

# **SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL**

## **MACKEREL COBIA COMMITTEE**

**Town and Country Inn  
Charleston, S.C.**

**September 15, 2022**

### **Transcript**

#### **Council Members**

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Mel Bell  
Gary Borland  
Tim Griner  
Kerry Marhefka  
Trish Murphey  
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#### **Attendees and Other Participants**

Rick DeVictor  
Frank Helies  
Dr. Jack McGovern  
Dr. Clay Porch  
Meg Withers

Dale Diaz  
Jamal Ingram  
LT Pat O'Shaughnessy  
Monica Smit-Brunello

Additional attendees and other participants are attached.

The Mackerel Cobia Committee of the South Atlantic Fishery Management Council convened at the Town and Country Inn, Charleston, South Carolina, on Thursday, September 15, 2022, and was called to order by Chairman Spud Woodward.

MR. WOODWARD: I am going to call the meeting of the Mackerel Cobia Committee to order. I'm sorry for that delay, and we had some technical issues there, and hopefully they're resolved. Our first item of business is Approval of the Agenda, which you have. I do have one item that, assuming we have enough time to address it briefly under Other Business, and that would be the September 9 letter from the American Saltwater Guides Association requesting federal management of little tunny/false albacore, and so any other recommended changes or additions to the agenda? Seeing none, we'll consider that accepted. The next item of business is approval of the transcript from our last meeting. Any modifications or edits or corrections to that? Seeing none, we'll consider that accepted as well.

All right. Our first agenda item is related to joint management activities with the Gulf, specifically CMP Amendment 33, and I'm going to turn it over to Christina for -- Sorry, Rick. Rick has been up here waiting for -- He waits so desperately for his three minutes of fame, and here I am --

MR. DEVICTOR: One minutes.

MR. WOODWARD: I'm robbing him of it, and, I mean, that is terrible. How inconsiderate of me. I apologize. Go ahead, Rick.

MR. DEVICTOR: All right. Here we go, and so two amendments are in rulemaking right now, CMP Amendment 32 and Amendment 34. 32, as you recall, has to do with Gulf group cobia, and it's to respond to a SEDAR stock assessment and reduce the ABC, ACL, and ACT. The purpose of these measures are to end overfishing of Gulf group cobia. There is other actions in there, such as increasing the minimum size limit in the FLEC Zone, the Florida East Coast Zone.

This amendment was submitted by the Gulf and South Atlantic Council last year, at the end of last year, and so the comment period on the proposed rule ended on August 17, and the comment period on the notice of availability -- That ended a little while ago, on September 6, and so the next steps on this amendment is for the Secretary and the agency to approve, disapprove, or partially approve the amendment, and, if approved, we'll publish the rule, which will have an effective date, and so that is Gulf group cobia, Amendment 32.

You recall Amendment 34, and you just finished this up recently, and this was sent to National Marine Fisheries Service last month, and this has to do with Atlantic migratory group king mackerel and the stock assessment for that, responding to that, and that increases the ABC and ACL and the recreational annual catch target for king mackerel, and it would also change the recreational bag limit in federal waters off the east coast of Florida. We are just working on the proposed rule right now, and so you'll see a Fishery Bulletin from us that will announce that comment period. That's it.

MR. WOODWARD: All right. Thanks, Rick. Any questions for Rick? It is a small, but extraordinarily important part of this process, to actually see things get to the finish line, and so

never underestimate the importance of your participation, Rick. All right. With that, we'll move on to the next item. As I mentioned, this related to joint management with the Gulf, and I'm going to turn it over to Christina for some context, and then we're going to have Matt Freeman give us a briefing overview.

MS. WIEGAND: That's exactly right, and so CMP Amendment 33 looks at updates to Gulf king mackerel, based on the SEDAR 38 stock assessment, and, just as a friendly reminder, the reason we're looking at actions for Gulf king mackerel is because Coastal Migratory Pelagics is a joint plan between the Gulf Council and the South Atlantic Council, and so any plan amendments that deal with a host of things, including allocations, must be agreed upon by both councils, and so, with that, we've got Matt Freeman on the line, who is Gulf Council staff, and he is going to be walking you guys this amendment, and so, Matt, I believe you're unmuted on our end, and so you should be able to rock-and-roll.

DR. FREEMAN: Okay. Perfect. Thank you for inviting me to present today, and so the last time the South Atlantic Council saw this document was earlier this year, at its March meeting. I want to note that I left -- This will be the last time I leave it this way, but I left the title of Amendment 33 as "Gulf King Mackerel Catch Limits and Sector Allocations", just as a highlight, and so if we can go to the next slide.

If you recall, at the March meeting, one of the decisions I brought to the council was potentially moving catch limits out of CMP 33, and the South Atlantic Council did agree to that, and so the Gulf Council moved forward in modifying the catch limits, the OFL, ABC, and ACLs, in Framework Amendment 11, and that also shifted those catch limits from CHTS into FES, and the Gulf Council eventually took final action, at its June 2022 meeting, when that document was completely filled out. What's left in CMP 33 is addressing the sector allocations between commercial and recreational sectors. Currently, it's 68 percent recreational and 32 percent commercial, and that has been in effect since 1985.

The reason the council is looking at potentially modifying those allocations, and we'll see some examples in just a few slides, is that the commercial sector generally lands or exceeds its sector ACL, while the recreational sector does not land of its sector ACL, and so the alternatives that they are currently considering would shift the allocation from the recreational to the commercial sector. In addition, that's also accounting for adjustments that were taken into account in that Framework 11, where we are shifting from CHTS data into the FES data.

Something that the South Atlantic Council has not yet seen, and we brought this to the Gulf Council at its June meeting, is to, at this point, review the FMP objectives, and so the last time these were modified was way back in 1992, when the number of objectives were increased from seven to eight, and part of the reason for reviewing these FMP objectives is based off of one of the NMFS procedural directives which recommends, during an allocation review, that a council reassess FMP objectives if they are not current, clear, or measurable. As I mentioned, last modified in 1992, and so I would not necessarily call that current.

I have broken up the eight objectives into two slides, and these are the first four. I will give everyone a moment to look at them, and I won't read through each one, and then I will have two slides asking for some input from the South Atlantic Council, and so if we can move to the next slide, and, again, I will give everyone just a moment to look these over.

At the June council meeting for the Gulf, there was a motion to add an objective, and that was to achieve robust fishery reporting and data collection systems across all sectors for monitoring the coastal migratory pelagic fishery which minimizes scientific, management, and risk uncertainty, and that is language that is borrowed from one of the current Gulf Council Reef Fish Fishery Management Plan objectives, and that motion carried with no opposition.

To proceed forward with that, we would need a motion from the South Atlantic Council, if we were to add it, but, before we get to that, I did have sort of a follow-up to that that our council staff here discussed following that June meeting, and that was that, if we do proceed with adding the objective, would it necessarily make Objective 3 redundant, and, if so, should it be considered for Objective 3 to be removed, and I will be posing a similar question to the Gulf Council at its October meeting.

As a reminder, the current Objective 3 is to provide necessarily information for effective management and establish a mandatory reporting system for monitoring catch, and so I will pause there, to see if there is any discussion about how to proceed with the Gulf Council's motion, as well as if there is any potential conflict with the current Objective 3.

MR. WOODWARD: All right. Thanks, Matt, and so we've got presented to us a motion that has been approved unanimously by the Gulf Council to add this language as well as a question about our opinion as to whether that renders Objective 3 redundant, and so I would open it up for some feedback on that. Go ahead, Jessica.

MS. MCCAWLEY: Yes, I think it makes it redundant, and I'm fine with removing it.

MR. WOODWARD: All right. Mel.

MR. BELL: Yes, it does seem redundant, and so, if we're going to go with the new one, I would remove Objective 3.

MR. WOODWARD: All right, and so I guess I've got a question. Procedurally, we need a motion from the -- Miraculously, it just showed up. How about that? Wow. We have a draft motion here for the committee to consider, which would basically affirm what the Gulf has done, and so I would offer that for consideration, if someone would like to make that motion. Mel.

**MR. BELL: Mr. Chair, I move to add the following language to the joint CMP FMP objectives: To achieve robust fishery reporting and data collection systems across all sectors for monitoring the coastal migratory pelagic fishery which minimizes scientific, management, and risk uncertainty.**

MR. WOODWARD: All right. Do I have a second? Carolyn Belcher seconds. All right. Any discussion about the motion? **Any opposition to the motion? Seeing none, the motion carries unanimously.** All right. As far as making Number 3 redundant, if there's a feeling that that's the case, then I would entertain a motion from this committee to remove that. Jessica.

MS. MCCAWLEY: **So moved.**

MR. WOODWARD: All right. **Let's get that, and so basically remove current Objective 3 from the CMP FMP objectives.** All right. Do I have a second? Second from Mel. All right. Any discussion on that motion? **Any opposition to that motion? Seeing none, the motion carries.** All right. Matt, you can proceed.

DR. FREEMAN: Okay. Great. That was very painless, and so, moving forward, still looking at the FMP objectives, staff at the Gulf Council discussed, this summer, Objective 1, and so Objective 1 reads as follows: The primary objective of this FMP is to stabilize yield at the maximum sustainable yield (MSY), allow recovery of overfished populations, and maintain population levels sufficient to ensure adequate recruitment.

As I'm sure folks are familiar, Standard 1 from MSA reads as follows, which is: Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield (OY) from each fishery for the U.S. fishing industry. This is a suggestion from Gulf Council staff, that, in Objective 1, the language "maximum sustainable yield (MSY)", be changed to read as "optimum yield (OY)" in Objective 1, and we will also be presenting this to the Gulf Council at its October meeting, and so I will pause there for any discussion.

MR. WOODWARD: All right. Thanks, Matt. Any questions about that for Matt? Andy.

MR. STRELCHECK: I guess the suggestion would be, rather than to say "to stabilize yield at the optimum yield", can we just say "to optimize yield and allow for recovery", to just simplify it?

MR. WOODWARD: I mean, I guess there's multiple ways, probably, to say that, but we certainly -- If we could capture that somehow, maybe, so we could all see it. We'll give Christina a moment here to --

MS. WIEGAND: Is that what you were looking for, Andy?

MR. WOODWARD: Okay, and so we've got an alternative version here for consideration. Any discussion on that? Chester.

MR. BREWER: Not to over-wordsmith it, but maybe the language that would be closer to some of your other language that appears in MSA would be to achieve -- "FMP is to achieve optimum yield and to allow recovery of overfished populations", blah, blah, blah.

MR. WOODWARD: Okay, and so --

MR. BREWER: Do you see the word -- I mean, the word "optimum yield" is used --

MR. WOODWARD: All right. We have a slightly different version of this. Andy, are you cool with that? I got a thumbs-up. Does anybody else have any strong feelings about this? Dewey.

MR. HEMILRIGHT: I just wonder -- What's the difference between optimum yield and maximum sustainable yield? It seems like you're only going to be allowed to catch as much as you're allowed to catch, and so educate me, please.

MR. WOODWARD: Well, Monica has gone to the book, and so all right. There is a difference.

MR. BREWER: There is a difference.

MS. SMIT-BRUNELLO: It's interesting that the definitions in the Magnuson Act don't define, necessarily, maximum sustainable yield, but they define optimum yield and then pull in maximum sustainable yield within the definition of optimum yield, so that it's basically -- Let me read this, instead of me paraphrasing.

The term "optimum", with respect to yield, means the amount of fish which will: 1) provide greatest overall benefit to the nation, particularly with respect to food production and recreational opportunities and taking into account the protection of marine ecosystems; 2) is prescribed -- So optimum is prescribed on the basis of the maximum sustainable yield from the fishery, as reduced by any relevant economic, social, or ecological factor, and then they discuss what happens with an overfished fishery, and so your maximum sustainable yield is at a level that the optimum yield can be reduced from that MSY on the basis of relevant economic, social, or ecological factors, and then you've got National Standard 1 that talks to you about preventing overfishing while achieving, on a continuing basis, the optimum yield, and so I think you're really looking at your optimum yield in these FMPs.

MR. WOODWARD: All right. Go ahead, Dewey. A follow-up?

MR. HEMILRIGHT: Yes, and so it's basically -- In my opinion, it's a buffer, and so maximum sustainable yield is the top, and we're going to do a -- It's a buffer down there to the optimum, based on three or four different things, like economics and social need and all this other stuff, and so all right. Thank you.

MR. WOODWARD: All right. It's always good to sort of reorient ourselves to those things sometimes. Clay.

DR. PORCH: I just wanted to follow up. Optimum yield has its roots in things like maximum economic yield, with the idea being that, as Dewey said, you're -- If you leave more fish in the water, then your catch rate is going to be higher, and so your profits are higher, and so maximum economic yield is definitely very much a commercial fishing perspective, but there was also the perspective of leaving more fish in the water, from an ecological perspective, in the buffer sense that Dewey was referring to, but the idea is generally meaning you take less catch than would support the maximum sustainable yield, so that you have a higher biomass in the water.

MR. WOODWARD: All right. Trish.

MS. MURPHEY: Sorry to wordsmith more, but would it be good to achieve and maintain optimum yield, since National Standard 1 talks about continuing?

MR. WOODWARD: I don't think that hinders anything, or hurts, and it just -- I always kind of look at these things like stop signs. A stop sign stays stop, and it doesn't say stop in order to prevent something stupid from happening, but anyway. All right. We have a draft modification to Objective 1 before us. Any further recommendations for changing the language? Mel.

MR. BELL: I don't have a recommendation, but, just procedurally, we'll make the modifications here, and that will go back, and the Gulf will have to look at that, and hopefully agree with that, and so, I guess, at some point, if we touch on anything, Dale, that, I don't know, but just holler if you see anything that we're tinkering with that might go across a line or something.

MR. WOODWARD: We actually need a motion to move this forward, so that it's carried forward to the Gulf, and so I would welcome a motion, if someone is willing to make it. Mel.

**MR. BELL: I would move to amend the language of Objective 1 to read as follows: The primary objective of this FMP is to achieve and maintain optimum yield and to allow recovery of overfished populations and maintain population levels sufficient to ensure adequate recruitment.**

MR. WOODWARD: Okay. Do I have a second? Tom Roller seconds. Okay. Any further discussion on this motion? **Any objection to the motion?** All right. **Seeing none, Matt, I'll turn it back over to you.**

DR. FREEMAN: Okay. Great, and so, before we leave this, just simply to ask if the South Atlantic has any other modifications to the objectives.

MR. WOODWARD: All right. Does anybody feel strongly about any of the other objectives that need to be modified or deleted or otherwise changed? I don't see anybody's head nodding, and so it sounds like we're good with that, Matt.

DR. FREEMAN: Okay. Great. The purpose and need, these have been updated since the South Atlantic Council last saw the document, at its March meeting. These were updated after that split with the Gulf's Framework 11, and so, currently, the purpose of this document, the purpose of this amendment, is to revise the Gulf king mackerel allocation between the commercial and recreational sectors in order to address the differences in sector landings relative to sector ACL and to continue to achieve optimum yield from the Gulf king mackerel stock.

Then the need for this amendment is to increase social and economic benefits for the king mackerel component of the CMP fishery through sustainable harvest in accordance with provisions set forth in the Magnuson-Stevens Fishery Conservation and Management Act. I will pause there, just to see if there's any questions or if there is agreement with the current purpose and need.

MR. WOODWARD: All right. Any concerns about the purpose and need statements that Matt presented? Any interest in tweaking those? I see heads shaking no. Do we need a motion, or just a concurrence, with this, Matt?

DR. FREEMAN: A concurrence is fine.

MR. WOODWARD: Okay. It looks like we have that, and so move ahead.

DR. FREEMAN: All right, and so, as I mentioned earlier, you know, why the Gulf Council is considering this is given the relative sector landings compared to sector ACLs, and so, if you look at the second-to-last and third-to-last columns, where it has percent of sector ACL landed, you can see, particularly for the commercial sector, where they are getting very close, if not slightly

exceeding, their sector ACL, and then, by comparison, the recreational sector is not coming as close to their sector ACL, and so there is interest in shifting from the rec sector to the commercial sector.

The action and the alternatives here have not been modified since the South Atlantic last saw this document in March, and so Alternative 1 is our standard no action, where we would be maintaining the current sector allocation for Gulf king mackerel with 32 percent commercial and 68 percent recreational.

Alternatives 2 and 3 are using information from a simulation model from the Southeast Fisheries Science Center where they used FES recreational landings data in the SEDAR 38 model instead of the CHTS recreational landings data. In doing so, they were able to generate a hypothetical OFL and ABC, which represent what the catch limits from SEDAR 38 would have been had FES data been used at that time.

Moving forward, when we do that for Alternative 2, here we would modify the sector allocation by reallocating to the commercial sector 25 percent of the average difference between the total landings from the 2016-2017 through the 2019-2020 fishing years using FES data along with the total simulated ACL from that model from the Science Center, and so the resulting sector allocation for Gulf king mackerel would be 42 percent commercial and 58 percent recreational. I will say, before I go into Alternative 3, that I do have sort of a summary slide, because I know this is a lot of sector allocation numbers here.

If we can move forward to Alternative 3, here, we are reallocating still, but, instead of reallocating 25 percent of that average difference, we're looking at reallocating 50 percent of that average difference towards the commercial sector, and, as a result, the sector allocations for Gulf king mackerel would be 53 percent commercial and 47 percent recreational.

Here, at the top portion of the table, you see the total landings, and that's using MRIP-FES, and so we've got it for the commercial and recreational sector, as well as the total projected ACL from that simulation model from the Science Center, and we take the difference between the landings and the projected ACL across those four fishing years, and then we get an average of that difference across the four years.

In the bottom table, Alternative 1 is our no action, and we would retain the 68 percent recreational and 32 percent commercial. Alternative 2 would reallocate 25 percent of that top number, that average difference, that 4.1 million pounds, towards the commercial sector in determining the sector allocations, and so we get the 58 percent recreational and 42 percent commercial. Alternative 3 reallocates 50 percent of the average of the difference for those four years, resulting in a recreational allocation of 47 percent and commercial allocation of 53 percent.

If we move into the next slide, this was a request from one of the Gulf Council members, to see sort of a comparison of Alternatives 2 and 3 by the sectors, and so, in the top portion of this table, if we take the average recreational landings across those four years, 2016-2017 through 2019-2020, it's roughly 4.62 million pounds, and so, in comparison to the proposed Alternative 2 or Alternative 3, if the recreational sector were to maintain that level of landings, then, under Alternative 2, they would land 80.2 percent of their sector ACL. Under Alternative 3, they would land 97.6 percent.

The next two portions of this table look at the commercial sector, the middle portion being a projection under that simulated model from the Science Center, and so, in essence, it's saying, had the commercial sector not been constrained, a projection of what they might have landed, and that model predicted that it would have been 4.1 million pounds, roughly, and so, under Alternative 2, that would equate to 97.3 percent of the sector ACL, and, under Alternative 3, 78.2 percent.

The bottom portion of this table looks solely at the average commercial landings as they stand on the books, and, as we've seen, the commercial sector has been constrained in certain years, and so, based off of that, they have about 2.84 million pounds, and so, by comparison, with Alternative 2, the commercial sector would land 67.3 percent, and, under Alternative 3, 54.1 percent, and so, again, the bottom portion is recognizing that the commercial sector has been constrained, and that middle portion is a projection of, if the commercial sector had not been constrained, what potentially might they have landed, and, again, looking at those in comparison to the two proposed alternatives.

If we go to the next slide, this I believe I showed as well back in March, and so this does show a bag limit distribution from the 2015-2016 through 2019-2020 fishing years, and, again, the efforts, previously, had been made to expand the recreational sector's bag limit, to see if that would increase recreational landings, but we see that the bag limit is still highly focused towards one king mackerel per person.

Tentative next steps, council staff, here for the Gulf, is working on our Chapter 3 and Chapter 4, and we'll be bringing that to the Gulf Council at its next meeting, as a public hearing draft, and so, if it's approved for public hearings by the Gulf, at that time, the South Atlantic Council would be afforded the same opportunity at its meeting in December. If that goes according to those tentative next steps, public hearings would be held in January and February of next year, looking at a combination of in-person and virtual, as well as promoting the opportunity to comment via the Fish Rules app.

If we were to try to sort of predict beyond that, we would tentatively think that, at the earliest, at the Gulf Council's April meeting, they could see the document for final action, and then the South Atlantic Council would see it at its June meeting for final action, and so I believe the next slide is just asking for questions, and so I will stop there and see if there's any discussion or questions.

MR. WOODWARD: All right. Thanks, Matt. Are there questions for Matt? Laurilee.

MS. THOMPSON: Matt, that was really good. Thank you. When you say that the commercial fishing was constrained, what does constrained mean?

DR. FREEMAN: Okay. Great question. If we could move forward in the slides, and it's a little bit earlier on, and I've got a table where -- Perfect. If you see where the column that has some highlighted numbers -- You will see, quite often, that the commercial sector was butting up against its ACL or, at times, when the commercial sector was closed for harvest, some landings still -- The final numbers had not rolled in, and so, on occasion, the final numbers were slightly over the ACL. It appears that there was potentially -- A potential for the commercial sector to have landed beyond the ACL that was on the books at the time, and, if I need to elaborate more, please let me know.

MR. WOODWARD: All right. Gary.

MR. BORLAND: I have some concerns on the recreational percentage here. Coming out of COVID, obviously, we saw a huge increase in participation in fishing over the last couple of years, and the data is not showing that, and I understand the reallocation probably of a small percentage of it over to commercial, and, obviously, as they get pushed against their ACL, but Alternative 3, to me, is a little too robust, with what we see, and I think there's probably -- We probably need to view some data from the recent couple of years, with the increase in participation on the rec sector.

MR. WOODWARD: Okay. Again, I think, you know, we'll certainly get another chance to look at this, going forward. Any other questions? Tom Roller.

MR. ROLLER: Thank you, Spud. Just a general question, for discussion. I've had some discussions about this, and I was curious if anyone has talked about potential impacts to the larger commercial king mackerel market that a large reallocation like this could bring and how that might impact the value of our east coast Atlantic fish.

MR. WOODWARD: I guess I will bounce that back to you, Matt. Do you have anything you can do to inform to that question?

DR. FREEMAN: That's a great question. It's not something that I have heard conversation on at this point, and I will ask if -- Perhaps if any of the SERO economists are on, and I don't know if someone like Dave Records or Mike Travis is available, if they have any insight, but, at this point, I do not have any information, but, if nothing else, it's certainly something that I could look into before -- Or when we bring the document back to the South Atlantic Council for December.

MS. WIEGAND: If I might make a recommendation, and our advisory panel is going to be meeting on October 5 and 6, and, later in the agenda, we talk about agenda topics for them, and we could certainly bring up to them this sort of reallocation going on in the Gulf, to see if they have any concerns about how that might affect the market price of Atlantic fish.

MR. WOODWARD: All right. Thanks, Christina. Any other feedback for Matt? I think we've done everything we need to do that's actionable at this point. I certainly want to offer an opportunity, if there are any concerns or anything that needs some clarification. I am not seeing anything, and so are you good, Matt?

DR. FREEMAN: I'm good, and I appreciate it, and I will plan on bringing an updated version back to you all for the December meeting.

MR. WOODWARD: All right. Thanks, Matt, for that clear and concise presentation. We appreciate it.

DR. FREEMAN: Thank you.

MR. WOODWARD: All right. I am going to turn back to Mr. Chairman. I think, given the time, it's a good place to pause, and we'll address the rest of our agenda after lunch.

MR. BELL: Thank you, Spud. I appreciate that. Yes, this is a good spot, and recall the photograph. Everyone go to the lobby, and we'll recess for lunch, and we'll plan on coming back at 1:30, and we'll take a quick photo. Thank you.

(Whereupon, a recess was taken.)

MR. WOODWARD: All right. I hope that everybody had a highly-nutritious lunch, because you're going to need some energy for this next hour or two of our meeting, and so we have dispensed with our second agenda item, and so I'm going to turn it over to Christina for Number 3, the Spanish Mackerel Management Overview.

MS. WIEGAND: Thank you, and so the next thing we're going to get into is the recent SEDAR 78 Spanish mackerel stock assessment, but, before we get into the nitty-gritty of the assessment, what I wanted to do was go over some relatively recent things that have happened in the Spanish mackerel fishery sort of surrounding this stock assessment, because I know we've got some new faces at the table, and it's also been a while since a lot of this stuff came up, and so consider this just sort of a brief refresher on what's been happening in the Spanish mackerel fishery.

Really, issues started in this fishery around 2019, and there were a number of closures, first, during the 2017-2018 season. The Northern Zone -- If you will remember, for the commercial sector, there are two zones to this fishery, and the Northern Zone, which is the North Carolina/South Carolina line north through New York, and so to that New York/Connecticut/Rhode Island line, and then the Southern Zone is the North Carolina/South Carolina line south to the Miami-Dade/Monroe County border in Florida, and so the Florida Keys is the Gulf stock, and we're not talking about that here.

During 2017-2018, there was a closure in the Northern Zone, and the Southern Zone transferred 100,000 pounds of their quota to the Northern Zone, as is allowed within the fishery management plan. Then, again, in the subsequent 2018-2019 season, there was again a closure in the Northern Zone, and, this time, the Southern Zone did not transfer any poundage north, because they were also getting very close to their ACL, and, sort of, ever since, we've seen closures in the Northern Zone, as well as closures in the Southern Zone, due to those commercial areas meeting their regional quotas.

One of the things that the council did, back in 2019, was request input from their Mackerel Cobia AP on ways to sort of control effort or address this effort in the commercial Spanish mackerel, and the AP came back and suggested a number of different things, including a limited entry permit for Spanish mackerel. The commercial permit, which covers both the Gulf and the South Atlantic and Mid-Atlantic is currently an open access commercial permit. There was also a discussion of a gillnet endorsement with qualifying criteria for the Southern Zone, as well as working collaboratively with state management agencies. ASMFC, the commission, also manages Spanish mackerel at the state level.

Upon receiving that report, one of the things the council did was set a control date for the commercial Spanish mackerel fishery. They set that date of March 7, 2019, and that was the date the council first began to discuss limited access for the commercial Spanish mackerel fishery. Additionally, they started work on CMP Framework Amendment 9, which has been on hold for

quite some time, and this was based on sort of a whitepaper that the council prepared detailing issues in the Spanish mackerel fishery and current effort levels.

That framework amendment intended to sort of be an interim measure to address these closures in between that time and when we finally had a finished stock assessment, and so it looked at changing accountability measures for commercial Spanish mackerel and modifying commercial trip limits in the Southern Zone, to try to curb harvest and keep them from meeting their quota.

The Mackerel AP discussed this and again recommended some additional things. They noted that, commercially, Spanish mackerel is an incredibly important species, and that it's really crucial that they have access to the fishery when the fish are available and it's actually profitable to harvest Spanish mackerel. It was also noted that, for the recreational sector, having high abundance is really key, because it ensures that encounter rates remain high and that fish are available for a long period of time. It was noted that you can catch Spanish mackerel further inshore, and, oftentimes, that's allows for-hire guys to run multiple trips a day, and so it's very important to that fishery as well.

Then, finally, commercial members expressed a lot of frustration with the current allocation. Right now, it's 55 percent commercial and 45 percent recreational, and they felt frustrated that the commercial sector was regularly meeting their ACL, whereas the recreational sector had stayed well below their ACL for quite some time, and, again, they recommended consideration of limited entry.

Then the council stopped work on Framework Amendment 9, at their December 2019 council meeting, and this was for two reasons. One, it was determined that the decrease in trip limit that had been proposed for the Northern Zone ultimately was not going to have that substantial of an effect at curbing harvest. Second, the council got information from Bob Beal, Executive Director of the Commission, noting that their plan does not require states to close their waters to commercial harvest upon a federal closure, and so I know that North Carolina, as well as other states, do keep Spanish mackerel open at a reduced trip limit, even upon a federal closure.

Ultimately, the council decided to stop work on Framework Amendment 9, with the intent to sort of completely review management of Spanish mackerel entirely upon completion of the stock assessment, and then COVID happened, and so there were --

There was a recommendation from the Science Center to delay the Spanish mackerel assessment, but the council, at the SEDAR Steering Committee, really pushed hard to make Spanish mackerel a priority, and so the Center agreed to sort of begin discussions with the states to determine if they could help with processing age samples, and so the Spanish mackerel assessment sort of continued on roughly as planned, though it is sort of important to note that this assessment was originally scheduled to be a standard assessment, back in 2019, and that assessment then ended up being pushed, based on other council priorities at the time, and I believe it was the tilefish assessment that the council wanted to prioritize. Then, of course the assessment was then further delayed, due to government shutdowns in 2019 and then the MRIP data concerns that had been raised by the SSC that had to be addressed before the assessment could move forward.

In the interim, Atlantic Spanish mackerel closures in the Northern Zone and Southern Zone continued to occur for the commercial sector, and they began to occur sort of earlier and earlier in

the fishing season, and there has also been an issue with the trip limit step-down system with Spanish mackerel in the Southern Zone. They operate on an adjusted quota, and what that means is that their full quota has about 250,000 pounds removed from it, and that is the adjusted quota, and, upon 75 percent of that adjusted quota being reached, the trip limit is dropped. Once 100 percent of that adjusted quota is met, the trip limit is dropped again, and then, when the full quota is met, the sector is closed in the Southern Zone.

Because of data reporting issues, recently, there has been a need to close the fishery to commercial harvest immediately, skipping those step-downs, because landings have come in so rapidly, and so that system is not really functioning the way it was intended for fishermen, nor for the agency, and so the committee noted this concern, when they heard it, and, again, said that will be addressed after we've received the results of the stock assessment.

Now we're getting close to current times, and work on the SEDAR begins, and they have their data scoping webinars, and the first data review and assessment webinar was November of 2021. Again, commercial Atlantic Spanish mackerel closures are continuing, earlier and earlier in the year. Finally, the assessment was delayed slightly, due to the final data delivery timeline, but, ultimately, it was made available on May 13 of this year and then presented to the Scientific and Statistical Committee, and Dr. Jeff Buckel will go over their comments, later this afternoon, and then, of course, there has already been a closure of the commercial Atlantic Spanish mackerel fishery in the Northern Zone this year. They closed on June 21, 2022. The Southern Zone has not closed yet, but that fishery typically picks up in the fall and into the winter.

That is just sort of the brief overview. I wanted to give you sort of all the concerns that have been happening in the Spanish mackerel fishery and how those relate to the timing of this stock assessment, and, last, but not least, before you start diving into the assessment details, I did want to note that there were a number of comments submitted to you guys directly related to the assessment, and you can find those in the briefing book, under the comments folder, if you're interested, and so I will pause, if there are any questions. If not, then we can move into the actual assessment.

MR. WOODWARD: All right. Thanks, Christina. Before we take questions, I was going to call on Bob Beal, maybe just to kind of give us an Atlantic States Marine Fisheries Commission perspective on where interstate management is and where we're trying to go in synchronization with the federal process, and so, Bob.

MR. BEAL: Thank you, Mr. Chair. As Christina mentioned, the council put a number of things on hold, waiting for the assessment, and ASMFC essentially did the same thing. There were a number of inconsistencies between the federal plan and the interstate fishery management plan, and the goal was, once we got the new assessment, to work, kind of in parallel, between the council and commission and work through some of those inconsistencies and see -- Inconsistencies aren't necessarily bad, but at least talk through them and decided if they need to be changed at the commission level or not.

The biggest one, as Christina mentioned, is the fact that the state waters don't close when federal quotas are closed, and so North Carolina, Virginia, and Maryland all implement -- For the northern region anyway, they have all implemented a 500-pound trip limit, and so, once the federal waters close, they back down their fishery to 500-pound trip limits, but there is some analysis that says

that a 500-pound trip limit is not very restrictive. Most trips actually are below the 500-pound threshold anyway, and so I think that's a point of discussion, for sure, but, you know, there's a number of other areas that we probably can get closer together on.

The allowable gear in the interstate commission plan is different than the federal FMP, and the recreational season that the commission manages under is based on the calendar year, and the council's recreational season begins, I think, March 1 and goes twelve months after that, through the end of February, and the accountability measures on the recreational side are a little bit different as well, and so we're all kind of waiting on the assessment, and then we're going to work together, and, Spud, you and I have talked a couple of times about potentially even a joint meeting between ASMFC's Coastal Pelagic Board and this council, or this committee at least, and making sure that we're coordinated across state and federal waters and there's not -- You know, the goal is to develop one management program that crosses all these jurisdictions and boundaries and things.

You know, Spanish mackerel, obviously, is one of those stocks that is showing a lot of signs of either moving north, or expanding north, and I'm not sure which it is, but, you know, if you look at the catches in Maryland and Virginia in particular, those are -- The fact that those catches are going up is some of the reason that these closures are happening earlier and earlier every year, and so we need to kind of get a handle on that and figure out what the best way to address that is. I'm happy to answer any questions, but that's kind of a quick background on where we are at the commission.

MR. WOODWARD: Thank you, Bob, and so any questions for Christina or Bob about the overview? I know, for some of our new members -- I think it's important to understand that relationship between the commission and the council. The Mid has a few joint plans, and we don't have a lot of joint plans down here, and so sometimes that kind of gets lost, in terms of understanding what is supposed to be a healthy, symbiotic relationship between the two entities, or supposed to be being the operational word there. All right. If we don't have any questions, I'm going to call on Dr. Cass-Calay to give us a presentation on SEDAR 78.

DR. CASS-CALAY: Good afternoon, everyone, and I wanted to let you know, first, how happy I am to be here and to meet each one of you. It's been a very long time, I think, since I was at a South Atlantic Council meeting, and I believe the last time was when I presented SEDAR 16, king mackerel, in 2008 or 2009, and so it's been a while, but I'm very pleased to be here and to meet you all.

I will be discussing the SEDAR 78 stock assessment of Spanish mackerel. As you are well aware, the SSC did have a number of concerns about this assessment, which will be part of the SSC report to be presented, and so I will not be showing you the management recommendations that result from this assessment, because it has not yet been accepted for use in management, but I will show you some of the work that we did to address the terms of reference and give you an idea of kind of the next steps forward.

First of all, I would like to credit the team who actually conducted this stock assessment, and it was conducted by Rob Cheshire, with support from Matt Vincent, when they were both members of our Atlantic Fisheries Branch under Erik Williams. Thank you very much to both Rob and Matt. Rob has since moved on now, and is a member of our Fisheries Statistics Division.

As I said, this is an operational assessment that operated under a terms of reference, and so there were six items to be addressed during this stock assessment, and I do realize that this is too small, but it was not my intention for you to read this text, but just to understand that this an official document produced through the SEDAR process that describes our commitment to what must be done during a given stock assessment to address the questions that were raised by councils and by our SEDAR operators.

In the initial term of reference for this stock assessment, we were asked to update SEDAR 28 with data through 2020 and to apply any approved improvements to the BAM model, and this was done. We did use the most current BAM model configuration, and we did update the data through the terminal year of 2020. In general, the assessment model and structure and data sources were quite similar to those that had been used in SEDAR 28, but there were some important modifications, which can talk about in some detail.

There were some modifications to selectivity functions, and these were investigated through the use of likelihood profiles and model fits to the data. More importantly, or at least probably of more interest to many, is that we did conduct a single-sex model this time, rather than the sex-specific model that had been applied in SEDAR 28, the sex-specific growth. Also, we did change the initial start year of this model, and we will talk about that, too.

Just a reminder that the SEDAR 28 assessment was conducted in 2012 and produced a result that the stock was not overfished and was not undergoing overfishing. The SEDAR 78 operational assessment was updated through the year 2020, and the process that occurred is that we held a data scoping call and four assessment webinars with an assessment panel that reviewed and made decisions about data use and model structure, and so there was panel input and approval of all decisions, which is responsive to Term of Reference 5.

Term of Reference 2 contained a number of requests for us to address data within the stock assessment model and parameterization, and so the first aspect was to update the growth and the reproduction models if samples were available for fish below 275 millimeters. We made an effort to acquire these data. There were a large number of age-zero samples that were collected primarily from the SEAMAP coastal trawl survey, and these were incorporated into our growth estimates.

We applied the von Bertalanffy growth function and updated three different growth functions in the model, the population growth rate, which used all data, the growth rate for the fisheries, which applied to fisheries samples taken during a twelve-inch size limit period, and the female growth curve, which was a population growth curve of female fish, all updated during the SEDAR 78 process.

Now, when you update the growth functions, you also need to update the age-based natural mortality, because it is based on the Lorenzen curve, which considers the growth parameters, and these were also updated, the natural mortality function, but in a methodology that was consistent with SEDAR 28, and so that's what this looks like. Essentially, we applied the same methodology to develop these functions, and the differences you see here between SEDAR 78, in blue, and SEDAR 28, in green, is due to the re-estimation of the growth parameters.

Term of Reference 2 also contained three other requests, and one was to include any information on steepness for similar pelagic species to evaluate the uncertainty with respect to recreational

landings and to calculate different F metrics to address shifts in the age of apical F towards the end of the assessment time series, and there was work done to address each one of these terms of reference.

No new information on steepness was made available to us that could be used to update the steepness assumed in the stock assessment, but we did create likelihood profiles on steepness which had very similar results to SEDAR 28, and so we did retain the assumptions made in SEDAR 28. There was uncertainty in the recreational landings, of course, and that was detailed in a working paper, Working Paper 3, which did describe the available data and the uncertainty of the estimates for the recreational landings. We did have a significant discussion about the years 2020 and 2021, and I will be discussing that in more detail soon, during this presentation.

We did explore two different fishing mortality metrics. The spawning potential ratio conditional on annual F and the exploitation rates were both examined as additional F metrics, and all of these examinations are described in more detail in the stock assessment report.

Term of Reference 3 was to document any changes or corrections made to the mode and input datasets and provide updated input data tables. We were also asked specifically to provide commercial and recreational landing and discards in both numbers and pounds, and these discussions also take place in the stock assessment report, and, during this presentation, whenever I'm discussing a data input, the relevant table, or figure referenced, does appear at the upper-right of the slide.

Now I will just begin a brief overview of the data sources that were used in this stock assessment, and these are found on Table 2 of our PDF, page 91, and so the commercial landings did include a number of fleets, which are shown here, the commercial handline, pound nets, gillnets, and cast nets. Now, as you can see in this figure, there were certainly landings as early as 1950, and, in fact, the landings in 1950 are relatively significant, and that is gillnet landings, and so you can also see, in this figure, that the commercial landings since about 2000 have been somewhat lower than they were in the 1970s and 1980s.

Recreational and bycatch fleets are shown on this panel. Again, this is on page 91 of our assessment report, and so you can see here the discards from the recreational fleet, the general recreational fleet, as well as the landings data. Discards shown here are both alive and dead, and we're also showing you, in the orange line, the shrimp bycatch estimates, and these are considered -- They're assumed to be dead. Now, of course, this has caused a great deal of concern these last few years of the recreational landings and discards, and I will discuss that in more detail here shortly.

We chose, for this assessment model, a 1986 start year, which differs from the SEDAR 28 model, and that was explored during a number of evaluations in the stock assessment process. They did also look at models that began in, I believe, 1976, but the 1986 start year was chosen because the age structure was available to us, and it did not require an estimation of the initial F, which had been required for the models that started in 1950.

The model that began in the 1970s was considered, but it was rejected by the panelists, because they were concerned about these high early years of the recreational fleet and the effect that that would have on the assumption, but, in all cases, there were sensitivity runs done that indicated that

the start year of the model was not particularly sensitive to the stock status result or to the trajectories of spawning stock biomass and fishing mortality. What was more sensitive, of course, is these last few years of the recreational statistics.

We did some very early explorations of the 2020 and 2021 estimates, and I wanted to show you that, if you pull the data directly off the MRIP website for all fishing modes combined, you do still see the very high estimates in 2020 and 2021. If you look at the intercept data themselves, and this is effort shown from essentially Cape Canaveral, here at the bottom of the figure, all the way up through Cape Cod, and you do see substantial increases in effort in this intercept data late in the time series, in the recent years, off of Cape Canaveral, and also off of North Carolina.

Now, we've had some relatively extensive and recent discussions with Richard Cody, who is listening to this phone call and available, and there are some concerns about low sample sizes in 2020 and 2021, and, without getting into too many of the technical details, they do think there is a basis to attempt to re-estimate those values, and so, you know, if we can get a re-estimate of those values relatively quickly, that is a relatively easy change to make in the stock assessment model.

There were three indices of abundance used in the stock assessment, and they are described -- Well, you can read basically pages 134 through 136 and page 92, and we have a commercial handline in blue, commercial handline index, which shows kind of a slow, but increasing, relative abundance during the time series. We have the MRIP index, which does have one large estimate in 1986, but the others largely vary without trend, and we also have a young-of-the-year index for recruits, which is shown in the gray trend, and that one is quite variable, and, if anything, it shows a slight decrease.

There was considerable concern about the length and age composition data that was used in the stock assessment expressed by the SSC. The length composition data is noisy, and it was determined to be uninformative in both the SEDAR 28 and 78 assessments, and it is not used directly in the stock assessment model, although I believe it is used to do some of the re-weighting of the age composition data.

We did modify the minimum sample size required for the age composition data to be used in the fit of the model to match current best practices, and so we did essentially require a minimum sample size of thirty fish and ten trips, and, in both the commercial handline and the cast net fleet, the age compositions did not meet those minimum size requirements for most years, and so, because there were important selectivity differences between the gears, it was not appropriate to combine gears, and so what we did, for both the commercial handline and the cast net fleet, was to pool across years. We did use the annual sample sizes. They were included for the model fit. Now, this was a concern of the SSC, whether or not it was appropriate to pool the data, but it was done, because the sample sizes are quite small and did not meet the minimum sample size requirements.

Term of Reference 4 had to do with updating all model parameter estimates and describing variances on the certainty providing estimates of stock status and management benchmarks and the probability of overfishing. We have very detailed information about the key estimates and outputs in the stock assessment report. There were a variety of key uncertainties explored during this model, including the assessment start year, selectivity, the initial F, the natural mortality rate and steepness.

Ultimately, after all of these explorations, they did make the decisions to make some changes to the base run. Again, I will just reiterate that the model started in 1986, which is different than the SEDAR 28 assessment, and the MRIP index was truncated. The early years were not used. We did allow the stock assessment model to estimate the initial F. There was no new information in M, or steepness, and so we did not deviate from the fixed values used in the SEDAR 28 base run.

This is a schematic that shows the data sources that were available for this stock assessment and the years that they were available, and so I have already, really, described most of this information, but, essentially, there five fleets, commercial handline, gillnet, pound net, cast net, general rec, two sources of discard information, both the shrimp bycatch and the general rec. The abundance indices, again, are commercial handline, general recreational, and a young-of-the-year index. Age composition data was available from the gillnet, primarily, the pound net, and the general rec, and, as I mentioned, both of the commercial handline and shrimp -- Sorry. One moment. Commercial handline and the cast net, we had to create -- We had to pool those age composition across all years, and so that's why you see just the single dot.

All right, and, like other assessments produced in BAM, and so I'm sure you're very familiar with this, we did use a Monte Carlo bootstrap ensemble to estimate the model uncertainty, and this is a mixed approach which bootstraps the data, and so you bootstrap using a multinomial resampling of the age and length composition data and a multiplicative lognormal error on indices, landings, and discards. Then you also use a Monte Carlo draw on the primary model parameters that are known to be uncertain, and they included the natural mortality, the steepness, and the discard mortality.

When you look at all of those sources of uncertainty from the Monte Carlo bootstrap estimate, you know, you do get what we call a large banana of uncertainty estimates, and this green cross shows you the median of the stock status estimate, but the important tidbit here is that almost 87 percent of these bootstrap estimates show that the stock is not overfished and not experiencing overfishing, and so it is very likely in healthy status.

We did three projection scenarios that are provisional and are reported in the stock assessment report, but, because they have not yet been accepted for use in management, it is not really very relevant to show them to you now. What I did want to mention is some of the points that the SSC made during their evaluation, and so council staff presented, to the SSC, a very comprehensive guideline to guide SSC discussions, and, using this outline, the SSC expressed a number of concerns, most of which I have not mentioned here, but, most notably, they were very concerned about the inputs themselves and the data quality and did feel that they needed more thorough investigation before setting the catch recommendations. In particular, they cited uncertainty about the recreational landings and the age composition data, which had been pooled.

They felt that the operational assessment terms of reference were constraining and that there should have been alternative data inputs evaluated that could have benefitted future assessments. They also felt that the stock status classification had a great deal of uncertainty, due to the terminal year of data, and, in particular, the 2020 recreational estimates for landings and discards, and they were concerned about how that uncertainty might play out into the projections which are used to develop the catch recommendations. Although this stock assessment did end in 2020, the 2021 year also

had a very high estimate for rec, which they were concerned about the effect of that in the projections themselves.

Now, the SSC -- I'm sure you'll see the report shortly, but they did propose to assemble a group to compile a specific list of recommendations to the Science Center to improve this assessment and to enable them to provide catch level recommendations.

The Science Center does note that some concerns that the SSC has brought up are outside of the scope of reference, the terms of reference, for this operational stock assessment and that there are real limitations in what we are able to accomplish with time and resources, so that, you know, there are high priority items that could be evaluated rapidly and might be the most important to address, but there are more complicated, or numerous, revisions that we're concerned could require us to postpone -- Essentially, put the stock assessment back on the calendar for further evaluation, and so there's a tradeoff there between what we can accomplish quickly and what would be nice to do but can't be done for quite some time. I believe that is all that I had to say, but, if there are particular questions, I am very happy to attempt to address them.

MR. WOODWARD: All right. Thank you, Shannon. Are there questions for Shannon? Dewey.

MR. HEMILRIGHT: Could you go back to Slide -- I think it's 14, or it might be 13.

DR. CASS-CALAY: This is 13.

MR. HEMILRIGHT: Maybe it's 8. Maybe I need to pay attention better.

DR. CASS-CALAY: Did you say 8 or 18?

MR. HEMILRIGHT: It was the one that showed what's been sampled, particularly where it only had very limited samples. That's it. Sorry. It's 16. See, I was wrong all over. Looking at this here, and looking at some of the things where we have -- You have a commercial cast net fishery that harvests a large amount of fish, it's my perception, and you look at where you need young-of-the-year is a driver, how, in the future, can we -- Can it get a lot better done, to where you have better samples than just the single blocks over twenty years of what I'm looking at here for the sample size, and, also, how do we go into a stock assessment with not meeting the minimal requirements of --

If I saw it right, you needed thirty fish, or ten trips, for fisheries that catch a million fish or something, and so I'm trying to wonder why we have these disconnects, and know, before you say lack of funding or something like that, and I just wonder why, because these are crucial driven elements that, before we go into a data workshop, or that gets done, we should already know that we have deficiencies that might could help in the terms of references that are described and what needs to be done, and maybe I gave more comments than I did questions, but it is truly frustrating to see, when you don't have samples, and where you need them exactly to indicate how the stock is doing in an assessment, and you don't find that out, I guess, until you get into the stock assessment, to see that it's lacking.

That just seems like the process of the five Ps, prior planning prevents poor performance, and it seems like we have some of that here, and I know that you're the second person that has gave this

presentation, and Erik Williams gave it the first time, to the SSC, and so you're the second person, and so I guess maybe to pass that along to the last person that's given it to us.

DR. CASS-CALAY: I do appreciate it, and that is a very good question, and, of course, it is relevant. It is disappointing when you have a fleet with high landings where we have so few samples, and so certainly this is a research recommendation that we need to attempt to address prior to the next age-structured stock assessment.

I will say that there are a number of stock assessment tools and that, oftentimes, when we run multiple tools, you know, we can run tools that don't require age composition, for example, and, oftentimes, you can get very similar results using various tools, and I do realize that that was done more during the SEDAR 28 assessment than it was for this one, but, in any case, it is definitely a deficiency in the datasets that are available for this stock assessment, and the assessment would definitely be improved if we had more historic and recent age samples for these important fleets, and so that is a research recommendation that we will pass along.

MR. HEMILRIGHT: Given my limited experience with some of the tools that's in the toolbox that gets used, I'm not a fan of using your tools, because I look at blueline tilefish north of Cape Hatteras in the DLM Toolkit, and it wasn't very receptive to the reality of what's out there on the water, and so maybe your tools for Spanish mackerel is different, but I'm not -- For me, personally, I'm not a fan of going outside of what reality is of gathering it, instead of having to go into the toolbox. It's almost like when you go to work on something, and you need your tools in your hand and not your tools in the toolbox somewhere else, and I relate that back to working on an engine or something that you've got to have there at-hand, and so thank you though.

DR. CASS-CALAY: Thanks again. I was referring to canonical stock assessment methods, such as surplus production models, Bayesian surplus production models, length-structured models, and age-structured models, but you are correct that there are even a broader suite of tools, including data-limited methods, that might provide a variety of answers.

MR. WOODWARD: All right. Clay.

DR. PORCH: Just following-up on Dewey's comments though, when you're working on the engine at your house, sometimes you have to work with the tools you have instead of the tools that you can't afford, and I think that's a big part of the problem here. Obviously, we get some samples from the states and various sources of information, and, in this case, we just don't have as many samples as we would like, and, if you look across-the-board, that's been true for years, and so, yes, it would be great if we can work with our partners to get more samples, but that's true for an awful lot of species, and so, nevertheless, there's a desire to do a stock assessment, and so this is what I've been saying for years.

In the Southeast, we're trying to stitch together lots of little pieces of information, and it makes it very difficult to do a stock assessment, and that's why they're so complicated, and they take so long, and there is so many pieces of information that we comb through and find flaws in. I mean, that's the problem, if you're not investing what it takes to get all the samples in a representative way, but it's expensive to do it, and, obviously, neither we nor the states have had the resources to collect the samples we need, and so we have to find a different way of doing it.

MR. WOODWARD: All right. Laurilee.

MS. THOMPSON: We heard numerous offers of help from the public speakers yesterday evening, and I know that my sister and my family and the commercial families -- We will help. I mean, tell us what you need, and you heard from the recreational people yesterday, and the commercial industry stands by, and what do you need? What can we do to help you, and it won't cost you anything.

MR. WOODWARD: Go ahead, Clay.

DR. PORCH: I just want to answer that, and it's not that it doesn't cost us anything. Somebody has to process all that, and it's a considerable amount of work, but I think the key is -- I mean, I would be very happy to come up with some system where we can facilitate getting more samples, but they do have to be done in a representative way, and it can't just be, well, I've got some samples that I will give you today, and it can't just be out of convenience. It has to be something that's orchestrated in a scientifically-designed way so that we know we can say this is representative of the fishery, but, having said that, there may be ways, and we've talked about this before, where we can take advantage of the goodwill that's in the fishery and collect data a little more effectively than we have, but it does have to be done in a systematic, way that we can defend in a stock assessment.

MR. WOODWARD: All right. Laurilee, to that point?

MS. THOMPSON: We can be trained. Just let us know how we can help you, and we're glad to do it. Just train us and tell us what you need.

MR. WOODWARD: All right. I think there's a will, but it's always trying to figure out a way, and the way is where the details come in, and so, all right. Trish.

MS. MURPHEY: You were talking about, you know, all the tools in the toolbox, and you were naming off different kinds of models, and so was it because of the constraint of the TORs that you had to run BAM, or could you run a different model that would maybe better fit the data that you have, or is it because you're constrained by the TORs that you have to do BAM?

DR. CASS-CALAY: Well, we're never fully constrained by TORs, but we are working -- What we try to do is maximize our assessment throughput of the priority species that our operators request, and so, to do that, we do have to decide which assessments require a research track and which assessments, you know, require extensive revision and which assessments we can do through an operational, and that's a delicate negotiation that occurs during the SEDAR Steering Committee, with, of course, the Science Center's participation.

In this case, this was, you know, an operational assessment, and we were specifically asked to update the BAM model, and so, you know, that's not to say that we can't examine the sensitivity of some different assumptions, to see how reliable a particular model might appear, but, you know, it is -- We are extremely busy, and there aren't a large number of us trying to serve a great deal of assessment work throughout the Southeast, and, in this particular case, the operational assessment was thought to be appropriate for this species, and we moved forward with these terms of reference, which are somewhat constraining.

MR. WOODWARD: All right. Any other questions for Shannon? If not, thank you. Now I want to call on Dr. Buckel, the chair of our SSC, for their report on the Spanish mackerel assessment. The man has two computers. Now, you can tell that's a serious person right there, when he's got two computers to work from.

DR. BUCKEL: You can tell that I'm a newbie to this. All right. Thank you, Chair. Okay, and so I will outline -- I am going to go over general comments and then hit on the different topics that we addressed on August 4, when we reviewed the Spanish mackerel operational assessment, and so I will provide some slides on the assessment review, addressing is the assessment consistent with BSIA, and we're going to discuss uncertainties, review the projections, and then comment and provide research recommendations and then provide the overall consensus statement.

Given the large number of items that we had, we broke the SSC into three breakout groups, and so I'm going to give, you know, the responses to these items from those three breakout groups, and so there is redundancy in those, and I have retained that, because I thought it was important for you to see that, even though there were separate groups of individuals, there were commonalities across those groups.

First, a couple of slides on our general comments on the operational assessment, and so the age comps are not accounted for in the assessment for all sectors, as we just heard, and so there is few age comps for the commercial cast net and commercial hand line. There were substantial regional differences in how the fishery is prosecuted, and so cast net in Florida, for example, and gillnet in North Carolina, a lack of adequate sample sizes across these sector types, and that created large data gaps in the assessment.

There are several data and model inputs that need to be explored more thoroughly, and so one data input was the MRIP data, and other model inputs were natural mortality, steepness, and selectivity, and then the last general comment is it's been ten years since the last assessment, and so, between SEDAR 78 and 28, and, given the time since the last assessment, further flexibility should have been provided for the operational assessment to make updates.

Given that, a research track assessment should be considered for the next assessment, and I say considered, and there were many SSC members that felt this research track was the way to go, but others raised that concerns that you can't do much about age comps, right, and, if the age comps aren't there, that's not going to get you out, but others felt that there were other aspects of the assessment that could benefit from a research track.

Now I'm going to present several slides on the assessment review from that breakout group, and so the stock recruitment data did not allow for an updated estimate of steepness in SEDAR 78, and so the same steepness that was used in 28 was used in 78. Steepness estimates from similar species do not appear to be available, but that may be something that a further literature review might provide some estimates for similar small coastal pelagics.

The steepness value, as I mentioned, is 0.75, and it was the same between 28 and 78, and that has high uncertainty, as indicated by the likelihood profiles, and those are shown in the bottom-right, and so the assessment -- The data didn't provide any indication of what that steepness value would be, and, in the lower-left, you can see why. That's a plot showing the stock recruitment data, the

recruitment versus spawning stock, and all the data are in the top-right-hand corner, and steepness is related to the slope in the lower-left-hand corner of that graph, and you can see there is no data in that lower-left-hand corner to provide an estimate of the steepness.

The recreational catch in 2020, as you saw in the last presentation, this large increase, and so we were asked to comment on how that impacted stock status and projections, and so, given that there's a three-year average of fishing mortality used for stock status, that 2020 estimate is not currently influential to stock status, because there is 2018, 2019, and 2020 F values that are averaged. However, given that the 2021 estimate of catch is similar, or larger, the three-year average may begin to affect stock status in the next few years. In contrast, the 2020 estimate does already affect projections, and so, during the pandemic, total fishing effort was increased, which indicates the increase in catch seen for Spanish mackerel are not unexpected.

The next slide, on the assessment review, the model's estimate of stock size are going down in recent years, while the observed landings are increasing, and so the increased landings could be driving the population down, but there's uncertainty if this is the case, given information provided during public input that suggests the potential for an increased stock size that could be promoting these greater landings with no change in effort, and so there were questions. Some of that input was questions about the accuracy of recent MRIP data and then the commercial quotas being met earlier in the year during recent years. If that effort is truly the same, then that would suggest there's more fish, right, that the quotas are being met earlier.

The MRIP shore mode landings, these were higher than the private mode, which had several members of the SSC and the public scratching their heads why the shore mode landings were higher than private boat, and that appears to be important in driving the changes in the increased recreational landings in recent years.

Now I'm going to move into several slides on the question of is the assessment consistent with BSIA, and so the constraints of the operational assessment and the poor quality or lack of data were a concern to the SSC, and then I will list these data and assessment concerns. There is a concern that projections are not sufficiently robust. Projections, unlike current stock status, are influenced greatly by that terminal year, and the terminal year is highly uncertain. The assessment model is estimating a decrease in spawning stock size as a result of the increases in catch, and this is driving the need for future catch reductions in the projections. However, other sources of evidence suggest that the stock size could be increasing.

Continuing on with these data and assessment concerns related to BSIA, the declining trend in biomass estimated by the OA was not reflective of what stakeholders describe or that was observed in fishery-independent data sampled further north, and NEAMAP data was discussed during the meeting.

It's not clear that the current sampling program represents the current geographic distribution of the fishery, and the increased occurrence to the north suggests that the stock boundaries may have shifted. You know, there was one member of the SSC that mentioned that that may be the case, that they may be further north, but, as long as our indices of abundance that are being used track the population, then that's not that big of an issue, and so I wanted to mention that caveat.

There were questions regarding the recreational landings in recent years, especially the shore-based mode, and, you know, what is driving the increase in shore landings in recent years? Is it real? There have been large changes in the fishery. For example, the commercial handline landings have increased in importance, but large portions of the OA are based on the 2012 SEDAR 28 assessment that is now over a decade old.

Then the last slide on the BSIA is SEDAR 78 was sensitive to the same parameters as those found for SEDAR 28, and that's natural mortality, and then the estimates of the parameters for the von Bertalanffy growth curve that impact natural mortality, as well as the steepness in the stock-recruit relationship. Jumps in recreational landings may reflect increases in recreational effort, increases in stock size, or a combination of both, and then, over the last several years, commercial fisheries have been meeting quotas earlier in the year, and is this because of increased effort or increased stock size?

Now I'm going to move on into several slides discussing uncertainties that a breakout group focused on, and their first point is steepness and natural mortality are uncertain. Steepness was not estimable and was fixed, based on SEDAR 28. Natural mortality was fixed, based on SEDAR 28, and it has a large -- It has a significant impact on stock status, as shown in the graph on the bottom of the slide, and you can see just a slight change of the base M of 0.35. If you go to increase that to 0.42, you see that the -- That SSB to SSB MSY ratio increases quite a bit. Likelihood profiles show that natural mortality could be much higher, greater than 0.5, which, if true, would indicate stock size that is higher than currently estimated, as I just described in that lower graph.

Continuing on with uncertainties, lack of adequate representation of length and age samples from each fishery to inform fishing mortality, and uncertainty of the shrimp bycatch estimates was high. The observer coverage for that shrimp fishery is extremely sparse, and effort data are questionable. The only fishery-independent index of abundance is for the age-zeroes from SEAMAP, and so there is a lack of a pelagic fishery-independent index of adult abundance. The fits to the commercial handline index were poor, and there was severe underfitting and overfitting, and the model ignored the initial year of MRIP catch per unit effort index, which was a relatively extreme value, and so the model wasn't fit to that, or it didn't -- It ignored that.

The last slide on uncertainties is we were asked to address the question of how did the interruptions in MRIP sampling impact the 2020 estimates and their uncertainty, and the SSC's comment was that interruption in MRIP sampling was somewhat addressed, due to imputations used by MRIP to account for reduced sampling in 2020, and the influence of that value, the 2020 MRIP value, as well as the missing SEAMAP young of the year index from 2020, which was impacted by COVID -- The influence of those data will be difficult to determine until additional years of data are collected.

Okay. Now onto a review of the projections, and so we were asked to address the question of do the projections and interim assumptions adequately capture uncertainty in the model and data and uncertainty in recruitment? The response is, no, and the SSC has several concerns with the assessment, including commercial age sampling is possibly inadequate, high PSEs on MRIP, uncertainty in terminal year data point, influence of bad fit to initial year general rec index, uncertainty in steepness, model likelihood profiling points to potentially higher natural mortality, young of the year index is missing terminal year data, and effect of removing early years with higher landings.

Continuing on with the review of assessment projections, we were asked to address the question of are the projected F rates in 2021-2022 reflective of the fishery. Given the concern with this operational assessment, more attention should be paid to 2021-2022 MRIP estimates used in projections, given the large sudden change in magnitude. It's a major source of uncertainty in setting catch levels. It would indicate a large increase in shore-based effort, which may or may not be realistic. With COVID, perhaps more shore-based angling effort, but, in 2022, inflation may have decreased angler effort, and that's to be determined. More investigation is needed, and it sounds like there's some efforts to look into that, which is great to hear.

The breakout group that was assigned to the projections was asked to work through the SSC's ABC Control Rule, and that information is provided here, and I won't go through each of those, but it came out to a total ABC adjustment of 10 percent, and so a P\* value of 40 percent, but, you know, that may change with the next iteration of the assessment, but we did work through that.

Moving on to research recommendations, the research recommendations that will most likely reduce risk and uncertainty in the next assessment include those that address the issues with SEDAR 78 described above, and so steepness, natural mortality, age comps, for example. Based on public comments from commercial fishermen and the NEAMAP data, the stock may be moving northward, and so research on stock distribution is warranted, and then the recreational discards and better characterization of age, size comps, and mortality of discarded fish.

Then these last couple of slides are a consensus statement that we developed at the end of the meeting, with all of the members of the SSC back together, and so the SSC has several concerns with this operational assessment before deeming consistent with BSIA. The assessment model is appropriate, but inputs need to be more thoroughly investigated. There are several concerns with certain aspects of the data quality that should be more thoroughly investigated before setting catch level recommendations. The operational assessment TORs constrained the modeling approach, and there could be alternative data inputs that would benefit future assessments, and that's something for future deliberation by the SSC when we receive TORs for review.

Continuing on with our consensus statement, the stock status classification has a great deal of uncertainty, because of the terminal year data, and this uncertainty leads to little confidence in projections. Specific investigations into certain data inputs, or model components, should occur before management advice can be provided, and so, at the end of our meeting, we decided that a technical group, and that's a subset of SSC members, would meet to compile a specific list of recommendations for the Center to look into to improve on the assessment, in order to achieve a stock status determination and catch level recommendations that the SSC was comfortable with. Currently, the members of that subgroup are Dustin Addis, Marcel Reichert, and Yan Li. I think that's the end of my slides, and I would be happy to answer any questions.

MR. WOODWARD: All right. Thank you, Jeff. It's obviously a situation that is going to demand some attention and some challenges that we're facing, and so questions for Jeff? We'll start with Mel.

MR. BELL: Hi, Jeff. Thanks for that. I appreciate it. What's the timing on the group getting together, or is that still in the air?

DR. BUCKEL: It's still up in the air. They have not met yet, and we were just -- Judd and I were just talking about that, if we maybe try to get them together and then bring that to the SSC in October to discuss, and that would be the fastest, but no guarantees that we'll get that done, but --

MR. WOODWARD: All right. Clay.

DR. PORCH: First of all, I want to congratulate the SSC on a very, very thorough review. They turned over about every stone you could imagine could be turned over, and I agree with an awful lot of these things, that they need further investigation. I am a little worried though that we're losing sight on what BSIA means, and it's best scientific information available and not best scientific information that you would like to be available, or you imagine is possible, and this is a pretty long laundry list.

I think there are some things that we could look at that are pretty clearly important, and could affect whether the stock is classified as overfishing or not, and that is, in particular, the recreational catches in the last year, and, as Shannon mentioned, we are looking into that, and we have Richard Cody on the line, if there's any questions about that, but I think that's something we definitely need to take a look at, and that's something we can do fairly easily.

When you look at the laundry list that you provided here, that's at least another operational assessment, really, and that means we would have to add it to the SEDAR schedule, and it's not something that we can just do in our spare time, and I think people have to keep that in mind, and we just don't have the horsepower to do all the analyses here in between the SEDAR schedule, and, beyond that, some of the items in here are pretty big research items, especially the northern extension and stock ID and things like that, and that's going to take resources that aren't in the pool right now, and so I think we need to think pretty carefully here about what we would actually ask to be done.

Like I said, certainly the recreational catches -- That's something that need to be looked at, but, at the same time, all of our assessments have some warts, because it costs a lot to have what we really need, which is comprehensive fishery-independent surveys that cover the whole range, but those are big-ticket items that we don't have the -- Nobody, the states or the feds, have the funding to do, and so we have to live with the information we have, and I think it's a little dangerous just to come up with a laundry list and say, well, do that, and, when you get that done, then maybe we'll just the assessment. That's not the spirit of best scientific information available, and so I just wanted the council to be a little circumspect when it comes to what actually can be done. Thank you.

MR. WOODWARD: All right. Jessica, and then I will go to Tim.

MS. MCCAWLEY: I guess my question is, because of all the things that the SSC wants to consider, and you also heard from Clay about, you know, some of these things are probably beyond something of just going back and looking at the assumptions in the model, and they're really, you know, doing additional research, and so is really the recommendation, instead of going back and trying to look at this laundry list of items -- Is the recommendation that, instead of a research track assessment should be considered -- Maybe it should go on the list sooner, rather than later, instead of trying to just fix this one and then wait another -- I am making up a number of four years or five years for a research track assessment, and do you guys have an opinion about that, like maybe we

should just not try to force this one here and, instead, go back and look at some of these things and develop a timeline for that?

DR. BUCKEL: There was definitely a large number of SSC members that felt the OA constrained the analyst and that they felt that the research track was the way to go and that, after ten years, that -- Given the amount of time that had elapsed, that that would have been the better way to go with this, but, as I mentioned in my presentation, there were members that also said, well, what new information is out there for a research track, and so I think maybe that subgroup -- That's another thing to look at, is are there things that the research track could explore, that could benefit from the research track, before that decision is made.

MR. WOODWARD: All right. Tim, and then I will go to Trish.

MR. GRINER: Thank you. You know, I was struggling a little bit with what Clay was commenting on, and it's almost like there is so many problems that you have to start over, or just scrap all this, but I was just curious, and, if you didn't -- If you go back and you look at these recreational landings, you know, and you talk about the best scientific information available, how do you go back to those rec landings, and what do you do to overcome the fact that the data you have shows shore landings greater than private boat landings at this point? I mean, what more -- What do you do to overcome that, so that you could even call that scientific information?

MR. WOODWARD: Clay.

DR. PORCH: Just to answer that, I mean, what we're looking at, in regard to the shore mode, is whether that's dominated by just a couple of intercepts. You know, we want to understand exactly why those estimates are so high, and I don't know if there's been any further insights, since I last talked with our folks in the Office of Science and Technology, but I think they have some concerns too that it might be just a result of a couple of outliers, and it's that rare-event thing, and so you get, all of a sudden, a couple of intercepts where there were a lot of fish, and that gets expanded up, and it's a huge number, and they can use some trimming techniques to get what probably would be a more reasonable estimate, but they're in the process of looking at that, and that just started, and that may take a little while before they have any definitive results, but the bottom line, in answer to your question, Tim, is I think we can look and see if it really was just driven by a couple of aberrant intercepts or something like that, or whether there's a trend across the entire region for increased effort or something off the shore.

MR. GRINER: Thank you, Clay.

MR. WOODWARD: All right. Trish, and then I will go to Dewey.

MS. MURPHEY: So I'm trying to think -- I am trying to think how we can make this better, and so, if this is crazy, just tell me, but so you mentioned -- I think both of you guys mentioned that the indices that we have right now are really in the south, and this management unit goes all the way to New York and Connecticut, and we already know too that off of -- You know, North Carolina's beaucoup share of the northern ACL, and you used the Florida trip ticket program, and I guess there is commercial landings from the Florida trip ticket program, and would our North Carolina trip ticket program be a source of data? I mean, it's not -- It's there, and, I mean, it only

goes back to 1994, but it's there, and, you know, we've got an inshore pound net fishery, and we have an offshore gillnet fishery, and that may be another data source to consider.

I sat down with our stock assessment folks, and I don't know how good NEAMAP is, but there are Spanish mackerel samples in the fall sampling periods, and I don't know if that might be something, or Chesapeake Bay, and I'm just trying to think of some ways to kind of get more information out of that northern piece, because, I mean, even SEAMAP does not go past Lookout, right, or Hatteras? Hatteras, and so, anyway, and I was just wondering, and would this -- I know everybody is swamped, and they have so much to do, but would an interim analysis kind of bringing in that data -- Would that be something that might give you a little more certainty, maybe, or maybe a little less uncertainty?

DR. BUCKEL: I think this is back to where the operational assessment was constraining, right, and so it was not going to be developing new indices of abundance, but that's something that could be done within a research track, or potentially a -- I think we're still learning about, right, what an interim analysis is for the South Atlantic, but certainly that would fit underneath a research track, and maybe that's -- We were talking about is there enough there to move in that research track direction, and is there enough data out there to warrant that, and so those are some arguments for that, but exploring some other indices of abundance.

I will note that, on the NEAMAP page -- I went there to look, because it was brought up by the public, and so I want to the NEAMAP page, and there are very few fish, and they actually have a statement on their page that says this isn't a good survey for Spanish mackerel, right, because it's a bottom trawl.

MS. MURPHEY: Yes, it did say that, but I just noticed there was something there.

DR. BUCKEL: It's definitely they're catching more, and so it's something to keep exploring as a potential source.

MS. MURPHEY: Yes, and I guess my thought was -- I guess, really, this would be a research track, but I guess the concern about research track is you're adding, what, three or four more years, and you have to get it in the list, and so that's why I was wondering, and I don't know much about interim analysis, and I know we just had one on yellowtail, and so I didn't know if that was kind of a, you know, a compromise between a research track and trying to get better answers out of the operational, and so anyway.

DR. BUCKEL: That would be better answered from a SEDAR staff person, and my take is that the interim analysis -- That it wouldn't be a place where you could develop a new index of abundance, but I could be wrong.

MR. WOODWARD: Dewey, and then I'm going to go to Jessica.

MR. HEMILRIGHT: Where do we go from here, because I look at this, and, from the commercial fishermen's perspective, particularly from North Carolina north, which I have knowledge of, these are in state waters, and so anything that's got to come into this assessment and different things has got to come from the state-water fisheries from North Carolina north, to my knowledge, and I

don't know too much about federal-water Spanish mackerel fisheries to any large amounts, but how do we get -- My frustration would be with maybe Science & Technology and with MRIP.

How do we get -- I sat through a SEDAR stock assessment, 32, that one fish, or six fish, produced 33,000 discards of blueline, and I've seen two mako sharks in North Carolina produce a hundred metric tons, and how do we get this far down the road and spit something out and figure out that we need to go look at the shore mode for MRIP, and we're working on getting that done? I mean, when we step up to the stock assessment, in my experience, which is very limited, in a data workshop, you bring in the data, to see if it's worth a -- I mean, to see how good it is or not good it is, and then you start using it, if you have defined it acceptable or not acceptable, or it kicks out, for some reason.

I'm not sure on how research or operational stock assessments work, but how are we getting this far in with MRIP that is the driving force of this here, and we've got commercial fishermen looking at either -- Hopefully either status quo, but with looking for an increase, based on the abundance we see, and the magnitude, and, yet, we've got to go back and say that Science & Technology is working on something, and, well, we've had MRIP for this long, and this question still rises, these anomalies of MRIP at certain times, and there is no methodology. Finally, in SEDAR 50, after so many years, we finally raised enough heck to -- They smoothed it over to 3,000 fish, was my belief, and so I'm wondering why, in this process, and I know that money is limited, and folks are busier than heck and all this stuff, but, with this thing, we keep on going back to SEDAR and these anomalies, and why haven't they got a daggone answer for it?

The answer is, when something absurd comes up with these numbers, why isn't like two or three people jumping on it and say, oh, we've got to check this out, before this number leaves us, and now they're getting to where, if it's over 50 percent, they're not going to even publish it and tell the public, and it says -- You know, NOAA puts out, in their thing, if it's over 50 percent, we're not going to use it for management, and there's publications of that, and so I look at --

I know we can't fix it today, but how did we get this far with using something that we've got to go back and look at, where they should have been a red flag going off saying we don't know about this, before we go all through all this, because the commercial fishermen, in reality, is the ones that is looking and that's going to harvest this fish, and that's going to feed the people, and they're looking for increases, and it looks like now we're status quo, and so I hope there is no reduction in where we're sitting around the table, and at least status quo, until somebody figures out how to get their shit, I mean stuff, together, so we can move forward with something.

That MRIP thing, and the continuation of these red flags that goes up -- Somebody needs to figure out a way to address that before it gets to the stock assessment level, whether it's operational or research, and that is a problem, and it's been a problem.

MR. WOODWARD: All right. Clay, I'm going to let you respond, and then I will go to you, Jessica.

DR. PORCH: I will start, but I think Richard Cody is on the line, and he could probably contribute some more, but, first off, I mean, the way to really fix this is quadruple the intercept sampling, and it really takes that much more, and so it would take considerable resources to avoid having these

types of situations, so that just an occasional intercept of high fish doesn't bias the whole results, and you have to have more intercepts, but that takes a lot more resources.

Having said that, we did look at 2021 catches, after the assessment, just to see if they lined up, and they actually did, but there may be some issues there too, and so we did do a first pass, just to make sure that 2020 wasn't just an outlier, but, beyond that, I think Richard can discuss their perspective on it, but I think they also agree that we need to probably improve the way we're doing some of the screening, and has he raised his hand? Okay. I will defer to him at this point.

MR. WOODWARD: You can go ahead, Richard.

DR. CODY: All right. Thanks. I appreciate the concern about outlier-like estimates, and it is a thing that bothers us quite a bit. I mean, we've done a lot, with our sampling program, to get the most that we can get out of the samples that we have available, and, you know, I don't want to jump on the we-don't-have-the-resources bandwagon, but Clay is exactly right. In most cases, this is fixed with additional sample size.

There were some flags that did appear in the review process, and the review process itself is fairly robust, and handle some it here at S&T, but we also distribute the raw data out to the regions as well, and so there were a couple of flags that were there that indicated that there were some very influential intercepts that contributed a lot to the overall landings, and those were in Florida and South Carolina, for one wave, and, those flags, I think we could do a better job of at least looking for.

For instance, they tend to happen in what we call shoulder waves, towards the end of the year, or early in the year, and they tend to be -- In shore mode, in particular, they tend to be more expressed, and so end up with a situation where you have a low sample size, but a large number of samples, from say Spanish mackerel, that contribute to the overall sample size, and so the weights jump up extremely.

You can't get away from using sample weights, and that's just a fact of life. If we don't, then we're just equally weighting every single intercept that comes in, and that's just plain wrong, and so we have to, you know, find a way that we can provide some consistent guidance on what we call flagged intercepts. The trick is going to be the consistency, and our tendency, at Science & Technology, is not to change the raw data, or not to censor the raw data and dump it, but look to the regions and to the stock assessment for advice if they see something wrong. That may not be timely enough, obviously. I think that's where -- That's how I would answer that question.

The other point that I wanted to make is related to not publishing estimates over 50 percent PSE. I mean, this is to get away from using estimates that are really not suitable for the use that they are currently being used for, and it conforms with best practices for large-scale surveys, and so I think it forces the issue. It really points out the deficiencies in the data, and I don't want another target on me, but that's what we do when we, you know, publish the estimates that are above 50 percent PSE, but we have to, I think, acknowledge that there are deficiencies here that we have to work more appropriately with the data. Hopefully that answers some of your questions.

MR. WOODWARD: Dewey, a follow-up to that?

MR. HEMILRIGHT: Just one follow-up about the PSEs and a target, not wanting an extra target on your back, and, if NOAA publishes that -- I guess it helps them if they publish that PSEs above 50 percent shouldn't be used for management in their literature, and then that helps you with a cover of not publicizing 50 percent, when it's 50 percent or over, and not putting that on paper, but, you know, the clarity of this program is it's the best available that we have and use for recreational reporting, and it's maybe the gold standard for the best methodology, but I don't know about the data that goes in there.

It's the best methodology, and that's my experience, but it should be published and known, what the PSEs are, so that it gives the opportunity for somebody to look at it and to flag that. I mean, I watched where the U.S., in 2014, with the MRIP update, increased their mako landings to ICCAT by about 500 metric tons, because of, you know, the MRIP revision, and so I think there's nothing wrong with publishing what the data shows, while you're working in a continuation of hopefully finding funding and working to get this program, that is the only one used, that everybody has problems with, in the recreational industry, the way they account for their catch, and it should be published, and it should be transparent. I would hope that that 50 percent level would be more transparent, and it should be to the public.

MR. WOODWARD: All right. Thank you, Dewey. Richard, I will let you respond to that, before I go to Jessica.

DR. CODY: Just a quick response. We have published disclaimers, or warnings, on the estimates for years, and those have largely gone unnoticed, and we will continue to publish the raw data and provide tools for people to do the types of analysis that they want to do with the data, and produce estimates if they want to, with PSEs greater than 50 percent. We were trying to minimize the damage by doing cumulative estimates throughout the year, and so, you know, this will at least minimize the number of species that would be impacted by this, but I think transparency, you know, obviously is a major concern, but all of the data will be there, and the tools will be there, for folks, if they want to do those additional analysis.

MR. WOODWARD: All right. Thank you, Richard. Jessica, and then I will go to you, Chip.

MS. MCCAWLEY: I was going to go down the route that Trish was going in asking the questions about the interim analysis, but, after hearing those responses, I don't necessarily think that that's a viable alternative, to do an interim analysis here, and I guess I would also say that I appreciate the SSC really digging in here and asking hard questions on this assessment, and then I started asking questions of council staff, as well as our own FWRI folks, and, you know, Dustin Addis is on this group that's working on the assessment, plus we had people from our division, Jeff Renchen, that was on this webinar as well, but maybe we could go to Chip, because he had some ideas of some things that maybe could be looked at in thinking about the next steps, and I think he has some insights here, and so I think I would like to hear from Chip.

MR. WOODWARD: All right. Chip, the microphone is yours.

DR. COLLIER: Thank you. There's a lot of thought that goes into planning these meetings, and our next committee is the SEDAR Committee, and we will be looking at the planning grid for upcoming stock assessments, and that's one reason the SEDAR Committee was after the Mackerel Committee, was to figure out exactly what we thought we needed for the next step of the Spanish

mackerel assessment, and it's really sounding like you guys are wanting a research track assessment to be done, and that will result in having to move some other stock assessments, maybe some other research track assessments, that are currently on the planning grid, and maybe we move that. Maybe we move greater amberjack back a year, or move white grunt, but, yes, it is going to be a few more years, and white grunt is always the poster-child for moving, and, John, if you have some additional comments.

MR. WOODWARD: Before I -- I am not feeling a lot of love for the white grunt here, and I will tell you.

MS. MCCAWLEY: I've been saying that for years, and you guys have been laughing at me.

MR. WOODWARD: I mean, you know, we just need to ship them off somewhere else, where they will get a little love, but, seriously, go ahead, John.

MR. CARMICHAEL: I thought the twentieth anniversary would be the winner for white grunt, but maybe it will be the twenty-fifth, since it was originally scheduled for 2005. You know, I think you look at the big picture of this, and this Spanish mackerel assessment has always been a bit data challenged. I think it's pretty clear, from the comments of the SSC, and the statements that Shannon made, and even Clay said, and he recognized a lot of what the SSC has brought on, but it's just a matter of what can be done.

We may have pushed this tool pretty far for doing this, and, you know, I thought Shannon made a really good statement about you come up with a process, and you come up with a terms of reference, and you hope you've got the right package that's going to do a good job for this particular situation, and sometimes we go that years in advance, and sometimes you get into it and you don't know how the fishery is going to change, and the data is going to change, and the COVID world is going to change, and so you get into doing it and it's like, well, it didn't really work out, and things that were hoped that were changes in that model that would resolve some of the long-standing issues maybe didn't.

I think that's just sort of what happens, and I feel like though, when we get in that situation, the terms of reference shouldn't be the impediment. You know, resources, time, money, data, to me, are all legitimate impediments to doing it good, but, if we have a way to evaluate things, you know, in any of these models -- You know, the terms of reference are always a minimum, and we ought to be able to evaluate what we can within the time and money and people and analytical abilities, and, the bottom line, data that can, but I do think, in the case of this stock, we probably do need a research track, long-term.

It's one that I have felt is a potential poster-child for climate change, because it's such a typically young fish, and it's very volatile, and it's very mobile, and we already see them showing up off the beaches of Cape Cod, and they're prevalent in Florida, and, you know, it doesn't seem to have much constraint, as far as where it's going to go, and I think, if conditions become more favorable in other parts of the coast for this species, we could really see it expanding its range and not just a shift, which is going to really create the kind of governance changes that we're starting to look at, you know, at the CCC level and nationally, and NMFS is working on a governance directive policy for when these species change.

To me, this is a prime stock to figure out is it potentially shifting or is it expanding, because that's going to be fundamental to how we respond, and so, you know, to me, that makes this kind of a priority to do a research track and understand what is happening, if we can figure out what to do in the short-term, and most of the wheels seem to come off of this assessment with the projections.

Shannon ended by showing the status, and it's not overfished and overfishing, and a lot of people looked at this assessment and said, well, it must be great, and it's not overfished and not overfishing. Status, in most cases, with a stock assessment, is not the most important thing. What matters, and what matters to fishermen, is what they're catching today and what they're going to get to catch when we put management in, and, if you look at this stock, in the projection period, the biomass collapses, and it goes to an all-time low, and the yield, in 2023 or whatever it is, the first year of management, is cut in half from what it is now.

It's cut in half from what it has averaged for thirty years, and that's really the core problem with this stock. You know, it seems like it does a pretty good job, when it's got complete cohorts and it's got all its surveys, and you've got the full suite of data, and it's captured the thirty-year history, and, you know, there are some issues with the data, and Ben pointed out some things in his comments, but it still seems to generally capture what has happened in that period since the mid-1980s, but then the projections just seem to go very awry, and it seems to be a combination of no JAI in the terminal year and then this big spike in the MRIP landings, and then carrying that spike into the interim period, which is between the terminal year and when management takes place.

Now, it turns out the recreational landings have continued high, and the shore mode landings have continued high, and so it does seem that there is something going on there, but the question is, you know, is that being supported by recruitment, and by a strong stock, or is that truly, you know, wiping out the biomass, and I think that's a critical question for the council to look at, and, you know, Clay said some of these things should be looked at to figure status, and I think that's very true, because, you know, if we're at the very low biomass that is projected, or assumed, to occur during the interim period right now, but we're still getting these high landings, then the stock could be in trouble.

On the other hand, the commercial Northern Zone fishery closed in the shortest number of days, last year, that it has ever closed. I mean, this year than it's ever closed, and so we're seeing commercial seasons getting shorter. I did some preliminary look at rec CPUE, and it's staying strong, and so I don't think there's really anecdotal evidence that the population has collapsed in the way the interim period is assuming, and so I think that's really critical, and maybe we can focus an interim analysis, or looking at projections, or doing something to get a handle of, you know, what's really happened since 2020, or even 2019, you know, and what has happened in this interim period, and where are we now, and can we come up with some good advice for the council that can get to, you know, five years before we can probably really be getting a research track on this stock.

Maybe Clay can help with that, and is there some thoughts of something we can do in the short-term, or, worst-case scenario, that SSC applies some of its data-limited methods and looks at, you know, long-term landings, and this stock has been pretty flat over thirty years, and there is no strong signals in the fishery landings and the indices or anything, and I think that's why this, you know, collapse in our crystal-ball period, in the recent years, is particularly concerning.

MR. WOODWARD: Thank you, John. Clay.

DR. PORCH: I appreciate John's comments, and, just, you know, glancing over the assessment, other than that recreational catch issue, it looks fairly well behaved. Certainly, when you look at the fundamental indices, they are fairly flat, and there's no indication of any rapid increases or decreases, and there might be some northern expansion, although, when we look at at least the MRIP catch data, it's maybe only a faint indication, and not something radical, but certainly worth looking into.

From my perspective, I think the obvious next step is to rerun the assessment with potentially revised MRIP estimates, and we'll let Richard Cody and his staff get into the details and see if there's some real outliers that, if we take them out, dramatically lower the catch estimates. If that's the case, we plug them into an assessment, and then I think some of the problems that John was referring to in the projections would go away, but certainly, over the last decade or more, the catch rates have been fairly stable, and so there's not any indication of a big drop there, and so, from my perspective, the short-term solution is revise the assessment with new landings that hopefully we can get fairly quickly from the Office of Science & Technology and run that by the SSC.

In the longer-term, something like a research track could be appropriate, although a research track, in its original spirit, where you're focusing on new data and concepts, not the way they've actually been run, but that's a topic that will come up at the SEDAR Steering Committee meeting, but I think that's certainly a viable alternative, but, again, getting back to best scientific information available, a lot of work went into this assessment. It's not as though it's poorly behaved, and the age compositions, while sparse, are well fit, and the indices are reasonably well fit, and things have been fairly stable, and so I think it's still useful, and we just need to look into that recreational catch issue. Thanks.

MR. WOODWARD: Okay. So I guess, at this point, it's about setting expectations, and, you know, we've heard back from Clay, and we know that S&T is looking into this terminal year and beyond catch estimates issue, and I guess, just to put a point on a calendar, Clay, I mean, you know, if S&T can do their analysis, and so we've got another SSC meeting in October, and so does it require, I guess, a meeting to vet that through, Jeff, or is that something that might could be done in a webinar or something, to expedite, so that it doesn't, you know -- An October in-person meeting isn't a roadblock to a more timely rerun of the assessment? I know there's a lot of moving parts here, and I'm just trying to figure out, for the benefit of the committee, where -- What are we looking at as a realistic timeline of getting, you know, some revised input?

DR. BUCKEL: I think the October meeting is pretty packed, right, Judd, and so -- That is a possibility, that subgroup meeting, to -- If there's some other item besides the MRIP, which I think is an important one that Clay mentioned, but there may be some other exploration they wanted, like steepness or natural mortality, for example, which also the model is very sensitive to, and they were not changed, because of this OA constraint, and so it would be good to let the subset group discuss what has been discussed here and see if they want to add anything to that.

That would be the first step, and then, depending on how that goes, what gets changed, and I don't know if the assessment is going to -- If that timing can work, to have a new analysis presented in October, that would be great, and it sounds like there's time during the meeting, but that's a pretty quick turnaround.

MR. WOODWARD: Yes, and, I mean, October is bearing down on us pretty quick here, and, you know, we're already halfway through September, and so, again, I think my goal is to help set realistic expectations, and, I mean, we've been waiting on this for a while, and the commission has been waiting, and the council has been waiting, and we've got a lot of folks that want to see changes made to address issues, and so there is -- You know, there is a definite sense of urgency here, but, at the same time, we don't want to find ourselves in the same place a few months from now, having the same conversations and the same concerns, you know, unless there is a way to remedy that.

It sounds, to me, like we may not be in a position, as a committee, to have something to react to, and I think December, and certainly somebody can correct me if I'm wrong, but I don't know that December is a realistic expectation, you know, and it may be more -- You know, it may be March is a more realistic thing, but, John.

MR. CARMICHAEL: I mean, I think it would be a lot to expect that this could be done for the October SSC meeting. It's late October, and they would have about -- Well, maybe four weeks to make the briefing book deadline, but, you know -- Maybe Clay and them can do that, but I would be hesitant to impose that, knowing everything else that is going on, and, oh yeah, there's a data workshop next week too, by the way, which is South Atlantic, and so I think March, or April, is realistic for the SSC to get this work and look at it.

MR. WOODWARD: Bad news, Clay. No Thanksgiving and no Christmas for you all. Go ahead.

DR. PORCH: I'm still stuck on no Thanksgiving. We think we can review the catch estimates probably in less than two weeks, and then it wouldn't take us long to turn around an assessment, if all we're doing is updating the landings. The big unknown is the SSC had a really long laundry list here, and, obviously, most of that would have to be accomplished in a research track, and so it depends on what other things the SSC felt were absolutely critical to include, and so, without knowing that, it's hard for me to say exactly how long it would take, but the bottom line is, if we did what I think is most important, which was the landings, we could turn that around pretty quickly, and we probably could turn it around in time for late October, but I just don't know what else would be asked of our folks.

MR. WOODWARD: Well, it sounds like that this subset group has got to have some time to do their work, and so I hesitate to say this, because it seems like we're just creating work, to duplicate work, but, if we could run that assessment again with those revised landings information and see what comes out of that, this subset group will continue to, I guess, develop a prioritization of the other elements of concern, and then that will provide some feedback to the Center about these are things we believe absolutely need to be done, and then you've got a whole other discussion of can you do it and when can you do it, but I think running the assessment, with the revised MRIP landings information, is a positive first step towards addressing at least one of the primary concerns, if that sounds like a reasonable course of action.

DR. BUCKEL: That sounds reasonable, and that subgroup may agree with Clay and say that's all we -- You know, when we look at everything, that's the main issue, but I hate to speak for them at this point. I want to check-in with them, but that would be great, if that could be presented to the SSC in October, and that would be awesome, and, if not, I just heard from Judd that we already have a January webinar scheduled for scamp, reviewing scamp, and, if it wasn't available by the

end of October, then we could review it at the January SSC webinar, and so it would be available for the March council meeting.

MR. WOODWARD: All right, and so, if you do a really good job, you get your Thanksgiving back. If you do a really, really good job, Santa Claus will come, and so -- I think we have -- Clay, are you -- Does that seem like a reasonable way forward?

DR. PORCH: I was just going to say that I like that plan, recognizing that, if that list gets too long, it's going to become another assessment that has to get on the SEDAR schedule.

MR. WOODWARD: All right. I think we have a path forward here, and hopefully it will yield something that we can move into management action sooner rather than later, recognizing again that -- I guess a question I have is, obviously, there are some things that will be needed to make an effective research track, and we've got to focus on getting those things and putting the processes in place to make sure that we don't have a Groundhog Day experience of, well, we've got our research track opportunity, but we still don't have the source data we need to optimize its performance, and so I think that's something we've got to work on, too. All right.

Any further questions or discussions about the assessment and the SSC report? All right. Seeing none, Chip, I believe you've got the next agenda item, the Spanish mackerel fishery overview, and thank you, Jeff.

DR. COLLIER: Before I get started, I do want to recognize what Nick has done for us recently. If you go to the webpage, and you go under regulations, we have everything listed for each species, and these fishery overviews that we've been developing are actually there for each species, and so, for Spanish mackerel, it should be listed, and so it's going to be listed here. It's going to be a yellow button called "Fishery Overview", and we have these for all assessed species since -- I think it was red snapper was our first one, and so we have them for about seven species. They're not updated annually, but, if you guys ever want to do a check on what's going on in the fisheries, some of the information that might be important to you, this is where you can go to find it pretty quickly.

Going into the fishery description for Spanish mackerel, this is a little bit different than what we have for most other species. We don't include the stock status or the projections for this, because it hasn't been approved by the SSC yet, and so what we're providing here are going to be the history of management, the fishery performance report, and also some of the fishery descriptions, as well as some of the biological information.

The history of management, we have just two pages of history of management for Spanish mackerel. It is a long, complex history of management for the species, but this is a synopsis of what's been done over the years. The fishery performance report is from April of 2021, and this was provided by the Mackerel Cobia Advisory Panel, and so it has all kinds of information in there, information on what the fishermen are describing in the stock, how it's been moving, the economics of the stock, and, also, some of the social impacts of it.

Then, finally, if we go into the graphs, this is looking at the combined recreational and commercial data. Once again, we start off with the amount of the ACL that's being harvested. From 2012 to 2014, we did not have some commercial zones, and so you can look at how it was caught there.

Then, beginning in 2015, that's when we had two separate zones for the commercial fishery, the Northern Zone and the Southern Zone, and, as you heard earlier, some of that discussion about the Northern Zone reaching their quota earlier and earlier, you can see this in the yellow line. Down here at the bottom, this is the recreational proportion of the ACL, and it's been hovering, generally, between 40 and 60 percent.

We have the relative catches, commercial and recreational, compared to each other, with recreational in blue and commercial in gray, and you can see some of the volatility that has been talked about today. I will note that what you're seeing here -- It might not be displaying all the well, as far as the number of years, but this is fishing year, and so it's going to be slightly different than what you see in the stock assessment, which is based on an annual year.

Unfortunately, I didn't label it all that well in every single graph, and I think some of them might be a little mixed up between fishing year and annual year, but, anyway, in this next one, we're looking at wave-based data, and so this doesn't matter, and this is actually annually, and you can kind of just track the year by yourself.

Looking at this, you can see, generally, you have high landings in January and February, as well as November and December, and that tended to continue through 2010 and 2011. I mean, it's pretty much there all year, but then, in 2020, you do begin to see this spike in some of the data, and so this is going to be the 2021 fishing year, and you see that recreational spike, and then you also see another one in March and April in 2021, and those are some of the sources of uncertainty.

Then you can look at this information by state, and we also -- Different than most graphs that we have down here, this one does have information going up into the Mid-Atlantic and New England regions, and so that's provided in blue, and we have the commercial data. One thing you will note, on this graph, is you can see the commercial is -- It's pretty volatile, and, you know, it's going from 3.5 million up to about 5.5 million pounds, but the other thing that we try to include on these graphs is the number of discards in the commercial fishery. We don't have an estimate of commercial discards, with the exception of the shrimp trawl fishery.

Once again, this is the wave data, and we've already talked about area-based data, and now we're looking here at the length distribution of Spanish mackerel, and this is unweighted commercial samples, and you can see, for the most part, the commercial fishery is harvesting around a fifteen-inch fork length fish, and that's going to be about the third kind of line that you're seeing on the graph, and that matches up with a fifteen-inch fork length.

Then, as far as how the trips are falling out, this is a little bit different than most species that you'll see. Most species, you'll see a little bit, or a very high amount, of lumping on the far-end of the graph, indicating that there's a few trips that are catching a lot of fish. In this one, it's pretty spread out, and there is a lot of trips that are just catching a few fish, but there's also some trips that are catching a large amount.

Then we'll go into the recreational data, real quickly, and we don't need to harp on this too much, but, as has been talked about, you can see, in 2020, and then 2021, on the annual year, you see these very high estimates in the recreational fishery, and you're also seeing a dramatic increase in the number of releases as well.

The seasonal catch of Spanish mackerel in 2020 and 2021 is much higher than most other years, and then the area breakdown of where these landings were occurring. These landings that I have displayed here, this is based on a fishing year, and that's why you're not seeing that dramatic increase in 2020 and in 2021.

Going into the length distribution for the recreational fishery, as has been talked about, it's pretty sporadic, as far as the length distribution for Spanish mackerel. In many years, it's pretty flat, and you're not seeing a real modal size in it, and then, in 2021, when you had that spike in shore-based estimates, you're also seeing a very high estimate for one size bin.

Catch per unit effort for the last fifteen years, you're not seeing really any trends, and, you know, this is limited out at the maximum bag limit, which is fifteen fish, and so you're not seeing a real pattern in the overall catch per unit effort through the time series, and, with that, there is the biological data that's provided for all of them, and you can look at that, if you would like, the growth of Spanish mackerel, as estimated through SEDAR 78, length at weight, and then the maturity. This is one of the interesting pieces for Spanish mackerel. If you're looking at them, most fish are going to be mature by the size of sixteen, and so, if there's any questions on the fisheries data, I would be happy to answer them, or try to answer them.

MR. WOODWARD: Any questions for Chip? That's a very informative approach, and, I mean, I like these. I think these are working real well to give us sort of a one-stop shop to be able to find all of this information and to be able to compare it efficiently without poring through lots of separate things, and so this is a good job. Any questions? All right. Thank you. All right. Our next, and last, agenda item, other than Other Business, is topics from the upcoming Mackerel Cobia Advisory Panel, and so I'm going to turn it back over to Christina.

MS. WIEGAND: All right, and so next up is to talk about topics for the Mackerel Cobia AP. Again, they're meeting for half a day on October 5, following the Outreach and Education AP meeting, and then a full day on the 6<sup>th</sup>, and so a day-and-a-half meeting here in Charleston. Here's what we've got on the list. We've got an update on amendments recently submitted, and so what Rick talked about earlier today.

I'm going to skip Spanish mackerel, at the moment, because I'm going to come back and talk to you guys about that, and we have them reviewing the CMP FMP goals and objectives, and this is something they have not done in quite some time, and, given that you all are discussing it during development of Amendment 33, we thought it would be appropriate to have them discuss it.

We've got the commercial electronic logbook, and we've also got the NOAA North Atlantic right whale vessel speed regulations, if they have any input on that. Like Andy noted earlier, the comment period on that has been extended, and so that does give us talk to this advisory panel about it, and it also might be appropriate, when talking about this, to have them talk about the scoping that's underway for the Atlantic Large Whale Take Reduction Plan, and that was recently expanded to include all fisheries that fall underneath that, which does include some CMP fisheries, specifically the Spanish mackerel gillnet fishery that occurs in Florida, and so it might be worthwhile to have your AP talk about that scoping period as well.

We do have the Hudson Canyon National Marine Sanctuary proposal on here, because that is in the Mid-Atlantic region, and, thus, falls within the CMP FMP, and the New England Fishery

Management Council, when they discussed it, did indicate that they anticipated both the South Atlantic and Mid-Atlantic Councils to provide comment on this area.

We also have the option for them to update fishery performance reports, if there's time, and they just did the one for Spanish mackerel, which you saw in Chip's fishery overview, and this is not an upcoming assessment immediately for king mackerel or Florida east coast cobia, and we just implemented amendments responding to assessments, but we could still have them update those FPRs, and then some sort of generic council updates, and we'll talk to them about the Citizen Science Program, particularly FISHstory and the analysis that was done for the length of king mackerel in those photos, as well as climate change scenario planning and any updates on the SEDAR schedule that may be relevant.

I am going to come back up to SEDAR 78, and this is on the agenda because, at the time, we didn't know what direction the assessment and the SSC review were going to go, and so my question to you all is, aside from a sort of update on the status of what came out of this meeting and your discussions on how to move forward with the assessment, is there anything else that you would like us to discuss related to Spanish mackerel with the Mackerel Cobia AP?

MR. WOODWARD: All right, and any feedback for Christina? Just, personally, it sounds like what we need to do is just give them kind of a high-level overview of here's where we are and here's what we're trying to do to move this along, and here's our path forward, and, obviously, I'm sure we'll get lots of feedback about the need to move it forward and to not, you know, maintain the status quo, and that's not going to give us the fix to the fishery issues that we've got, and so any specifics on that to guide Christina when she's forming these topics? Chester.

MR. BREWER: It's probably already covered here, but I would like for the AP to tell us whether they have seen some sort of huge increase in the inshore landings, or the shore landings, excuse me, of Spanish mackerel, because I haven't heard if that's happening. At least where I live, the vast majority of those things are caught with cast nets and/or spoons, and neither one of those you're going to be able to -- You can't cast that far, or at least I can't, to get out to where these fish are, and so, to me, that is very highly suspect, and I would like to know what they think about it, or what they've seen.

MR. WOODWARD: All right. Thanks, Chester. Gary.

MR. BORLAND: You know, I will just add the comment from yesterday that, obviously, I know we don't take into account the last two years and the amount of effort put on by the recreational fishermen during COVID times, right, and nobody was working, and license sales were through the roof, and tackle sales were through the roof. The effort -- These fish sit on the beach down there in Florida, right? I mean, from Fort Pierce to Jupiter Inlet, they sit on the beach, and I'm sure effort was increased substantially, and I know we don't have data to support that, as far as -- But I can tell you, from the effort part, and so some of these numbers might not be as much of anomaly as we think they are, the last two years, because of the effort that was probably put forth on these fish from the recreational sector.

MR. WOODWARD: I think there is -- I believe that things certainly spiked, and all the other metrics that you would use to measure that show that, and it's the challenge of how do you use

what may be a temporary situation and make it a long-term plan, you know, and that's always one of our challenges. Go ahead, Gary.

MR. BORLAND: Yes, and I don't think it's going to be sustained, right, and we're seeing people, obviously, back off from an effort, and we're seeing all that fall back off now, because that was a spike when everybody was home and not working and had the time to go do it, and the weather was right, and the fish were laying it, and it's easy fish, and I hate to say this, but it's an easy fish to go catch, and we probably saw that increase in that effort, and hopefully it's going to come back, and the data will have to show that, going forward.

MR. WOODWARD: All right. Okay. Any other -- Go ahead, Tom.

MR. ROLLER: Thank you. I would just add that we do have a big shore-based fishery in North Carolina, and I don't know if it's that big, but it is pretty large, and I think we'll hear that from some of our advisors. It would be helpful, I think, to hear from them regarding commercial trip limits, and we've had a discussion about that in the past, and we've heard some of the advisors say they may more money when the trips are lower, and we've heard from Mr. Beal that the 500-pound stepdown may not be realistic for parts of the coast, and I would love to get some feedback from the AP on that.

MR. WOODWARD: All right. Thanks, Tom. Anything else? The Other Business item, we'll certainly add that, but, if we don't have anything else specific for the AP agenda, then I'm going to just go ahead and get into Other Business. As I mentioned earlier, John Carmichael was sent a letter from the American Saltwater Guides Association regarding management of little tunny, and I want to let Tom have the microphone for a few minutes, just to sort of give us some context for that.

MR. ROLLER: Thank you, Spud. I will try to be as brief as possible here, and I know we're a little bit behind, and so we've received this letter asking for us to look into the management of false albacore, and this is an issue that I've been involved in for a while, because it's a very important fishery to me and to coastal North Carolina anglers.

It's also important to note here that this fish, that goes by many different names, little tunny, false albacore, bonita, fat Albert, means something very different depending on where you are on the coast, what state you're in or what sort of water you fish, and it can be an annoyance to king mackerel fishermen, offshore fishermen, and, you know, I was talking to a guide in Florida the other day who took his bait boat out, and he caught a sailfish, and he came to the beach and caught a tarpon, and then he went and caught snook.

I understand that they may be a little lower on the totem pole for some of the Florida anglers, right, but, up in North Carolina, they are an extraordinarily important fish for us, a targeted fishery on the southeastern coast, and we have people come from all over the world to target them, and it's one of the favorite locations of the late President H.W. Bush, who fished in our county all the time, and he was a great fly caster.

For me, I first came to a former council member, Mac Currin, when it was removed from our complex of species in 2011, and I spoke to him about that, and is that correct? Was it 2011? Christina is nodding her head, and I believe so, and I understand the logic at the time, but, since

then, there has been many efforts to have a discussion about where these fish belong. We've discussed it at the state level in the past in North Carolina, and that hasn't really gone anywhere, and it was extensively discussed in the Mid-Atlantic during the omnibus forage fish amendment, and, for those involved and who paid attention to that fishery, comments on false albacore, from the angling community up and down the coast, really drove the process, to a degree.

Recently, you know, the AP has had this discussion, and they've brought it to this council before, and we've discussed it at our state level, and we've recently just passed a motion, at the North Carolina Marine Fisheries Commission, asking our state to update its whitepaper on this fish. I've had discussions with state leadership on this fish, and they have kind of indicated to me that they believe that federal management would be more applicable here.

Knowing all that, and knowing how important they are, and the fact that we really are catching more of them than Spanish mackerel, to many degrees, I think, as valuable as they are, there is nothing to protect this fishery. It's arguably sustainable now, but it would be really interesting to have a discussion about what sort of guardrails we could have on it. I would like to see if there was any appetite to ask staff to do kind of a short analysis, or a whitepaper, whatever you call it, to see if they could meet the criteria of management under Magnuson, and also add it to the AP as a discussion item, at the October meeting.

MR. WOODWARD: All right. Thanks, Tom. You all have heard what Tom had to say, and, you know, I encourage you to read the letter. Is there any strong feelings in opposition to maybe tasking staff to not take a real deep dive into this, but revisit it under the current context? Go ahead, Gary.

MR. BORLAND: I will say too that, being involved in -- When I was a guide in that fishery, I used that fishery for clients, and there is harvest going on, I know not for food value, to speak of, but there is a substantial amount of fish being harvested to use for bait, bonita strips in crab traps and whatever, and so I think there's more pressure on this fish than is probably seen, because we don't see the food coming back into commerce, I mean the fish coming back into commerce, and so I think it -- I also advocate that we, if we can -- I think we need to look at it.

MR. WOODWARD: Okay. All right. Tim, and then I will go back to you, Tom.

MR. GRINER: This kind of reminds me, or takes me back, to kind of those same discussions that we had around bullet and frigate and what constitutes the need for a fishery management plan. This is one of those fish that is a very short-lived fish. These fish only live for about four or five years, and they have an extremely large range, and they're only in say the coast of North Carolina for a very short period of time, and so it's also a pulse fishery.

All of those things make this, in my opinion, very difficult for federal management. It seems, to me, the majority of this fishery takes place in state waters, and it really lends itself to a state-managed fish. When you add, on top of the fact that it's not really in need of conservation and management, that it's a short-lived fish, and we have no data whatsoever on this fish, and we'll never have any data on this fish. It ranges from the Mediterranean to here, and it moves, and it comes and goes in two weeks, three weeks, four weeks max, and I really think this is the perfect fish for state management.

I think that, you know, with all that we have on our plate right now, that, you know, this is just going to be another distraction and take up staff time and our time that is unnecessary. We've just got some really important issues that just keep getting kicked down the road, and, you know, here we are kicking the poor white grunt back down the road again, and so I don't know, and I just think this is one of those species that I just really struggle to get my arms around, and why would we want to jump into trying to even consider managing a fish like this to do anything other than maybe some kind of ecosystem component, like a bullet and a frigate, but, to go down the road, or even consider developing a fishery management plan for it, I just think that would be a total waste of time, and I would be against that.

MR. WOODWARD: All right. Tom. I really didn't want to have a real lengthy debate on this, and we're running out of time, and more of a -- We've got a letter, and we need to respond to it, and, you know, a proportional response, a thank you, but no thank you, and I'm not sure that's really a good response, and there is some opportunities. There is going to be some work done to develop some better scientific understanding of the stock and that kind of thing, and that's what this American Guides Association is sponsoring, and so, anyway, Tom, just a brief response to that, and then I'm going to go to Clay.

MR. ROLLER: Just real quick, you know, there is, from my understanding with conversations with state folks -- You know, we're decades away from science to have a fishery management plan, and the ecosystem component may be the appropriate manner for them, but that's kind of where a lot of us would like this discussion to go.

In my experience, there's been a lot of finger-pointing, states pointing at the feds and feds pointing at this, and they, again, just don't really have a home, but, to go back to Gary's comments, you're absolutely right that there are developing fisheries for this fishery, and we've heard of greatly expanded bait fisheries in Florida, and North Carolina landings do show a lot of new, developing fisheries, particularly drift gillnet fisheries, off of the central and northern coast, and so it's clear that there's a greater interest in this, and I'm not sure it's just bait, and I think there is foreign markets for these, and so, again, we should just -- They're important, and so we shouldn't forget about them.

MR. WOODWARD: All right. Thanks, Tom. Clay, and then we'll go to Jessica, and she's been waiting patiently, and then back to you, Andy.

DR. PORCH: All right. Thank you, Chair. We actually did do a stock assessment for this species, little tunny, and it was like twenty years ago. It was a pretty drafty assessment, and I think, if we did it again, it would be equally drafty, but, having said that, Tim raises a very valid point that, again, we would only have a fraction of the stock, and so this would be in the same situation as dolphinfish, and, if we were to manage it, it would have to be through some kind of management procedure like we might develop for dolphin.

MR. WOODWARD: All right. Thanks. Jessica, and then back to you, Andy.

MS. MCCAWLEY: I just want to remind us that it did have federal management, and it was removed in 2011, in Amendment 18, and we did look at landings off of Florida, and they are primarily in state waters, and so I agree with what Tim is suggesting here. I'm not saying don't do this whitepaper, but I don't think that federal management is the proper place for this.

MR. WOODWARD: Okay. Andy, final word on this.

MR. STRELCHECK: I'm fine with what's recommended on the board, in terms of the white paper. I mean, this is reminding me a lot of what we've been talking about in the Gulf, Jessica, with regard to pompano requests, and there's just a little bit different aspect to it, but, yes, I don't think it's just kind of a yea or nay and we want to manage it or don't. We do need to go through the formality of evaluating whether this is in need of conservation and management, and we can do that in the whitepaper.

MR. WOODWARD: Yes, and, Bob, and then I will go back to you, Dewey. I said last word, but I guess that wasn't the final word. Go ahead, Bob.

MR. BEAL: Thank you, Mr. Chair. I will be really quick, and it may be a question for you and your other chairmanship role at ASMFC, and I went out -- I was out in the hall, on the phone, and so I may have walked out at the wrong time. Was part of this discussion a motion of state -- That the management should occur at the state level, or interstate level, or was that not really discussed yet, and so sorry, but I went out in the hallway when this was being talked about.

MR. WOODWARD: See, I wasn't even going to bring that up, but now you've brought it up. You've let the genie out of the bottle. No, but the request is for consideration of bringing them back into federal management. As Jessica said, they were in, and then they got put out, and so, you know, it's a -- The belief of this group is that the circumstances are different now than they were then and it bears a fresh look. It may or may not be, but, you know, personally, I think, unless it is going to displace some other highly-important thing, that we at least respond to it in an affirmative manner and do -- You know, here's what we see, under current conditions, and we go forward with that, but, Dewey, last word.

MR. HEMILRIGHT: This request here says to direct the staff to develop a paper, and is that going to come back with landings and different things like that, where they're located at? I mean, given, from what I have seen with different things, it's all mostly state waters, and I'm just curious what this whitepaper is going to bring back, and it's saying, to me, to provide the MSA criteria for conservation, and, if something is in state waters -- I mean, this could meet the criteria, but how - - I am just asking what is this whitepaper going to bring back?

MR. WOODWARD: Well, it's sort of like the other whitepapers, or options papers, we do. You look at what you know, what you know or don't know, what threats may be out there, sort of the aggregate of all that, and then you look at it in the context of the MSA, and then you make a recommendation back, you know, just like the bullet and frigate mackerel deal. It was a decision, and so this, obviously, has turned into much more of an in-depth conversation than I intended to have for this.

MR. HEMILRIGHT: One last -- Does the guides association have a more -- I guess they're asking, through their letter, which I haven't seen, they're asking for management of this resource, somebody to manage it, and is that the case?

MR. WOODWARD: Go ahead, Christina. Maybe you can --

MS. WIEGAND: I think I can hopefully provide some guidance on what I think staff would work to put together for a paper like this, and so, in the letter from the American Saltwater Guides Association, they weren't necessarily explicitly saying manage this in the CMP FMP. There are those -- If you can, you know, remember back to the bullet and frigate mackerel discussion, there are sort of ten criteria within the Magnuson-Stevens Act that help, you know, determine whether or not a species is in need of conservation or management, and so I think what staff would do is pull whatever data we have, and I know we do have landings data, and anything else we have, and go through those ten criteria and then provide this council with sort of, to the best of our ability, an analysis of how false albacore meet those ten criteria, and then, based on that information, this council could determine what, if any, way to move forward.

I am looking at Tom, who provided this direction to staff, and I have a couple of -- My thought was that perhaps -- It was mentioned that North Carolina DMF staff may be working on updating an original paper, and I'm going to look to Trish, and certainly we could work with them, talk to them, about what they're putting in their paper, so that it's encompassed within whatever we would present to the council. I'm also hearing that you guys might want to look at landings in state waters versus landings that are occurring in federal waters, since it seems like the appropriate management body for this may be something that the council wants to discuss.

Then I would just ask for a little bit of timing clarification. If we are going to discuss this with the AP in October, what I would like from the committee, at this time, is sort of maybe a quick bullet-pointed list to ask the AP this. Putting together a paper like this, I cannot get it done in time for the October AP meeting. The briefing book for that is due in just a couple of days, but we could ask them a series of questions that we could then sort of include with this paper to be presented at the council when it fits into sort of the broader timing, which you'll talk about at Full Council.

MR. WOODWARD: What I would recommend, in the interest of time, is, if you've got specific questions related to this, just provide them back to Christina, maybe via email, instead of necessarily a long discussion about it, and that would be a little more practical, at this time. Tom.

MR. ROLLER: Real quick, I just wanted to say, Christina, I in no way expect you to have such an analysis done for the AP. I just thought it would be a good thing to discuss, how they felt about this fishery, and if it should be something that we should look into. I would be happy to provide some bullet points.

MR. WOODWARD: Okay. All right. Laurilee.

MS. THOMPSON: I'm going to see if I can help you out and change the subject, because I know that you're fixing to send us on break, Chairman Bell, but I wanted to see if anybody would have any objection to changing the agenda, because those two young men have been sitting back there patiently waiting to get their well-deserved recognition and award, and I think they probably want to start heading back to Florida, and so would anybody have any objection to moving the 2021 Law Enforcement Officer of the Year Award in front of the SEDAR Committee, so they don't have to sit through the SEDAR Committee meeting?

MR. BELL: I have no problem with getting them on the road as soon as possible, but we just need to stop talking about this other stuff first.

MR. WOODWARD: I am scared to even ask this, but is there any other business to come before the Mackerel Cobia Committee? There is none, and so thank you for your attention. Thank you for the discussion, and we will stand adjourned.

(Whereupon, the meeting adjourned on September 15, 2022.)

- - -

Certified By: \_\_\_\_\_ Date: \_\_\_\_\_

Transcribed By  
Amanda Thomas  
October 31, 2022

SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL  
2022 COMMITTEE MEMBERS continued

*mackerel cmte -  
Thursday 9/15/22  
10:30 am - 2:30 pm*

**MACKEREL COBIA**

Spud Woodward, Chair  
Tom Roller, Vice Chair  
Robert Beal  
Carolyn Belcher  
Mel Bell  
Chester Brewer  
Gary Borland  
LT Cameron Box  
Tim Griner  
~~Judy Helmey~~  
Kerry Marhefka  
Jessica McCawley  
Trish Murphrey  
Andy Strelcheck  
Laurilee Thompson  
Mid-Atlantic:  
Dewey Hemilright/Joe Cimino  
Staff contact: Christina Wiegand

**SEDAR**

Mel Bell, Chair  
Carolyn Belcher, Vice Chair  
Robert Beal  
Tim Griner  
Kerry Marhefka  
Jessica McCawley  
Trish Murphrey  
Andy Strelcheck  
Staff contact: Chip Collier

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Jessica McCawley  
Trish Murphrey  
Andy Strelcheck  
Spud Woodward  
Staff contact: Roger Pugliese

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Kerry Marhefka, Vice Chair  
Robert Beal  
Carolyn Belcher  
Mel Bell  
Chester Brewer  
Gary Borland  
LT Cameron Box  
Tim Griner  
Judy Helmey  
Trish Murphrey  
Tom Roller  
Andy Strelcheck  
Laurilee Thompson  
Spud Woodward  
Mid-Atlantic:  
Dewey Hemilright/Earl "Sonny" Gwin  
Staff Contact: Mike Schmidtke

**SPINY LOBSTER**

Jessica McCawley, Chair  
Chester Brewer, Vice Chair  
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Monica Sutti Brunello  
Ralle Diaz  
Mark Rischard  
Samal Ingram*  
SNAPPER GROUPER

*me g weles  
Frank Helles  
Dr. Jack McGovern  
Rick DeVito  
Liz Pat O'Shaughnessy  
Dr. Clay Porch*

*MacClellan Creek  
Thursday, 9/15/22  
10:30 am - 2:30 pm*

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## **SAFMC September Council**

### **Attendee Report: Meeting (9/12/22 - 9/16/22)**

Report Generated:

09/17/2022 04:09 PM EDT

<b>Webinar ID</b>	<b>Actual Start Date/Time</b>	<b>Duration</b>
734-573-171	09/15/2022 08:11 AM EDT	10 hours 21 minutes

### **Attendee Details**

<b>Attended</b>	<b>Last Name</b>	<b>First Name</b>
Yes	Addis	Dustin
Yes	Allen	Shanae
Yes	Bailey	Adam
Yes	Barbieri	Luiz
Yes	Barrineau	Marina
Yes	Batsavage	Chris
Yes	Beal	Bob
Yes	Berry	james
Yes	Bianchi	Alan
Yes	Borland	Gary
Yes	Box	Cameron
Yes	Brennan	Ken
Yes	Brouwer	Myra
Yes	Bubley	Walter
Yes	Buckel	Jeff
Yes	Burgess	Erika
Yes	Byrd	01Julia
Yes	Campfield	Patrick
Yes	Caycedo	Mario
Yes	Cheshire	Rob
Yes	Cimino	Joseph
Yes	Cody	Richard
Yes	Coleman	Heather
Yes	Conklin	The Real Chris
Yes	Corey	Morgan
Yes	Cox	Derek
Yes	Cox	Jack
Yes	Crosson	Scott
Yes	Curtis	Judd
Yes	Dale	Diaz
Yes	Dale (NMFS SERO)	David
Yes	Dathe	Michael

· Yes	David	Andrew
Yes	DeVictor	Rick
Yes	Dingle	Julie
Yes	Dixon	Michael
Yes	Dunlap	Matt
Yes	Duval	Michelle
Yes	Edmonds	Melissa
Yes	Fifer	Jocelyn
Yes	Finch	Margaret
Yes	Fitzpatrick	Eric
Yes	Flowers	Jared
Yes	Foss	Kristin
Yes	Franke	Emilie
Yes	Freeman	Matt
Yes	French	Patrick
Yes	Friedrich	Tony
Yes	Glazier	Ed
Yes	Goldsmith	Willy
Yes	Good	Caroline
Yes	Gore	Karla
Yes	Gray	Alisha
Yes	Guyas	Martha
Yes	Harrison	BeBe Dalton
Yes	Harrison	Alana
Yes	Hart	Hannah
Yes	Hawes	Rachel
Yes	Helies	Frank
Yes	Helmey	Judy
Yes	Hemilright	Dewey
Yes	Herrera	John
Yes	Hildreth	Delaine
Yes	Howington	Kathleen
Yes	Iverson	Kim
Yes	Jones	Carlisle
Yes	Karazsia	Jocelyn
Yes	Kellison	Todd
Yes	Keppler	Blaik
Yes	Kerns	Toni
Yes	Kramer	Rob
Yes	Laboccetta	Mark
Yes	Laks	Ira
Yes	Larkin	Michael
Yes	Lazarre	Dominique
Yes	Lee	Jennifer
Yes	Li	Yan
Yes	Lorenzen	Kai
Yes	Malinowski	Rich

Yes	Marinko	Jeff
Yes	Martinez	Adrian
Yes	Masi	Michelle
Yes	McCoy	Sherylanne
Yes	McGovern	Jack
Yes	McManus	Brian
Yes	McRae	G
Yes	Mehta	Nikhil
Yes	Merrifield	Mike
Yes	Merrifield	Jeanna
Yes	Morrell	Nick
Yes	Murphey	Trish
Yes	Neer	Julie
Yes	Newman	Thomas
Yes	OShaughnessy	Patrick
Yes	Patrick	Donald
Yes	Pellicer	Joseph
Yes	Perkinson	Matt
Yes	Poholek	Ariel
Yes	Poston	Will
Yes	Powell	Jessica
Yes	Pugliese	01Roger
Yes	Rapp	Greg
Yes	Records	David
Yes	Reed	John
Yes	Reeder	Kelly
Yes	Reichert	Marcel
Yes	Renchen	Jeff
Yes	Reynolds	Jon
Yes	Roller	00Tom
Yes	Schwanger	Chuck
Yes	Sedberry	George
Yes	Seward	McLean
Yes	Shervanick	Kara
Yes	Siegfried	Katie
Yes	Sinkus	Wiley
Yes	Sitton	Brent
Yes	Smarrito	Michael
Yes	Spurgin	Kali
Yes	Spurlock	Zack
Yes	Sramek	Mark
Yes	Stam	Monica
Yes	Stam	Geoff
Yes	Stemle	Adam
Yes	Stephen	Jessica
Yes	Surrency	Ron
Yes	Swanson	Chris

Yes	Sweetman	CJ
Yes	Switzer	Ted
Yes	Takade-Heumacher	Helen
Yes	Thompson	00 Laurilee
Yes	Tibulle	Sébastien
Yes	Torres-Pabon	Jashira
Yes	Travis	Michael
Yes	Vecchio	Julie
Yes	Venker	Ted
Yes	Waine	Mike
Yes	Walia	Matthew
Yes	Walter	John
Yes	Wamer	David
Yes	Whitaker	David
Yes	White	Geoff
Yes	Wilber	Pace
Yes	Williams	Erik
Yes	Withers	Meg
Yes	Wolfe	Wes
Yes	Wyanski	David
Yes	Zoodsma	Barb
Yes	blough	heather
Yes	brewer	00chester
Yes	buie	jay
Yes	collier	chip
Yes	moss	david
Yes	thomas	suz
Yes	thomas	suz
Yes	usina	ken
Yes	vara	mary