey. I don't know if that helps any, but can you clarify a little bit more about what you're speaking of?

MR. GREGORY: Well, that was back in 2007 or 2008, and so -- I just remember there -- At the time, I was on the assessment panel and thinking that maybe those small fish were not mutton, and I don't know if it got resolved or not, and I'm just bringing it up as something to keep an eye out for.

MR. O'HOP: I don't know, and there's probably very few fish, very few snappers, that you might confuse with it, but small mahogany will have spots, and so it's possible, I suppose, but that's -- I am not sure that the people, divers, doing the visual survey would mistake the two, but you never know.

MR. GREGORY: Right. Okay. Thank you.

DR. NESSLAGE: Thank you. All right. I don't see any other SSC member hands raised. I would like to take -- If there's any public comment, I will take it now. Please raise your hand. Lisa Hollensead.

DR. HOLLENSEAD: Thank you. I'm actually sitting in for Ryan Rindone today, and so he had looked over the TORs, probably a little bit better than I had, and so, if I've missed anything, please feel free to clarify, but he had mentioned, when he looked over the TORs, and, Shanae, I assume this is the case, but I just wanted to double-check, but this assessment will incorporate the MRIP-FES data, correct?

MS. ALLEN: Yes, that's correct.

DR. HOLLENSEAD: Okay. I'm not sure if that's in the TORs, or if that's something that needs to be explicitly put in there, or if it's something that's just sort of generally agreed upon as assessments move forward, but he wanted me to note that. He also wanted me to note perhaps looking at CPUE during spawning and try to see what the effect of high historical CPUE during

spawning may have had on recruitment. Again, he's more knowledgeable about these past assessments than I am, but those were two things that he has asked me to bring up when reviewing the TORs, and so I wanted to do that now, and so thank you for the opportunity to do so.

DR. NESSLAGE: Thank you. I am just looking at the terms of reference, and I am not seeing --

DR. NEER: Genny, I guess, with regard to the first question, with regard to FES versus any other potential datasets that might be reviewed, it's a benchmark, and so everything is up for review, and the data team will recommend what they think is the most appropriate data series to be used, and so we don't normally list a specific -- We don't normally dictate what is going to be decided, and we let the panel make that decision, is what I'm trying to say, with regard to what data stream will be used.

DR. NESSLAGE: Got you, but expect potential -- As we said in our meeting last week, expect potential road-bumps along the way.

DR. NEER: Everything will need to be -- It is a benchmark, and so everything is up for consideration and discussion by the panels.

DR. NESSLAGE: Hopefully -- I don't know that we need to be as specific in the TORs, but hopefully, Shanae, you're taking notes on the second comment about CPUE effects during spawning on recruitment as something to look out for, and hopefully -- I assume that Gulf staff will be involved in the SEDAR process, and so that can come up during the workshop process as well. Once you have the model and the datasets in hand, you can explore that in a little bit more detail, and is that adequate, or does anyone feel that we need to change the wording?

MR. ALLEN: Just to confirm that, yes, I made notes under the CPUE indices discussions that we'll be having at the data workshop to explicitly take a look at that.

DR. NESSLAGE: Thank you very much. Great. Is there any other public comment? Seeing no hands raised, I had been told that we were going to wait to appoint members. Are we --

DR. NEER: Yes.

DR. NESSLAGE: So we will table that. Do you need to review the schedule or anything else on this?

DR. NEER: We don't have to. You guys can take a look at it, and Mike has a copy of it, if he wants to put it up there, but just, in general, timing-wise, data scoping will be the beginning of August of 2021, and the data workshop is going to be in February of 2022, hence why we're not asking for volunteers just yet, and assessments will happen spring or summer of 2022, and the review workshop is January of 2023, and so we're going to be asking for volunteers from the independent SSCs, and I think we're going to come to the Gulf at the January SSC meeting and the South Atlantic at the April SSC meeting, when we're a tad closer to this getting kicked off.

DR. NESSLAGE: Great.

DR. NEER: But people can start thinking about if they would like to volunteer and be ready to let us know.

DR. NESSLAGE: Excellent. Doug Gregory.

MR. GREGORY: Thank you. For Joe O'Hop, I think what stuck in my mind was the data workshop report of indices in the estuaries of Florida. It's called Data Workshop 05 in the original assessment, and it showed a large peak in abundance in 2005. That's what stuck in my mind. My other question for Julie is why is this assessment taking two years?

DR. NEER: It's really not. It's taking about a year-and-a-half, roughly, from when we actually start. Data is starting the first week of February, and the review workshop is then January of the following year, and so assessment proper, kick-off to kick-off, but we do have -- We're trying to frontload and allow the data scoping to happen a little bit earlier, so people can start working on their data a little sooner in the process, but, from data workshop to review workshop, it's actually one year, and there is a good portion of time that's put between data scoping in August, and the first data webinar is in October, but it's also when we could reliably get all the data components that we need, and you do lose a good bit of time around the last couple of -- Basically November and December, and we don't get all of those weeks, because of holidays.

MR. GREGORY: Thank you.

DR. NEER: We also have to avoid all the -- The other issue with this particular assessment is it is a joint assessment, and so we have to avoid two council's council meetings, two council's SSC meetings, federal holidays, all of that stuff, and so it's complicated to schedule when we have to work around two cooperators, plus Florida's availability. That's why.

DR. NESSLAGE: Thank you. If there are no other questions or concerns being raised by the SSC -- If not, we will consider the TORs approved as written. Last chance to raise your hand. No hands raised, and let's consider those TORs approved. We did get to it, Julie, to your surprise. I would like to open up the floor for public comment on anything else from this meeting. If you have something to say, please raise your hand. Seeing no hands raised, we'll move on to Other Business. Is there any other business to come before the joint Gulf and South Atlantic SSCs? No hands raised.

As our tradition in the South Atlantic, we usually review our consensus statements, acknowledging that there will be some wordsmithing to make these complete sentences, but not change the content, and, staff, correct me if I'm wrong in my understanding of the plan, but I will take a crack at turning this into a proper report, and I would propose sending it to Joe first, making sure he's comfortable with it. If you could just show those, that will be great. Again, we'll flesh this out into complete sentences, but the content would stay the same, for those that aren't already complete sentences, and then we'll send that out to all of your for last final edits. I believe that our briefing book deadline is November 13, and so this will have to be pretty fast.

CONSENSUS STATEMENTS AND RECOMMENDATIONS REVIEW

DR. ERRIGO: Yes.

DR. NESSLAGE: And I don't know if the Gulf --It's not sooner, right? Ours is the sooner of the two, I believe?

DR. ERRIGO: I do not know, but I think the Gulf had a meeting last week, or this week.

DR. HOLLENSHAD: Yes, that's correct. The South Atlantic will be before the Gulf.

DR. NESSLAGE: Okay. Great. So this will be a quick turnaround. Scott Crosson.

DR. CROSSON: When will see the actual numbers for the ABC projections? I would like to see those, as always. I would like to see those in the report before we sign-off.

DR. NESSLAGE: Would we take the table from the slide and put it in the report? Is that what you are --

DR. ERRIGO: I think what he means is we asked for the projections to be done from 2021 to 2025, rather than 2020 to 2024.

DR. NESSLAGE: That's right.

DR. ERRIGO: So they will be slightly different.

DR. NESSLAGE: Thank you for reminding me. Shanae, can you comment on that, because this is going to be a tight turnaround here.

MS. ALLEN: Is the suggestion to add 2020 landings and to re-run, starting in 2021?

DR. ERRIGO: Yes, if we have the -- Well, will we even have -- It's to add 2020 to the interim years and start the projections in 2021.

MS. ALLEN: That would only be possible if we had -- We would have to assume some landings data, retained landings data, for each fleet, and so that would be possible, but we don't have those data on-hand.

DR. NESSLAGE: Good point.

DR. ERRIGO: The recreational data are probably not coming anytime soon, and so we may just stick with the projections that we have and just go out to 2025.

DR. NESSLAGE: So clip it at 2025 and don't show anything beyond there.

DR. ERRIGO: Yes.

DR. NESSLAGE: It was there, as you mentioned earlier, for a specific reason, but, regarding ABC recommendations, we wouldn't go beyond that, correct?

DR. ERRIGO: Right, and so I think that the projections you have now are going to be the projections, because 2020 is a weird year. We don't have any recreational landings, or any way

to figure out what the recreational landings are for this year yet, and we could probably do commercial, but that's only going to give us half the picture.

DR. NESSLAGE: So the numbers are what they are, but we just will only show them through 2025. Chip.

DR. COLLIER: Sometimes in the South Atlantic, when we have requested these kinds of years, these different years, where we have interim years without landings, they will do an average landings from a couple of years before, and it's either two or three years before that they use to fill in the projections.

DR. NESSLAGE: Is that really getting us anywhere closer to what the original suggestion was though, or am I misunderstanding what you're saying?

DR. COLLIER: If you wanted to continue on with the 2021 through 2025 as the ABC in the projection, then you would have to fill in that 2020, and that could be done with the average from 2018, or 2017 to 2019, years when you do have complete landings.

DR. NESSLAGE: Julie.

DR. NEER: I'm sorry, and I didn't mean to put my hand up, but, since I'm unmuted, I would agree that, if you wanted to do average years, you would have to try and do something like 2017 to 2019, or, like you said, you could just use what you have now and just recommend 2021 through 2025, because nobody knows what's happening in 2020, and the year is almost over.

DR. NESSLAGE: Yes. Would anyone be upset with just simply presenting the numbers, the ABC recommendations, that we've been shown in the tables that Shanae has provided through 2025, without rerunning anything, without rerunning the projections with some estimate of what recent harvest has been?

MR. GILL: Madam Chair?

DR. NESSLAGE: Yes, please, and you were the one who suggested this, I believe, right?

MR. GILL: Yes, ma'am, and so I think that's one way to go about it. We just should recognize that the 2020 yield stream is presumed taken from the stock, and, therefore, the follow-ons assume that, and, given the recent catch histories, that's probably not the case, but, as long as we recognize that, I think that's one way to go about it, and I think it would probably be better just to do the average of the previous two or three years, as Chip suggested, which is commonly done as well, but it's not a big deal, from my perspective, either way.

DR. NESSLAGE: The concern though, just to make sure I'm understanding, is 2020 is going to be an odd year, and likely lower, correct, and so would the average of the last two or three years be actually representative of that concern, or is it a different concern that I am not understanding?

MR. GILL: No, and that's correct. Aside from the fact that 2020 is weird, that's the highest point of the spike. Well, the recent history suggests that that's not going to be attained, and so that

modifies the follow-on years, and so I think it's probably slightly better, although probably not significantly, to use the average of the previous couple of years, but I am comfortable either way.

DR. NESSLAGE: I see your point, and that might be more appropriate. Scott Crosson, what do you think?

DR. CROSSON: I am comfortable with using the average of the previous couple of years, but I don't have a strong opinion on this. I just wanted to make sure that it was clear, because it didn't feel like it was clear from the discussion, and that's all, and I'm just making sure that we address this, because I wanted to see those numbers.

DR. NESSLAGE: Absolutely, and that's why we're reviewing this. Thank you for catching it. I really appreciate it. The more I was talking, the more I'm thinking you're right, that we probably do want to use the average of the last -- I would assume let's say three years, and does anyone -- That's kind of what we had discussed, but not been terribly explicit, and so not all of us were following, myself included, and so does anyone object to that.

It would require Shanae rerunning things, but -- I think Mike is showing us here what we're talking about, and that spike is 2020. Right there. Thank you. That's probably not actually going to be achieved, and that's the concern, and so, if we average over the last let's say three years, it would bring that spike down a little bit to something more realistic. If we do that, Shanae, realistically, how quickly could you get those numbers back to us to include in our report that we could review?

MS. ALLEN: The projections take about close to a day, and they take -- Well, that's to do all the processing, and so I guess you would only be looking for that table, and you wouldn't want me to put together the figures and everything, which, again, could be done, and it's just little tweaks here and there, but it adds up, and so I would say -- I mean, would a week be too long, or do you need these sooner? It could be done in a couple of days, if needed.

DR. NESSLAGE: If our briefing book deadline is the 13th, a week would give us only four business days to review it, which makes me a little nervous, given there is two SSCs, and so is it possible to get it to us a little quicker? If it can't be done, it can't be done, but I just want to be realistic, and I don't want to be holding my breath on this.

MS. ALLEN: Also, something else you -- Again, I have no problems doing this, but just what to expect is that that peak is going to be shifted one year, to 2021, most likely, but where exactly that peak hits, and it should be very close to where it is now, but it could definitely change. Realistically, I could have it by Wednesday.

DR. NESSLAGE: Thank you for thinking of that, and, yes, just to answer your earlier question, at this moment, I'm just looking for the tables, and we would need all the figures later, for the presentation in December, but does that actually allay the actual underlying concern then, if we're actually shifting that peak to 2021? That may actually be backfiring on you, on the --

DR. ERRIGO: That actually makes sense that that would happen, because the -- You are fishing down from where the SSB is way above SSB MSY, and so the yield has to go up, in order to fish down.

DR. NESSLAGE: Okay. So it just moves it a year, because you're not taking it in 2020. Okay. I am following. Chris.

MR. SWANSON: That was my point about the spike. One of the other things that I wanted to ask, just with this conversation, and I don't know if it's my place as an analyst to ask, and so I will preface it and apologize in advance, but there's been so much discussion today about the uncertainty surrounding some of these results, but then we're talking about manufacturing data for 2020, which adds another layer of uncertainty to it, and so I just -- I was wondering about the consistency of what all has been done, or talked about and so, again, that was just my thought, but I don't know if it's my place, and so I will apologize.

DR. NESSLAGE: You're raising a good point, and I think the acknowledgment though is that we're pretty darn certain we know the direction of the bias, in this case, and so I think folks are trying to adjust for that. Joe O'Hop.

MR. O'HOP: About manufacturing data for 2020, we'll have reasonable guesses through September for the commercial data, but, for the recreational data, I don't think MRIP is really releasing those data, and so we would have to use some sort of average.

DR. NESSLAGE: We're proposing average, I think, of the last three years, is what we're proposing.

MR. O'HOP: Okay.

DR. NESSLAGE: That was off the table, and we don't have the time to wait for that.

MR. O'HOP: Then it still just shifts the peak over a year, and so it really doesn't get to your major concerns.

DR. NESSLAGE: But I can see the council really glomming onto -- There has already been a lot of discussion about 2020 and low catches in 2020, and anything we can do to address that, even if, realistically, we recognize it's just shifting it a year, and I think it might go a long way, but I could be wrong, and I would like to hear from the SSCs. Thank you though, Joe. Does anyone object to asking Shanae to rerun the projections using the average of the last three years? Could you pull up the wording again, Mike, please? While you're at it, take a look at the rest of the bullets, and this is your last chance to raise any concerns about the consensus statements.

MS. ALLEN: If I may add something quickly, Madam Chair, that the -- I don't believe the commercial sector has had a fishery closure this year, whereas they have had it in the previous three years, and, anyway, if there was a way, ideally, to have commercial landings for 2020, but then average just the recreational landings for 2017 to 2019, and that's just an idea.

DR. NESSLAGE: So you said there has not been a closure, and so it's preliminary landings, correct, for 2020 then?

MS. ALLEN: Yes, and it would be preliminary. Well, sorry. Again, the fishing year is from -- I always forget this, which is an important point, but the fishing year goes to August 1, and so the fishing year for both recreational and commercial have been completed for 2020.

DR. NESSLAGE: So we could use the actual commercial catch and the average of the last three years for recreational. That's what you're suggesting, and that would be a little bit more realistic.

MS. ALLEN: However, and I apologize, because I don't think things through enough before I say them, the model uses -- It's on an annual basis, and so I'm sorry. That idea will not work, and it would have to be preliminary calendar year landings for commercial.

DR. NESSLAGE: Okay. So we're back to -- I think we need to be explicit in here, Mike, if you don't mind, and, somewhere, we need to say -- This is what Scott was suggesting, but we recommend, or ask, that projections be rerun using average commercial and recreational catch from the last three years, or based on projections. Let's not say "ask for", but let's say projections used to set ABC will be based on, or we recommend projections use -- Change that to -- Help me out here. I am getting light-headed. I haven't had lunch.

DR. COLLIER: Instead of the last three years, can you just do 2017 to 2019?

DR. NESSLAGE: Be explicit? That's good. SSC, any objections to that recommendation, or that clarification of the recommendation that we thought we made?

MS. LANGE: It looks good to me.

DR. NESSLAGE: Thank you, Anne. No hands raised. All right. Sorry, Shanae, and I apologize to ask you to do more work, and I recognize this may not be the big change that you were -- Be a big enough change, in some people's minds, but I think this -- We appreciate your efforts, we really do, and, yes, the sooner you can get that to us, that would be fabulous, and I will incorporate that into the report, the table that is.

MS. ALLEN: I should have that by Wednesday.

DR. NESSLAGE: Fabulous. Thank you so much. I really do appreciate that. We all appreciate that. Okay. Are there any other concerns or questions or comments regarding the consensus statements? Last chance to voice your concerns. If not, you will see those revised estimates from Shanae in the draft report, which I will circulate at the end of next week, once Joe has had a chance to look at it, and we would appreciate your feedback, and I also appreciate you staying a bit over today to hash out this entire agenda and to hash out a very difficult discussion.

Thank you to the modeling team, and thank you to staff on both coasts, and thank you to both SSCs. I really appreciate all of your input and your time today, and, if there's no objection, I am going to suggest that we adjourn, and thank you, all, for your attendance.

(Whereupon, the meeting adjourned on October 30, 2020.)

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Transcribed By
Amanda Thomas
December 18, 2020

South Atlantic SSC

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Froeschke	John
Gill	Bob
Gregory	Doug
Grimes	Churchill
H	Lisa
Helies	Frank
Howington	Kathleen
Iberle	Allie
Isaacs	Jack
Jepson	Michael
Johnson	Alison
Laney	Wilson
Lange	Anne
Levy	Mara
Li	Yan
Long	Stephen

Lorenzen	Kai
Matos	Jessica
Mehta	Nikhil
Mendez	Natasha
Muller	Robert
Munyandorero	Joseph
Nance	Jim
Neer	Julie
Nesslage	00 Genny
O'Hop	Joe
Patterson	Will
Poland	00Stephen
Powers	Joseph
Pulver	Jeff
Ralston	Kellie
Rhodes	01Cameron
Ropicki	Andrew
SR	Christopher Conklin
Scharf	Fred
Schiaffo	Charlotte
Schmidtke	01Michael
Schueller	Amy
Sedberry	George
Simmons	Carrie
Swanson	Chris
Tolan	Jim
Travis	Michael
Vara	Mary
Wiegand	01Christina
crosson	scott
hood	peter
matens	camp
roberts	kenneth